# **Clinical Reminders**

# Manager's Manual



(Revised December 2017)

March 2005

Product Development
Office of Information and Technology
Department of Veterans Affairs

## **Preface**

## **Purpose of Manager's Manual**

This manual provides reference information for Clinical Reminders menus and options. It can serve both as a reference manual and a tutorial for Clinical Application Coordinators (CACs) and Clinical Reminders Managers who are just becoming familiar with Clinical Reminders.

To get further help information, please enter a Remedy ticket or call the National Help Desk: (1-888-596-4357).

#### **Recommended Users**

- Clinical Reminders Managers
- Clinical Application Coordinators (CACs)
- Department of Veterans Affairs Medical Center (VAMC) Information Resources Management (IRM) staff

#### **Related Manuals**

Manuals are available in Portable Document Format (PDF) at the following locations:

Hines - ftp.fo-hines.med.va.gov - anonymous.software Salt Lake City - ftp.fo-slc.med.va.gov - anonymous.software

Clinical Reminders documentation can also be found in the VistA Software Document Library (VDL): <a href="http://www.va.gov/vdl">http://www.va.gov/vdl</a>

#### **Related Web Sites**

| Site                                  | URL   |
|---------------------------------------|---|
| National HSD&D Reminders site         | http://vista.med.va.gov/reminders                       |
| Office of Quality, Safety, and Value  | http://vaww.oqsv.med.va.gov/                            |
| VA Software Document Library          | http://www.va.gov/vdl/                                  |
| VA/DoD Clinical Practice Guidelines   | https://www.healthquality.va.gov/                       |
| National Clinical Reminders Committee | http://vaww.portal.va.gov/sites/ncrcpublic/default.aspx |

# **Revision History**

| Revision Date | Page(s)         | Description  | Project Authors                                     |
|---------------|-----------------|--|---|
| December 2017 | 20-24           | PXRM*2.0*68 – Removed VA-MHV references.   | K. Watson: TW<br>J. Crumley: SD                     |
| October 2017  | ii              | PXRM*2.0*47 – Removed reference to Albany download site which has been decommissioned.   | Patrick Redington Tom Robinson                      |
| August 2016   | Various,<br>186 | Updates based on review by developers. Minor changes.  | Patrick Redington Tom Robinson                      |
| August 2016   | 108,<br>186     | Added a comment that running the integrity check monthly or quarterly would be a best practice.  | Patrick Redington<br>Tom Robinson                   |
| June 2016     | 186             | Added a section about Value Sets.  | Patrick Redington Tom Robinson                      |
| June 2016     | 120,<br>121     | Added two items under Finding Modifier description: Use Start Date and Include Visit Data.   | Patrick Redington Tom Robinson                      |
| June 2016     | 350             | Made a small change to the section about List Rule Sets.   | Patrick Redington Tom Robinson                      |
| June 2016     | 114,<br>124     | Added an item about using a STATUS LIST with orderable items. And added to the section referencing using status/condition in searches. | Patrick Redington Tom Robinson                      |
| June 2016     | 40, 46          | New Computed Findings: VA – Age Birth Sex List, VA-BIRTH DATE BIRTH SEX LIST,  | Patrick Redington Tom Robinson                      |
| June 2016     | 207,<br>217     | Added that Reminder Exchange files cannot be used from SharePoint.   | Patrick Redington Tom Robinson                      |
| June 2016     | 287             | Added to the section about the Dialog Taxonomy Editor.   | Patrick Redington Tom Robinson                      |
| June 2015     | 111             | PXRM*2.0*53 – Added that the Custom Due Date might also use the RANK_DATE function.  | Patrick Redington Tom Robinson                      |
| June 2015     | 9, 281          | Added information about the Reminder Dialog Search report.   | Anthony Puleo<br>Tom Robinson                       |
| August 2014   | Various         | Updates based on developers' reviews   | Patrick Redington<br>Anthony Puleo, Tom<br>Robinson |
| June 2014     | Various         | Updates based on developers' reviews   | Patrick Redington<br>Anthony Puleo<br>JoAnn Green   |
| April 2014    | 206             | Added changes made by PXRM*2*26 to Reminder Exchange   | Patrick Redington<br>JoAnn Green                    |
| Jan 2014      | 32              | Added changes made by PXRM*2*26 in Computed Findings   | Patrick Redington<br>JoAnn Green                    |
| Jan 2014      | 321             | Added changes made by PXRM*2*26 in Reports/Finding Usage Report  | Patrick Redington<br>JoAnn Green                    |
| Jan 2014      | 125             | Added changes made by PXRM*2*26 in Function Findings   | Patrick Redington<br>JoAnn Green                    |

| Revision Date   | Page(s)       | Description   | Project Authors                                   |
|-----------------|---------------|---|---|
| Jan 2014        | 251           | Added changes made by PXRM*2*26 to Dialog Management  | Patrick Redington<br>Anthony Puleo<br>JoAnn Green |
| Jan 2014        | 206           | Added changes made in Reminder Exchange New Exchange action: Load Web Host File                                   | Patrick Redington<br>JoAnn Green                  |
| Aug 2013        | 300           | Added dialog taxonomy editor description  | Patrick Redington<br>Anthony Puleo<br>JoAnn Green |
| April-June 2013 | 287           | Updated Dialog Management chapter   | Anthony Puleo<br>JoAnn Green                      |
| April-June 2013 | 146           | Updated Taxonomy chapter  | Patrick Redington JoAnn Green                     |
| February 2013   | 9, 146        | Added description of PXRM*2*26 and changed Taxonomy chapter per changes made in PXRM*2*26 for the ICD-10 project. | Patrick Redington<br>JoAnn Green                  |
| Apr-Dec 2012    | Various       | Added details about changes made for Patch 24 and phase 2 of the HRMHP project                                    | Patrick Redington<br>JoAnn Green                  |
| Jan 2012        | App B,<br>414 | Updated Appendix B, Order Check example for PXRM*2*22   | Patrick Redington<br>Anthony Puleo<br>JoAnn Green |
| Jan 2012        | 397           | Updated Order Check section for PXRM*2*22   | Patrick Redington Anthony Puleo JoAnn Green       |
| Dec 2011        | n/a           | Added description of patch 21 and MSDS project  | Patrick Redington<br>JoAnn Green                  |
| Dec 2011        | Various       | Updates per reviews by Product Support team.  | Alan Montgomery<br>Philip VanCamp<br>JoAnn Green  |
| July 2011       | 129           | Added Function Findings primer by Product Support team.   | Alan Montgomery<br>Philip VanCamp<br>JoAnn Green  |
| Feb 2011        | Various       | Added details about changes made for Patch 18 and HRMHP project   | Patrick Redington Anthony Puleo JoAnn Green       |
| January 2011    | 397           | Edited Order Check section, per Anthony Puleo and Rob Silverman,  | Anthony Puleo                                     |
| December 2010   | 53            | Added computed finding example for VA-IS INPATIENT  | Patrick Redington<br>JoAnn Green                  |
| November 2010   | 379           | Added Reminder Extracts section provided by Clinical Product Support  | Alan Montgomery                                   |
| June 2010       | n/a           | Added description of Order Check menu and options, introduced in patch 16.  | Anthony Puleo<br>JoAnn Green                      |
| July 2009       | 206           | Updated patch 12 update section and Reminder Exchange section   | Patrick Redington<br>JoAnn Green                  |

| Revision Date             | Page(s)     | Description   | Project Authors                                   |
|---------------------------|-------------|---|---|
| May 2009                  | 251,<br>281 | Updated Dialogs and Reports sections, per developer Review  | Anthony Puleo<br>Patrick Redington<br>JoAnn Green |
| May 2009                  | 32          | Updated Computed Findings section   | Patrick Redington<br>JoAnn Green                  |
| December 2008             | 206         | Updated Reminder Exchange section   | Patrick Redington<br>JoAnn Green                  |
| December 2008             | 224         | Updated Reminder Test section   | Patrick Redington<br>JoAnn Green                  |
| December 2008             | 32          | Updated Computed Findings section   | Patrick Redington<br>JoAnn Green                  |
| September 2008            | n/a         | Added new computed findings descriptions  | Patrick Redington<br>JoAnn Green                  |
| July 2008                 | 339         | New report, Finding Usage Report  | Patrick Redington JoAnn Green                     |
| October 2007              | 20          | Updated National Reminders list   | Patrick Redington JoAnn Green                     |
| October 2007              | 205         | Added description of new option, Copy Location List   | Patrick Redington<br>JoAnn Green                  |
| October 2007              | 318         | Added description of new option, TIU Template Reminder Dialog Parameter   | Patrick Redington JoAnn Green                     |
| October 2007              | 268         | Updates to description of Mental Health Dialog functionality  | Patrick Redington JoAnn Green                     |
| October 2007              | 347         | Added description of new option, Edit<br>Number of MH Questions   | Patrick Redington JoAnn Green                     |
| September 2007            | 139         | Added new function finding, NUMERIC   | Patrick Redington JoAnn Green                     |
| June 2007                 | Various     | Changes per patch 6   | Patrick Redington JoAnn Green                     |
| September 2006            | 348-379     | Changes to Patient Lists and Extract Management descriptions  | Patrick Redington JoAnn Green                     |
| May-June 2006             | 379         | Extract Management option changes   | Patrick Redington JoAnn Green                     |
| March 2006                | N/A         | Added descriptions of new computed findings for appointments  | Patrick Redington JoAnn Green                     |
| February 2006             | 348         | Rewrite of Patient List section, based on changes to software and need for more explanation and clarification       | Patrick Redington<br>JoAnn Green                  |
| February 2006             | Page<br>379 | Rewrite of Extract Management section, based on changes to software and need for more explanation and clarification | Patrick Redington<br>JoAnn Green                  |
| January-<br>February 2006 | Various     | Updates, based on changes or corrections in software  | Patrick Redington<br>JoAnn Green                  |
| July-August 2005          | Various     | Changes for Patch 4   | Patrick Redington<br>JoAnn Green                  |
| March 2005                | Various     | Changes for Version 2.0   | Patrick Redington<br>JoAnn Green                  |

## Contents

| Preface  | II  |
|--|-----|
| REVISION HISTORY   | III |
| CONTENTS   |     |
| Introduction   |     |
| Patch 47 (PXRM*2*47) Changes                                       |     |
| Patch 53 (PXRM*2*53) Changes                                       |     |
| Patch 26 (PXRM*2*26) Changes                                       |     |
| Patch 31 (PXRM*2.0*31)- Palliative Care National Clinical Template |     |
| Patch 36 (PXRM*2*36) Changes - Pneumococcal Reminders and Women    |     |
| Health Taxonomy update   | 13  |
| Patch 24 (PXRM*2*24) Changes                                       | 14  |
| Patch 23 (PXRM*2*23) Changes                                       | 15  |
| Patch 22 (PXRM*2*22) Changes                                       |     |
| Patch 21 (PXRM*2*21) Changes (Military Service Data Sharing (MSDS) |     |
| project)   |     |
| Patch 18 (PXRM*2*18) Changes                                       |     |
| Patch 16 (PXRM*2*16) Changes                                       |     |
| Patch 17 (PXRM*2*17) Changes                                       |     |
| National Reminders   |     |
| REMINDERS MAINTENANCE  | 27  |
| Reminder Managers Menu   | 27  |
| Options not on a menu  |     |
| Security Key   | 29  |
| Reminder Managers Menu Descriptions                                | 30  |
| Reminder Computed Finding Management                               | 32  |
| National Computed Findings   | 38  |
| Reminder Definition Management                                     | 75  |
| List Reminder Definitions  |     |
| Inquire About Reminder Item  | 96  |
| Add/Edit Reminder Definition                                       | 101 |
| Copy Reminder Definition   | 104 |
| Reminder Edit History  | 106 |
| Integrity Check Options  |     |
| Integrity Check Selected   | 107 |
| Integrity Check All  |     |
| Reminder Definition Fields   |     |
| Reminder Findings  |     |
| * Changes to Beginning and Ending Date/Time made in Patch 18       |     |
| Function Findings  |     |
| Status List  |     |
| Activate/Inactivate Reminders                                      |     |
| Reminder Sponsor Management  |     |
| List Reminder Sponsors   | 144 |

| Reminder Sponsor Inquiry   | 145 |
|--|-----|
| Add/Edit Reminder Sponsor  | 145 |
| Reminder Taxonomy Management   | 146 |
| Reminder Taxonomy Actions  |     |
| Add  | 151 |
| Edit   | 152 |
| Taxonomy Fields  | 153 |
| Patient Data Source Keywords   | 154 |
| Copy   | 158 |
| Inquire about Taxonomy Item  |     |
| Change Log   |     |
| Code Search  |     |
| Import   |     |
| At this point you will have the option of browsing the list of codes |     |
| Use in Dialog Report (UIDR)  |     |
| Code Set Versioning  |     |
| Value Sets   |     |
| Reminder Term Management   | 188 |
| List Reminder Terms  | 189 |
| Inquire about Reminder Term  | 190 |
| Add/Edit Reminder Term   | 191 |
| Copy Reminder Term   | 192 |
| Reminder Location List Management                                    | 193 |
| Reminder Location List Menu  | 194 |
| List Location Lists  | 195 |
| Location List Inquiry  | 200 |
| Add/Edit Location List   | 203 |
| Create a new Location List   |     |
| Copy Location List   |     |
| Reminder Exchange  | 206 |
| Reminder Test  | 224 |
| Other Supporting Menus   | 249 |
| Reminder Information Only Menu                                       |     |
| Reminder Dialog Management   |     |
| Dialog Parameters  |     |
| Mental Health Result Dialogs   |     |
| Editing Template Fields used in Reminder Dialogs                     |     |
| Dialog Reports   |     |
| Dialog Taxonomy Changes  |     |
| New Fields   |     |
| CPRS Reminder Configuration Menu                                     |     |
| Add/Edit Reminder Categories   |     |
| CPRS Lookup Categories   |     |
| CPRS Cover Sheet Reminder List                                       |     |
| Mental Health Dialogs Active   |     |
|  |     |

| Progress Note Headers                              | 315 |
|--|-----|
| Reminder GUI Resolution Active                     | 316 |
| Default Outside Location                           | 316 |
| Position Reminder Text at Cursor                   |     |
| TIU Template Reminder Dialog Parameter             |     |
| GEC Status Check Active                            |     |
| WH Print Now Active                                |     |
| Reminder Reports                                   |     |
| Reminders Due Report option                        |     |
| Reminders Due Report – Patient List Template       |     |
| Reminders Due Report – Patient List                |     |
| Extract EPI Totals                                 |     |
| Extract QUERI Totals                               |     |
| GEC Referral Report                                |     |
| Finding Usage Report                               |     |
| MST Synchronization Management Project             |     |
| Reminder Parameters Menu                           |     |
| Edit Site Disclaimer Example                       |     |
| Edit Web Sites Example                             |     |
| Edit Number of MH Tests Example                    |     |
| Reminder Patient List Management                   | 348 |
| List Rules   |     |
| Rule Set Definition                                |     |
| Steps to Create a Patient List                     |     |
| Patient List Management Option                     |     |
| Demographic Report                                 |     |
| Reminder Extract Tools                             |     |
| Reminder Extract Menu                              | 379 |
| Clinical Reminder Extracts Guide                   | 381 |
| Key Components                                     | 381 |
| Extract Definitions                                | 390 |
| RUNNING THE EXTRACT                                | 392 |
| Understanding your Output                          |     |
| FAQ:   |     |
| CLINICAL REMINDER ORDER CHECKS                     |     |
| GEC Referral Report                                |     |
| <u>-</u>   |     |
| APPENDIX A: GLOSSARY                               |     |
| National Acronym Directory:                        |     |
| Acronyms   |     |
| Definitions  |     |
| APPENDIX B: CLINICAL REMINDER ORDER CHECKS EXAMPLE | 414 |

## Introduction

The Clinical Reminder system helps caregivers deliver higher quality care to patients for both preventive health care and management of chronic conditions, and helps ensure that timely clinical interventions are initiated.

Reminders assist clinical decision-making and also improve documentation and follow-up, by allowing providers to easily view dates when certain tests or evaluations were performed and to track and document when care has been delivered. They can direct providers to perform certain tests or other evaluations that will enhance the quality of care for specific conditions. The clinicians can then respond to the reminders by placing relevant orders or recording clinical activities on patients' progress notes.

Clinical Reminders may be used for both clinical and administrative purposes. However, the primary goal is to provide relevant information to providers at the point of care, for improving care for Veterans. The package benefits clinicians by:

- Providing pertinent data for clinical decision-making
- Reducing duplicate documenting activities
- Assisting in targeting patients with particular diagnoses and procedures or site-defined criteria
- Assisting in compliance with VHA performance measures and with Health Promotion and Disease Prevention guidelines

### Patch 47 (PXRM\*2\*47) Changes

This patch is the follow-up to PXRM\*2\*26, which was part of the Computerized Patient Record System CPRS v30 project. That project modified the Computerized Patient Record System, Text Integration Utilities, Consults, Health Summary, Problem List, Clinical Reminders, and Order Entry/Results Reporting domains to meet the requirements proposed by the Dept. of Health and Human Services to replace the ICD-9 code set with the ICD-10 code set. It removes the taxonomy fields made obsolete by PXRM\*2\*26, adds the taxonomy editor actions that could not be completed for the release of PXRM\*2\*26, and fixes some defects.

One of the bugs that is fixed involves display of the status line when the frequency is in hours. This change adds time to the Date Due and Last Done fields. Because there are a number of Clinical Reminders Health Summary components, a Health Summary patch is required, it is: GMTS\*2.7\*113.

## Patch 53 (PXRM\*2\*53) Changes

PXRM\*2\*53 adds a Reminder Dialog Search Report option to the Reminder Dialog Report menu. The Reminder Dialog Search Report allows sites to find Reminder Dialogs based on search criteria such as Coding Systems, Findings, and Dialog Items.

## Patch 26 (PXRM\*2\*26) Changes

PXRM\*2\*26 is part of the ICD-10 project, and the purpose of patch 26 and its related patches (DG\*5.3\*853 and GMPL\*2\*43) is to update Clinical Reminders to allow the use of ICD-10 codes. A very general approach has been taken, wherein Clinical Reminders taxonomies are being restructured to be Lexicon-based instead of pointer-based. This allows the use of any coding system supported by the Lexicon Utility. In addition to adding ICD-10 codes, SNOMED CT codes are being added. After the

release of CPRS 29, SNOMED CT codes will be collected by Problem List and Clinical Reminders will be able to search for them.

A new taxonomy management system replaces the previous taxonomy management menu. See the Taxonomy Management chapter for details and examples. Also see the Dialog management chapter for information and examples of the changes made to Dialog options by this patch.

The new system uses a combination of List Manager, ScreenMan, and the Browser. List Manager should already be familiar to users of Clinical Reminders tools such as Dialog Management or Reminder Exchange. ScreenMan and the Browser may not be as familiar, but reviewing Appendix B of this manual or the FileMan documentation should give you enough knowledge to make using the taxonomy management system much easier.

After PXRM\*2\*26 is installed, users will no longer be able to add ICD-9-CM and/or CPT-4 codes to a Reminder Dialog. Users will need to create a Taxonomy, assign codes, and then add the Taxonomy to the Reminder Dialog. To maintain similar end user functionality in CPRS, a new called Taxonomy Pick List Display has been added to the dialog editor. This controls how Taxonomies should display in CPRS.

A simple taxonomy editor that is accessed from Dialog Management (either the element or group view) is available. Codes added in this editor are automatically marked as Use In Dialog. If a code is deleted in this editor, the Use In Dialog designation is removed from the code.

A change to Reminder Exchange was made to add a check of the line length and a warning if a line exceeds 245 characters. The maximum value allowed by Kernel is 255 characters, but for FileMan word-processing fields, it is 245. When a line exceeds this length, there is a very high probability that the Exchange entry will not install correctly. If the Exchange entry is transported as a host file, then 255 should work, but if is transported as a MailMan message, then 245 is the limit. The warning was added because previously, when an Exchange entry would not install correctly due to the line length being exceeded, it was difficult to determine the reason. The solution was to shorten the length of the field being transported. Detailed information about the field that needs to be shortened is given in the warning.

#### Example:

```
Warning the following line exceeds the VistA maximum allowed length of 245.
Therefore this Exchange entry will not transport correctly.
Line: 811.23;+619,+617,;.01~Telephone Assessment/Management by Nonphysician to Established
PT/Parent/Guardian not Originating from A/M Provided within Previous
7 Days Nor Leading to A/M Service/Procedure within Next 24 Hrs/Soonest Appt; 11-
20 Mins Medical Discussion
Its length is: 260
Component: REMINDER TAXONOMY
Name: PBM PHARMD PHONE VISIT CPT CODE 98967 V5*1
IEN: 617
Field number: .01
Value: Telephone Assessment/Management by Nonphysician to Established PT/Parent/
Guardian not Originating from A/M Provided within Previous 7 Days Nor Leading to
A/M Service/Procedure within Next 24 Hrs/Soonest Appt; 11-20 Mins Medical Discussion
```

#### **Disable/Enable Reminder Evaluation**

The option PXRM INDEX BUILD provides the ability to rebuild selected portions of the Clinical Reminders Index. (For information and details about the Clinical Reminders Index see the Clinical Reminders Index Technical Manual.) While an index is rebuilding, any reminder that uses the data from that index cannot be correctly evaluated – it will have the status of CNBD (cannot be determined). In the

past, a MailMan message was sent to the Clinical Reminders mail group every time a reminder could not be evaluated because an index was rebuilding. Now, when an index is going to be rebuilt, reminder evaluation will be automatically disabled, meaning that any attempt to evaluate a reminder will result in an immediate return of a CNBD status. The Clinical Maintenance display will include text letting the user know that reminder evaluation is disabled and the reason(s). When the index has finished rebuilding, evaluation will be automatically enabled.

The option PXRM DISABLE/ENABLE EVALUATION provides a manual disable/enable function. If for some reason, reminder evaluation needs to be disabled, it can be done through this option. This option should be given to a very limited number of people and can only be used by holders of the PXRM MANAGER key. When the issue that required disabling evaluation has been handled, reminder evaluation can be enabled again using this same option. Note that this option can be used to enable evaluation even if it was not disabled using this option. For example, if reminder evaluation was automatically disabled for an index rebuild, this option could be used to enable evaluation even though the index is still rebuilding. If that is done, the MailMan messages will start being sent again.

When reminder evaluation is disabled, the following options and protocols will be put out of order. Options:

```
PXRM DEF INTEGRITY CHECK ALL
PXRM DEF INTEGRITY CHECK ONE
PXRM ORDER CHECK TESTER
PXRM REMINDERS DUE
PXRM REMINDERS DUE (USER)
```

#### Protocols:

```
PXRM PATIENT LIST CREATE
PXRM EXTRACT MANUAL TRANSMISSION
```

When reminder evaluation is again enabled, these options and protocols will be put back in order.

Anytime reminder evaluation is disabled, a message with the subject "REMINDER EVALUATION DISABLED" will be sent to the Clinical Reminders mail group. The message will give the date and time that evaluation was disabled, list the reasons for disabling evaluation, and a search will be made for any Clinical Reminders TaskMan jobs that could be affected. There will be a list of those that are found; it will include the job description, the status (pending or running), and the task number. The results of any jobs that are already running will be unreliable and should be discarded. If possible, these jobs should be stopped, so that they don't waste system resources. None of the pending jobs should be allowed to start until evaluation is enabled again.

When evaluation is enabled, a message with the subject "REMINDER EVALUATION ENABLED" will be sent to the Clinical Reminders mail group. It will contain the date and time evaluation was disabled and when it was enabled. This gives you the exact period of when evaluation was disabled.

Here are examples of disable and enable messages:

```
Pending jobs should not be allowed to start until evaluation is enabled.
The results of running jobs should be discarded and if possible, running jobs
should be stopped.
Reason: index rebuild for file #45.
Reminders Due Report Jobs
Task number - 316820
Status - Active: Running
Time - Feb 08, 2012@12:40:28
User - CRCOORDINATOR, TWO
Reminder Patient List Jobs
Task number - 1980022
Status - Active: Running
Time - Apr 16, 2014@08:00
User - TASKMAN, PROXY USER
Task number - 1980207
Status - Active: Pending
Time - Apr 17, 2014@08:00
User - TASKMAN, PROXY USER
Reminder Extract Jobs
Task number - 342256
Status - Active: Pending
Time - Mar 06, 2012@20:04:25
User - CRCOORDINATOR, SIX
Task number - 1867565
Status - Active: Pending
Time - May 17, 2013@16:44:13
User - CRCOORDINATOR, SIX
Task number - 1902474
Status - Active: Pending
Time - Jul 17, 2013@17:16:30
User - CRCOORDINATOR, TEN
Task number - 1945932
Status - Active: Pending
Time - Oct 22, 2013@12:37:23
User - CRCOORDINATOR, THIRTY
Task number - 1946204
Status - Active: Pending
Time - Oct 23, 2013@12:37:35
User - CRCOORDINATOR, TWO
Task number - 1966964
Status - Active: Pending
Time - Feb 05, 2014@07:54:39
User - CRCOORDINATOR, THREE
Enter message action (in IN basket): Ignore//
```

```
Subj: REMINDER EVALUATION ENABLED [#122942] 04/16/14@10:30 2 lines
From: POSTMASTER (Sender: CRMANAGER, ONE) In 'IN' basket. Page 1
```

Reminder evaluation was enabled on Apr 16, 2014@10:30:49.

It was disabled on Apr 16, 2014@10:30:42.

Enter message action (in IN basket): Ignore//

See the Revision History in this manual and the Release Notes for additional changes made by PXRM\*2\*26.

## Patch 31 (PXRM\*2.0\*31)- Palliative Care National Clinical Template

This patch releases the Palliative Care National Clinical Template without any changes to routines, data dictionaries, or other package functions – "content" only. The reminder dialog is VA-PALLIATIVE CARE NATIONAL CLINICAL TEMPLATE (PC-NCT).

There are two Reminder Exchange entries that will be installed as part of this patch.

- 1. VA-PALLIATIVE CARE CONSULT
- 2. VA-PATCH 31 POST HS COMPONENTS

The VA Hospice and Palliative Care (HPC) program office has sponsored the development of this reminder dialog template to document provider-based palliative care consultations at all sites within VHA. This template is critical to improving the process and documentation of clinical care, and facilitating high quality palliative care and programmatic quality improvement. It is the intent of the HPC program office that this national template be formally distributed to VA palliative care programs for voluntary use throughout VHA in early 2014.

# Patch 36 (PXRM\*2\*36) Changes - Pneumococcal Reminders and Women's Health Taxonomy update

This patch installs two new or modified pneumococcal reminders, two new dialogs, and several new or modified terms and taxonomies, based on new guidelines.

ACIP recommends that adults aged >=19 years with immuno-compromising conditions, functional or anatomic asplenia, CSF leaks, or cochlear implants, and who have not previously received PCV13 or PPSV23, should receive a dose of PCV13 first, followed by a dose of PPSV23 at least 8 weeks later (Table). Subsequent doses of PPSV23 should

follow current PPSV23 recommendations for adults at high risk.

See the patch 36 Installation Guide for further details.

# Patch 34 (PXRM\*2\*34) Changes - Teratogenic Medication Reminder Order Check Update

The Teratogenic Medications Order Check Interim Solution was originally released as VistA patch PXRM\*2\*22 in July 2012. The interim solution is intended to have regular updates for clinical content, primarily to add newly approved medications with FDA Pregnancy Categories that warrant an order check. This patch, PXRM\*2\*34 represents the first such update. Included in this update are new medications, order check text changes consistent with the Notification of Teratogenic Medications project, support for reversal of tubal ligations, and updates to the taxonomies that define a women's medical inability to conceive a pregnancy.

This patch also includes an update to a single dialog element for the Epilepsy Initial note that was released with PXRM\*2.0\*30. That element had a mapped Health Factor Category, instead of a mapped Health Factor. This element updates that mapped item.

## Patch 24 (PXRM\*2\*24) Changes

The High Risk Mental Health Patient – Reminder & Flag project was released in two phases; the first phase was released in March 2012 with PXRM\*2\*18.

Phase 1 of this project provided the following:

- 1. Two new Scheduling reports that identify no-show "high risk for suicide" patients that missed their MH appointments,
- 2.A new national reminder and reminder dialog that will be used by providers to document results of following up with a high risk for suicide patient that missed a MH appointment, and
- 3.A new health summary type with MH-specific supporting information.

#### Phase 2 of this project provides the following:

- DG\*5.3\*849 DGPF New Category 1 Flag and Conversion.
- TIU\*1\*265 New PRF Category 1 Title HIGH RISK FOR SUICIDE
- SD\*5.3\*588 New proactive reports that list appointments for High Risk for Suicide patients who have appointments for the day. MHTC has been added to these reports and also to the background nightly job no-show reports.
- PXRM\*2\*24 New patch that includes an updated reminder (VA-MH HIGH RISK NO-SHOW FOLLOW-UP), a new computed finding (VA-PCMM MHTC), a new dialog that will display the MHTC, two new Reminder Definitions (VA-MH HIGH RISK NO-SHOW ADHOC RPT and VA- MHTC NEEDS ASSIGNMENT), and a new location list, VA-MHTC APPT STOP CODES LL, which is used in the Computed Finding: VA-Appointments for a Patient. The new Reminder Location List is consistent with the national list of MH Encounter Stop Codes defined for sites by the Office of Mental Health Services.
- OR\*3\*348 Order Entry changes for the Mental Health Treatment Coordinator Ability to select a Mental Health Treatment Coordinator as a notification recipient to receive notifications in CPRS. A new notification is also being released with this patch: SUICIDE ATTEMPTED/ COMPLETED. This informational notification is triggered by Clinical Reminders when a MH SUICIDE ATTEMPTED or MH SUICIDE COMPLETED health factor has been documented in PCE.
- GMTS\*2.7\*104 modifies two entries in the Health Summary Component file (142.1): MH HIGH RISK PRF HX and MH TREATMENT COORDINATOR. These components are used in the VA-MH HIGH RISK PATIENT and REMOTE MH HIGH RISK PATIENT Health Summaries, as well as being available for use in the Health Summary Ad hoc Report.
- Suicide Behavior Report (SBR) instrument The SBR is a new mental health template and a new entry in the MH TESTS & SURVEYS file (#601.71). It was distributed nationally in YS\*5.01\*103, as an enhancement to the Mental Health Assistant 3.0 Package. This instrument can be used by MH professionals to assess and reassess the High Risk for Suicide patient's behavior.

See the Release Notes, Installation & Setup Guide, and User Manual for more details about PXRM\*2\*24 enhancements and fixes.

## Patch 23 (PXRM\*2\*23) Changes

This patch is part of a multi-package build that contains FB\*3.5\*138 and PXRM\*2.0\*23. It supports the third increment for Project ARCH (Access to Care Received Closer to Home). FB\*3.5\*138:

This build adds the PROJECT ARCH REMINDER DELAY field (#38) to the FEE BASIS SITE PARAMETERS file (#161.4) that allows sites to customize number of days that the Project ARCH Clinical Reminder will become due again after the patient Declines or Refuses services offered. Two new options are also installed on the Project ARCH Menu. The ARCH

Eligibility Data Upload option allows sites to upload the national Project ARCH data extract files that contain the updates for Project ARCH Eligibility. The ARCH Clinical Reminder Due Delay option sets the value in the new PROJECT ARCH REMINDER DELAY field with a number between 1 and 180 days.

#### PXRM\*2\*23:

This build places updated VA-PROJECT ARCH VISN CONTRACT CARE PILOT ELIGIBILITY in the Reminder Exchange file. Updates to this reminder include a new Health Factor ARCH-SERVICE NEEDED THIS VISIT REFUSES. The updates also include a mandatory checkbox indicating that the patient has signed the consent form when the ARCH-SERVICE NEEDED THIS VISIT CONSENTS Health Factor is selected in the Reminder Dialog.

## Patch 22 (PXRM\*2\*22) Changes

Patch PXRM\*2\*22 releases two new National Reminder Order Checks for placing Teratogenic Medications in CPRS. A pre-installation routine will identify any previously identified components and rename them correctly, and the patch installation will create or overwrite VA-named, national reminder components

This patch also addresses two bug fixes in the Reminder Order Check setup. To address these fixes, the Reminder Order Check System had to be divided into two files:

- File 801 Reminder Order Check Items Group
  File 801 contains the grouping of Orderable Items. This file has also been modified to allow
  groups to include entries from the Drugs file, file #50, VA Generic file, file #50.6 and VA Drug
  Class file, file #50.605.
- File 801.1 Reminder Order Check Rules.
  File 801.1 contains the Reminder Order Check Rules.

These changes will allow sites to modify the Active and Testing Fields for National Rules.

This patch also fixes a Mumps error when the select order checks prompt times out.

To support the two-file structures, the existing menu options have been renamed and two new options will be released with this patch: Reminder Order Check Rule Inquiry and Reminder Order Check Test.

### Patch 21 (PXRM\*2\*21) Changes (Military Service Data Sharing (MSDS) project)

This patch is being released along with patches DG\*5.3\*797, EAS\*1.0\*92, IVM\*2.0\*141, DVB\*4.0\*62, in host file DG\_53\_P797.KID, to support technology and business changes that occur with the implementation of the Enrollment System Redesign (ESR) Military Service Data Sharing (MSDS) project. The MSDS project introduced an MSDS Broker that will be activated in ESR. The Broker will construct a definitive military service data set including data received from the VA/DoD Identity Repository (VADIR), the Beneficiary Identification and Records Locator System (BIRLS), and VistA. Once the MSDS Broker is activated, ESR becomes the authoritative source for Military Service Episode data. The verified data will be shared from ESR to all VistA sites of record for the Veteran. The ESR-verified Military Service Episode data cannot be edited by VistA except to add new episodes. An unlimited number of military service episodes per Veteran will now be supported.

### **Clinical Reminders Computed Findings**

One aspect of the Military Service Data Sharing (MSDS) project increases the number of military service episodes from three to an unlimited number. It provides new APIs for Clinical Reminders to use to get this data. These APIs are used to update the computed findings, VA-SERVICE BRANCH and VA-SERVICE SEPARATION DATES, so they can get data for all episodes of service.

NOTE: VA-LAST SEPARATION DATE is being renamed to VA-LAST SEPARATION DATES, because now it will return all service separation dates instead of just the last one.

A new list type computed finding: VA-OEF/OIF SERVICE (LIST) is also included. It can be used to build lists of patients with OEF/OIF service.

### Patch 18 (PXRM\*2\*18) Changes

The High Risk Mental Health Patient – National Reminder and Flag project includes a national reminder and reminder dialog that mental health professionals can use to follow up on patients with the "High Risk of Suicide" patient record flag ,who missed their Mental Health appointments. The project also includes reports to facilitate follow-up on these patients by Suicide Prevention Coordinators and other Mental Health professionals.

Veterans Health Administration (VHA) mental health officials estimate that there are 1,000 suicides per year among Veterans receiving care within VHA and as many as 5,000 per year among all living Veterans. This request supports the Secretary's Mental Health Strategic Plan that contains several initiatives pertaining to suicide prevention, including "Develop methods for tracking Veterans with risk factors for suicide and systems for appropriate referral of such patients to specialty mental health care."

Major objectives of this project include:

- 1. Identifying those Veterans who are at risk for suicide (Sites define this locally in the Patient Record Flag.)
- 2. Preventing high risk, depressed patients from failing to get appropriate care if they miss appointments. The plan is to evaluate patients for depression so that appropriate referrals can be made, identify those Veterans with a history of suicide attempt or suicidal ideation who miss an appointment, notify the mental health professional of the missed appointment, and track efforts to reach this Veteran. If the Veteran is not reached after three attempts, a staff member may need to call other patient contacts or request a welfare check.

The purpose of this project is to release 1) two new Scheduling reports that identify no-show "high risk for suicide" patients that missed their MH appointments, 2) a new national reminder and reminder dialog that will be used by providers to document results of following up with a high risk for suicide patient that missed a MH appointment, and 3) provide a health summary type with MH-specific supporting information.

**Phase 1:** The first release of the High Risk Mental Health Patient- Reminder and Flag (HRMHP) project includes five patches, which will be installed as a combined build. The second phase of this project will be released in a future build.

#### 1. SD\*5.3\*578

This Scheduling patch provides two new MH NO SHOW Scheduling Reports for use by Suicide Prevention Coordinators and other Mental Health professionals. The reports will support following up with High Risk for Suicide patients that missed a scheduled MH appointment.

#### 2. DG\*5.3\*836

This Registration – Patient Record Flag patch provides new interfaces used by the Scheduling and Reminder patches to determine the High Risk for Suicide flag status on a specified date.

#### 3. PXRM\*2\*18

This patch creates a national reminder to notify clinicians of a patient's risk of suicide and creates a dialog that the clinicians can use to document follow-up with the high risk patients when they miss MH appointments.

- HIGH RISK MH NO-SHOW FOLLOW-UP Reminder Definition
- HIGH RISK MH NO-SHOW Follow-up Reminder Dialog

This Clinical Reminder patch supports the Scheduling patch by providing a national Reminder Location List of Mental Health stop codes used for scheduled appointments. Additionally, this patch includes miscellaneous clinical reminder maintenance changes. Details of all the Clinical Reminder changes can be found in the Release Notes.

#### 4. GMTS\*2.7\*99

This patch installs four Health Summary Components and two Health Summary Types, a single Health Summary Object, and a single TIU/Health Summary object.

#### 5. TIU\*1\*260

The Text Integration Utility patch contains a single Health Summary Object and a single new TIU Health Summary object based on the new VA-MH HIGH RISK PATIENT Health Summary Type from GMTS\*2.7\*99. The TIU/HS object will be used in the VA-MH HIGH RISK NO SHOW FOLLOW-UP Reminder Dialog distributed in PXRM\*2\*18.

See the Clinical Reminders patch 18 Release Notes for specific details about enhancements and changes in patch 18 and related GMTS, OR, and TIU patches.

#### Patch 16 (PXRM\*2\*16) Changes

The Clinical Reminders patch PXRM\*2\*16 and bundled patches (OR\*3.0\*280, PSJ\*5.0\*226) released new functionality that enables sites to create their own CPRS Order Checks using Clinical Reminder

Definitions or Terms. Both Reminder Exchange and the Review Date Report have been enhanced to support the Clinical Reminder Order Check functionality.

This patch contains a new computed finding, VA-ACTIVE PATIENT RECORD FLAGS.

This computed finding will allow sites to evaluate whether a patient has a specific active record flag on the date of evaluation.

Sites can create local order checks using the Clinical Reminder functionality. These Order Checks will occur at the time the user clicks on the accept button when placing an order in CPRS. This functionality is available with PXRM\*2.0\*16 and CPRS 28. The set-up of a Clinical Reminders Order Check consists of two parts:

- Creating a group of orderable items that the rules should be applied to.
- Creating the rules that will be applied to the orderable item when accepting an order in CPRS. It will be possible to have the same orderable item in multiple groups. Each rule assigned to the different groups will be evaluated when placing the orderable item in CPRS. The order check groups and the rule will be stored in the Reminder Order Check file, file #801

**Note:** Sites should evaluate all requests to create a Clinical Reminder Order Check to determine the importance of adding it. The more reminders that are used in an order check, the more they could affect the performance of the order check system. This file stores a pointer to an entry in the Orderable Item file, file #101.43. The reminder Order Check file **will not** automatically be updated with changes to the Orderable Item file, such as inactivating an existing orderable item, or if an ancillary package adds an item to the Orderable Item file.. The entries in Reminder Order Check file, file #801 need to be evaluated by the site anytime an update is done to the Orderable Item file, file #101.43. The site will be need to determine if it needs to remove an orderable item from an existing group or if it needs to add an orderable item to existing group.

A new menu Reminder Orderable Item Group Menu ...[ PXRM ORDERABLE ITEM GROUP MENU] has been added to the Reminder Managers Menu [PXRM MANAGERS MENU]

#### Patch 17 (PXRM\*2\*17) Changes

This project released a new national reminder and reminder dialog to be used by Polytrauma Specialty providers to identify potential OEF/OIF Polytrauma patients and mark the patient with a Polytrauma Marker (health factor) when appropriate.

The Polytrauma Marker project includes two patches:

PXRM\*2\*17 - Clinical Reminder patch with Polytrauma Marker reminder/dialog
USR\*1\*33 - ASU patch with API that checks to see if a user is a member of a specific User Class

This project was requested by the Office of Patient Care Services (PCS) to provide a means of improving care provided to Veterans and active duty patients suffering from blast-related polytrauma (multiple complex injuries). VHA has identified this as one of several initiatives that will support health care of Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF) Veterans.

The Polytrauma Assessment reminder definition contains a new national reminder term which will be predefined with the new computed finding for the ASU User Class. Sites will be required to add the Computed Finding Parameter to the national reminder term. The parameter should specify the local ASU User Class that identifies specialty provider members that focus on Polytrauma and Rehabilitation services at the local facility.

The Polytrauma Assessment reminder uses a series of national Reminder Taxonomies to determine whether the patient has multiple diagnoses that identify the patient as a potential Polytrauma patient. The combination of the diagnoses found and the user's ASU user class will determine whether the reminder is applicable to the patient.

If the reminder is applicable to the patient and the patient has not been previously assessed for Polytrauma, the reminder will be DUE and will appear on the cover sheet and in the reminder drawer on the CPRS notes tab.

The reminder will be resolved by the provider responding to reminder dialog responses that result in the assessment that the patient "is" or "is not" an OEF/OIF Polytrauma patient. The responses will cause Health Factors to be created that make the reminder no longer due.

If the CPRS user views Clinical Maintenance output for the Polytrauma Assessment reminder and the user is not a member of the ASU User Class, then a message will be included in the Patient Cohort section indicating that the ASU User Class was not found.

The new Polytrauma Assessment reminder dialog was created outside the OI Field Office and tested at three sites based on input from Rehabilitation Service stakeholders.

This reminder/dialog includes branching logic that will use the new national reminder term that is defined with the ASU user class used by the reminder definition. The branching logic will check to see if the CPRS user is a member of the ASU user class before continuing with the reminder dialog. If the CPRS user is not a member of the ASU user class, then the reminder dialog will display text indicating the reminder is not applicable and the user is not the appropriate user to complete the reminder dialog.

Completing the reminder dialog will cause a progress note to be created and Health Factors will be populated in PCE. These health factors will be used by future reminder definition evaluation to indicate the reminder is resolved.

#### **National Reminders**

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, and MST,. Other national reminders are being developed under the guidance of the National Clinical Reminders Workgroup (NCRW)

Guideline-related reminders are developed for two reasons:

- 1. To provide reminders for sites that don't have reminders in place for a specific guideline (e.g., 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 (e.g., IHD, Mental Health).

## **Updates to National Reminders in Patch 18**

- **1.** Updated branching logic reminders for OEF/OIF screening:
  - a. Fix the problem that patients who do not have the required LSSD entry are not having the items show as due when they have been done.
  - b. Remove refusals and other exclusions from the branching logic if not done, then show the item as open and allow the parent reminder to use the exclusions instead of also evaluating them in the branching logic. This makes all 7 of the branching logic reminders consistent.
- **2.** Updated the URLs for MH screening.
- **3.** Added '0' to the Within Category Rank for EF-NO BLAST/EXPLOSION INJURY and EF-NO BULLET INJURY in the reminder VA-EMBEDDED FRAGMENTS RISK EVALUATION.
- **4.** Added occurrence count of 4 to AUD C in the alcohol screening reminder.
- **5.** Fixed header/info text in AAA reminder.
- **6.** Distributed H1N1 reminders and dialog via patch and distribute and inactivate.
- **7.** Updated VA-ALCOHOL F/U POS AUDIT-C dialog to display the education and advice interventions without a box around both and also to have the results of an AUDIT-10 go into the progress note.
- **8.** Added VA-TB/POSITIVE PPD.

#### Detailed descriptions:

1. Updated branching logic reminders

VA-BL DEPRESSION SCREEN

Removed RT.VA-ACTIVE DUTY

Cohort: changed to due for all

Resolution: changed to resolve for any entry that is not before the LSSD

Changed the logic from

MRD(VA-DEPRESSION SCREEN NEGATIVE, VA-DEPRESSION SCREEN POSITIVE)>MRD(VA-LAST SERVICE SEPARATION DATE)

To

MRD(VA-DEPRESSION SCREEN POSITIVE, VA-DEPRESSION SCREEN NEGATIVE)'<MRD(VA-LAST SERVICE SEPARATION DATE)

VA-BL ALCOHOL SCREEN

Removed RT.VA-ACTIVE DUTY

Cohort: change to due for all

Removed exclusions

Resolution: changed to resolve for any entry that is not before the LSSD

#### VA-BL PTSD SCREEN

Removed RT.VA-ACTIVE DUTY

Cohort: change to due for all

Removed exclusions

Resolution: change to resolve for any entry that is not before the LSSD

Add a '0' to the Within Category Rank for the health factors.

#### VA-BL OEF/OIF EMBEDDED FRAGMENTS

VA-BL OEF/OIF FEVER

VA-BL OEF/OIF GI SX

VA-BL OEF/OIF SKIN SX

Removed RT.VA-IRAQ/AFGHAN PERIOD OF SERVICE and substitute CF.VA-LAST SERVICE SEPARATION DATE

Removed RT.VA-ACTIVE DUTY

Cohort: change to due for all

Resolution: change to resolve for any entry that is not before the LSSD

#### 2. Updated URLs

VA-ALCOHOL USE SCREEN (AUDIT-C)

VA-DEPRESSION SCREENING

**VA-PTSD SCREENING** 

- 3. VA-EMBEDDED FRAGMENTS RISK EVALUATION: Added '0' to the Within Category Rank for EF-NO BLAST/EXPLOSION INJURY and EF-NO BULLET INJURY
- 4. VA-ALCOHOL USE SCREENING (AUDIT-C)
  - a. Added occurrence count of 4 to AUD C in the alcohol screening reminder
  - b. Updated the dialog by changing 'Optional open and optional complete (partial complete possible)' to 'Optional open and required complete or cancel before finish'.
- 5. Fixed grammatical error in VA-TEXT INFO SCREEN FOR AAA
- 6. Distributes reminders VA-INFLUENZA H1N1 IMMUNIZATION, VA-INFLUENZA H1N1 IMMUNIZATION HIGH RISK, and dialog VA-INFLUENZA H1N1 IMMUNIZATION (DIALOG). Distribute as INACTIVE.
- 7. Updated VA-ALCOHOL F/U POS AUDIT-C dialog to display the education and advice interventions without a box around both and also to have the results of an AUDIT-10 go into the progress note. Add an \* to the word 'required' in 2 of the captions.
- 8. Added VA-TB/POSITIVE PPD. This updates the taxonomy VA-TB/POSITIVE PPD by adding the ICD diagnosis code 795.51

#### **Updates to National Reminders in Patch 12**

The following Reminder components were updated and redistributed with PXRM\*2\*12:

| Component | Name | Change |
|-----------|------|--------|

|    |                             | Added SUD; added text dialog element for   |
|----|-----------------------------|--|
|    |                             | local health summary object for prior      |
|    |                             | AUDIT-C display; reversed order of         |
|    | VA-ALCOHOL AUDIT-C POSITIVE | feedback and advice; made nothing          |
| RD | F/U EVAL                    | required                                   |
|    | VA-EMBEDDED FRAGMENTS       |  |
| RD | RISK EVALUATION             | New  |
| RD | VA-IRAQ & AFGHAN POST-      | Added a FF to the cohort logic             |
|    | DEPLOY SCREEN               |  |
|    |                             | Changed dialog to have documentation of    |
| RD | VA-TBI SCREENING            | discussion of positive screen              |
| RL | VA-OEF/OIF EXCLUSION STOPS  | Added ultrasound stop code                 |
|    | VA-ALCOHOL AUDIT-C POSITIVE | Added SUD clinic visit exclusions          |
| RM | F/U EVAL                    |  |
| RM | VA-DEPRESSION SCREEN        | Updated URLs and description.              |
|    | VA-EMBEDDED FRAGMENTS       |  |
| RM | RISK EVALUATION             | New  |
|    | VA-IRAQ/AFGHAN POST         | Uses OEF/OIF in dialog and logic;          |
| RM | DEPLOYMENT SCREEN           | updated logic, fixed active duty problem   |
|    | VA-OEF/OIF MONITOR          | Removed dialog from this reporting         |
| RM | REPORTING                   | reminder.                                  |
|    |                             | Changes to OEF/OIF in dialog and logic,    |
| RM | VA-TBI SCREENING            | fixed active duty issue                    |
| RT | VA-ACTIVE DUTY              | Updated active duty term description       |
|    |                             | Removed MH test from term VA-              |
| RT | VA-ALCOHOL NONE PAST 1YR    | ALCOHOL NONE PAST 1YR                      |
|    |                             | Updated to include CFs for OEF/OIF         |
| RT | VA-IRAQ/AFGHAN SERVICE      | service that point to the patient file     |
| RX | VA-OEF/OIF MONITOR          | New extract                                |
|    |                             | Changed description to include mass, pain, |
| TX | VA-BREAST TUMOR             | abnormality                                |
| TX | VA-DEPRESSION               | Updated to FY09 definition                 |
| TX | VA-DEPRESSION OUTPT         | Updated to FY09 definition                 |
| TX | VA-DIABETES                 | Added 250.91-250.93                        |
| TX | VA-HIGH RISK FOR FLU        | New  |
|    | VA-HIGH RISK FOR            |  |
| TX | FLU/PNEUMONIA               | Inactivated                                |
| TX | VA-HIGH RISK FOR PNEUMONIA  | New  |

## **Updates to National Reminders in Patch 11**

| Reminder                                | Change  |
|---|---|
| VA-ALCOHOL AUDIT-C POSITIVE F/U<br>EVAL | Fixed logic   |
| VA-ALCOHOL USE SCREEN (AUDIT-C)         | Changes to dialog.  Removed date from term and moved to the |

|   | health factor for "No alcohol in the past 1 year"  |
|---|--|
| VA-BL OEF/OIF FEVER                             | Fixed logic  |
| VA-BL OEF/OIF GI SX                             | Fixed logic  |
| VA-BL OEF/OIF SKIN SX                           | Fixed logic  |
| VA-DEPRESSION SCREENING                         | Changes to terms and dialog; verify/report any changes   |
| VA-IRAQ & AFGHANISTAN POST<br>DEPLOYMENT SCREEN | <ul> <li>Multiple changes:</li> <li>Added Combat Vet to logic</li> <li>Excluded those who did not serve from denominator</li> <li>Added cognitive impairment to exclusions</li> <li>Added done elsewhere to resolutions</li> <li>Updated dates of health factors for depression/PTSD to 10/1/08</li> </ul> |
| VA-PTSD SCREENING                               | Added Veteran status  Added Acute Illness to the dialog  |

#### **National Reminders**

- 1. VA-\*IHD 412 ELEVATED LDL REPORTING
- 2. VA-\*IHD 412 LIPID PROFILE REPORTING
- 3. VA-\*IHD ELEVATED LDL REPORTING
- 4. VA-\*IHD LIPID PROFILE REPORTING
- 5. VA-AAA SCREENING
- 6. VA-ALCOHOL ABUSE SCREEN (AUDIT-C)
- 7. VA-ALCOHOL AUDIT-C POSITIVE F/U EVAL
- 8. VA-ALCOHOL USE SCREEN (AUDIT-C)
- VA-ANTIPSYCHOTIC MED SIDE EFF EVAL
- 10. VA-DEPRESSION SCREENING
- 11. VA-EMBEDDED FRAGMENTS RISK EVALUATION
- 12. VA-EMBEDDED FRAGMENTS SCREEN
- 13. VA-GEC REFERRAL CARE COORDINATION
- 14. VA-GEC REFERRAL CARE RECOMMENDATION
- 15. VA-GEC REFERRAL NURSING ASSESSMENT
- 16. VA-GEC REFERRAL SOCIAL SERVICES
- 17. VA-GEC REFERRAL TERM SET (CC)
- 18. VA-GEC REFERRAL TERM SET (CR)
- 19. VA-GEC REFERRAL TERM SET (NA)
- 20. VA-GEC REFERRAL TERM SET (SS)
- 21. VA-HEP C RISK ASSESSMENT
- 22. VA-HTN ASSESSMENT BP >=140/90
- 23. VA-HTN ASSESSMENT BP >=160/100
- 24. VA-HTN LIFESTYLE EDUCATION
- 25. VA-IHD ELEVATED LDL
- 26. VA-IHD LIPID PROFILE
- 27. VA-INFLUENZA H1N1 IMMUNIZATION
- 28. VA-INFLUENZA H1N1 IMMUNIZATION HIGH RISK
- 29. VA-IRAQ & AFGHAN POST-DEPLOY SCREEN
- 30. VA-MH HIGH RISK NO-SHOW ADHOC RPT
- 31. VA-MH HIGH RISK NO-SHOW FOLLOW-UP
- 32. VA-MHTC NEEDS ASSIGNMENT
- 33. VA-MST SCREENING
- 34. VA- EPI LAB EXTRACT
- 35. VA- EPI RX EXTRACT
- 36. VA-PNEUMOCOCCAL IMMUNIZATION PCV13
- 37. VA-PNEUMOCOCCAL IMMUNIZATION PPSV23.docx
- 38. VA-OEF/OIF MONITOR REPORTING
- 39. VA-POLYTRAUMA MARKER
- 40. VA-POS DEPRESSION SCREEN FOLLOWUP
- 41. VA-PROJECT ARCH VISN CONTRACT CARE PILOT ELIGIBILITY
- 42. VA-PTSD REASSESSMENT (PCL)
- 43. VA-PTSD SCREENING
- 44. VA-QUERI REPORT IHD ELEVATED LDL
- 45. VA-QUERI REPORT LIPID STATUS
- 46. VA-TBI SCREENING
- 47. VA-TBI/POLYTRAUMA REHAB/REINTEGRATION PLAN OF CARE
- 48. VA-TERATOGENIC MEDICATIONS ORDER CHECK
- 49. VA-VANOD SKIN ASSESSMENT
- 50. VA-VANOD SKIN REASSESSMENT

- 51. VA-WH MAMMOGRAM REVIEW RESULTS
- 52. VA-WH MAMMOGRAM SCREENING
- 53. VA-WH PAP SMEAR REVIEW RESULTS
- 54. VA-WH PAP SMEAR SCREENING

## Patches Released since V2.0

| PXRM*2*1  | National Women's Health Reminders                      |
|-----------|--|
| PXRM*2*2  | GEC NATIONAL ROLLUP                                    |
| PXRM*2*3  | NATIONAL MYHEALTHEVET REMINDERS                        |
| PXRM*2*4  | REMOVAL OF OLD-STYLE MRD                               |
| PXRM*2*5  | NATIONAL VA-IRAQ & AFGHAN POST-DEPLOY SCREEN REMINDERS |
| PXRM*2*6  | INTEGRATION WITH NEW MENTAL HEALTH PACKAGE             |
| PXRM*2*8  | NATIONAL VA-TBI SCREENING REMINDER                     |
| PXRM*2*9  | PXRM CODE SET UPDATE protocol fix                      |
| PXRM*2*10 | SKIN RISK ASSESSMENT                                   |
| PXRM*2*11 | REMINDER AND DIALOG UPDATES                            |
| PXRM*2*12 | MH REMINDERS AND DIALOGS                               |
| PXRM*2*15 | NATIONAL VA-TBI/POLYTRAUMA REHABILITATION DIALOG       |
| PXRM*2*16 | CLINICAL REMINDER ORDER CHECKS                         |
| PXRM*2*17 | POLYTRAUMA MARKER                                      |
| PXRM*2*18 | MH HIGH RISK PHASE 1                                   |
| PXRM*2*20 | ARCH PILOT - ACCESS RECEIVED CLOSER TO HOME 1.0        |
| PXRM*2*21 | MILITARY SERVICE COMPUTED FINDING UPDATES              |
| PXRM*2*22 | TERATOGENIC DRUGS ORDER CHECK                          |
| PXRM*2*23 | ARCH PILOT UPDATE                                      |
| PXRM*2*24 | MH HIGH RISK PHASE 2                                   |
| PXRM*2*26 | CLINICAL REMINDERS ICD-10 CHANGES                      |
| PXRM*2*27 | HOMELESSNESS SCREENING REMINDER & LIPID STATIN RE      |
| PXRM*2*28 | WOMEN'S HEALTH REMINDERS                               |
| PXRM*2*29 | MH NATIONAL EVIDENCE BASED PSYCHOTHERAPY REM           |
| PXRM*2*30 | EPILEPSY CENTERS OF EXCELLENCE REMINDER DIALOG         |
| PXRM*2*31 | PALLIATIVE CARE PATCH                                  |
| PXRM*2*32 | EPILEPSY CENTERS OF EXCELLENCE REMINDER DIALOG         |
| PXRM*2*34 | VA-TERATOGENIC MEDIATION ORDER CHECK                   |
| PXRM*2*36 | PNEUMOCOCCAL REMINDERS AND WOMEN'S HEALTH TAXONOMY     |
| UPDATE    |  |
| PXRM*2*38 | LUNG CANCER DIALOG                                     |
| PXRM*2*39 | AIRBORNE HAZARD/BURNPIT EVALUATION                     |
| PXRM*2*40 | MHV SECURE MESSAGING FIX                               |
| PXRM*2*50 | ICD10 AND SNOMED CODES                                 |
| PXRM*2*51 | TERATOGENIC MEDICATION REMINDER ORDER CHECK            |
| PXRM*2*52 | HEPATITIS C UPDATES                                    |
| PXRM*2*54 | NATIONAL EBOLA REMINDER                                |
| PXRM*2*55 | PNEUMOCOCCAL IMMUNIZATION UPDATES                      |
| PXRM*2*56 | VETERANS CHOICE REMINDER DIALOG                        |
| PXRM*2*57 | ADVANCE DIRECTIVE CLINICAL REMINDER DIALOG             |

NOTE: Several of these patches to the Clinical Reminders package have used the recently approved expedited patch process. These patches release new and updated National VHA reminders to the field, without any changes to routines, data dictionaries, or other package functions - they are "content-only" patches.

## **Reminders Maintenance**

This section describes all the major components of the Clinical Reminders application. It describes the menus and options, and provides examples of how to use these to define reminders, create dialogs, and how to modify, troubleshoot, and maintain them for your site.

## Reminder Managers Menu

This is a list of the options and menus on the Reminders Managers Menu.

```
Reminders Managers Menu [PXRM MANAGERS MENU]
          Reminder Computed Finding Management ... [PXRM CF MANAGEMENT]
                 Computed Finding List
          CRL
          CFI
                 Reminder Computed Finding Inquiry
          CFE
                 Add/ Edit Computed Finding
          Reminder Definition Management ... [PXRM REMINDER MANAGEMENT]
                 List Reminder Definitions
          RΤ
                 Inquire about Reminder Definition
          RF.
                 Add/Edit Reminder Definition
          RC.
                Copy Reminder Definition
                Activate/Inactivate Reminders
          RA
                Reminder Edit History
          RH
                Integrity Check Selected
                Integrity Check All
   SM
          Reminder Sponsor Management [PXRM SPONSOR MANAGEMENT]
                List Reminder Sponsors
                Reminder Sponsor Inquiry
                Add/Edit Reminder Sponsor
          Reminder Taxonomy Management ... [PXRM TAXONOMY MANAGEMENT]
   MXT
          Reminder Term Management ... [PXRM TERM MANAGEMENT]
                List Reminder Terms
          ΤI
                 Inquire about Reminder Term
          TE
                 Add/Edit Reminder Term
                 Copy Reminder Term
  T.M
          Reminder Location List Management ... [PXRM LOCATION LIST MANAGEMENT]
                List Location Lists
                Location List Inquiry
          LΙ
                Add/Edit Location List
          LC
                 Copy Location List
   RX
          Reminder Exchange [PXRM REMINDER EXCHANGE]
   RТ
          Reminder Test [PXRM REMINDER TEST]
   OS
          Other Supporting Menus ... [PXRM OTHER SUPPORTING MENUS]
                PCE Table Maintenance ...
          ΤМ
                 PCE Coordinator Menu ...
                 Health Summary Coordinator's Menu ...
                 Print Blank Encounter Forms ...
          QO
                Enter/edit quick orders
   INFO
          Reminder Information Only Menu ... [PXRM INFO ONLY]
              List Reminder Definitions
          RL
          RT
                Inquire about Reminder Definition
               List Taxonomy Definitions
          TXL
                Inquire about Taxonomy Item
          TRI
                List Reminder Terms
          TRI
                Inquire about Reminder Term
                 List Reminder Sponsors
   DM
          Reminder Dialog Management ... [PXRM DIALOG MANAGEMENT]
   DΡ
          Dialog Parameters ...
                 RS
                        Reminder Resolution Statuses
                 HR
                        Health Factor Resolutions
                FP
                       General Finding Type Parameters
```

```
FΤ
                     Finding Item Parameters
              TП
                     Taxonomy Dialog Parameters
       DΤ
              Reminder Dialogs
       DR
              Dialog Reports
                             Reminder Dialog Elements Orphan Report
                             Empty Reminder Dialog Report
                             Check all active reminder dialogs for invalid items
                     CH
                             Check Reminder Dialog for invalid items
       ΙA
               Inactive Codes Mail Message
CP
       CPRS Reminder Configuration [PXRM CONFIGURATION MANAGEMENT]
              Add/Edit Reminder Categories
       CL
              CPRS Lookup Categories
              CPRS Cover Sheet Reminder List
       CS
              Mental Health Dialogs Active
       MH
       PN
              Progress Note Headers
       RA
              Reminder GUI Resolution Active
              Default Outside Location
       DL
       РΤ
              Position Reminder Text at Cursor
       WH
              WH Print Now Active
       GEC
              GEC Status Check Active
       TIU
              TIU Template Reminder Dialog Parameter
              New Reminder Parameters
RP
       Reminder Reports ... [PXRM REMINDER REPORTS]
       RD
              Reminders Due Report
              Reminders Due Report (User)
       RDII
       RDT
              User Report Templates
       EPT
              Extract EPI Totals
       EPF
              Extract EPI List by Finding and SSN
       EQT
              Extract QUERI Totals
       GEC
              GEC Referral Report
       REV
              Review Date Report
       FUR
              Finding Usage Report
MST
       Reminders MST Synchronization Management ... [PXRM MST MANAGEMENT]
              Reminders MST Synchronization
              Reminders MST Synchronization Report
       Reminder Patient List Menu ... [PXRM PATIENT LIST MENU]
              List Rule Management
              Patient List Management
       Reminder Parameters ... [PXRM REMINDER PARAMETERS]
PAR
       ESD
              Edit Site Disclaimer
       EWS
              Edit Web Sites
              Edit Number of MH Questions
ROI
       Reminder Orderable Item Menu
              Add/Edit Reminder Orderable Item Group
       ΟI
              Reminder Orderable Item Inquiry
       ОТ
              Reminder Orderable Item Group Test
ΧM
       Reminder Extract Menu [PXRM EXTRACT MENU]
              Reminder Extract Management
              Extract Definition Management
              Extract Counting Rule Management
              Extract Counting Group Management
              List Rule Management
GEC
       GEC Referral Report
                             [GEC REFERRAL REPORT]
```

#### Options not on a menu

The option PXRM DISABLE/ENABLE EVALUATION provides a manual disable/enable function. If for some reason, reminder evaluation needs to be disabled, it can be done through this option. This option should be given to a very limited number of people and can only be used by holders of the PXRM MANAGER key. When the issue that required disabling evaluation has been handled, reminder

evaluation can be enabled again using this same option. Note that this option can be used to enable evaluation even if it was not disabled using this option. For example, if reminder evaluation was automatically disabled for an index rebuild, this option could be used to enable evaluation even though the index is still rebuilding. If that is done, the MailMan messages will start being sent again.

## **Security Key**

#### PXRM MANAGER

**DESCRIPTION:** 

Assign this key to people who are responsible for managing Clinical Reminders.

#### Options/actions requiring key

#### PXRM DISABLE/ENABLE EVALUATION

(see above description)

#### PXRM FINDING USAGE REPORT on the PXRM REMINDER REPORTS menu

• The field called **Creator** is populated when someone creates a reminder report template. This field will be used when someone accesses the template. The user accessing the template must either be the same user who created the template or must hold the PXRM MGR key to be able to access the option to edit the template. If the user is not the creator and does not hold the PXRM MANAGER key, they will not see the prompt to edit the template.

#### **Patient List Management Option**

Actions

- Create Patient List
  - Secure List? prompt
  - If the answer to this prompt is "YES," the list becomes a private list, which means that the only people who can view the list are the creator, anyone who the creator has given view access, and anyone who holds the PXRM MANAGER KEY.
- ED (Edit Patient List) if you are the creator of the list you can use this action to edit the name and type of list; if you hold the PXRM MANAGER key you can also edit the creator of the list.
- USR (View Users) this action is applicable only to private lists. If you are the creator of the list or hold the PXRM MANAGER key you can use this action to give other users either view only or full access to the patient list. You can also remove a user's access to the list.

## **Reminder Managers Menu Descriptions**

| Option                            | Option Name                | Syn  | Description  |
|-----------------------------------|----------------------------|------|--|
| Reminder Computed                 | PXRM CF                    | CF   | This option provides tools for viewing and editing   |
| Finding Management                | MANAGEMENT                 |      | reminder computed findings.  |
| Reminder Definition               | PXRM REMINDER              | RM   | This menu contains options for creating, copying,  |
| Management                        | MANAGEMENT                 |      | and editing reminder definitions, as well as the   |
|                                   |                            |      | options for maintaining the parameters used by   |
| Danie dan Carraga                 | DVDM CDONCOD               | CNA  | CPRS for reminder processing.  |
| Reminder Sponsor Management       | PXRM SPONSOR<br>MANAGEMENT | SM   | A Reminder Sponsor is the organization or group that sponsors a Reminder Definition, such as the   |
| Management                        | MANAGEMENT                 |      | Office of Quality and Performance. Options on this   |
|                                   |                            |      | menu let you view, define, or edit Reminder  |
|                                   |                            |      | Sponsors.  |
| Reminder Taxonomy                 | PXRM                       | TXM  | This option provides all aspects of taxonomy   |
| Management                        | TAXONOMY                   |      | management including creation, editing, and  |
|                                   | MANAGEMENT                 |      | inquiry.   |
| Reminder Term                     | PXRM TERM                  | TRM  | This menu allows you to edit, map, and view  |
| Management                        | MANAGEMENT                 | 1.54 | reminder terms.  |
| Reminder Location List Management | PXRM LOCATION<br>LIST      | LM   | Location Lists store locations as stop codes or hospital locations. This option provides tools for |
| Management                        | MANAGEMENT                 |      | viewing and editing location lists.  |
| Reminder Exchange                 | PXRM REMINDER              | RX   | This option allows sites to exchange reminder  |
| J                                 | EXCHANGE                   |      | definitions, dialogs, and other reminder   |
|                                   |                            |      | components via MailMan messages and host   |
|                                   |                            |      | files.   |
| Reminder Test                     | PXRM REMINDER              | RT   | This utility helps you test and troubleshoot your  |
|                                   | TEST                       |      | reminders when you create them or when you   |
| Other Supporting                  | PXRM OTHER                 | os   | have problems.  This option contains menus from related  |
| Menus                             | SUPPORTING                 | US   | packages such as PCE and Health Summary.   |
| 11131130                          | MENUS                      |      | pastages such as the and theath cultillary.  |
| Reminder Information              | PXRM INFO ONLY             | INFO | This menu provides information-only options for  |
| Only Men                          |                            |      | users who need information about reminders but   |
|                                   |                            |      | do not need the ability to make changes.   |
| Reminder Dialog                   | PXRM DIALOG                | DM   | This menu allows maintenance of the parameters   |
| Management                        | MANAGEMENT                 |      | used by CPRS for reminder dialog processing.   |

| Option   | Option Name                    | Syn | Description   |
|--|--------------------------------|-----|---|
| Reminder Reports                               | PXRM REMINDER<br>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<br>Synchronization<br>Management | PXRM MST<br>MANAGEMENT         | MST | This option provides the Clinical Reminders MST management options. These options give you the ability to synchronize the MST History file #29.11 with MST data recorded elsewhere and to determine when the synchronization was last done.                         |
| Reminder Patient List<br>Menu                  | PXRM PATIENT<br>LIST MENU      | PL  | This menu contains options to manage list rules and patient lists.  |
| Reminder Orderable<br>Item Menu                | PXM ORDER                      | OI  | This menu contains options to allow sites to create Reminder Order Checks   |
| Reminder Parameters                            | PXRM REMINDER<br>PARAMETERS    | PAR | This menu contains the options, Edit Site Disclaimer and Edit Web Sites, which allow you to modify the parameters for these items.  |
| Reminder Extract Menu                          | PXRM EXTRACT<br>MENU           | XM  | This option allows management of extract definitions, extract runs, and extract transmissions.  |
| GEC Referral Report                            | PXRM GEC<br>REFERRAL<br>REPORT | GEC | This is the option that is used to generate GEC Reports. GEC (Geriatrics Extended Care) is used for referral of geriatric patients to receive further care  |

## **Reminder Computed Finding Management**

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 or term. When none of the standard finding types will work, a computed finding can be used.

The Clinical Reminders application provides a set of national computed findings. Sites can also create their own.

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.

#### Changes made by PXRM\*2\*26

The national computed finding VA-REMINDER DEFINITION evaluates a reminder definition. If it is used recursively (evaluating the same definition that is calling it), it will generate framestack errors. This can wreak havoc with production systems. Remedy ticket #761925. Code was added to prevent this. Also, a check for recursion was added to the Integrity Checker.

The print name of VA-REMINDER DEFINITION was changed from VA-Reminder Definition Computed Finding to VA-Reminder Definition. The variable TEXT was not set before, but is now set to "Reminder: "\_NAME, where NAME is the .01 of the reminder being evaluated. This means that the name of the reminder definition that was evaluated will be displayed in the clinical maintenance output.

The description for VA-FILEMAN DATE was updated to make it clear that the global reminder dates PXRMDOB, PXRMDOD, and PXRMLAD can also be used with this computed finding.

The computed finding inquiry was not displaying the Type; Type was added.

When a computed finding was selected to be used as a finding in a definition or term, the description of the computed finding was displayed on the screen to help the user set it up properly. If Type was not included in the description, then it was not displayed. The computed finding help was upgraded to include Type, Class, and Description, and is now displayed with the Browser instead of just written to the screen.

In the past we have had problems with updated national computed findings being overwritten by outdated versions that were installed via Reminder Exchange. To prevent further occurrences, Reminder Exchange was modified so it will not install national computed findings. From this point on, national computed findings will only be distributed via a KIDS build.

EXPECTED SIGNER and EXPECTED COSIGNER were added as CSUBs to the VA-PROGRESS NOTE computed finding. The description was updated to include these.

When using the special Reminder Location List VA-ALL LOCATIONS in the computed finding VA-APPOINTMENTS FOR A PATIENT, a message was being erroneously displayed (Remedy ticket #916079):

^TMP(NODE,\$J,1,0)=Warning Reminder Location List VA-ALL LOCATIONS ^TMP(NODE,\$J,2,0)=does not contain or expand to contain any hospital locations!

This was corrected.

#### **Reminder Computed Finding Management Menu**

| Syn. | Name                                  | Option Name                          | Description  |
|------|---------------------------------------|--------------------------------------|--|
| CFE  | Add/Edit Reminder<br>Computed Finding | PXRM COMPUTED<br>FINDING EDIT        | This option provides for editing of computed finding entries in the REMINDER COMPUTED FINDINGS file. This option requires programmer's access. |
| CFI  | Computed Finding Inquiry              | PXRM COMPUTED<br>FINDING INQUI<br>RY | Allows a user to display the information about a computed finding in an easy-to-read format.   |
| CFL  | Reminder<br>Computed Finding<br>List  | PXRM COMPUTED<br>FINDING LIST        | This option lists the computed findings that are defined at a site.  |

#### Steps to Create a Computed finding

NOTE: The person who performs the step is listed in parentheses.

#### 1. Write an M routine (developer).

For a *single occurrence* computed finding, the routine takes the following arguments: (DFN, TEST,DATE,DATA,TEXT). DFN is the patient ien 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 associated with the finding that can be used by the CONDITION field; when the Condition is evaluated V=DATA. Additional values that can also be used in the CONDITION can be passed back in DATA. This is done using subscripts, i.e., DATA("COLOR")="RED" and the CONDITION could test for color with a statement like I V("COLOR")="BLUE". The choice of what data is passed back and the associated subscripts are completely up to the programmer, however they should be well documented so the person using the computed finding knows what is available. See the DESCRIPTION field below for information on how to document your computed finding. Setting the DATA array is optional, but it must be set if a CONDITION is going to be used with the computed finding.

TEXT is text to be displayed in the Clinical Maintenance output. Setting this is optional.

Note: Now that multiple occurrence computed findings are available, creation of new single occurrence computed finding is generally discouraged because single occurrences are less flexible and less powerful.

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 ien.
- 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 in the date range, 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. You can also pass back other data using subscripts just as for a single occurrence computed finding, the only difference being the occurrence subscript comes first. For example, DATA(N,"COLOR")="RED".
- 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.

**NOTE**: DAS is optional for a list computed finding, but if it's not set, a NULL should be used; i.e., ^TMP(\$J,PLIST,DFN,N)=^DATE^FILENUM^ITEM^VALUE

- 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")

The field COMPUTED FINDING PARAMETER 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 PARAM. 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.

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 that you "new" all the variables you use, to avoid strange side effects.

#### 2. Enter your computed finding into the Reminders package (developer).

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 VA-. Local entry names can't start with VA-.

Complete each of the following 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.VA-BMI to add the exported VA-BMI 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.

DESCRIPTION – This is a word-processing field that is used to document the computed finding. It is very important to include this field so that the person who is using the computed finding knows how to properly use it. During the definition editing process if a computed finding is selected as a finding the DESCRIPTION will be displayed to the user so the documentation for the computed finding will be right in front of them as they setup the computed finding.

The remaining fields are optional.

#### Example

```
Select Reminder Computed Finding Management Option: cfe Reminder Computed
Finding Edit
Select Reminder Computed Finding: AJEY TEST COMPUTED FINDING
...OK? Yes// <Enter> (Yes)
NAME: AJEY TEST COMPUTED FINDING Replace <Enter>
ROUTINE: PXRMZC1
ENTRY POINT: TEST
PRINT NAME: Test Computed Finding
TYPE: ?
     Choose from:
            MULTIPLE
      M
       L
               LIST
                SINGLE
DESCRIPTION:
  1>
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
```

#### Example: Computed finding for determining if a 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 your patient was an inpatient, it might look like this:

```
INP(DFN, TEST, DATE, VALUE, TEXT) ;
N VAIN
```

```
D INP^VADPT ;IA #10061
I +$P(VAIN(7),U,1) S TEST=1,DATE=$P(VAIN(7),U,1)
E S TEST=0,DATE=""
D KVA^VADPT
S (TEXT,VALUE)=""
```

In this example we are not going to use TEXT or VALUE, so they are set to null.

# 3. (Reminder Manager) Place the finding into your 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 selecting a computed finding is CF. When a computed finding is selected its description will be displayed and this will provide information on how to use the selected computed finding. This is an example of adding a computed finding to a reminder definition.

```
Select FINDING: CF.VA-DATE FOR AGE
     Searching for a REMINDER COMPUTED FINDING, (pointed-to by FINDING ITEM)
    VA-DATE FOR AGE
                       NATIONAL
         ...OK? Yes// Y (Yes)
Computed Finding Description:
This computed finding returns the date on which the patient will
reach the age (in years) specified by the value of the computed
finding parameter. Both the default value and date of the finding
will be the date in FileMan format when the patient reaches the
specified age.
Fractional ages like 59.5 are not allowed and the fractional part
will be ignored.
Editing Finding Number: 1
FINDING ITEM: VA-DATE FOR AGE//
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:
CONDITION:
CONDITION CASE SENSITIVE:
USE STATUS/COND IN SEARCH:
COMPUTED FINDING PARAMETER: 65
FOUND TEXT:
  No existing text
  Edit? NO//
NOT FOUND TEXT:
  No existing text
  Edit? NO//
```

See the <u>Hines Computed Findings website</u> for further information about computed findings. Also look in SHOP,ALL and on the <u>Clinical Reminders website</u> for examples.

# **National Computed Findings**

- VA-ACTIVE PATIENT RECORD FLAGS
- VA-ADMISSIONS FOR A DATE RANGE
- VA-AGE
- VA-AGE BIRTH SEX LIST
- VA-AGENT ORANGE EXPOSURE
- **VA-ALLERGY**
- VA-APPOINTMENTS FOR A PATIENT
- VA-ASU USER CLASS
- VA-BIRTH DATE BIRTH SEX LIST
- VA-BMI
- VA-BSA
- VA-COMBAT SERVICE
- VA-COMBAT VET ELIGIBILITY
- **VA-CURRENT INPATIENTS**
- VA-DATE FOR AGE
- VA-DATE OF BIRTH
- VA-DATE OF DEATH
- VA-DISCHARGES FOR A DATE RANGE
- **VA-EMPLOYEE**
- **VA-ETHNICITY**
- VA-FILEMAN DATE
- VA-IS INPATIENT
- VA-LAST SERVICE SEPARATION DATE
- VA-MST STATUS
- VA-OEF SERVICE
- VA-OIF SERVICE
- VA-PATIENT RECORD FLAG INFORMATION
- VA-PATIENT RECORD FLAG LIST
- VA-PATIENT TYPE
- VA-PATIENTS WITH APPOINTMENTS
- VA-PCMM MHTC
- VA-PCMM PATIENTS ASSIGNED TO A PRACTITIONER
- VA-PCMM PATIENTS ASSIGNED TO A TEAM
- VA-PCMM PC TEAM AND INSTITUTION
- VA-PCMM PRACTITIONERS ASSIGNED TO A PATIENT
- VA-POW
- VA-PRIMARY CARE PROVIDER
- VA-PRIMARY CARE TEAM
- VA-PROGRESS NOTE
- VA-PROJECT ARCH ELIGIBILITY
- VA-PROJECT ARCH ELIGIBILITY LIST
- VA-PTF HOSPITAL DISCHARGE DATE
- VA-PURPLE HEART
- VA-RACE 2003
- VA-RACE PRE 2003
- VA-RANDOM NUMBER
- VA-REMINDER DEFINITION
- VA-SERVICE BRANCH
- VA-SERVICE SEPARATION DATE

```
VA-SEX
VA-TREATING FACILITY LIST
VA-UNKNOWN OEF/OIF SERVICE
VA-VETERAN
VA-VIETNAM SERVICE
VA-WAS INPATIENT
VA-WH MAMMOGRAM ABNORMAL IN WH PKG
VA-WH MAMMOGRAM IN WH PKG
VA-WH PAP SMEAR ABNORMAL IN WH PKG
VA-WH PAP SMEAR IN LAB PKG
VA-WH PAP SMEAR IN WH PKG
```

# **Detailed Descriptions**

#### VA-ACTIVE PATIENT RECORD FLAGS

This multiple occurrence computed finding will return active patient record flags. The Computed Finding Parameter is used to precisely specify what flags to search for. There are three parameters that can be used: C for category, T for type, and F for a specific flag.

The possible values are:

```
Category - N (national), L (local)
Type - B (behavioral), C (clinical), O (other), and R (research)
Flag - exact name of the flag
```

Use the "^" character to include more than one parameter in the search specification.

# Some examples:

C:L - would search for local flags

C:N^T:B - would search for national flags whose type is behavioral

F:DRINKING PROBLEM - would search for the flag DRINKING PROBLEM

T:C^F:INFECTIOUS DISEASE - would search for the flag INFECTIOUS DISEASE whose type is clinical

Only active flags that meet all the specified criteria will be returned. If no search parameters are specified then no flags will be returned.

The date associated with a flag is the assigned date.

The following "CSUB" data is returned for each flag that is found:

```
APPRVBY - approved by

ASSIGNDT - assigned date/time

CATEGORY - category

DATE - assigned date/time

FLAG - flag name

FLAGTYPE - flag type

ORIGSITE - originating site

OWNER - owner site

REVIEWDT - review date/time

TIULINK - pointer to the TIU note (only applies if the flag is linked to a TIU note)

TIUTITLE - the note title (only applies if the flag is linked to a
```

#### VA-ADMISSIONS FOR A DATE RANGE

This list type computed finding can be used to build a list of patients who were admitted in the specified date range. A Reminder Location List can be used to restrict the selection of patients to only the ward locations included in the location list. To do this, enter the exact .01 name of a Reminder Location List into the COMPUTED FINDING PARAMETER field. If a Reminder Location List is not used then all ward locations will be included.

The CONDITION field may also be used to select entries by any of the following CSUB subscripts:

V or V("VALUE") = the ward to which the patient was admitted in the format of 9;3EAST (IEN;Ward Name)

V("INSTITUTION") = the name of the INSTITUTION (file #4) entry with which the ward is associated in the format 5000;ELY;660GC (IEN;Institution Name;Station Number)

V("TYPE\_OF\_MVMT") = the type of movement entry from file 405.1 (e.g., REGULAR, OPT-NSC, OPT-SC, etc.)

#### VA-AGE

Print Name: VA-Patient Age Class: NATIONAL

Sponsor: Review Date:

## Description:

This is a single occurrence computed finding that returns the patient's age in years. It can be used as the value in the Condition. For example: I V>50.

If the patient is deceased the age will be their age on the date of death and V("DECEASED")=1.

Entry Point: AGE Routine: PXRMPDEM

#### VA-AGE BIRTH SEX LIST

ROUTINE: PXRMASL

ENTRY POINT: CFAGESL PRINT NAME: VA-Age and Birth Sex List

TYPE: LIST CF PARAMETER REQUIRED: YES

DESCRIPTION:

This list type computed finding builds a list of all patients

in the inclusive age range defined by a minimum age and a maximum age.

Optionally, birth sex can used as an additional filter.

The Computed Finding Parameter is used to specify the search criteria in the format: minimum age^maximum age^sex. Age is written as a number followed by a unit. The units are: D=days, W=weeks, M=months, or Y=years. If the unit is not

specified it defaults to years. Sex can be F=female, M=male, or null. If sex is null then both female and male patients who fall in the age range will be included on the list.

### Here are some examples:

- 30Y^65Y all patients between the ages of 30 and 65 years
- 40Y^65Y^F all female patients between the ages of 40 and 65 years
- 66Y^66Y^M all male patients whose age is 66 years

If these parameters are not correctly specified no patients will be on the list. Minimum age and maximum age cannot be null and maximum age must be greater than or equal to minimum age.

Note that Beginning Date/Time, Ending Date/Time, and Occurrence Count are not relevant for this computed finding.

**CLASS: NATIONAL** 

#### VA-AGENT ORANGE EXPOSURE

This computed finding will be true if the patient has an agent orange exposure registration date in the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are:

"LOCATION"

The default value is "LOCATION".

## VA-ALLERGY

Print Name: VA-Allergy Class: NATIONAL

Sponsor: Review Date:

#### Description:

Identifies any allergies that contain either the ingredient or drug class that you specify via the Computed Finding Parameter. Ingredients will be prefixed with IN: while DR: is used for drug classes. You may also use the \* as a 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\*.

Note: This computed finding does not support date reversal.

Entry Point: ARTCL Routine: PXRMART

# **Appointment Computed Findings**

These appointment computed findings allow more detailed or specific appointment information to be used in cohort or resolution logic in reminder definitions. Use the COMPUTED FINDING PARAMETER in

the findings editor to filter the results. See the Descriptions and examples that follow, for instructions on how to use these computed findings.

# VA-APPOINTMENTS FOR A PATIENT

This multiple occurrence computed finding returns a list of appointments for a patient in the specified date range from the Scheduling Package.

The Computed Finding Parameter can be used to specify which appointment data fields should be returned from the Scheduling package and filter the results returned based on location and status. The Computed Finding Parameter entry uses FLDS: to specify appointment data fields, STATUS: to filter specific statuses, and LL: to specify a Reminder Location List to filter locations.

FLDS, STATUS, and LL are all optional and can be defined in any order in the computed finding parameter field.

Some examples of how to use FLDS, STATUS and/or LL:

FLDS:1,2,16^STATUS:R^LL:DIABETIC LOCATIONS

STATUS:CP,CC^FLDS:25 LL:DIABETIC LOCATION

# FLDS parameter information:

The appointment data fields are specified as follows:

FLDS:F1,F2,... where F1,F2,... are any of the possible ID values listed in the Available Appointment Data Fields table below.

The F1,F2,... ID values specify what data associated with the appointment will display in the clinical maintenance output. If no FLDS is specified, the default display fields will be 1,2 for APPOINTMENT DATE/TIME and CLINIC.

Additionally, each F1,F2,... specified will be returned as CSUB data that can also be used in the computed finding's CONDITION field. The CONDITION can be used to further screen the filtered appointments, returned by Scheduling, by setting the USE STATUS/CONDIN SEARCH field to YES.

For example, if you only want appointments that were checked out, use FLDS: 1,2,11 to get the APPOINTMENT DATE/TIME, CLINIC, and CHECK-OUT DATE/TIME for display purposes. The FLDS:1,2,11 will return the CSUB data "APPOINTMENT DATE/TIME", "CLINIC" and "CHECK-OUT DATE/TIME".

CSUB values are used in the CONDITION field to do a comparison to numeric or string values. Using +V causes the CSUB data to be interpreted as as numeric. Strings that cannot be converted to a number are set to zero. For example, a CONDITION such as I + V("CHECK-OUT DATE/TIME")>0 would be true if the appointment had a check-out date/time.

List of Available Appointment Data Fields table with assigned ID

#### ID Field Name

\_\_\_\_\_

- 1 APPOINTMENT DATE/TIME
- 2 CLINIC
- 3 APPOINTMENT STATUS
- 4 PATIENT
- 5 LENGTH OF APPOINTMENT
- 6 COMMENTS
- 7 OVERBOOK

```
ELIGIBILITY OF VISIT
 9
       CHECK-IN DATE/TIME
10
       APPOINTMENT TYPE
11
       CHECK-OUT DATE/TIME
12
       OUTPATIENT ENCOUNTER IEN
       PRIMARY STOP CODE
13
14
       CREDIT STOP CODE
15
       WORKLOAD NON-COUNT
       DATE APPOINTMENT MADE
16
17
       DESIRED DATE OF APPOINTMENT
18
       PURPOSE OF VISIT and SHORT DESCRIPTION
19
       EKG DATE/TIME
       X-RAY DATE/TIME
20
21
       LAB DATE/TIME
22
       STATUS
23
       X-RAY FILMS
24
      AUTO-REBOOKED APPOINTMENT DATE/TIME
2.5
      NO-SHOW/CANCEL DATE/TIME
26
      RSA APPOINTMENT ID
28
      DATA ENTRY CLERK
29
      NO-SHOW/CANCELED BY
30
       CHECK-IN USER
31
       CHECK-OUT USER
32
       CANCELLATION REASON
33
       CONSULT LINK
```

#### STATUS information:

STATUS: is used to set a filter on the appointment status; only those appointments with a status that matches the STATUS: values list will be returned. The possible values that the Scheduling API allows are:

| VALUE | Description                       |
|-------|-----------------------------------|
| R     | SCHEDULED/KEPT                    |
| I     | INPATIENT                         |
| NS    | NO-SHOW                           |
| NSR   | NO-SHOW, RESCHEDULED              |
| CP    | CANCELLED BY PATIENT              |
| CPR   | CANCELLED BY PATIENT, RESCHEDULED |
| CC    | CANCELLED BY CLINIC               |
| CCR   | CANCELLED BY CLINIC, RESCHEDULED  |
| NT    | NO ACTION TAKEN                   |

# If STATUS is not specified the default is R,I.

The APPOINTMENT STATUS returned by the API is a summarized list which does not include detailed statuses such as Future, Checked-In, or Checked Out. These statuses are summarized as SCHEDULED/KEPT. As a result, a CONDITION may be required to make sure you are getting the correct results. For example, if you are looking for an appointment that was kept you would set STATUS:R combined with a CONDITION of I (+V("OUTPATIENT ENCOUNTER IEN")>0)!(+V("CHECK-OUT DATE/TIME")>0) with USE STATUS/COND IN SEARCH set to YES.

#### LL information:

LL: Reminder Location List specifies a list of locations so that only appointments for those locations will be returned. If LL is not specified, then appointments for all locations will be returned.

**Available Appointment Data Fields** 

| ID | ailable Appoint<br>  FIELD NAME         | DATA           | Format/Valid Values   | Description   | Examples of Returned Data  |
|----|---|----------------|---|---|--|
| 1  | APPOINTMENT<br>DATE/TIME                | TYPE DATE/TIME | YYYMMDD.HHMM  | The scheduled Appointment Date/Time                                 | 3031215.113<br>3031201.0815  |
| 2  | CLINIC IEN and NAME                     | TEXT           | ID^name   | Clinic IEN and name   | 150;CARDIOLOGY<br>32;BLOOD DONOR   |
| 3  | APPOINTMENT<br>STATUS                   | TEXT           | R (Scheduled/Kept) I (Inpatient) NS (No-Show) NSR (No-Show, Rescheduled) CP (Cancelled by Patient) CPR (Cancelled by Patient, Rescheduled) CC (Cancelled by Clinic) CCR (Cancelled by Clinic, Rescheduled) NT (No Action Taken) | The status of the appointment.                                      | R;SCHEDULED/KEPT I;INPATIENT NS;N0-SHOW NSR;NO-SHOW & RESCHEDULED CP;CANCELLED BY PATIENT CPR;CANCELLED BY PATIENT & RESCHEDULED CC;CANCELLED BY CLINIC CCR;CANCELLED BY CLINIC & RESCHEDULED NT;NO ACTION TAKEN |
| 4  | PATIENT DFN and NAME                    | TEXT           | DFN;name  | Patient DFN and<br>Patient Name                                     | 34877;JONES,BOB<br>455;SCHILSON,BRIAN  |
| 5  | LENGTH OF<br>APPOINTMENT                | TEXT           | NNN   | The scheduled length of appointment, in minutes                     | 20<br>60   |
| 6  | COMMENTS                                | TEXT           | free text   | Any comments associated with the appointment                        | PATIENT NEEDS WHEELCHAIR   |
| 7  | OVERBOOK                                | TEXT           | Y or N  | "Y" if appointment is an overbook else "N"                          | Y<br>N   |
| 8  | ELIGIBILITY OF<br>VISIT IEN and<br>NAME | TEXT           | IEN;name  | Eligibility code and name associated with the appointment           | 2;AID & ATTENDANCE<br>7;ALLIED VETERAN<br>13;COLLATERAL OF VET.  |
| 9  | CHECK-IN<br>DATE/TIME                   | DATE/TIME      | YYYMMDD.HHMM  | Date/time the patient checked in for the appointment                | 3031215.113  |
| 10 | APPOINTMENT<br>TYPE IEN and<br>NAME     | TEXT           | IEN;name  | Type of Appointment IEN and name                                    | 1;COMPENSATION & PENSION<br>3;ORGAN DONORS<br>7;COLLATERAL OF VET.   |
| 11 | CHECK-OUT<br>DATE/TIME                  | DATE/TIME      | YYYMMDD.HHMM  | Date/time the patient checked out of the appointment                | 3031215.113  |
| 12 | OUTPATIENT<br>ENCOUNTER<br>IEN          | TEXT           | NNN   | The outpatient encounter IEN associated with this appointment       | 4578   |
| 13 | PRIMARY STOP<br>CODE IEN and<br>CODE    | TEXT           | IEN;code  | Primary Stop code<br>IEN and code<br>associated with the<br>clinic. | 301;350  |
| ID | FIELD NAME                              | DATA<br>TYPE   | Format/Valid Values   | Description   | Examples of Returned Data  |
| 14 | CREDIT STOP<br>CODE IEN and<br>CODE     | TEXT           | IEN;code  | Credit Stop code IEN and code associated with the clinic.           | 549;500  |
| 15 | WORKLOAD<br>NON-COUNT                   | TEXT           | Y or N  | "Y" if clinic is non-<br>count else "N"                             | Y<br>N   |
| 16 | DATE<br>APPOINTMENT<br>MADE             | DATE           | YYYMMDD   | Date the appointment<br>was entered into the<br>Scheduling system   | 3031215  |

| 17 | DESIRED DATE<br>OF<br>APPOINTMENT | DATE      | YYYMMDD   | The date the clinician or patient desired for the scheduling of this appointment. | 3031215  |
|----|-----------------------------------|-----------|---|---|--|
| 18 | PURPOSE OF<br>VISIT               | TEXT      | Code (1, 2, 3, or 4) and<br>short description (C&P,<br>10-10, SV, or UV)  | The Purpose of Visit  | 1;C&P<br>2;10-10<br>3;SV<br>4;UV   |
| 19 | EKG<br>DATE/TIME                  | DATE/TIME | YYYMMDD.HHMM  | The scheduled date/time of the EKG tests in conjunction with this appointment     | 3031215.083  |
| 20 | X-RAY<br>DATE/TIME                | DATE/TIME | YYYMMDD.HHMM  | The scheduled date/time of the X-RAY in conjunction with this appointment         | 3031215.083  |
| 21 | LAB<br>DATE/TIME                  | DATE/TIME | YYYMMDD.HHMM  | The scheduled date/time of the Lab tests in conjunction with this appointment     | 3031215.083  |
| 22 | STATUS                            | TEXT      | Status Code, Status<br>Description, Print Status,<br>Checked In Date/Time,<br>Checked Out Date/Time,<br>and Admission Movement<br>IFN | Status Information for the Visit.   | 8;INPATIENT<br>APPOINTMENT;INPATIENT/CH<br>ECKED<br>OUT;;3030218.1548;145844 |
| 23 | X-RAY FILMS                       | TEXT      | Y or N  | "Y" if x-ray films are required at clinic else "N"                                | Y<br>N   |

#### VA-ASU USER CLASS

Print Name: VA-ASU User Class

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This multi-occurrence computed finding returns a list of the ASU User Classes that the user belongs to. The user is the person who is running the reminder evaluation or processing a reminder dialog.

When a user is assigned to an ASU User Class, there can be an Activation Date and an Expiration Date. For the purpose of this computed finding, the date of the finding will be the Activation Date. In those cases when there is no Activation Date, 00/00/0000 will be displayed as the date of the finding. If a Beginning Date/Time and Ending Date/Time are used with the finding, then the period defined by the Activation Date and Expiration Date must overlap the period defined by the Beginning Date/Time and the Ending Date/Time in order for the finding to be true. When the Activation Date is missing, a 0 will be used in its place for determining the overlap. When the Expiration Date is missing, the evaluation date will be used in its place for determining the overlap.

The Computed Finding Parameter can be used to specify either the internal entry number or the exact name of an ASU User Class. If this option is used, then each User Class the user is a member of is checked to see if it is either the specified User Class or a child of the specified User Class. Only the User Classes that pass this test will remain on the list of the user's User Classes. For example, if the user is a member of the user class ATTENDING PHYSICIAN, which is a child of the user class PHYSICIAN, and the Computed Finding Parameter is set to "PHYSICIAN," then ATTENDING PHYSICIAN will remain on the list. If the Computed Finding Parameter was set to CARDIOLOGIST, then ATTENDING PHYSICIAN would be removed since it is not a child of CARDIOLOGIST.

If you want to specify the user class as PHYSICIAN, in the computed finding parameter field, type the following: COMPUTED FINDING PARAMETER:PHYSICIAN

This computed finding uses date ranges like drug findings do, so if the user was an active member of the class anytime during the date range, the computed finding will be true. If you want to know if the user is active as of today, then use T for the beginning and ending date/time.

Entry Point: CLASS Routine: PXRMASU

# VA-BIRTH DATE BIRTH SEX LIST

**ROUTINE: PXRMASL** 

ENTRY POINT: CFBDAYSL

PRINT NAME: VA-Birth Date Birth Sex List

TYPE: LIST

CF PARAMETER REQUIRED: YES

DESCRIPTION:

This list type computed finding builds a list of all patients in the inclusive age defined by a minimum birth date and a maximum birth date.

Optionally, birth sex can used as an additional filter.

The Computed Finding Parameter is used to specify the search criteria in the format: minimum birth date^maximum birth date^sex. The dates can be entered in any of the date formats that can be used in Clinical Reminders. Sex can be F=female, M=male, or null. If sex is null then both female and male patients whose birth date falls in the range will be included on the list.

Here are some examples:

- 10/01/1940\text{\text{Oct 1, 1965}} all patients born between October 1, 1940 and October 1, 1965.
- 01-01-1970^01 Jan 1980^F all female patients born between January 1, 1970 and January 1, 1980
- Jun 1, 1969\(^Jun 1 1969\(^M \) all male patients born on June 1, 1969.

If these parameters are not correctly specified no patients will be on the list. Minimum birth date and maximum birth date cannot be null and maximum birth date must be greater than or equal to minimum birth date.

Note that Beginning Date/Time, Ending Date/Time, and Occurrence Count are not relevant for this computed finding.

**CLASS: NATIONAL** 

#### VA-BMI

The VA-BMI computed finding calculates the patient's body mass index. The value returned, which can be used in the CONDITION field of the findings, is the body mass index.

Note that date range searching is applied only to the weight and that the date of the finding is the date of the weight measurement used in the BMI calculation. The height used in the calculation will be the height measurement that occurred closest to the date of the weight measurement. This may be before or after the weight measurement.

An example of using the VA-BMI computed finding:

- 1) Create a finding in a reminder that is the VA-BMI computed finding;
- 2) Add logic in the CONDITION field to check for a particular BMI value: "I V>25";

Example: Changing the Occurrence count in a Reminder Definition using VA-BMI

```
Select Reminder Definition Management Option: RE Add/Edit Reminder Definition
Select Reminder Definition: bmi and BSA TEST PKR BMI AND BSA TEST LOCAL
    Select one of the following:
                   All reminder details
         G
                  General
         В
                  Baseline Frequency
                 Findings
         F
                 Function Findings
         FF
                   Logic
                   Custom date due
                  Reminder Dialog
                  Web Addresses
Select section to edit: f Findings
Reminder Definition Findings
Choose from:
CF BSA
                                                               Finding #
CF VA-BMI
                                                               Finding # 1
Select FINDING: VA-BMI
    Searching for a DRUG, (pointed-to by FINDING ITEM)
    Searching for a EDUCATION TOPICS, (pointed-to by FINDING ITEM)
    Searching for a EXAM, (pointed-to by FINDING ITEM)
    Searching for a REMINDER LOCATION LIST, (pointed-to by FINDING ITEM)
    Searching for a HEALTH FACTOR, (pointed-to by FINDING ITEM)
    Searching for a IMMUNIZATION, (pointed-to by FINDING ITEM)
    Searching for a LABORATORY TEST, (pointed-to by FINDING ITEM)
    Searching for a MH TESTS AND SURVEYS, (pointed-to by FINDING ITEM)
    Searching for a ORDERABLE ITEM, (pointed-to by FINDING ITEM)
    Searching for a RADIOLOGY PROCEDURE, (pointed-to by FINDING ITEM)
    Searching for a REMINDER COMPUTED FINDING, (pointed-to by FINDING ITEM)
          NATIONAL
        ...OK? Yes// (Yes)
Computed Finding Description:
```

```
The VA-BMI computed finding calculates the patient's body mass index. The
value returned, which can be used in the CONDITION field of the findings, is
the body mass index.
An example of using the VA-BMI computed finding:
1) Create a finding in a reminder that is the VA-BMI computed finding;
2) Add logic in the CONDITION field to check for a particular BMI value:
"I V>25";
3) This finding will be evaluated to true for patients with a BMI that is
greater than 25.
This is a multi-occurrence computed finding.
Editing Finding Number: 1
FINDING ITEM: VA-BMI//
REMINDER FREQUENCY:
MINIMUM AGE:
MAXIMUM AGE:
RANK FREQUENCY:
USE IN RESOLUTION LOGIC:
USE IN PATIENT COHORT LOGIC:
BEGINNING DATE/TIME:
ENDING DATE/TIME:
CONDITION:
CONDITION CASE SENSITIVE:
USE STATUS/COND IN SEARCH:
COMPUTED FINDING PARAMETER:
FOUND TEXT:
 No existing text
 Edit? NO//
NOT FOUND TEXT:
 No existing text
 Edit? NO//
Reminder Definition Findings
Choose from:
CF BSA
                                                            Finding #
CF VA-BMI
                                                            Finding #
                                                                       1
Select FINDING:
```

#### **VA-BSA**

This multi-occurrence computed finding returns the patient's body surface area (BSA) as a value that can be used in the CONDITION field. The COMPUTED FINDING PARAMETER can be used to select which formula is used to calculate the BSA.

#### COMPUTED FINDING PARAMETER FORMULA

| OTED I INDING I MORNIETER TORMIC |                   |  |  |  |
|----------------------------------|-------------------|--|--|--|
| M                                | Mosteller         |  |  |  |
| D                                | DuBois and Dubois |  |  |  |
| Н                                | Haycock           |  |  |  |
| G                                | Gehan and George  |  |  |  |
| В                                | Boyd              |  |  |  |
|                                  |                   |  |  |  |

The default is to use the Mosteller formula. Unless there is a reason to use one of the other formulas, the recommendation is to use the default, because it is faster to calculate and the numerical results are very close to those of the other formulas.

Formulas for Body Surface Area Calculator

```
The Mosteller formula

BSA (m²) = ( [Height(cm) x Weight(kg) ]/ 3600 )^{1/2} e.g. BSA = SQRT( (cm*kg)/3600 ) or in inches and pounds: BSA (m²) = ( [Height(in) x Weight(lbs) ]/ 3131 )^{1/2}

The DuBois and DuBois² formula

BSA (m²) = 0.20247 x Height(m)^{0.725} x Weight(kg)^{0.425}

A variation of DuBois and DuBois that gives virtually identical results is:

BSA (m²) = 0.007184 x Height(cm)^{0.725} x Weight(kg)^{0.425}

The Haycock formula

BSA (m²) = 0.024265 x Height(cm)^{0.3964} x Weight(kg)^{0.5378}

The Gehan and George formula

BSA (m²) = 0.0235 x Height(cm)^{0.42246} x Weight(kg)^{0.51456}

The Boyd formula

BSA (m²) = 0.0003207 x Height(cm)^{0.3} x Weight(grams)^{(0.7285 - (0.0188 \times LOG(grams)))}
```

#### References

- 1. Mosteller RD: Simplified Calculation of Body Surface Area. *N Engl J Med* 1987 Oct 22;317(17):1098 (letter)
- 2. DuBois D; DuBois EF: A formula to estimate the approximate surface area if height and weight be known. *Arch Int Med* 1916 17:863-71.
- 3. Haycock G.B., Schwartz G.J., Wisotsky D.H. Geometric method for measuring body surface area: A height weight formula validated in infants, children and adults. *The Journal of Pediatrics* 1978 93:1:62-66
- 4. Gehan EA, George SL, Estimation of human body surface area from height and weight. *Cancer Chemother Rep* 1970 54:225-35.
- 5. Boyd E, The growth of the surface area of the human body. Minneapolis: university of Minnesota Press, 1935. (I never found the original source. Instead, I copied the formula from: http://www.ispub.com/journals/IJA/Vol2N2/bsa.htm)

Note that the changes to VA-BMI (only applying the date range criteria to the weight) also apply to the VA-BSA computed finding, because it uses the same routine to obtain matched weight and height measurements.

# **VA-COMBAT SERVICE**

This computed finding will be true if combat service is found in the date range the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are: "LOCATION"

The default value is "LOCATION".

Entry Point: COMBAT Routine: PXRMMSER

# **VA-COMBAT VET ELIGIBILITY**

Print Name: VA-Combat Vet Eligibility

Class: NATIONAL

Sponsor: Review Date:

Description:

This computed finding will be true if the patient qualifies as a combat vet.

The possible values that can be used in a Condition are: "Eligible", "Expired", and "Not eligible". An example is:

I V="Not eligible"

If the patient was eligible on the evaluation date then the Value for use in a Condition will be "Eligible". If the patient is not eligible and the evaluation date is greater than the eligibility end date then the Value is "Expired", otherwise the value is "Not eligible".

Entry Point: CVELIG Routine: PXRMMSER

# **VA-CURRENT INPATIENTS**

Print Name: VA-Current Inpatients

Class: NATIONAL

Sponsor: Review Date:

# Description:

This list type computed finding can be used to build a list of all current inpatients. Note that current refers to the actual calendar date so for this computed finding date ranges are irrelevant. A Reminder Location List can be used to restrict the selection of patients to only the ward locations included in the location list. To do this, enter the exact .01 name of a Reminder Location List into the COMPUTED FINDING PARAMETER field. If a Reminder Location List is not used, then all ward locations will be included.

The CONDITION field may also be used to select entries by any of the following CSUB subscripts:

V("INSTITUTION") = the name of the INSTITUTION (file #4) entry with which the ward is associated in the format

5000; ELY; 660GC (IEN; Institution Name; Station Number)

V("ADMIT DATE") = the date of admission for the patient in the format 3010815.114255^AUG 15,2001@11:42:55

(Internal^External)

Entry Point: CURR Routine: PXRMINPL

#### VA-DATE FOR AGE

Print Name: VA-Date for Age

Class: **NATIONAL** 

Sponsor: Review Date:

## Description:

This computed finding returns the date on which the patient will reach the age (in years) specified by the value of the computed finding parameter. Both the default value and date of the finding will be the date in FileMan format when the patient reaches the specified age.

Fractional ages like 59.5 are not allowed and the fractional part will be ignored.

Routine: PXRMPDEM Entry Point: DFA

# VA-DATE OF BIRTH

Print Name: VA-Patient's Date of Birth

Class: NATIONAL

Sponsor: Review Date: Description:

This is a single occurrence computed finding that returns the patient's date of birth as a FileMan date. It can be used as the value in the Condition. For example: I V>2850302. The date of the finding is the date of birth so that date range searches can be used to find patients who were born in a certain time frame.

Routine: PXRMPDEM Entry Point: DOB

#### VA-DATE OF DEATH

Print Name: VA-Patient's Date of Death

Class: NATIONAL.

Sponsor: Review Date:

# Description:

This is a single occurrence computed finding that returns the patient's date of death, if it exists, as a FileMan date. It can be used as the value in the Condition. For example: I V>2330304 The date of the finding is the date of death so that date range searches can be used to find patients who died in a certain time frame.

Entry Point: DOD Routine: PXRMPDEM

## VA-DISCHARGES FOR A DATE RANGE

This list type computed finding can be used to build a list of patients who have been discharged in the specified date range. A Reminder Location List can be used to restrict the selection of patients to only the ward locations included in the location list. To do this, enter the exact .01 name of a Reminder Location List into the COMPUTED FINDING PARAMETER field. If a Reminder Location List is not used then all ward locations will be included.

The CONDITION field may also be used to select entries by any of the following CSUB subscripts:

# **VA-EMPLOYEE**

DESCRIPTION: This computed finding will be true if the patient was an employee during the date range specified by the Beginning Date/Time and Ending Date/Time.

The following algorithm is used to determine if the patient was an employee:

- 1. A lookup based on the patient's SSN is made in the New Person file. If there is no match, the computed finding is false.
- 2. If there is a match, a check is made to see if the patient's New Person file entry has a pointer to the PAID file. If there is no pointer, the computed finding is false.
- 3. If there is a pointer, then Date Entered is compared with Ending Date/Time. If it is greater, the computing finding is false.
- 4. Next, a check is made to see if there is a Termination Date. If there is a Termination Date and it is prior to the Beginning Date/Time, the computed finding is false.
- 5. If steps one through four are passed, the computed finding is true.

# **VA-ETHNICITY**

Print Name: VA-Patient's Ethnicity

Class: NATIONAL

Sponsor:

Review Date:

# Description:

This multiple occurrence computed finding will return the patient's ethnicity values from the Patient file. If none are recorded then the computed finding will be false. This computed finding does not support date reversal.

The value of the computed finding that can be used in the Condition is the patient's ethnicity.

Entry Point: ETHNY Routine: PXRMPDEM

# **VA-FILEMAN DATE**

Print Name: VA-FileMan Date

Class: NATIONAL

Sponsor: Review Date:

# Description:

The purpose of this computed finding is to allow the creation of a finding that has a specific date to be used for comparison purposes in a function finding date function.

This computed finding takes any acceptable FileMan date, via the COMPUTED FINDING PARAMETER, and sets the date of the finding and its value to that date.

See the FileMan Getting Started Manual to learn about acceptable FileMan date/time formats and abbreviations. Additionally, you may use the abbreviations T-NY or NOW-NY, where N is an integer and Y stands for years.

For example, setting the COMPUTED FINDING PARAMETER to T-3M would give the finding a date and value of the evaluation date minus three months.

:

Entry Point: FMDATE Routine: PXRMDATE

# VA-IS INPATIENT

Print Name: VA-Is Inpatient Class: NATIONAL

Sponsor: Review Date:

#### Description:

This computed finding will be true if the patient was/is an inpatient on the evaluation date. The following "CSUB" values will be available:

ADMISSION DATE/TIME (FileMan format)
ADMISSION TYPE
ATTENDING PHYSICIAN
DATE (FileMan format)
PRIMARY PROVIDER
TREATING SPECIALITY
WARD LOCATION

Entry Point: INP Routine: PXRMPDEM

# Example:

# **Determining if the inpatient is on ward 7 EAST or 7 WEST** (these are mental health inpatient locations)

```
I (V("WARD LOCATION")="7 EAST (SEA)")!(V("WARD LOCATION")="7 WEST (SEA)")
                                    --STATUS-- -- DUE DATE-- -- LAST DONE--
Ment Hlth Inpatient Locations
                                   N/A
Patient is not on an inpatient mental health ward.
Information:
Computed Finding: Is patient admitted as inpatient?
  10/01/2010 value - 23<sup>3</sup> EAST (SEA)
                                   --STATUS-- --DUE DATE-- --LAST DONE--
Ment Hlth Inpatient Locations DUE NOW DUE NOW
                                                             unknown
Computed Finding: Is Inpatient
  12/06/2010; Patient is an inpatient; admission date/time:
  08/13/2010@10:12:17
Information:
Computed Finding: Is patient admitted as inpatient?
  08/13/2010 value - 27^7 EAST (SEA)
```

# VA-MST STATUS

Print Name: VA-MST Status

Class: NATIONAL

Sponsor: Office of Mental Health Services and Women Veterans Heal

th Program

Review Date: Description:

This computed finding uses \$\$GETSTAT^DGMSTAPI, DBIA #2716, to obtain a patient's MST status information.

Entry Point: STATUS Routine: PXRMMST

## **VA-OEF SERVICE**

This multi-occurrence computed finding will search for periods of OEF service in the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are: "LOCATION"

The default value is "LOCATION".

Entry Point: OEF Routine: PXRMMSER

#### VA-OIF SERVICE

Print Name: VA-OIF Service

Class: NATIONAL

Sponsor: Review Date:

# Description:

This multi-occurrence computed finding will search for periods of OIF service in the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are:

"LOCATION"

The default value is "LOCATION".

:

Entry Point: OIF Routine: PXRMMSER

# VA-OEF/OIF SERVICE (LIST)

Print Name: VA-OEF/OIF Service List Patient List

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This list type computed finding builds a list of patients who have been deployed in Operation Enduring Freedom (OEF) or Operation Iraqi Freedom (OIF). If the location was either OEF or OIF, but cannot be Disclosed or determined, then it is listed as unknown (UNK).

Date range searching is done by looking for an overlap in the period defined by Beginning Date/Time (BDT) and Ending Date/Time (EDT), with the period defined by OEF/OIF From and To Dates. In order for a patient to be included on the list, there must be an overlap of these two time periods. In other words, if patients had service at any time in the date range specified by BDT and EDT, they will be included.

The Computed Finding Parameter can be used to include only patients who had service at a specific location. The locations can be OEF, OIF, or ANY. The value ANY, which is the default, will include all locations. Each location is separated by the "^" character. For example, to include patients who had OEF, service the Computed Finding Parameter is: OEF

To include patients who had either OEF or OIF service, the Computed Finding Parameter is: OEF^OIF

To include patients who had UNK, service the Computed Finding Parameter is: UNK

:

Entry Point: OEIF Routine: PXRMMSER

# VA-PATIENT RECORD FLAG INFORMATION

Print Name: VA-Patient Record Flag Information

Class: NATIONAL

Sponsor: Review Date:

# Description:

This multiple type computed finding returns information about the specified flag for a patient. The flag is specified by putting the exact name of the flag in the Computed Finding Parameter.

The following "CSUBS" are available:

"ACTION" The action

"APPRVBY" Approved by

"ASSIGN DT" Date and time the flag was assigned

"CATEGORY" The category

"DATE" Date of the action

"FLAGTYPE" Flag type

"REVIEW DT" Review date

"TIU TITLE" TIU title associated with the flag

:

Entry Point: GETINF Routine: PXRMPRF

# VA-PATIENT RECORD FLAG LIST

Print Name: VA-Patient Record Flag List

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This list type computed finding returns a list of all patients who have a specified record flag active any time in the date range.

The Computed Finding Parameter is used to specify the flag in the following format: FLAG NAME^FLAG TYPE

Where FLAG NAME is the exact name of the flag and FLAG TYPE is L for local or N for national. FLAG TYPE is optional and defaults to L.

.

Entry Point: GETLST Routine: PXRMPRF

# **VA-PATIENT TYPE**

Print Name: VA-Patient Type

Class: NATIONAL

Sponsor: Review Date:

# Description:

This computed finding is a single value computed finding. If a patient type is found for the patient the computed finding will be true and type will be returned as the Value.

Example: I V="ACTIVE DUTY"

Possible Values that can be returned from this computed finding are:

ACTIVE DUTY
ALLIED VETERAN
COLLATERAL
EMPLOYEE
MILITARY RETIREE
NON-VETERAN (OTHER)
NSC VETERAN
SC VETERAN
TRICARE

:

Entry Point: PATTYPE Routine: PXRMPDEM

#### VA-PATIENTS WITH APPOINTMENTS

Print Name: VA-Patients with Appointments

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This list computed finding returns a list of patients with appointments in the specified date range. The COMPUTED FINDING PARAMETER can be used to filter the results. The values that can be used in the parameter are: FLDS:F1,F2,... where F1,F2 are any of the possible integer ID values listed in the table for this computed finding in the Computed Finding section of the Clinical Reminders Manager's Manual. These specify what data associated with the appointment is to be returned; this data can be used in a CONDITION statement. Field number n will be the nth piece of the value. For example FLDS:1,16 would return the Appointment Date/Time in piece 1 and Date Appointment Made in piece 16. A condition such as I \$P(V,U,16)>3060301 would be true if the date the appointment was made was after March 1, 2006. If FLDS is not specified then the value will be ID=1 (Appointment Date/Time) and ID=2 (Clinic IEN and Name).

STATUS sets a filter on the appointment status; only those appointments with status on the list will be returned. The possible values for STATUS are R (Scheduled/Kept), I (Inpatient), NS (No-show), NSR (No-show, Rescheduled), CP (Cancelled by Patient),

CPR (Cancelled by Patient, Rescheduled), CC (Cancelled by Clinic),

CCR (Cancelled by Clinic, Rescheduled), NT (No Action Taken). If STATUS is not specified the default is R,I.

LL: Reminder Location List specifies a list of locations so that only appointments for those locations will be returned. If LL is not specified, then appointments for all locations will be returned.

FLDS, STATUS, and LL are all optional and can be given in any order. Some examples:

FLDS:1,2,16^STATUS:R^LL:DIABETIC LOCATIONS STATUS:CP,CC^FLDS:25 LL:DIABETIC LOCATION

Entry Point: APPL Routine: PXRMRDI

#### **VA-PCMM MHTC**

Print Name: VA-PCMM Mental Health Treatment Coordinator

Class: NATIONAL

Sponsor: Review Date: Description:

This computed finding returns the patient's current Mental Health Treatment Coordinator (MHTC). The Scheduling API that this computed finding uses does not take a date as a parameter so it only returns the MHTC as of the actual calendar date. Therefore, this computed finding cannot be used to determine if the patient had an MHTC sometime in the past.

The default value of the computed finding is the MHTC. The following additional CSUBs are returned:

MHTC - Mental Health Treatment Coordinator ROLE - role TEAM - team TEAM POSITION - team position

# VA-PCMM PATIENTS ASSIGNED TO A PRACTITIONER

ROUTINE: PXRMPCMM ENTRY POINT: PTPR
PRINT NAME: VA-PCMM Patients Assigned to a Practitioner
TYPE: LIST CF PARAMETER REQUIRED: YES

DESCRIPTION: This list type computed finding returns a list of patients assigned to a list of practitioners in the date range defined by Beginning Date/Time and Ending Date/Time. The Computed Finding Parameter is used to specify the practitioners. Each practitioner is separated by a semicolon. Either the IEN or the exact name (.01 field) from file #200, the New Person file, can be used. IENs and names can be mixed.

Please note: When you identify a practitioner in the Computed Finding Parameter field, only patients who are directly linked to that practitioner will be included. Any patients that are only associated with that practitioner in a PRECEPTOR role, through an assignment to an Associate Provider, will NOT be included.

To get patients who are linked to a Preceptor via an Associate Provider, you would need to run a separate report for the Resident (Associate Provider) or include an additional entry of the Computed Finding with the resident's name or IEN

The Computed Finding Parameter can also be used to pass the optional parameter INCLUDE. If you want to use this parameter, it is passed as the second piece of the Computed Finding Parameter. The possible values of INCLUDE are:

- 0 include patients who were assigned anytime in the date range.
- 1 include patients who were assigned for the entire date range.

The default is 0.

The format for the computed finding parameter is: PRACTITIONER(s)^INCLUDE

Here is an example of how to specify a list of practitioners, two by name and one by IEN:

PROVIDER, ONE; 345; PROVIDER, SIX

In the above example, INCLUDE is not specified, so it takes the default value of 0. To set the value of INCLUDE to 1 with the above list, the computed finding parameter would be:

PROVIDER,ONE;345;PROVIDER,SIX^1

#### VA-PCMM PATIENTS ASSIGNED TO A TEAM

Print Name: VA-PCMM Patients Assigned to a Team

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This list type computed finding returns a list of patients assigned to a team in the date range specified by Beginning Date/Time and Ending Date/Time. If the patient was assigned to the team at anytime during the date range they will be on the list. The Computed Finding Parameter is used to specify the team. It can be either the IEN or the exact name (.01 field) from file #404.51, the Team file.

The Computed Finding Parameter can be used to pass the optional parameter INCLUDE. If you want to use this parameter, it is passed as the second piece of the Computed Finding Parameter. The possible values of INCLUDE are:

0 - include patients who were assigned anytime in the date range. 1 - include patients who were assigned for the entire date range.

The default is 0.

The format for the computed finding parameter is: TEAM^INCLUDE

For example, if the team is TEAM ONE and you want the value of INCLUDE to be 1, then the computed finding parameter would be: TEAM ONE^1

Entry Point: PTTM Routine: PXRMPCMM

# VA-PCMM PC TEAM AND INSTITUTION

Print Name: VA-PCMM Primary Care Team & Institution

Class: NATIONAL

Sponsor: Review Date:

Description:

This computed finding returns the patient's primary care team and institution as of the evaluation date.

:

Entry Point: INSTPCTM Routine: PXRMPCMM

#### VA-PCMM PRACTITIONERS ASSIGNED TO A PATIENT

Print Name: VA-PCMM Practitioners Assigned to a Patient

Class: NATIONAL

Sponsor: Review Date:

# Description:

This multiple valued computed finding returns a list of practitioners assigned to a patient in the date range defined by the Beginning Date/Time and Ending Date/Time.

The Computed Finding Parameter can be used to pass the optional parameter INCLUDE. The possible values are:

0 - include practitioners who were assigned anytime in the date range. 1 - include practitioners who were assigned for the entire date range.

The default is 0.

For example, if you want the value of INCLUDE to be 1, then the computed finding parameter would be: 1

:

Entry Point: PRPT Routine: PXRMPCMM

# **VA-POW**

Print Name: VA-POW

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This computed finding will be true if the patient was a POW in the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are:

"LOCATION"

The default value is "LOCATION".

:

Entry Point: POW Routine: PXRMMSER

#### VA-PRIMARY CARE PROVIDER

Print Name: VA-PCMM Primary Care Provider

Class: NATIONAL

Sponsor: Review Date:

# Description:

This single occurrence computed finding returns the patient's primary care provider. This is the name field from the NEW PERSON file (#200). If no primary care provider has been assigned, the value will be null.

:

Entry Point: PROVIDER Routine: PXRMPCIN

# **VA-PRIMARY CARE TEAM**

Print Name: VA-PCMM Primary Care Team

Class: NATIONAL

Sponsor: Review Date:

## Description:

This single occurrence computed finding returns the name of the patient's PCMM primary care team as the value. If no team has been assigned, the value will be null.

:

Entry Point: TEAM Routine: PXRMPCIN

# **VA-PROGRESS NOTE**

Print Name: VA-Progress Note

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This computed finding will return multiple instances of a progress note based on the exact title of the TIU DOCUMENT DEFINTION or the internal entry number (IEN) of the TIU DOCUMENT DEFINTION. If the IEN is used, it should be preceded by the "`" character. The note title or IEN 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

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

For example, if the COMPUTED FINDING PARAMETER field contains:

ADMITTING HISTORY & PHYSICAL<sup>5</sup>, the search would be for notes with the exact title of "ADMITTING HISTORY & PHYSICAL" and a status of "UNSIGNED."

If the IEN were used then the COMPUTED FINDING PARAMETER filed would be: `1091^5

Note: The specified TIU DOCUMENT DEFINITION must have a TYPE of "DOC"; if it does not, the computed finding will always be false.

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

Additional data for use in the Condition can be obtained by appending "^1" after the status; for example: ADMITTING HISTORY & PHYSICAL^5^1 ADMITTING HISTORY & PHYSICAL^^1

(In the second example, since the status is blank, it would default to notes with a status of COMPLETED.)

The additional data is:

V("DISPLAY NAME")=Display name of TIU title.

V("EPISODE BEGIN DATE/TIME")=String\_":"\_EPISODE BEGIN DATE/TIME where String is "Adm" for ward locations and "Visit" for all other location types. Date/time is in MM/DD/YY format.

V("EPISODE END DATE/TIME")=String\_" "\_EPISODE END DATE/TIME where string is null if no date/time or "Dis: " if date/time exists. Date/time is in MM/DD/YY format

V("HOSPITAL LOCATION")=External format of HOSPITAL LOCATION from TIU DOCUMENT file

V("NUMBER OF IMAGES")=Number of images associated with TIU DOCUMENT entry

V("REQUESTING PACKAGE")=REQUESTING PACKAGE REFERENCE field from TIU DOCUMENT file (internal format)

V("SUBJECT")=SUBJECT (OPTIONAL description) field from TIU DOCUMENT file (note that characters are limited to ensure returned string is not longer than 255 characters).

Entry Point: NOTE Routine: PXRMTIU

## VA-PROJECT ARCH ELIGIBILITY

Print Name: VA-ARCH Eligibility

Class: NATIONAL

Sponsor: Review Date:

# Description:

This multi-occurrence computing finding returns the patient's Project ARCH eligibility status for instances in the ARCH dataset that are in the date range defined by Beginning Date/Time and Ending Date/Time.

:

Entry Point: ELIG Routine: PXRMARCH

# VA-PROJECT ARCH ELIGIBILITY LIST

Print Name: VA-Project ARCH Patient List

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This list computed finding returns a list of all patients who were Project ARCH eligible in the date range defined by Beginning Date/Time and Ending Date/Time.

:

Entry Point: LIST Routine: PXRMARCH

# VA-PTF HOSPITAL DISCHARGE DATE

Print Name: VA-PTF Hospital Discharge Date

Class: NATIONAL

Sponsor: Review Date:

# Description:

This multi-occurrence computed finding returns a list of hospital discharge dates from the Patient Treatment File. The default is to not include fee basis or census entries. The computed finding parameter can be used to include them. The format is IN:FEE to include fee bases and IN:CEN to include census. If you want to include both, the format is IN:FEE,CEN.

Entry Point: HDISCH Routine: PXRMPDEM

# VA-PURPLE HEART

Print Name: VA-Purple Heart

Class: NATIONAL

Sponsor:

Review Date:

Description:

This computed finding will be true if the patient is a Purple Heart recipient.

There is no value for use in a Condition.

•

Entry Point: PHEART Routine: PXRMMSER

This computed finding will be true if the patient is a Purple Heart recipient.

There is no value for use in a Condition.

# **VA-RACE 2003**

Print Name: VA-Patient's Race, 2003 and On.

Class: NATIONAL

Sponsor:

Review Date:

# Description:

This multiple occurrence computed finding returns entries from the Race Information multiple of the Patient file. Patch DG\*5.3\*415, compliance date

January 31, 2003, made the Race field obsolete and replaced it with the Race Information multiple. The possible values are limited to the nationally approved/supported races, which are:

Nationally Approved/Supported Races

-----

- \* AMERICAN INDIAN OR ALASKA NATIVE
- \* ASIAN
- \* BLACK OR AFRICAN AMERICAN
- \* NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
- \* WHITE
- \* DECLINED TO ANSWER

.

Entry Point: NEWRACE Routine: PXRMPDEM

# VA-RACE PRE 2003

Print Name: VA-Patient's pre-2003 Race

Class: NATIONAL

Sponsor: Review Date:

# Description:

This single occurrence computed finding returns a patient's Race value from the Patient file. Patch DG\*5.3\*415, compliance date January 31, 2003, made the Race field obsolete and replaced it with the Race Information multiple.

The possible values are those in the RACE file (#10). If there is an entry, the computed finding will be true; otherwise it will be false.

:

Entry Point: RACE Routine: PXRMPDEM

#### VA-RANDOM NUMBER

Print Name: VA-Random number

Class: NATIONAL

Sponsor: Review Date:

# Description:

This computed finding uses the MUMPS \$RANDOM function to return pseudo random numbers as the value. The Occurrence Count is the number of random numbers that will be returned and the Computed Finding Parameter is used to specify the range and optionally the number of decimal digits; the default is to generate integers, i.e., no decimal digits. The Occurrence Count entry on the finding will be an absolute value. Entering an Occurrence Count of 5 or -5 will result in 5 returns.

The format of the Computed Finding Parameter is: LB^UB^NDD, where LB is the inclusive lower bound, UB is the inclusive upper bound, and NDD is the optional number of decimal digits. LB and UB must be integers and UB must be greater than LB. If these conditions are not met then the computed finding will be false.

# Some examples:

 $0^{500}$  - integers in the range 0 to 500

0^1^1 - numbers in the range 0 to 1 with one decimal place

-1^1^2 - numbers in the range -1 to 1 with two decimal places

\*\*\*Please note: This CF was developed for research program consideration/use. No clinical uses have been identified at present. Every evaluation of this finding on a given patient will yield different results, thus the name RANDOM. Please use caution when using this Computed Finding in a clinical setting.\*\*\*

Entry Point: RANDOM Routine: PXRMMATH

#### **VA-REMINDER DEFINITION**

Print Name: VA-Reminder Definition Computed Finding

Class: NATIONAL

Sponsor:

Review Date:

## Description:

This computed finding will evaluate the reminder definition that is specified by name in the COMPUTED FINDING PARAMETER field. The name that is used is the NAME field (.01) of the reminder definition, not the PRINT NAME, additionally the definition must be active. The computed finding will be false if the reminder evaluation status is CNBD or ERROR, in all other cases it will be true.

The default date of the finding is the evaluation date; this can be overridden by appending "^DATE=DUE DATE" or "^DATE=LAST DONE" to the reminder name. If a last done date cannot be determined then the date of the finding will be the evaluation date.

## Examples:

VA-IHD LIPID PROFILE VA-IHD LIPID PROFILE^DATE=LAST DONE VA-IHD LIPID PROFILE^DATE=DUE DATE

The VALUE array, which can be used in a Condition, will contain the evaluation status, due date, and last done date. The date values are in VA FileMan format. The variable V is the reminder evaluation status. Possible values for the reminder evaluation status are:

DONE
DUE NOW
DUE SOON
RESOLVED
NEVER
N/A

Example of the Value array:

VALUE("STATUS")="DUE NOW" VALUE("DUEDATE")=3051010.1220 VALUE("LASTDONE")=3051010.1220

#### Condition examples:

I V="DUE NOW"
I V("STATUS")="DUE NOW"
I V("DUEDATE")>3051010.1220
I V("LASTDONE")=3051010.1220

\*\*\*WARNING\*\*\* This computed finding can be used to evaluate a reminder inside of a reminder evaluation - do not have this computed finding evaluate the same reminder as the one being evaluated.

:

Edit Date: APR 18,2011 14:22 Edit By: CRPROGRAMMER, ONE

Edit Comments: Exchange Install

Entry Point: RDEF Routine: PXRMCDEF

# **VA-SERVICE BRANCH**

Print Name: VA-Service Branch

Class: NATIONAL

Sponsor: Review Date:

# Description:

This multiple occurrence computed finding will return service branch information for one or more service periods in the date range.

CSUB data that can be used in a Condition are:

"BRANCH"

"DISCHARGE TYPE"

"ENTRY DATE"

"SEPARATION DATE"

"SERVICE COMPONENT"

The default value is "SEPARATION DATE".

:

Entry Point: SBRANCH Routine: PXRMMSER

# **VA-SERVICE SEPARATION DATES**

Print Name: VA-Service Separation Date(s)

Class: NATIONAL

Sponsor: Office of Quality & Performance

Review Date:

# Description:

This multiple occurrence computed finding returns service separation information. The date of the finding is the separation date.

CSUB data that can be used in a Condition are:

"BRANCH"

"DISCHARGE TYPE"

"ENTRY DATE"

"SEPARATION DATE"

"SERVICE COMPONENT"

The default value is "SEPARATION DATE".

Entry Point: DISCHDT Routine: PXRMMSER

VA-SEX

Print Name: VA-Patient Sex

Class: NATIONAL

Sponsor:

Review Date:

# Description:

This is a single occurrence computed finding that returns a patient's sex as either "F" for female or "M" for male.

Edit Date: FEB 15,2005 12:38 Edit By: CRPROGRAMMER, ONE

Edit Comments: Exchange Install

Entry Point: SEX Routine: PXRMPDEM

# VA-TREATING FACILITY LIST

Print Name: VA-Treating Facility List

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This multi-occurrence computed finding returns a list of treating facilities i.e., systems that store data related to a patient. The value for each entry is:

STATION NUMBER^NAME^DATE LAST TREATED^ADT/HL7 EVENT REASON^FACILITY TYPE

STATION NUMBER, NAME, and FACILITY TYPE are from the Institution file.

FACILITY TYPE is one of the entries found in the FACILITY TYPE file.

ADT/HL7 EVENT REASON is a code from the ADT/HL7 EVENT REASON file. If there is no ADT/HL7 EVENT REASON then DATE LAST TREATED will also be null.

Some examples of values that are returned:

- "516^BAY PINES VAMC^^^VAMC"
- "537^JESSE BROWN VAMC^3041122.110926^3^VAMC"
- "552^DAYTON^3001113.092056^3^VAMC"
- "556^NORTH CHICAGO VAMC^3050406.13^3^VAMC"
- "578^HINES, IL VAMC^3020919.2324^3^VAMC"
- "589^VA HEARTLAND WEST, VISN 15^^^VAMC"
- "636^VA NWIHS, OMAHA DIVISION^^^VAMC"
- "673^TAMPA VAMC^3001215.1327^3^VAMC"

#### "695^MILWAUKEE VAMC^3030328.13^3^VAMC"

A CONDITION can be written that uses any of the pieces of the value. For example, a CONDITION to check that the FACILITY TYPE is VAMC would be: I \$P(V,U,5)="VAMC"

Since no date can be associated with an entry, the date of evaluation will be used.

Edit Date: MAR 10,2006 15:00 Edit By: CRPROGRAMMER, ONE

**Edit Comments:** 

Entry Point: TFL Routine: PXRMRDI

# VA-UNKNOWN OEF/OIF SERVICE

Print Name: VA-Unknown OEF/OIF Service

Class: NATIONAL

Sponsor: Review Date:

## Description:

This multi-occurrence computed finding will search for periods of OEF/OIF service with an unknown location in the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are:

"LOCATION"

The default value is "LOCATION".

Entry Point: UNKOEIF Routine: PXRMMSER

This multi-occurrence computed finding will search for periods of OEF/OIF service with an unknown location in the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are:

"LOCATION"

The default value is "LOCATION".

#### VA-VETERAN

Print Name: VA-Patient is a Veteran

Class: NATIONAL

Sponsor: Review Date:

#### Description:

This single occurrence computed finding is true if the patient is a Veteran and false otherwise.

There are no values that can be used in a Condition.

Edit Date: APR 18,2011 14:18 Edit By: CRPROGRAMMER, ONE

Edit Comments: Exchange Install

Entry Point: VETERAN Routine: PXRMMSER

This single occurrence computed finding is true if the patient is a Veteran and false otherwise.

There are no values that can be used in a Condition.

#### VA-VIETNAM SERVICE

Print Name: VA-Vietnam Service

Class: NATIONAL

Sponsor: Review Date:

# Description:

This computed finding will be true if Vietnam service in the time frame specified by Beginning Date/Time and Ending Date/Time is found.

There are no subscripts that can be used in a Condition.

Entry Point: VIET Routine: PXRMMSER

#### **VA-WAS INPATIENT**

Print Name: VA-Was Inpatient

Class: NATIONAL

Sponsor: Review Date:

# Description:

This multi-occurrence computed finding will search the Patient Movement File for a list of patient admissions and associated discharges. If the date range defined by the admission date and discharge date overlaps the date range defined by the Beginning Date/Time and Ending Date/Time, the admission discharge pair will be kept on the list. If the patient's last admission does not have an associated discharge, then the evaluation date will be used in place of the discharge date in the overlap calculation.

The date of the finding will be the admission date, unless the Computed Finding Parameter is set to "DISCH," in which case the discharge date will be used. If you want to use discharge date as the finding date, in the computed finding parameter field, type the following: COMPUTED FINDING PARAMETER:DISCH

The "CSUB" values returned by this computed finding are:

- "ADMISSION DATE"
- "ADMISSION WARD"
- "DISCHARGE DATE"
- "DISCHARGE WARD"
- "LENGTH OF STAY"

Entry Point: WASINP Routine: PXRMPDEM

## VA-WH MAMMOGRAM ABNORMAL IN WH PKG

Print Name: VA-WH Mammogram Abnormal in WH pkg

Class: NATIONAL

Sponsor: Women Veterans Health Program

Review Date:

# Description:

This computed finding calls an API to the WH package that returns up to n number for a specific date range of Mammogram procedures found in the WH package that have an abnormal diagnosis.

The result from the computed finding will be returned in the Data Array; the format of the array is: DATA(n,"LINK")= DATA(n,"STATUS")= DATA(n,"VALUE")= DATA(n,"WVIEN")=

The data assigned to the Link subscript is a boolean value. If the value is a 1, then the Mammogram procedure was entered through the Radiology package.

The data assigned to the Status subscript is used to determine if the procedure is Open, Closed, or Pending. Pending means that the Mammogram procedure in the Women's Health package needs to have a result entered. Open means that the Mammogram procedure has been resulted but the provider has not closed the case. Closed means that a result has been entered for the procedure and it has been closed.

The data assigned to the Value subscript is used to determine the diagnosis of the Mammogram procedure. The diagnosis in the Women's Health package can either be Normal, Abnormal, or Unsatisfactory. For this computed finding, the Value should always be Abnormal

The data assigned to the WVIEN subscript is the Women's Health procedure IEN.

The text display in the Clinical Maintenance will be found in the Text array.

Entry Point: MAMA Routine: PXRMCWH

#### VA-WH MAMMOGRAM IN WH PKG

Print Name: VA-Mammogram in WH pkg

Class: NATIONAL

Sponsor: Review Date:

# Description:

This computed finding calls an API to the WH package that returns up to n number for a specific date range of Mammogram procedures found in the WH package.

The results from the computed finding will be returned in the Data Array; the format of the array is: DATA(n,"LINK")= DATA(n,"STATUS")= DATA(n,"VALUE")= DATA(n,"WVIEN")=

The data assigned to the Link subscript is a boolean value. If the value is a 1, then the Mammogram procedure was entered through the Radiology package.

The data assigned to the Status subscript is used to determine if the procedure is Open, Closed, or Pending. Pending means that the Mammogram procedure in the Women's Health package needs to have a result entered. Open means that the Mammogram procedure has been resulted but the provider has not closed the case. Closed means that a result has been entered for the procedure and it has been closed.

The data assigned to the Value subscript is used to determine the diagnosis of the Mammogram procedure. The diagnosis in the Women's Health package can be either Normal, Abnormal, or Unsatisfactory.

The data assigned to the WVIEN subscript is the Women's Health procedure IEN.

The text display in the Clinical Maintenance will be found in the Text array.

Entry Point: MAM Routine: PXRMCWH

#### VA-WH PAP SMEAR ABNORMAL IN WH PKG

Print Name: VA-WH Pap Smear Abnormal in WH pkg

Class: NATIONAL

Sponsor: Women Veterans Health Program

Review Date:

# Description:

This computed finding calls an API to the WH package that returns up to n number for a specific date range of Pap smear procedures found in the WH package that have an abnormal diagnosis. The results from the computed finding will be returned in the Data Array; the format of the array is: DATA(n,"LINK")= DATA(n,"STATUS")= DATA(n,"VALUE")= DATA(n,"WVIEN")=

The data assigned to the Link subscript is a boolean value. If the value is a 1, then the Pap smear procedure was entered through the Radiology package.

The data assigned to the Status subscript is used to determine if the procedure is Open, Closed, or Pending. Pending means that the Pap smear procedure in the Women's Health package needs to have a result entered.

Open means that the Pap Smear procedure has been resulted but the provider has not closed the case. Closed means that a result has been entered for the procedure and it has been closed.

The data assigned to the Value subscript is used to determine the diagnosis of the Pap smear procedure. The diagnosis in the Women's Health package can either be Normal, Abnormal, or Unsatisfactory. For this computed finding, the Value should always be Abnormal

The data assigned to the WVIEN subscript is the Women's Health procedure IEN.

The text display in the Clinical Maintenance will be found in the Text array.

Entry Point: PAPA Routine: PXRMCWH

#### VA-WH PAP SMEAR IN LAB PKG

Print Name: VA-Lab Pap Smear SNOMED

Class: NATIONAL

Sponsor: Review Date:

## Description:

This computed finding pulls a list of Topography and Morphology codes that are mapped to the Pap smear entry in the Women Health package. The Pap Smear entry is defined in file #790.2 the WV Procedure Type file.

This computed finding requires that both the topography and morphology codes are mapped to the Pap smear procedure. The morphology codes must also have a result assigned to them.

This computed search will return up to n number of entries found in the Lab package for a specific data range of procedures that match the topography and morphology codes.

The output of the computed finding will be returned in the Data array. The format of the data array is:

DATA(n, "TOPH") = DATA(n, "VALUE") = DATA(n, "MORP") = DATA(n, "RESULT STATUS") =

The data found in the TOPH subscript is the Topography code in the following format: T-SNOMED CODE

The data found in the VALUE subscript is the Topography code in the following format: T-SNOMED CODE SNOMED CODE DESCRIPTION

The data found in the MOPH subscript is the Morphology code in the following format: M-SNOMED CODE

The data found in the RESULT STATUS subscript is the result that has been mapped to the Morphology code in the Women's Health package. The result will either be NEM, Abnormal, Unsatisfactory, or Unknown.

The text display in the Clinical Maintenance will be found in the Text array.

Entry Point: PAPSCR Routine: PXRMCWH

#### VA-WH PAP SMEAR IN WH PKG

Print Name: VA-Pap Smear in WH pkg

Class: NATIONAL

Sponsor: Review Date:

## Description:

This computed finding calls an API to the WH package that returns up to n number for a specific date range of Pap smear procedures found in the WH package.

The result from the computed finding will be returned in the Data Array; the format of the array is: DATA(n,"LINK")= DATA(n,"STATUS")= DATA(n,"VALUE")= DATA(n,"WVIEN")=

The data assigned to the Link subscript is a Boolean value. If the value is a 1, then the Pap smear procedure was entered through the Radiology package.

The data assigned to the Status subscript is used to determine if the procedure is Open, Closed, or Pending. Pending means that the Pap smear procedure in the Women's Health package needs to have a result entered.

Open means that the Pap smear procedure has been resulted but the provider has not closed the case. Closed means that a result has been entered for the procedure and it has been closed. The data assigned to the Value subscript is used to determine diagnosis of the Pap smear procedure. The diagnosis in the Women's Health package can either be Normal, Abnormal, or Unsatisfactory.

The data assigned to the WVIEN subscript is the Women's Health procedure IEN.

The text display in the Clinical Maintenance will be found in the Text array.

Edit Date: FEB 15,2005 12:31 Edit By: CRPROGRAMMER, ONE

Edit Comments: Exchange Install

Entry Point: PAP Routine: PXRMCWH

## **Reminder Definition Management**

This PowerPoint presentation, used for VistaU distance learning, provides a good overview of how reminder definitions work.



Introduction to Reminder Definitions.

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

National Reminders, identified by having a CLASS of NATIONAL and a name starting with VA-, cannot be edited. If you cannot use a national reminder "as is" then copy to a new name, at which point it becomes local, and then edit the reminder to meet your requirements.

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                        | Description  |
|------|-----------------------------------|------------------------------------|--|
| RA   | Activate/Inactivate<br>Reminders  | PXRM<br>(IN)/ACTIVATE<br>REMINDERS | This option is used to make reminders active or inactive.  |
| RE   | Add/Edit Reminder<br>Definition   | PXRM DEFINITION<br>EDIT            | This option is used to create or edit Clinical Reminder Definitions. Nationally distributed reminder definitions items all have a "VA-"prefix. VA- for Ambulatory Care EP reminders and VA-* for National Center for Health Promotion reminders.   |
| RC   | Copy Reminder<br>Definition       | PXRM DEFINITION<br>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 | PXRM DEFINITION INQUIRY            | This option allows you to display a clinical reminder definition in an easy to read format.  |
| RL   | List Reminder<br>Definitions      | PXRM DEFINITION LIST               | This option provides a brief summary of selected Clinical Reminder definitions.  |
| RH   | Reminder Edit<br>History          | PXRM REMINDER<br>EDIT HISTORY      | This option allows you to display a reminder definition's edit history. Edit history was formerly displayed as part of the Definition Inquiry, but was removed and made available within this option.  |
| ICS  | Integrity Check<br>Selected       | PXRM DEF<br>INTEGRITY CHECK<br>ONE | This option lets the user select a reminder definition for integrity checking.   |
| ICA  | Integrity Check All               | PXRM DEF<br>INTEGRITY CHECK<br>ALL | This option runs the integrity check for all reminder definitions on the system.   |

## Patch 24 (PXRM\*2\*24) High Risk Mental Health Patient - Reminder and Flag: Changes to Reminder Definitions

#### 1. New Reminder Definitions:

#### • VA-MH HIGH RISK NO-SHOW ADHOC RPT

No reminder dialog is associated with this reminder. This new Reminder Definition looks for the first appointment found, given a date and time and looking through the rest of the day. It is resolved if the finding is documented within 1 week. It is used by the SD MH NO SHOW AD HOC REPORT to get Results related to the follow-up reminder for each missed appointment date/time, if results are available.

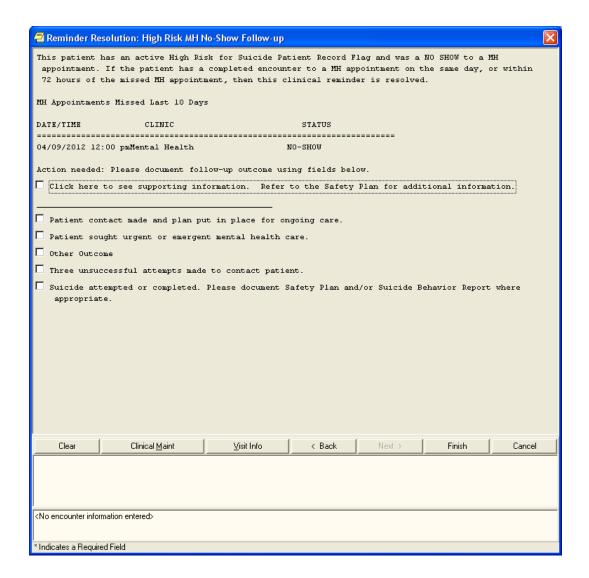
#### Example of Results section that prints after the Future Scheduled Appointments:

```
Future Scheduled Appointments: NO APPOINTMENTS SCHEDULED WITHIN 30 DAYS
Results:
Resolution: Last done 05/14/2012@12:00
Reminder Term: VA-MH NOSHOW PT EMERGENT CARE
Health Factor: MH NOSHOW PT EMERGENT CARE
05/14/2012@12:00

Reminder Term: VA-MH SUICIDE ATTEMPTED
Health Factor: MH SUICIDE ATTEMPTED
05/14/2012@12:00
```

#### VA-MHTC NEEDS ASSIGNMENT

- This reminder looks for the most recent three completed appointments to MH clinics over the past year and checks to see if an MHTC is currently assigned to the patient. If no MHTC is assigned, the reminder will be due.
- The reminder definition uses the new VA-PCMM MHTC computed finding.
- There is no reminder dialog related to this reminder.
- This reminder can be used from CPRS to show as due on the CPRS GUI Cover Sheet.
- This reminder can also be used from Reminder Reporting options/Reminder Due Report.
   Reminder CACs can create a Reminder Due Report (User) template for an SPC user to get the list of patients who are scheduled for a MH appointment next week and are candidates for MHTC.
- Uses Reminder Term VA-MH APPTS FOR MHTC ASSIGNMENT, which uses a
  new Reminder Location List called VA-MHTC APPT STOP CODES LL in the
  Computed Finding VA-Appointments for a Patient. The new Reminder Location List is
  consistent with the national list of MH Encounter Stop Codes defined for sites by the
  Office of Mental Health Services.
- 2. Changed the dialog info text presented to the user to clarify that the reminder is resolved if a completed encounter is found for a MH appointment on the same day, or within 72 hours of the missed MH appointment.



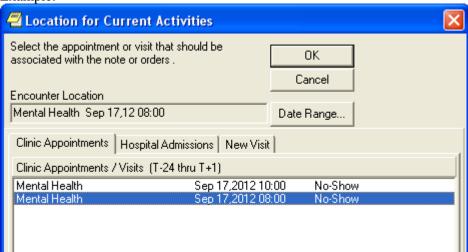
3. Added Category I PRF for HIGH RISK FOR SUICIDE to the Reminder Definition. The reminder now looks for both the Category I and Category II active PRF for High Risk for Suicide.

```
--STATUS-- --DUE DATE--
High Risk MH No-Show Follow-up
                                     DUE NOW
                                                 DUE NOW
                                                                unknown
Frequency: Due every 99Y - Once for all ages.
Reminder triggered by missed MH appointment and when resolved won't be due
again until another missed MH appointment occurs.
The patient has an active High Risk for Suicide Patient Record Flag and missed a MH
appointment.
Cohort:
Reminder Term: VA-MH NOSHOW MISSED MH CLINIC APPTS
  Computed Finding: VA-Appointments for a Patient
   04/09/2012@12:00 value - Mental Health
     CLINIC: Mental Health
     APPOINTMENT STATUS: NO-SHOW
Reminder Term: VA-MH HIGH RISK FOR SUICIDE PRF
 Computed Finding: VA-Patient Record Flag Information
  01/31/2012@11:08:45 value - NEW ASSIGNMENT;
  Flag - HIGH RISK FOR SUICIDE (I (NATIONAL)).
  Assigned Jan 31, 2012@11:08:45 by REDINGTON, PATRICK. New record flag
  12/21/2010@15:36:02 value - NEW ASSIGNMENT;
  Flag - HIGH RISK FOR SUICIDE (II (LOCAL)).
  Assigned Dec 21, 2010@15:36:02 by TROST, DEBBIE. New record flag assignment.
```

- 4. Change to VA-MH HIGH RISK NO-SHOW FOLLOW-UP reminder definition:
  - Removed Occurrence Count of 5 from RT.VA-MH NOSHOW MISSED MH CLINIC
    APPTS Hospital Location and only defined occurrence at the Reminder Definition level.
    It still looks back 10D and resolves with specific health factors entered from the reminder dialog the same day or a completed MH Appointment within 8 hours before or 72 hours after.
  - Modifies the Reminder Dialog to include the Suicide Behavior Report(SBR) for optional entry.
  - If there are several No-show appointments for a given day, responses to any of the no-show appointments (even the earliest appointment) on that day will resolve all of the no-show follow-ups for that day.

No-show health factors entered at any time on the date of the missed appointment resolve all no-show appointment follow-up on that day.

#### Example:



#### Example: Clinical Maintenance output after selecting 8am appointment

```
--STATUS-- --DUE DATE-- --LAST DONE--
High Risk MH No-Show Follow-up
                                       DONE
                                                              09/17/2012
Frequency: Due every 99Y - Once for all ages.
Reminder triggered by missed MH appointment and when resolved won't be due
again until another missed MH appointment occurs.
The patient has an active High Risk for Suicide Patient Record Flag and missed a MH
appointment.
Cohort:
Reminder Term: VA-MH NOSHOW MISSED MH CLINIC APPTS
 Computed Finding: VA-Appointments for a Patient
                                                       Most recent appointment that
  09/17/2012@10:00 value - Mental Health
                                                       triggered the reminder
     APPOINTMENT DATE/TIME: 09/17/2012@10:00
     CLINIC: Mental Health
     APPOINTMENT STATUS: NO-SHOW
   09/17/2012@08:00 value - Mental Health
     APPOINTMENT DATE/TIME: 09/17/2012@08:00
     CLINIC: Mental Health
    APPOINTMENT STATUS: NO-SHOW
Reminder Term: VA-MH HIGH RISK FOR SUICIDE PRF
 Computed Finding: VA-Patient Record Flag Information
  12/21/2010@15:33:08 value - NEW ASSIGNMENT;
  Flag - HIGH RISK FOR SUICIDE(II (LOCAL)).
  Assigned Dec 21, 2010@15:33:08 by TROST, DEBBIE. New record flag assignment.
Resolution: Last done 09/17/2012@08:00
                                                         Resolved by no show findings
Reminder Term: VA-MH NOSHOW PT CONTACTED
                                                          for an earlier no-show appt.
 Health Factor: MH NOSHOW PT CONTACTED
   09/17/2012@08:00
   Comments: Patient had flu
```

5. Three terms were removed (VA-MH NOSHOW SUPPORT CONTACT, VA-MH NOSHOW INITIATE WELLNESS CHECK, VA-MH NOSHOW UNABLE TO REACH PT) from the reminder definition, since they are no longer valid responses in the related reminder dialog.

- **6.** New functionality was added that gives Clinical Reminders the ability to send notifications. The specific notification is SUICIDE ATTEMPTED /COMPLETED.
- 7. For list-type reminders, the definition integrity checker was not correctly checking the Baseline Age Findings to make sure that an age range was defined. This was corrected.

# Patch 18 (PXRM\*2\*18- High Risk Mental Health Patient - Reminder and Flag-phase 1) Updates for Reminder Definitions

#### **Changes to National Reminder Definitions**

## Summary:

- 1. Updated branching logic reminders for OEF/OIF screening:
  - a. Fixed the problem that patients who do not have the required LSSD entry are not having the items show as due when they have been done.
  - b. Removed refusals and other exclusions from the branching logic if not done, then show the item as open and allow the parent reminder to use the exclusions instead of also evaluating them in the branching logic. This makes all 7 of the branching logic reminders consistent.
- **2.** Updated the URLs for MH screening.
- **3.** Added '0' to the Within Category Rank for EF-NO BLAST/EXPLOSION INJURY and EF-NO BULLET INJURY in the reminder VA-EMBEDDED FRAGMENTS RISK EVALUATION.
- **4.** Added occurrence count of 4 to AUD C in the alcohol screening reminder.
- **5.** Fixed header/info text in AAA reminder.
- **6.** Distributed H1N1 reminders and dialog via patch and distribute and inactivate.
- **7.** Updated VA-ALCOHOL F/U POS AUDIT-C dialog to display the education and advice interventions without a box around both and also to have the results of an AUDIT-10 go into the progress note.
- **8.** Distributed the updates to the VA-MHV INFLUENZA VACCINE reminder.

## **Detailed Descriptions:**

1. Updated branching logic reminders

VA-BL DEPRESSION SCREEN

Removed RT.VA-ACTIVE DUTY

Cohort: changed to due for all

Resolution: changed to resolve for any entry that is not before the LSSD

Changed the logic from

MRD(VA-DEPRESSION SCREEN NEGATIVE, VA-DEPRESSION SCREEN POSITIVE)>MRD(VA-LAST SERVICE SEPARATION DATE)

To

MRD(VA-DEPRESSION SCREEN POSITIVE, VA-DEPRESSION SCREEN NEGATIVE)'<MRD(VA-LAST SERVICE SEPARATION DATE)

#### VA-BL ALCOHOL SCREEN

Removed RT.VA-ACTIVE DUTY

Cohort: changed to due for all

Removed exclusions

Resolution: changed to resolve for any entry that is not before the LSSD

#### VA-BL PTSD SCREEN

Removed RT.VA-ACTIVE DUTY

Cohort: changed to due for all

Removed exclusions

Resolution: changed to resolve for any entry that is not before the LSSD

Added a '0' to the Within Category Rank for the health factors.

VA-BL OEF/OIF EMBEDDED FRAGMENTS

VA-BL OEF/OIF FEVER

VA-BL OEF/OIF GI SX

VA-BL OEF/OIF SKIN SX

Removed RT.VA-IRAQ/AFGHAN PERIOD OF SERVICE and substitute CF.VA-LAST

SERVICE SEPARATION DATE

Removed RT.VA-ACTIVE DUTY

Cohort: changed to due for all

Resolution: changed to resolve for any entry that is not before the LSSD

#### 2. Updated URLs

VA-ALCOHOL USE SCREEN (AUDIT-C)

VA-DEPRESSION SCREENING

**VA-PTSD SCREENING** 

- 3. VA-EMBEDDED FRAGMENTS RISK EVALUATION: Added '0' to the Within Category Rank for EF-NO BLAST/EXPLOSION INJURY and EF-NO BULLET INJURY
- 4. VA-ALCOHOL USE SCREENING (AUDIT-C)
  - a. Added occurrence count of 4 to AUD C in the alcohol screening reminder
  - b. Updated the dialog by changing 'Optional open and optional complete (partial complete possible)' to 'Optional open and required complete or cancel before finish'.
- 5. Fixed grammatical error in VA-TEXT INFO SCREEN FOR AAA
- 6. Distributing reminders VA-INFLUENZA H1N1 IMMUNIZATION, VA-INFLUENZA H1N1 IMMUNIZATION HIGH RISK, and dialog VA-INFLUENZA H1N1 IMMUNIZATION (DIALOG). Distribute as INACTIVE.
- 7. Updated VA-ALCOHOL F/U POS AUDIT-C dialog to display the education and advice interventions without a box around both and also to have the results of an AUDIT-10 go into the progress note. Added an \* to the word 'required' in 2 of the captions.
- 8. Distributing the updates to the VA-MHV INFLUENZA VACCINE reminder which update the age range and also the date of the reminder term for vaccination for the '10-'11 flu season.

#### **Enhancements in Patch 18**

#### **New options**

Two new options were added to the reminder definition management menu:

- Integrity Check Selected
- Integrity Check All.

These can be used to check the integrity of selected or all reminder definitions. The integrity check will also be made automatically whenever a reminder definition has been edited. Fatal errors (F) that will prevent the reminder from working properly and warnings (W) will be given. The following checks are made:

- F Each finding is checked to make sure it exists
- F If either the Beginning Date/Time or Ending Date/Time contains FIEVAL(M,"DATE") or FIEVAL(M,N,"DATE"), the definition is checked to make sure it contains finding M, and if an occurrence is used, the Occurrence Count of finding M is checked to make sure it is greater than or equal to N.
- F- Function findings functions of the form FUNCTION(M) and FUNCTION(M,N) are checked to make sure finding M is in the definition and the Occurrence Count of finding M is greater than or equal to N.
- F If a Custom Date Due is defined, it is checked to make sure that the findings used in the Custom Date Due all exist in the definition.
- F Patient Cohort Logic and Resolution Logic are checked to make sure that the findings used in the logic all exist in the definition.
- F Logic strings are checked to make sure their syntax is valid.
- F The definition contains Resolution Logic but does not have a baseline frequency or any findings that will set a frequency.
- W The Usage field contains a "P" and it is not a national reminder
- W- The definition contains Resolution Logic but does not have a baseline frequency. It does have findings that will set a frequency. This could be a problem if all findings that set frequency are false.

New functionality was added to allow using the date of one finding to set the date range of another finding. The syntax for the date of a finding is FIEVAL(M,"DATE") or FIEVAL(M,N,"DATE"), where M is the finding number and N is the occurrence. This means you can now use dates like FIEVAL(3,"DATE")-3W as the Beginning or Ending Date/Time of another finding. The global reminder dates PXRMDOB and PXRMLAD can also be used. Note that if FIEVAL(M) is false or PXRMLAD does not exist, then the finding whose date range depends on the date of finding M will be set to false.

In conjunction with allowing FIEVAL(M,N,"DATE") to be used in Beginning Date/Time or Ending Date/Time, additional frequency units were added. The allowed values are now: H (hours), D (days), W (weeks), M (months), and Y (years). This change applies everywhere that a frequency can be used, including Beginning Date/Time, Ending Date/Time, Reminder Frequency in the Baseline Age Findings multiple, Findings multiple, Function Findings multiple, and Custom Date Due. Custom Date Due will now allow both "+" and "-"; in the past it only allowed "+".

#### **Fixes**

Remedy ticket #360708 reported a problem with the incorrect calculation of the resolution date when the resolution logic contains function findings. This was because the resolution date calculation was not properly differentiating between true and false function findings. This was corrected.

Remedy ticket #413731 pointed out a problem with non-VA meds that turned out to be two problems. The first is the existing issue where the Index for non-VA meds has incorrect entries. Remedy ticket #347730 reporting this problem was submitted September 4, 2009 and it still has not been fixed by

Pharmacy. The second problem was a display issue. By default, the date of a drug finding is the stop date. If USE START DATE is true, the date of a drug finding is the start date. However, even when USE START DATE was true, the stop date was being displayed as the date of the finding. That has been corrected so that now whichever date is selected for the drug finding will be displayed as its finding date.

The Clin2 support team pointed out that the value for blood pressure can come back in either of the following forms: SYSTOLIC/DIASTOLIC or SYSTOLIC/MEAN/DIASTOLIC ( the second form is not very common). If the second form comes back, then the DIASTOLIC CSUB would have the value for mean, and if \$P was used in a Condition, it would also be the mean. The code was changed so that the DIASTOLIC CSUB will always have the correct value. If you are using \$P in a Condition, we recommend that you replace it with the appropriate CSUBs. Several national definitions and terms were originally distributed with Conditions using \$P; as part of this patch they will be updated to use the SYSTOLIC and DIASTOLIC CSUBs.

The following updates are made:

```
Definitions:
```

VA-HTN ASSESSMENT BP >=140/90

FI(11) CONDITION: I \$P(V,"/",1)>139!(\$P(V,"/",2)>89)

changed to I (V("SYSTOLIC")>139)!(V("DIASTOLIC")>89)

FI(13) CONDITION: I \$P(V,"/",1)>159!(\$P(V,"/",2)>99) changed to I (V("SYSTOLIC")>159)!(V("DIASTOLIC")>99)

VA-HTN ASSESSMENT BP >=160/100

FI(13) CONDITION: I \$P(V,"/",1)>159!(\$P(V,"/",2)>99) changed to I (V("SYSTOLIC")>159)!(V("DIASTOLIC")>99)

VA-HTN LIFESTYLE EDUCATION

FI(11) CONDITION: I \$P(V,"/",1)>139!(\$P(V,"/",2)>89) changed to I

(V("SYSTOLIC")>139)!(V("DIASTOLIC")>89)

#### Terms:

VA-BP > 130/80

Mapped item 1: CONDITION: I \$P(V,"/",1)>130!(\$P(V,"/",2)>80)

changed to I (V("SYSTOLIC")>130)!(V("DIASTOLIC")>80)

VA-BP > 130/80 (ANY OF LAST 3)

Mapped item 1: CONDITION: I \$P(V,"/",1)>130!(\$P(V,"/",2)>80) changed to I (V("SYSTOLIC")>130)!(V("DIASTOLIC")>80)

VA-BP >= 140/90

Mapped item 1: CONDITION: I P(V, '', 1) > 139!(P(V, '', 2) > 89)

changed to I (V("SYSTOLIC")>139)!(V("DIASTOLIC")>89)

VA-BP >= 160/100

Mapped item 1: CONDITION: I \$P(V,"/",1)>159!(\$P(V,"/",2)>99)

changed to I (V("SYSTOLIC")>159)!(V("DIASTOLIC")>99)

On the Nov 19, 2010 national reminder call, there was a discussion about frequency being required. If there is no resolution logic, then frequency is not required as long as AGE is not in the cohort logic (because age is associated with a frequency). When there was no frequency, the status was being returned as CNBD even if there was no resolution logic and no age in the cohort logic. This was changed so that as long as there is no AGE in the cohort logic and no resolution logic, the status will be either DUE or N/A.

There were a couple of errors in the description of the **Usage field**.

#### Original Description:

The Usage field describes how the reminder definition will be used. This field must contain C if the reminder is to be selected in CPRS. The L or the O values will override all other values. For example, if L and C are defined in the usage field, the Reminder will not show on the cover sheet in CPRS, because L is in the Usage field.

This is free text field and can contain any combination of the following codes:

## Corrected Description:

The Usage field describes how the reminder definition can be used. This field must contain C or \* if the reminder is to be selected in CPRS. The L or the O values will override all other values. For example, if L and C are defined in the Usage field, the Reminder will not show on the cover sheet in CPRS, because L is in the Usage field.

This is free text field and can contain any combination of the following codes:

| Code | Usage                                 |
|------|---------------------------------------|
| С    | CPRS                                  |
| L    | Reminder Patient List                 |
| 0    | Reminder Order Checks                 |
| P    | Patient                               |
| R    | Reminder Reports                      |
| Χ    | Reminder Extracts                     |
| *    | All of the above, except L, O, and P. |

## Steps to Define a Working 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.

These are the basic steps for defining a reminder. More detailed instructions for creating reminders and dialogs are provided in chapters that follow. As you become more experienced, you will probably develop your own process, but this provides a good starting place.

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 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)
- 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. For example, you may need exams or health factors. *Option: PCE Table Maintenance on Other Supporting Menus*
- 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*,
- 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 CPRS;
- 6. Create a reminder dialog (following instructions in the Reminder Dialog section of this manual), if desired, for resolving the reminder in CPRS.
- 7. Once you are certain the reminder works as intended, set it up in one or more of the following applications:
  - Add it to a health summary
  - Make it available to users through the CPRS GUI

**NOTE**: The procedure for making a health summary available in the CPRS GUI is found on page 310.

#### **List Reminder Definitions**

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**: Only the first few of the reminder definitions are deleted from this example, for brevity's sake.

```
RL
         List Reminder Definitions
        Inquire about Reminder Definition
  RT
  RE Add/Edit Reminder Definition
  RC Copy Reminder Definition
  RA Activate/Inactivate Reminders
  RH
       Reminder Edit History
  ICS Integrity Check Selected
  ICA Integrity Check All
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-//
List Active (A), Inactive (I), Both (B)? B// Active
Sort list by Name (N), Print Name (P)? N// 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-
 List Active (A), Inactive (I), Both (B)? Active
 Sort list by Name (N), Print Name (P)? Name (.01)
Is this correct? Y// ES
DEVICE: HOME
                                            JUL 20,2012 09:50 PAGE 1
REMINDER DEFINITION LIST
______
Name: VA-*IHD 412 ELEVATED LDL REPORTING
Print Name: IHD 412 Elevated LDL Reporting
                            NATIONAL
Class:
Sponsor:
                            Office of Quality & Performance
Review Date:
Usage: DATA EXTRACT, REPORTS
Priority:
Reminder Description:
```

Compliance reporting measures the management of IHD patients with an ICD-9 412.nn diagnosis, whose most recent LDL is greater than or equal to 120mg/dl as defined by the VA External Peer Review Program (EPRP) performance measure and the maximum guideline recommended below:

The VHA/DOD Clinical Practice Guideline for Management of Dyslipidemia recommends an LDL goal of <120 mg/dl for patients with Ischemic Heart Disease; and the NCEP Adult Treatment Panel II recommends a more stringent goal of <100 mg/dl.

This national IHD 412 Elevated LDL Reporting reminder is used monthly to roll up compliance totals for management of a subgroup of IHD patients with a 412.nn diagnosis, whose most recent LDL is greater than or equal to  $120 \, \mathrm{mg/dl}$ .

This national reminder identifies IHD patients with a documented ICD-9 code 412.nn in the last 5 years, who have had a serum lipid panel within the last two years, where the most recent LDL lab test (or documented outside LDL) is greater than or equal to 120 mg/dl.

If a more recent record of an UNCONFIRMED IHD DIAGNOSIS is found, the reminder will not be applicable to the patient.

```
Findings:
  Finding Item: VA-IHD 412 DIAGNOSIS (FI(1)=RT(75))
 Finding Item: VA-ID 412 DIAGNOSIS (FI(1)-R1(73))
Finding Item: VA-OUTSIDE LDL <100 (FI(3)=RT(35))
Finding Item: VA-OUTSIDE LDL 100-119 (FI(4)=RT(34))
Finding Item: VA-OUTSIDE LDL 120-129 (FI(5)=RT(52))
Finding Item: VA-OUTSIDE LDL >129 (FI(6)=RT(36))
Finding Item: VA-LDL <100 (FI(7)=RT(49))
Finding Item: VA-LDL 100-119 (FI(8)=RT(50))
  Finding Item: VA-LDL 120-129 (FI(9)=RT(51))
  Finding Item: VA-LDL > 129 (FI(10)=RT(71))
  Finding Item: VA-UNCONFIRMED IHD DIAGNOSIS (FI(11)=RT(42))
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)
REMINDER DEFINITION LIST
                                                           JUL 20,2012 09:50 PAGE 5
Name: VA-*IHD 412 LIPID PROFILE REPORTING
Print Name: IHD 412 Lipid Profile Reporting
Class:
                                      NATIONAL
                                      Office of Quality & Performance
Sponsor:
Review Date:
```

```
Usage: DATA EXTRACT, REPORTS
Priority:
Reminder Description:
    Compliance reporting measures the LDL completed within 2 years as defined
    by the VA External Peer Review Program (EPRP) performance measure and the
    maximum guideline recommended below:
      The VHA/DOD Clinical Practice Guideline for Management of Dyslipidemia
      recommends that patients with Ischemic Heart Disease have a lipid
      profile/LDL every one to two years; and that patients taking lipid
      lowering medications have a lipid profile/LDL at least every year.
    This national IHD 412 Lipid Profile Reporting reminder is used monthly to
    roll up LDL compliance totals for a subgroup of IHD patients. This
    reminder identifies IHD patients with a documented ICD-9 code 412.nn in
    the last five years who have not had a serum lipid panel/LDL (calculated
    or direct lab package LDL or documented outside LDL) within the last two
    years. If a more recent record of an UNCONFIRMED IHD DIAGNOSIS is found,
    the reminder will not be applicable to the patient.
Findings:
  Finding Item: VA-IHD 412 DIAGNOSIS (FI(1)=RT(75))
  Finding Item: VA-LDL (FI(2)=RT(32))
 Finding Item: VA-OUTSIDE LDL <100 (FI(3)=RT(35))
Finding Item: VA-OUTSIDE LDL 100-119 (FI(4)=RT(34))
Finding Item: VA-OUTSIDE LDL 120-129 (FI(5)=RT(52))
Finding Item: VA-OUTSIDE LDL >129 (FI(6)=RT(36))
Finding Item: VA-UNCONFIRMED IHD DIAGNOSIS (FI(10)=RT(42))
Finding Item: VA-LIPID LOWERING MEDS (FI(12)=RT(54))
 Finding Item: VA-LDL <100 (FI(13)=RT(49))
 Finding Item: VA-LDL 100-119 (FI(14)=RT(50))
 Finding Item: VA-LDL 120-129 (FI(15)=RT(51))
  Finding Item: VA-LDL > 129 (FI(16)=RT(71))
Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
FI(1)&FF(1)
Expanded Patient Cohort Logic:
FI(VA-IHD 412 DIAGNOSIS) &FF(1)
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
FI(2)!FI(3)!FI(4)!FI(5)!FI(6)
Expanded Resolution Logic:
FI(VA-LDL)!FI(VA-OUTSIDE LDL <100)!FI(VA-OUTSIDE LDL 100-119)!
FI(VA-OUTSIDE LDL 120-129)!FI(VA-OUTSIDE LDL >129)
REMINDER DEFINITION LIST
                                                  JUL 20,2012 09:50 PAGE 8
______
Name: VA-*IHD ELEVATED LDL REPORTING
Print Name: IHD Elevated LDL Reporting
Class:
                                NATIONAL
                                Office of Quality & Performance
Sponsor:
Review Date:
```

```
Usage: DATA EXTRACT, REPORTS
Priority:
Reminder Description:
    Compliance reporting measures the management of IHD patients whose most
    recent LDL is greater than or equal to 120mg/dl as defined by the VA
    External Peer Review Program (EPRP) performance measure and the maximum
    guideline recommended below:
       The VHA/DOD Clinical Practice Guideline for Management of Dyslipidemia
       recommends an LDL goal of <120 mg/dl for patients with Ischemic Heart
       Disease; and the NCEP Adult Treatment Panel II recommends a more
       stringent goal of <100 mg/dl.
    This national IHD Elevated LDL Reporting reminder is used monthly to roll
    up compliance totals for management of IHD patients whose most recent LDL
    is greater than or equal to 120mg/dl.
    This national reminder identifies patients with known IHD (i.e., a
    documented ICD-9 code for IHD in the last five years) who have had a
    serum lipid panel within the last two years, where the most recent LDL
    lab test (or documented outside LDL) is greater than or equal to 120
    mg/dl. If a more recent record of an UNCONFIRMED IHD DIAGNOSIS is found,
    the reminder will not be applicable to the patient.
Findings:
 Finding Item: VA-IHD DIAGNOSIS (FI(1)=RT(27))
Finding Item: VA-OUTSIDE LDL <100 (FI(3)=RT(35))
Finding Item: VA-OUTSIDE LDL 100-119 (FI(4)=RT(34))
 Finding Item: VA-OUTSIDE LDL 120-129 (FI(5)=RT(52))
 Finding Item: VA-OUTSIDE LDL >129 (FI(6)=RT(36))
 Finding Item: VA-LDL > 129 (FI(7)=RT(71))
 Finding Item: VA-LDL < 100 (FI(8)=RT(49))
 Finding Item: VA-UNCONFIRMED IHD DIAGNOSIS (FI(13)=RT(42))
 Finding Item: VA-LDL 100-119 (FI(14)=RT(50))
 Finding Item: VA-LDL 120-129 (FI(15)=RT(51))
Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
FI(1)&FF(2)
Expanded Patient Cohort Logic:
FI(VA-IHD DIAGNOSIS)&FF(2)
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
FI(3)!FI(4)!'FI(5)!'FI(6)!'FI(7)!FI(8)!FI(14)!'FI(15)&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 >129)!
FI(VA-LDL <100)!FI(VA-LDL 100-119)!'FI(VA-LDL 120-129)&FF(1)
REMINDER DEFINITION LIST
                                                JUL 20,2012 09:50 PAGE 12
Name: VA-*IHD LIPID PROFILE REPORTING
Print Name: IHD Lipid Profile Reporting
                               NATIONAL
Class:
```

```
Sponsor:
                               Office of Quality & Performance
Review Date:
Usage: DATA EXTRACT, REPORTS
Priority:
Reminder Description:
    Compliance reporting measures the LDL completed within 2 years as defined
    by the VA External Peer Review Program (EPRP) performance measure and the
    maximum quideline recommended below:
      The VHA/DOD Clinical Practice Guideline for Management of Dyslipidemia
      recommends that patients with Ischemic Heart Disease have a lipid
      profile/LDL every one to two years; and that patients taking lipid
      lowering medications have a lipid profile/LDL at least every year.
    This national IHD Lipid Profile Reporting reminder is used monthly to
    roll up LDL compliance totals for IHD patients. This reminder identifies
    patients with known IHD (i.e., a documented ICD-9 code for IHD in the
    last five years) who have not had a serum lipid panel/LDL (calculated or
    direct lab package LDL) or documented outside LDL within the last two
    years. If a more recent record of an UNCONFIRMED IHD DIAGNOSIS is found,
    the reminder will not be applicable to the patient.
Findings:
 Finding Item: VA-IHD DIAGNOSIS (FI(1)=RT(27))
Finding Item: VA-LDL (FI(2)=RT(32))
Finding Item: VA-OUTSIDE LDL <100 (FI(3)=RT(35))
Finding Item: VA-OUTSIDE LDL 100-119 (FI(4)=RT(34))
 Finding Item: VA-OUTSIDE LDL 120-129 (FI(5)=RT(52))
 Finding Item: VA-OUTSIDE LDL >129 (FI(6)=RT(36))
 Finding Item: VA-UNCONFIRMED IHD DIAGNOSIS (FI(10)=RT(42))
 Finding Item: VA-LIPID LOWERING MEDS (FI(12)=RT(54))
 Finding Item: VA-LDL < 100 (FI(13)=RT(49))
 Finding Item: VA-LDL 100-119 (FI(14)=RT(50))
 Finding Item: VA-LDL 120-129 (FI(15)=RT(51))
 Finding Item: VA-LDL > 129 (FI(16)=RT(71))
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)
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
FI(2)!FI(3)!FI(4)!FI(5)!FI(6)
Expanded Resolution Logic:
FI(VA-LDL)!FI(VA-OUTSIDE LDL <100)!FI(VA-OUTSIDE LDL 100-119)!
FI(VA-OUTSIDE LDL 120-129)!FI(VA-OUTSIDE LDL >129)
REMINDER DEFINITION LIST
                                                 JUL 20,2012 09:50 PAGE 15
Name: VA-*IRAQ & AFGHAN POST-DEPLOY SCREEN REPORTING
Print Name: Iraq&Afghan Post-Deployment Screen
```

Class: LOCAL

Sponsor:

Review Date:

Usage: CPRS, REPORTS

Priority:

#### Reminder Description:

Patients who served in combat in either Operation Iraqi Freedom (Iraq, Kuwait, Saudi Arabia, Turkey) or in Operation Enduring Freedom (Afghanistan, Georgia, Kyrgyzstan, Pakistan, Tajikistan, Uzbekistan, The Philippines) should be screened for illnesses related to their service. Screening for PTSD, depression, problem alcohol use, infectious diseases, and chronic symptoms should be part of the initial evaluation of these Veterans.

COHORT: Veterans with separation date after 9/11/01. This finding is part of the reminder term: VA-IRAQ/AFGHAN PERIOD OF SERVICE and is determined by a computed finding.

An additional reminder term VA-ACTIVE DUTY is also available to cause patients to be part of the cohort. This term contains a computed finding for VA-PATIENT TYPE which can be used to include active duty patients. Sites that do not screen active duty patients may remove the computed finding from this reminder term.

RESOLUTION: entry of a health factor for NO IRAQ/AFGHAN SERVICE which is found in the reminder term IRAQ/AFGHAN SERVICE NO will resolve the reminder. If the Veteran served in Iraq or Afghanistan (IRAQ/AFGHAN SERVICE) then

- 1. the area of service by country must be answered and 2. all the other items are required to resolve the reminder and must be completed after the date of the most recent service separation:
  - a) screen for PTSD,
  - b) screen for depression,
  - c) screen for alcohol use,
- d) all 4 screening questions related to infectious diseases and other  $\ensuremath{\mathsf{symptoms}}$  .

The clinical maintenance will display information on which portions of the screen are not yet completed.

All of the individual elements of the screening tool are exported with attached health factors and reminder terms. The national health factors and reminder terms for the 2 question depression screen are used for the depression screening. The reminder dialog for alcohol screening allows the use of the standard AUDIT-C tool from the Mental Health package or entry of a refusal or entry of a health factor for no alcohol in the past year. The reminder term for ALCOHOL USE SCREEN contains the AUDIT-C and CAGE from the Mental Health package, the health factor for no alcohol use in the past year and the health factor for refusal. Additional health factors are included for PTSD screening and for the Infectious Diseases/Chronic symptoms screening. If your site does PTSD screening, then you will need to map your local health factors to the national PTSD reminder terms that are exported with this reminder.

The HFs for all of these screens should be entered in the site parameters as ones that cannot be added outside of a reminder dialog. Use the parameter ORWPCE EXCLUDE HEALTH FACTORS to exclude these from the

```
electronic encounter forms. Entry of these health factors should ONLY
    occur during reminder dialog use.
Findings:
 Finding Item: VA-IRAO/AFGHAN SERVICE NO (FI(1)=RT(489))
 Finding Item: VA-IRAQ/AFGHAN PERIOD OF SERVI (FI(2)=RT(490))
 Finding Item: VA-IRAQ/AFGHAN SERVICE (FI(3)=RT(568012))
 Finding Item: VA-DEPRESSION SCREEN NEGATIVE (FI(4)=RT(80))
 Finding Item: VA-DEPRESSION SCREEN POSITIVE (FI(5)=RT(81))
 Finding Item: VA-ALCOHOL USE SCREEN (FI(6)=RT(488))
 Finding Item: VA-PTSD SCREEN (FI(7)=RT(568013))
  Finding Item: VA-UNEXPLAINED FEVER (IRAQ/AFG (FI(8)=RT(568015))
  Finding Item: VA-OTHER SYMPTOMS (IRAQ/AFGHAN (FI(9)=RT(568017))
 Finding Item: VA-GI SYMPTOMS (IRAQ/AFGHANIST (FI(10)=RT(568014))
Finding Item: VA-PERSISTENT RASH (IRAQ/AFGHA (FI(11)=RT(568016))
 Finding Item: VA-PTSD AVOIDANCE ALL (FI(12)=RT(617))
 Finding Item: VA-PTSD DETACHMENT ALL (FI(13)=RT(620))
 Finding Item: VA-PTSD NIGHTMARES ALL (FI(14)=RT(618))
 Finding Item: VA-PTSD ON GUARD ALL (FI(15)=RT(619))
 Finding Item: VA-REFUSED PTSD SCREEN (FI(16)=RT(631))
 Finding Item: VA-REFUSED ALCOHOL SCREENING (FI(17)=RT(568018))
 Finding Item: VA-REFUSED DEPRESSION SCREENIN (FI(18)=RT(73))
 Finding Item: VA-ACTIVE DUTY (FI(19)=RT(568019))
 Finding Item: VA-REFUSED ID & OTHER SX SCREE (FI(20)=RT(568020))
 Finding Item: VA-*SERVICE PERIOD SEPARATION (FI(21)=RT(616))
 Finding Item: VA-*SERVICE PERIOD SERVICE TYP (FI(22)=RT(644))
 Finding Item: VA-*SERVICE PERIOD SERVICE TYP (FI(23)=RT(645))
Finding Item: VA-*SERVICE PERIOD SERVICE TYP (FI(24)=RT(646))
Finding Item: VA-*SERVICE PERIOD SERVICE TYP (FI(25)=RT(647))
 Finding Item: VA-*SERVICE PERIOD SERVICE TYP (FI(26)=RT(648))
 Finding Item: VA-*SERVICE PERIOD BRANCH AIR (FI(27)=RT(650))
 Finding Item: VA-*SERVICE PERIOD BRANCH ARMY (FI(28)=RT(649))
 Finding Item: VA-*SERVICE PERIOD BRANCH COAS (FI(29)=RT(653))
 Finding Item: VA-*SERVICE PERIOD BRANCH MARI (FI(30)=RT(652))
 Finding Item: VA-*SERVICE PERIOD BRANCH NAVY (FI(31)=RT(651))
 Finding Item: VA-*SERVICE PERIOD BRANCH OTHE (FI(32)=RT(654))
 Finding Item: VA-*SERVICE PERIOD BRANCH NONE (FI(33)=RT(655))
 Finding Item: VA-*CONFLICT OEF/OIF/VIS WITHI (FI(34)=RT(624))
 Finding Item: VA-*CONFLICT OIF WITHIN LATEST (FI(35)=RT(675))
 Finding Item: VA-*CONFLICT OEF WITHIN LATEST (FI(36)=RT(674))
 Finding Item: VA-*CONFLICT VIS WITHIN LATEST (FI(37)=RT(633))
  Finding Item: VA-*CONFLICT OEF/OIF/VIS SERVI (FI(38)=RT(625))
  Finding Item:
                 VA-*OEF COUNTRY AFGHANISTAN (P (FI(39)=RT(666))
                VA-*OEF COUNTRY GEORGIA (PER P (FI(40)=RT(667))
  Finding Item:
  Finding Item: VA-*OEF COUNTRY KYRGYZSTAN (PE (FI(41)=RT(668))
 Finding Item: VA-*OEF COUNTRY PAKISTAN (PER (FI(42)=RT(669))
 Finding Item: VA-*OEF COUNTRY PHILIPPINES (P (FI(43)=RT(672))
 Finding Item: VA-*OEF COUNTRY TAJIKISTAN (FI(44)=RT(670))
 Finding Item: VA-*OEF COUNTRY UZBEKISTAN (PE (FI(45)=RT(671))
 Finding Item: VA-*OEF COUNTRY OTHER (PER PAT (FI(46)=RT(673))
  Finding Item: VA-*OIF COUNTRY IRAQ (PER PATI (FI(47)=RT(643))
 Finding Item: VA-*OIF COUNTRY KUWAIT (PER PA (FI(48)=RT(662))
 Finding Item: VA-*OIF COUNTRY SAUDI ARABIA ( (FI(49)=RT(663))
 Finding Item: VA-*OIF COUNTRY TURKEY (PER PA (FI(50)=RT(664))
 Finding Item: VA-*OIF COUNTRY OTHER (PER PAT (FI(51)=RT(665))
 Finding Item: VA-*SEX FEMALE (FI(52)=RT(661))
 Finding Item: VA-*SEX MALE (FI(53)=RT(660))
Finding Item: VA-*AGE LESS THAN 20 (FI(54)=RT(636))
                VA-*AGE 20-29 (FI(55)=RT(637))
 Finding Item:
 Finding Item: VA-*AGE 30-39 (FI(56)=RT(638))
 Finding Item: VA-*AGE 40-49 (FI(57)=RT(639))
 Finding Item: VA-*AGE 50-59 (FI(58)=RT(640))
  Finding Item: VA-*AGE 60-69 (FI(59)=RT(641))
```

```
Finding Item: VA-*AGE GREATER THAN 69 (FI(60)=RT(642))
 Finding Item: VA-*RACE ASIAN (FI(61)=RT(632))
 Finding Item: VA-*RACE BLACK OR AFRICAN AMER (FI(62)=RT(629))
 Finding Item: VA-*RACE NATIVE HAWAIIAN OR OT (FI(63)=RT(630))
 Finding Item: VA-*RACE WHITE (FI(64)=RT(628))
 Finding Item: VA-*ETHNICITY HISPANIC (FI(65)=RT(634))
 Finding Item: VA-*ETHNICITY NOT HISPANIC (FI(66)=RT(635))
 Finding Item: VA-*LOCATION LIST NEXUS PRIMAR (FI(67)=RT(656))
 Finding Item: VA-*LOCATION LIST NEXUS MENTAL (FI(68)=RT(657))
 Finding Item: VA-*LOCATION LIST EMERGENCY/ (FI(69)=RT(658))
Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
 (SEX) & (AGE) &FI(2) !FI(19)
Expanded Patient Cohort Logic:
(SEX) & (AGE) &FI (VA-IRAQ/AFGHAN PERIOD OF SERVICE) !FI (VA-ACTIVE DUTY)
Customized RESOLUTION LOGIC defines findings that resolve the Reminder:
(FI(1)&FF(1))!(FI(3)&(FF(2)!FI(16))&(FF(3)!FI(18))&(FF(4)!FI(17))&FF(5)&
FF(6)&FF(7)&FF(8))
Expanded Resolution Logic:
(FI(VA-IRAQ/AFGHAN SERVICE NO)&FF(1))!(FI(VA-IRAQ/AFGHAN SERVICE)&
(FF(2)!FI(VA-REFUSED PTSD SCREEN))&(FF(3)!
FI(VA-REFUSED DEPRESSION SCREENING))&(FF(4)!
FI(VA-REFUSED ALCOHOL SCREENING))&FF(5)&FF(6)&FF(7)&FF(8))
REMINDER DEFINITION LIST
                                             JUL 20,2012 09:50
_____
Name: VA-AAA SCREENING
Print Name: Screen for Abd Aortic Aneurysm
                             NATIONAL
Class:
                             National Clinical Reminder Committee
Sponsor:
Review Date:
Usage: CPRS, DATA EXTRACT, REPORTS
Priority:
Reminder Description:
   Screen once for AAA in men ages 65-75 who are current or prior smokers.
   Developed by the National Clinical Reminder Committee in conjunction with
   the VA National Center for Health Promotion and Disease Prevention and
   Dr. Charles Anderson, Director, VHA Radiology Program.
   The reminder applies to all patients who have a history of smoking
   recorded in their record. Mapping of all local health factors for
   current or prior smoking history is needed. The term VA-SMOKING HISTORY
   is included for this. The user has an option in the dialog to indicate
   that the patient smoked <100 total lifetime cigarettes.
   If the procedure was done on or after the 60th birthday, then it will be
   counted as adequate screening.
   Many types of imaging procedures could be adequate to evaluate the status
   of the abdominal aorta if the interpreting Radiologist addresses the
```

aorta in the reading and the report. Because it is not always clear from the type of procedure, these procedures are marked as "non-specific" abdominal imaging in this reminder and a health factor is available to be entered by a user if it is clear from the report that the procedure adequately addressed the status of the abdominal aorta from the renal arteries to the bifurcation of the aorta.

The following terms are included: VA-IMAGING FOR AAA (CPT NON-SPECIFIC PROC) This term is mapped to a taxonomy of procedures that represent radiology studies that could be adequate for screening but may not be depending on the report.

VA-IMAGING FOR AAA (RAD NON-SPECIFIC PROC) This term must be mapped locally and should contain radiology procedures ONLY. No CPT codes should be added to this term. If a diagnostic code is added by Radiology to one of the procedures in this term to show that AAA screening was completed, then the reminder will be resolved.

VA-IMAGING FOR AAA (RAD SPECIFIC PROC) This term must be mapped locally and should contain radiology procedures ONLY. No CPT codes should be added to this term. Only procedures that are always used to screen for AAA should be added to this term. Do not enter any procedures that may be done for purposes other than AAA screening. This term will resolve the reminder.

A reminder term for orderable items is included. You will need to map your local orderable items for the procedures in the taxonomy to this term in order for orders to temporarily resolve the reminder. If a procedure has been ordered in the past 6 months, then this finding will temporarily resolve the reminder. If a different time period is preferable at the local VA, then enter a different date range on the findings in this term and those dates will override the 6 month period.

A health factor for outside procedures is included.

Patients with a short life expectancy are excluded. You may want to add any local health factors for short life expectancy to the reminder term VA-AAA SCREENING NOT APPLICABLE.

Patients who are not candidates for repair may not be appropriate for screening and may be excluded.

Patients with known AAA or with prior repair of an AAA are excluded.

A term is included for refusals and this term permanently resolves the reminder. If a shorter time frame is desired for refusal, then enter that time frame on the health factor in the term.

#### Findings:

```
Finding Item: VA-SMOKING HISTORY (FI(1)=RT(793))
Finding Item: VA-SMOKING HX <100 LIFETIME CI (FI(2)=RT(794))
Finding Item: VA-AAA DX/AAA REPAIR CPT (FI(3)=RT(795))
Finding Item: VA-AAA SCREENING NOT APPLICABL (FI(7)=RT(786))
Finding Item: VA-IMAGING FOR AAA (RAD SPECIF (FI(8)=RT(785))
Finding Item: VA-IMAGING FOR AAA (CPT NON-SP (FI(9)=RT(784))
Finding Item: VA-IMAGING CONFIRMED AS ADEQUA (FI(10)=RT(787))
Finding Item: VA-OUTSIDE SCREENING FOR AAA (FI(11)=RT(788))
Finding Item: VA-IMAGING FOR AAA (RAD NON-SP (FI(12)=RT(789))
Finding Item: VA-IMAGING FOR AAA ORDERABLE I (FI(13)=RT(790))
Finding Item: VA-DATE OF BIRTH (FI(14)=CF(2))
Finding Item: VA-REFUSED IMAGING FOR AAA SCR (FI(15)=RT(791))
```

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

```
(SEX) & (AGE) &FI(1) & 'FI(2) & 'FI(3) & 'FI(7)
Expanded Patient Cohort Logic:
(SEX) & (AGE) &FI (VA-SMOKING HISTORY) &'
FI(VA-SMOKING HX <100 LIFETIME CIGARETTES) &'
FI(VA-AAA DX/AAA REPAIR CPT) & 'FI(VA-AAA SCREENING NOT APPLICABLE)
Customized RESOLUTION LOGIC defines findings that resolve the Reminder:
FI(8)&FF(8)!(FI(9)&FI(10)&FF(9))!(FI(11)&FF(11))!(FI(12)&FF(12))!FI(13)!
FI(15)
Expanded Resolution Logic:
FI (VA-IMAGING FOR AAA (RAD SPECIFIC PROC)) &FF(8)!
 (FI(VA-IMAGING FOR AAA (CPT NON-SPECIFIC PROC)) &
FI(VA-IMAGING CONFIRMED AS ADEQUATE FOR AAA SCREENING) &FF(9))!
 (FI(VA-OUTSIDE SCREENING FOR AAA)&FF(11))!
(FI(VA-IMAGING FOR AAA (RAD NON-SPECIFIC PROC))&FF(12))!
FI(VA-IMAGING FOR AAA ORDERABLE ITEMS)!
FI (VA-REFUSED IMAGING FOR AAA SCREEN)
REMINDER DEFINITION LIST
                                             JUL 20,2012 09:50 PAGE 30
_____
Name: VA-ALCOHOL ABUSE SCREEN (AUDIT-C)
Print Name: Alcohol Abuse Screen (AUDIT-C)
Class:
                             NATIONAL
                           Office of Patient Care Services
Sponsor:
Review Date:
Usage: CPRS, REPORTS
Priority:
Reminder Description:
   Alcohol Screen Due yearly for all patients.
   The AUDIT-C is needed on all patients on a yearly basis. A reminder term
```

## **Inquire About Reminder Item**

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

Select Reminder Definition Management Option: RI Inquire about Reminder Definition Select REMINDER DEFINITION: VA-MH HIGH RISK NO-SHOW FOLLOW-UP NATIONAL

DEVICE: ;;999 HOME

REMINDER DEFINITION INQUIRY Jul 20, 2012 10:02:07 am Page 1

VA-MH HIGH RISK NO-SHOW FOLLOW-UP No. 406

Print Name: High Risk MH No-Show Follow-up

Class: NATIONAL

Sponsor: Office of Mental Health Services

Review Date:

Rescission Date:

Usage: CPRS, DATA EXTRACT, REPORTS

Related VA-\* Reminder:

Reminder Dialog: VA-MH HIGH RISK NO SHOW FOLLOW-UP

Priority:

Description:

This reminder shall determine whether Mental Health (MH) professionals have followed up on a No-Show MH appointment for a patient with an active High Risk for Suicide Patient Record Flag.

The reminder requires clinicians to initiate follow-up with the patient to insure his/her safety and to try to get the patient back into care. The follow-up results are documented with health factors.

Studies show that individuals that get lost to follow-up have a higher rate of actual suicide than those that stay connected with care.

If the patient has a completed encounter to a MH appointment on the same day, or within 72 hours of the missed MH appointment, follow-up will no longer be necessary.

Technical Description:

Baseline Frequency:

Do In Advance Time Frame: Do if DUE within 99Y - Once

Sex Specific: Ignore on N/A:

Frequency for Age Range: 99Y - Once for all ages

```
Match Text:
                              Reminder triggered by missed MH appointment
                               and when resolved won't be due again until
                               another missed MH appointment occurs.\\
                No Match Text:
Findings:
 ---- Begin: VA-MH NOSHOW MISSED MH CLINIC APPTS (FI(1)=RT(809)) ------
                Finding Type: REMINDER TERM
  Use in Patient Cohort Logic: AND
          Beginning Date/Time: T-10D
             Ending Date/Time: T
             Occurrence Count: 5
   Computed Finding Parameter: FLDS:1,2,3^STATUS:NS,NSR^LL:VA-MH NO SHOW APPT
CLINICS LL
                  Mapped Findings: CF.VA-APPOINTMENTS FOR A PATIENT
        Computed Finding Parameter: FLDS:1,2,3^STATUS:NS,NSR^LL:VA-MH NO SHOW
APPT CLINICS LL^
 ---- End: VA-MH NOSHOW MISSED MH CLINIC APPTS ------
 ---- Begin: VA-MH HIGH RISK FOR SUICIDE PRF (FI(2)=RT(811)) ------
                Finding Type: REMINDER TERM
  Use in Patient Cohort Logic: AND
          Beginning Date/Time: FIEVAL(1,1,"DATE")
             Ending Date/Time: FIEVAL(1,1,"DATE")+1D
             Occurrence Count: 2
                  Mapped Findings: CF.VA-PATIENT RECORD FLAG
                                  INFORMATION
        Computed Finding Parameter: HIGH RISK FOR SUICIDE^L
                  Mapped Findings: CF.VA-PATIENT RECORD FLAG
                                  INFORMATION
        Computed Finding Parameter: HIGH RISK FOR SUICIDE^N
 ---- End: VA-MH HIGH RISK FOR SUICIDE PRF ------
 ---- Begin: VA-MH NOSHOW PT CONTACTED (FI(3)=RT(812)) ------
                Finding Type: REMINDER TERM
      Use in Resolution Logic: OR
          Beginning Date/Time: FIEVAL(1,1,"DATE")
            Occurrence Count: 3
                  Mapped Findings: HF.MH NOSHOW PT CONTACTED
            Health Factor Category: MH NOSHOW MANAGEMENT
 ---- End: VA-MH NOSHOW PT CONTACTED ------
 ---- Begin: VA-MH NOSHOW PT EMERGENT CARE (FI(4)=RT(818)) ------
                Finding Type: REMINDER TERM
      Use in Resolution Logic: OR
          Beginning Date/Time: FIEVAL(1,1,"DATE")
                  Mapped Findings: HF.MH NOSHOW PT EMERGENT CARE
            Health Factor Category: MH NOSHOW MANAGEMENT
```

```
---- End: VA-MH NOSHOW PT EMERGENT CARE ------
---- Begin: VA-MH NOSHOW SUPPORT CONTACT (FI(5)=RT(819)) --------
              Finding Type: REMINDER TERM
    Use in Resolution Logic: OR
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH NOSHOW SUPPORT CONTACT
         Health Factor Category: MH NOSHOW MANAGEMENT
---- End: VA-MH NOSHOW SUPPORT CONTACT ------
---- Begin: VA-MH NOSHOW PT CALLED 3X UNSUCCESSFUL (FI(6)=RT(821)) ------
              Finding Type: REMINDER TERM
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH NOSHOW PT CALLED 3X
                               UNSUCCESSFUL
         Health Factor Category: MH NOSHOW MANAGEMENT
---- End: VA-MH NOSHOW PT CALLED 3X UNSUCCESSFUL -----------------
---- Begin: VA-MH NOSHOW PLAN DEVELOPED (FI(8)=RT(827)) ---------
              Finding Type: REMINDER TERM
    Use in Resolution Logic: OR
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH NOSHOW PLAN DEVELOPED
         Health Factor Category: MH NOSHOW MANAGEMENT
---- End: VA-MH NOSHOW PLAN DEVELOPED -----
---- Begin: VA-MH NOSHOW INITIATE WELLNESS CHECK (FI(9)=RT(830)) ------
              Finding Type: REMINDER TERM
    Use in Resolution Logic: OR
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH NOSHOW INITIATE WELLNESS
                               CHECK
         Health Factor Category: MH NOSHOW MANAGEMENT
---- End: VA-MH NOSHOW INITIATE WELLNESS CHECK ------
---- Begin: VA-MH NOSHOW OUTREACH LETTER (FI(10)=RT(832)) ------
              Finding Type: REMINDER TERM
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH NOSHOW OUTREACH LETTER
          Health Factor Category: MH NOSHOW MANAGEMENT
---- End: VA-MH NOSHOW OUTREACH LETTER ------
---- Begin: VA-MH NOSHOW OTHER OUTCOME (FI(11)=RT(831)) ------
              Finding Type: REMINDER TERM
    Use in Resolution Logic: OR
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH NOSHOW OTHER OUTCOME
         Health Factor Category: MH NOSHOW MANAGEMENT
```

```
---- End: VA-MH NOSHOW OTHER OUTCOME -----
 ---- Begin: VA-MH SUICIDE ATTEMPTED (FI(12)=RT(833)) ------
              Finding Type: REMINDER TERM
     Use in Resolution Logic: OR
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH SUICIDE ATTEMPTED
          Health Factor Category: MH NOSHOW MANAGEMENT
---- End: VA-MH SUICIDE ATTEMPTED ------
 ---- Begin: VA-MH SUICIDE COMPLETED (FI(13)=RT(834)) --------
              Finding Type: REMINDER TERM
     Use in Resolution Logic: OR
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH SUICIDE COMPLETED
          Health Factor Category: MH NOSHOW MANAGEMENT
 ---- End: VA-MH SUICIDE COMPLETED ------
 ---- Begin: VA-MH APPT KEPT (FI(14)=RT(835)) ------
              Finding Type: REMINDER TERM
     Use in Resolution Logic: OR
        Beginning Date/Time: FIEVAL(1,1,"DATE")-8H
           Ending Date/Time: FIEVAL(1,1,"DATE")+72H
           Occurrence Count: 4
                Found Text: Patient kept a MH appointment within 72 hours
                            of the missed MH appointment, resolving the
                            reminder.
                Mapped Findings: CF.VA-APPOINTMENTS FOR A PATIENT
                      Condition: I +V("OUTPATIENT ENCOUNTER
IEN")>0!+V("CHECK-OUT DATE/TIME")>0
       Use Status/Cond in Search: YES
       Computed Finding Parameter: FLDS:1,2,3,11,12^STATUS:R^LL:VA-MH NO SHOW
APPT CLINICS LL
---- End: VA-MH APPT KEPT -------
---- Begin: VA-MH NOSHOW UNABLE TO REACH PT (FI(15)=RT(836)) ------
              Finding Type: REMINDER TERM
        Beginning Date/Time: FIEVAL(1,1,"DATE")
                Mapped Findings: HF.MH NOSHOW UNABLE TO REACH PT
          Health Factor Category: MH NOSHOW MANAGEMENT
---- End: VA-MH NOSHOW UNABLE TO REACH PT ------
Function Findings:
---- Begin: FF(1)------
            Function String: MRD(1)>MRD(3,4,5,8,9,11,12,13)
    Expanded Function String:
     MRD(VA-MH NOSHOW MISSED MH CLINIC APPTS)>MRD(VA-MH NOSHOW PT CONTACTED,
     VA-MH NOSHOW PT EMERGENT CARE, VA-MH NOSHOW SUPPORT CONTACT,
     VA-MH NOSHOW PLAN DEVELOPED, VA-MH NOSHOW INITIATE WELLNESS CHECK,
```

```
VA-MH NOSHOW OTHER OUTCOME, VA-MH SUICIDE ATTEMPTED,
      VA-MH SUICIDE COMPLETED)
  Use in Patient Cohort Logic: AND
  ---- End: FF(1) ------
General Patient Cohort Found Text:
   The patient has an active High Risk for Suicide Patient Record Flag and
   missed a MH appointment.
General Patient Cohort Not Found Text:
   This patient has no missed MH appointment pending follow-up.
Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
(SEX)&(AGE)&FI(1)&FI(2)&FF(1)
Expanded Patient Cohort Logic:
(SEX)&(AGE)&FI(VA-MH NOSHOW MISSED MH CLINIC APPTS)&
FI(VA-MH HIGH RISK FOR SUICIDE PRF)&FF(1)
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
FI(3)!FI(4)!FI(5)!FI(8)!FI(9)!FI(11)!FI(12)!FI(13)!FI(14)
Expanded Resolution Logic:
FI(VA-MH NOSHOW PT CONTACTED)!FI(VA-MH NOSHOW PT EMERGENT CARE)!
FI(VA-MH NOSHOW SUPPORT CONTACT)!FI(VA-MH NOSHOW PLAN DEVELOPED)!
FI(VA-MH NOSHOW INITIATE WELLNESS CHECK)!FI(VA-MH NOSHOW OTHER OUTCOME)!
FI(VA-MH SUICIDE ATTEMPTED)!FI(VA-MH SUICIDE COMPLETED)!
FI(VA-MH APPT KEPT)
Web Sites:
Select REMINDER DEFINITION:
```

#### **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. Only local reminders can be edited.

```
Select Reminder Definition Management Option: Add/Edit Reminder Definition
Select Reminder Definition: JG DIABETIC EYE EXAM
     Select one of the following:
                   All reminder details
                   General
         В
                   Baseline Frequency
         F
                   Findings
         FF
                   Function Findings
                   Logic
         T.
         С
                  Custom date due
                  Reminder Dialog
                  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:
    DIABETIC EYE EXAM
TΧ
       VA-DIABETES
Select FINDING: ex.DIAB
    Searching for a EXAM, (pointed-to by FINDING ITEM)
 DIABETIC EYE EXAM
       ...OK? 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:
                   All reminder details
```

```
General
          В
                    Baseline Frequency
          F
                   Findings
          FF
                   Function Findings
          L
                   Logic
                   Custom date due
          D
                   Reminder Dialog
                   Web Addresses
Select section to edit:
Input your edit comments.
Edit? NO//
```

## 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:
                   All reminder details
         A
          G
                   General
          В
                   Baseline Frequency
          F
                   Findings
          FF
                    Function Findings
          L
                   Logic
          С
                   Custom date due
                   Reminder Dialog
          D
          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>
```

## **Copy Reminder Definition**

This option allows you to copy an existing reminder definition into a new reminder definition.

```
Select Reminder Definition Management Option: copy Reminder Definition
                                    VA-WH PAP SMEAR SCREENING
Select the reminder item to copy:
                                                                   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:
                   All reminder details
                   General
         В
                  Baseline Frequency
         F
                  Findings
         FF
                  Function Findings
         L
                   Logic
                   Custom date due
         D
                   Reminder Dialog
                   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

Reminder Dialog

Web Addresses

Select section to edit:

D

W

## **Reminder Edit History**

You can display a reminder definition's edit history with this option.

```
Select Reminder Definition Management Option: RH Reminder Edit History
Maximum number of occurrences to display: (2-99): 3//
                                       LOCAL
Select Reminder Definition:
                               TEST
Edit History for reminder AGP TEST:
  Edit date: May 12, 2010@08:30:49
                                      Edit by: CRUSER, TWO
 Edit Comments: Exchange Install
Select Reminder Definition: VA-TERATOGENIC MEDICATIONS ORDER CHECK
NATIONAL
Edit History for reminder VA-TERATOGENIC MEDICATIONS ORDER CHECK:
 Edit date: Oct 27, 2011@22:05:53
                                      Edit by: CRDEVELOPER, TWO
 Edit Comments: Exchange Install
Select Reminder Definition:
```

## **Integrity Check Options**

Two new options were added to the reminder definition management menu: Integrity Check Selected and Integrity Check All. These can be used to check the integrity of selected or all reminder definitions. The integrity check will also be made automatically whenever a reminder definition has been edited. Fatal errors (F) that will prevent the reminder from working properly and warnings (W) will be given. The following checks are made:

- F Each finding is checked to make sure it exists
- F If either the Beginning Date/Time or Ending Date/Time contains FIEVAL(M,"DATE") or FIEVAL(M,N,"DATE"), the definition is checked to make sure it contains finding M, and if an occurrence is used, the Occurrence Count of finding M is checked to make sure it is greater than or equal to N.
- F- Function findings functions of the form FUNCTION(M) and FUNCTION(M,N) are checked to make sure finding M is in the definition and the Occurrence Count of finding M is greater than or equal to N.
- F If a Custom Date Due is defined, it is checked to make sure that the findings used in the Custom Date Due all exist in the definition.
- F Patient Cohort Logic and Resolution Logic are checked to make sure that the findings used in the logic all exist in the definition.
- F Logic strings are checked to make sure their syntax is valid.
- F The definition contains Resolution Logic but does not have a baseline frequency or any findings that will set a frequency.
- W The Usage field contains a "P" and it is not a national reminder
- W The definition contains Resolution Logic but does not have a baseline frequency. It does have findings that will set a frequency. This could be a problem if all findings that set frequency are false.

NOTE: PXRM\*2\*26 added new checks:

- When the Usage is 'L', any computed findings that are not list-type are flagged as fatal errors.
- Terms that are used as findings in the definition will now be checked to make sure all the mapped findings exist and mapped computed findings are the proper type.

## **Integrity Check Selected**

This option lets the user select a reminder definition for integrity checking.

```
Select Reminder Definition Management Option: ICS Integrity Check Selected

Select Reminder Definition: VA-TERATOGENIC MEDICATIONS ORDER CHECK
NATIONAL
```

```
Warning, there is no Resolution logic.
No fatal errors were found.
```

## **Integrity Check All**

This option runs the integrity check for all reminder definitions on the system. It is good practice to run this on a regular basis such as monthly or quarterly.

```
Select Reminder Definition Management Option: ica Integrity Check All
Check the integrity of all reminder definitions.
DEVICE: HOME//
                HOME
Checking 01-DIAB PTS (5Y) W/O DIAB EXAM (1Y) (IEN=256)
Warning, there is no Resolution logic.
No fatal errors were found.
Checking 37-PC-PTSD SCREENING (IEN=331)
No fatal errors were found.
Checking 691 PNT EYE CLINIC (IEN=262)
Warning, there is no Resolution logic.
No fatal errors were found.
Checking AAA SCREENING (IEN=360)
No fatal errors were found.
Checking AGETEST (IEN=660004)
No fatal errors were found.
Checking AGP ABNORMAL WH STUFF (IEN=170)
Finding number 10 uses computed finding VA-PROGRESS NOTE. This computed
finding
will not work properly unless the Computed Finding Parameter is defined and
in this case it is not.
Finding number 13 uses computed finding VA-ACTIVE PATIENT RECORD FLAGS. This
computed finding will not work properly unless the Computed Finding Parameter
is defined and in this case it is not.
Checking AGP APPOINTMENT (IEN=419)
Finding number 1 uses computed finding VA-APPOINTMENTS FOR A PATIENT. This
computed finding will not work properly unless the Computed Finding Parameter
is defined and in this case it is not.
Etc.
```

# **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.  |  |
| USAGE                       | 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 CPRS GUI) L – Reminder Patient List O – Reminder Order Checks   |  |
|                             | P – Patient; patients can view "My Health" reminders; the wildcard (*) excludes P R - Reminder Reports (the reminder can be used in reminder reports) X - Reminder Extracts (the reminder is used for data extraction) * - All of the above, except L, O, and P   |  |
|                             | This field must contain C or * if the reminder is to be selected in CPRS. The L or the O values will override all other values.  NOTE: To enter more than one code, type the codes with no spaces or punctuation between them.  |  |
| INACTIVE FLAG               | 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.  Other applications that use reminders may use this flag to determine if a reminder can be selected for inclusion.   |  |
| REMINDER<br>DESCRIPTION     | This is a description of the clinical purpose of the reminder.  |  |
| TECHNICAL DESCRIPTION       | This is a description of how the reminder works.  |  |
| PRIORITY                    | The reminder priority is used by the CPRS GUI for sorting purposes.   |  |
| DO IN ADVANCE<br>TIME FRAME | 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." |  |

| SEX SPECIFIC                               | 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.   |
|--|---|
| IGNORE ON N/A                              | 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:  Code Description  A N/A due to not meeting age criteria.  I N/A due to inactive reminder.  R N/A due to the wrong race.  S N/A due to the wrong sex.  * N/A for any reason.  |
| FREQUENCY AGE<br>RANGE SET                 | 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:  REMINDER FREQUENCY: 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.  MINIMUM AGE: This field specifies the minimum age for defining an age range associated with a frequency. Leave it blank if there is no minimum age.  MAXIMUM AGE: This field specifies the maximum age for defining an age range associated with a frequency. Leave it blank if there is no maximum age.  AGE MATCH TEXT: This text will be displayed in the Clinical Maintenance component if the patient's age falls in the age range.  AGE NO MATCH TEXT: This text will be displayed in the Clinical Maintenance component if the patient's age does not fall in the age range. |
| FINDING                                    | The Findings multiple is documented later in this chapter, page 118.  |
| FUNCTION<br>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.  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 commaseparated list of regular finding numbers. See page 125.   |
| CUSTOMIZED<br>PATIENT<br>COHORT LOGIC      | This field may be used to define a customized Boolean logic string that defines how and what findings in a reminder are 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)  Tip: Before defining the Boolean string, review the default logic defined in the DEFAULT PATIENT COHORT LOGIC field using the reminder inquiry option.  |
| GENERAL<br>PATIENT<br>COHORT FOUND<br>TEXT | This text is displayed in the Clinical Maintenance component if the patient is in the cohort and the reminder is applicable.  |

| GENERAL PATIENT COHORT NOT FOUND TEXT   | This text will be displayed in the Clinical Maintenance component if the patient is not in the cohort and the reminder is not applicable.   |
|---|---|
| CUSTOMIZED<br>RESOLUTION<br>LOGIC       | This field may be used to define a customized Boolean logic string that defines how and what reminder findings are 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). Tip: Before defining the Boolean string, review the default logic defined in the DEFAULT RESOLUTION LOGIC field using the reminder inquiry option.  |
| GENERAL<br>RESOLUTION<br>FOUND TEXT     | This text will be displayed in the Clinical Maintenance component if the reminder has been resolved.  |
| GENERAL<br>RESOLUTION<br>NOT FOUND TEXT | This text will be displayed in the Clinical Maintenance component if the reminder has not been resolved.  |
| CUSTOM DATE<br>DUE                      | 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. 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 the MIN_DATE, MAX_DATE, or RANK_DATE functions. |
| LINKED<br>REMINDER<br>DIALOG            | This is the Reminder Dialog that will be used when the reminder is processed in the CPRS GUI.   |
| WEB SITES                               | This multiple contains Web site(s) for information related to this reminder. When processing a reminder in the CPRS 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 CPRS GUI. It will appear after a right-click, allowing you to select the web site.   |
| WEB SITE<br>DESCRIPTION                 | This field contains a description of the Web site.  |

# **Reminder Findings**

Findings are types of data elements in VistA that determine a reminder's status. Each finding is evaluated when a reminder is evaluated for a patient. Findings are either True (1) or False (0)

Findings have three functions in reminder definitions:

- To select the applicable patient population (Patient Cohort Logic)
- To resolve the reminder (Resolution Logic)
- To provide information

## **Findings Types**

| Finding Type              | Source File Number | Abbreviation |
|---------------------------|--------------------|--------------|
| Drug                      | 50                 | DR           |
| Education Topic           | 9999999.09         | ED           |
| Exam                      | 9999999.15         | EX           |
| Health Factor             | 9999999.64         | HF           |
| Immunization              | 9999999.14         | IM           |
| Laboratory Test           | 60                 | LT           |
| MH Tests and Surveys      | 601.71             | MH           |
| Orderable Item            | 101.43             | OI           |
| 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           |

**IMPORTANT:** There is a problem with the scoring of some Mental Health instruments, see the discussion and Important Note on page 268.

**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** 

**Hint**: To add a second occurrence of a finding, enclose it in quotes, i.e., "Prefix.Name"

**Drug** – Drugs are found in the DRUG file #50. Results for individual patients can be found in the Pharmacy Patient file #55 (inpatient), the Prescription file #52 (outpatient), or for non-VA Meds which are stored in the Pharmacy Patient file. The parameter RXTYPE can be used to control which files are searched for patient results; see the description of RXTYPE below.

Each type of drug has an associated start date and stop date. For inpatient drugs, these are the START DATE and the STOP DATE. For outpatient drugs, the start date is the RELEASE DATE and the stop date is the RELEASE DATE + DAYS SUPPLY. For non-VA Meds, the start date is the START DATE or, if there is no START DATE, it is the DOCUMENTED DATE and the stop date is the DISCONTINUED DATE if it exists; otherwise it is today's date.

**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 default 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.

**Exam** – Exams are found in the EXAM file #9999999.15. Results for individual patients are found in the V EXAM file #9000010.13. The default 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".

**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 default 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. Categories provide a way to group health factors. Typical examples of categories are alcohol use, breast cancer, and tobacco. 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. This feature can be used to make a reminder applicable or not applicable for a patient.

#### **Example:**

A reminder for smoking cessation education provides a good example. A health factor of current smoker is used in the PATIENT COHORT LOGIC with the AND Boolean operator. A second health factor of non-smoker is included as an information finding. A patient comes in and is a current smoker so they are given the current smoker health factor; this makes the reminder applicable. The patient has the smoking

cessation education; six months later he or she has quit, so is given the non-smoker health factor. Since non-smoker is more recent than current smoker, the reminder is not applicable. Another six months passes and the patient is smoking again, so he is given the current smoker health factor, which makes the reminder applicable again. All the health factors are still in the patient's record, so you can see the progression of their smoker non-smoker status.

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 categorization behavior. See that section, page 120, 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 already exist. Category health factors should be installed before factor health factors.

**Immunization** – Immunizations are found in the IMMUNIZATION file #9999999.14. Results for individual patients are found in the V IMMUNIZATION file #9000010.11. The default 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

**Laboratory Test** – Laboratory tests are found in the LABORATORY TEST file #60. Only individual tests may be selected as a reminder finding; lab panels cannot be used. Test results are found in the LAB DATA file #63. The default value for the CONDITION is the result of the lab test. The type of result, text or numerical, the normal range of values, and the units will be a function of the particular test, so you should be aware of what they are before you set up a Condition.

**Orderable Item** –Orderable Items are found in the ORDERABLE ITEMS file #101.43. Results for a patient are found in the ORDER file #100. An order has an associated Start Date and in most – but not all – cases, an associated Stop Date. If the Stop Date does not exist, then reminder evaluation date is used as the Stop Date. By default, Start Date is used as the date of an orderable item finding. If you want the date of the finding to be the Stop Date, set the finding modifier to NO. See the description of the USE START DATE finding modifier to understand how date ranges are used in the finding search.

You can use a STATUS LIST for orderable item findings. If no STATUS LIST is defined, then only orders with a status of active or pending can be true. The default value for the CONDITION is the order status.

Possible order statuses are found in the ORDER STATUS file #100.01:

DISCONTINUED COMPLETE HOLD FLAGGED PENDING ACTIVE

EXPIRED SCHEDULED PARTIAL RESULTS

DELAYED UNRELEASED RENEWED DISCONTINUED/EDIT CANCELLED LAPSED

NO STATUS

In Clinical Reminders V.1.5, an OE/RR API was used to obtain order information and it always returned the order status in lower-case. Clinical Reminders V.2.0 uses the Clinical Reminders Index to determine if a patient has a particular orderable item and a new API to obtain the actual order data. This new API returns the order status in all upper-case.

MH Tests and Surveys – This file defines the interviews, surveys and tests available in the Mental Health Assistant. Attributes of the instruments include authoring credits, target populations, normative samples and copyright information. Actions available including privileging, reporting of full item content and transmission to the Mental Health National Database are also specified.

Entries may be made through the provided Mental Health Authoring software. Direct entry through Fileman or the programmer prompt is prohibited.

Mental Health Instruments are found in the MH INSTRUMENT file #601. Results for a patient are found in the PSYCH INSTRUMENT PATIENT file #601.2. The default value for the CONDITION is the result returned by the Mental Health test. The normal range of values and the units will be a function of the particular test. When the user enters answers to a mental health test, the answers are automatically passed to the Mental Health package to calculate a result, which may be referenced as SCORE. For example, CAGE test has a SCORE from 1-4 and GAF has a SCORE from 1-99.

For most Mental Health tests, progress note text can be automatically generated that summarizes or includes the results (SCORE). Default text is distributed in the REMINDER DIALOG file # 801.41 for sites to use for each Mental Health test processed in the reminder resolution process.

Because different Mental Health Score could have possible results, reminder dialogs use Result Group for the score evaluation. A result group can contain multiple result elements. Based on the Mental Health test score, the correct Result element Text is displayed in the progress note. To modify the default text, sites would need to copy both the Result Element and the Result group, The progress note text is contained in the result element. The modified result element must be added to the local result group alone, with any other result element to be evaluated against when the Mental Health test is processed in the Reminder Dialog. Once the result group is completed, it must be added to the Dialog element that contains the Mental Health dialog. Sites would add the new Result group to this field: RESULT GROUP/ELEMENT.

**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.

See the chapter on Computed Findings, page 32, for more details.

**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 VA-DIABETES 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, Problem List, and PTF. For CPT codes, it looks in V CPT and Radiology. For ICD0 codes, it looks in PTF.

There are two dates associated with ICD9 diagnoses found in Problem List, 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. The default is to only use active problems unless the field USE INACTIVE PROBLEMS is yes or the STATUS LIST contains the status of inactive.

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        |
| INDXLS  | Search in PTF for DXLS only                  |
| INPR    | Search in PTF for principal diagnosis only   |
| EN      | Search encounter (PCE) data                  |
| ENPR    | Search PCE 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.

See the chapter that describes Reminder Taxonomy options on page <u>146</u>.

**Reminder Term** – Reminder Terms are found in file #811.5. Reminder Terms provide a way to define a general concept, 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: BEGINNING DATE/TIME, ENDING DATE/TIME, 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.

See the chapter in this manual that describes Reminder Term options on page 186.

**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 default 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".

**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.

**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.

**Vital Measurement** – Vital Measurement types are found in the GMRV VITAL TYPE file #120.51. Results for individual patients are found in the GMRV VITAL MEASUREMENT file #120.5. The default value used 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, Rate will be a number that is the weight in pounds. If the vital sign is blood pressure, then Rate can have two possible forms: systolic/diastolic or systolic/intermediate/diastolic. If your Condition is to be based only on systolic pressure, then it is straightforward; you always check the first piece. For example, 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. Checking the diastolic pressure is not so straightforward because there is no way to know in advance whether the Rate will be returned as systolic/diastolic or systolic/intermediate/diastolic. Insuring that you are always checking the diastolic requires the complex Condition statement I \$S(\$L(V,"/")=3:\$P(V,"/",3),1:\$P(V,"/",2)). NOTE: Blood pressure is the only Vital measurement for which the Rate can have two possible forms.

#### PXRM\*2\*18 Update:

If you are using \$P in a Condition, we recommend that you replace it with the appropriate CSUBs. Several national definitions and terms were originally distributed with Conditions using \$P; as part of this patch, they will be updated to use the SYSTOLIC and DIASTOLIC CSUBs.

SYSTOLIC/MEAN/DIASTOLIC and use of CSUB instead of \$P: The Clin2 support team pointed out that the value for blood pressure can come back in either of the following forms: SYSTOLIC/DIASTOLIC or SYSTOLIC/MEAN/DIASTOLIC ( the second form is not very common). If the second form comes back, then the DIASTOLIC CSUB would have the value for mean, and if \$P was used in a Condition, it would also be the mean. The code was changed so that the DIASTOLIC CSUB will always have the correct value.

**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/or hospital locations for use as a reminder finding. Results for individual patients are found by looking at the patient's Visit file entries and matching the location associated with a Visit with a location in the location list. See the chapter in this manual, page 193, that describes Reminder Location List options.

#### **Finding Modifier Fields**

There are a number of fields in the Findings multiple that modify how each Finding is used in the reminder evaluation process. Each of these fields is described in detail below. Some fields apply only to specific finding types and you will only be prompted for them if they apply to the selected finding item.

- FINDING ITEM
- 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
- USE INACTIVE PROBLEMS (applies only to taxonomies that search Problem List)
- WITHIN CATEGORY RANK (applies only to health factors)
- MH SCALE (applies only to mental health instruments)
- RXTYPE (applies only to drug findings)
- CONDITION
- CONDITION CASE SENSITIVE
- USE STATUS/COND IN SEARCH
- FOUND TEXT
- NOT FOUND TEXT
- STATUS LIST (applies only to findings that have a status)
- COMPUTED FINDING PARAMETER (applies only to computed findings)

# **Finding Modifiers Description**

REMINDER FREQUENCY, MINIMUM AGE, and MAXIMUM AGE – 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. The values these fields can take are exactly the same as those that set the baseline frequency and age range.

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; i.e., 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.

- 1. The date/time cannot be in the future.
- 2. The date/time can be any of the acceptable FileMan date/time formats or abbreviations.
- 3. In addition, you may use the abbreviations T-NY or NOW-NY, where N is an integer and Y stands for years.
- 4. 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.

- 1. The date/time cannot be before the beginning date/time.
- 2. The date/time can be any of the acceptable FileMan date/time formats or abbreviations.
- 3. In addition you may use the abbreviations T-NY or NOW-NY, where N is an integer and Y stands for years.
- 4. If this is null then the ending date/time will be the end of today.

When date range searching is done, a finding with a single date is considered to be in the date range if the date of the finding falls anywhere in the date range defined by the BEGINNING DATE/TIME and ENDING DATE/TIME. The criteria for findings with a start date and a stop date are different. In this case, if there is any overlap between the date range defined by the start date and stop date and the date range defined by the BEGINNING DATE/TIME and the ENDING DATE/TIME, the finding is considered to be in the date range.

#### \* Changes to Beginning and Ending Date/Time made in Patch 18

New functionality was added to allow using the date of one finding to set the date range of another finding. The syntax for the date of a finding is FIEVAL(M,"DATE") or FIEVAL(M,N,"DATE"), where M is the finding number and N is the occurrence. This means you can now use dates like FIEVAL(3,"DATE")-3W as the Beginning or Ending Date/Time of another finding. The global reminder dates PXRMDOB and PXRMLAD can also be used. Note that if FIEVAL(M) is false or PXRMLAD does not exist, then the finding whose date range depends on the date of finding M will be set to false.

In conjunction with allowing FIEVAL(M,N,"DATE") to be used in Beginning Date/Time or Ending Date/Time, additional frequency units were added. The allowed values are now: H (hours), D (days),

W (weeks), M (months), and Y (years). This change applies everywhere that a frequency can be used, including Beginning Date/Time, Ending Date/Time, Reminder Frequency in the Baseline Age Findings multiple, Findings multiple, Function Findings multiple, and Custom Date Due. Custom Date Due will now allow both "+" and "-"; in the past it only allowed "+".

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. 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.

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. The default behavior is that all the health factor findings in the definition are grouped by category and only the most recent health factor in a category can be true. A problem can arise if there are two or more health factors in the same category and they have exactly the same date and time. (This can happen if multiple health factors are given during the same encounter.) If the date/times are the same, the health factor with the highest WITHIN CATEGORY RANK will be the true one. 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.

MH SCALE – This is applicable only to Mental Health Instrument findings. The scale is used to score the results. Typing a "?" at the MH SCALE prompt will list all the scales that are applicable for the selected mental health test. Select the scale to use by typing its number. If no scale is selected then the first scale for the test will be used.

#### **Patch 6 Changes:**

To aid sites in making the conversion of Clinical Reminders to use MHA3, the post-init will convert all existing mental health findings to their MHA3 equivalent and MH SCALE values to the appropriate MHA3 scale. If the field MH SCALE is null, then the score for the first scale returned by MHA3 will be displayed in the Clinical Maintenance output.

When MH SCALE has a value, it will set the value of V for use in a Condition. In other words, V will be the score according to the scale stored in MH SCALE. Another change is that score is now returned as raw score^transformed score. Thus, if your Condition uses the raw score, you will use +V or P(V,U,1) and if it uses the transformed score, use P(V,U,2). The post-init will convert V to +V in all existing national Conditions for MH findings.

The entire set of scores has been made into a CSUB item in patch PXRM\*2\*6, so that any score or combination of scores can be used in a Condition. For example, the MH Test AUIR has scales 279 through 329; if you want to use the raw score for scale 300, then you can use +V("S",300).

USE START DATE – Some findings such as drugs and orderable items have a Start Date and a Stop Date. When these findings are used in the Resolution Logic, determination of a resolution date requires assigning a single date to these types of findings. For drug findings this defaults to the Stop Date while for orderable items it defaults to the Start Date. For findings that have a date range, the finding will be

true if the date range defined by the Start Date to the date of the finding overlaps with the date range defined by the Beginning Date/Time to Ending Date/Time. If USE START DATE is not defined, the date of the finding can be either the Start Date or the Stop Date, as described above. If the date of the finding is set to be the Start Date then the date range for the finding is just Start Date to Start Date.

INCLUDE VISIT DATA – This applies only to the data in the PCE V-files. It includes: V CPT, V EXAM, V HEALTH FACTORS, V IMMUNIZATION, V PATIENT ED, V POV, and V SKIN TEST. When this is set to YES, additional data from the corresponding Visit File entry is included in the list of CSUB data. The best way to determine what additional data is included is by examining the CSUB list shown in reminder test. Adding this data to the CSUB list requires additional computing overhead so set this value to YES only when the additional data is needed; accordingly the default is NO.

RXTYPE - RXTYPE is applicable only to drug findings and 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.

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 default 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       | Exam Status                  |
| Reminder Computed Finding | Determined by the programmer |
| Reminder Taxonomy         | None                         |
| Skin Test                 | Results                      |
| VA Drug Class             | None                         |
| VA Generic                | None                         |
| Vital Measurement         | Rate                         |
| Reminder Location List    | Service Category             |

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

| Finding Type    | Results File    | Result Fields             | Data example                     | CONDITION      |
|-----------------|-----------------|---------------------------|----------------------------------|----------------|
| 5 71            |                 | that can be               | •                                | field example  |
|                 |                 | used in                   |                                  |                |
|                 |                 | CONDITION                 |                                  |                |
| Drug (50)       |                 | NONE – but                |                                  |                |
|                 |                 | you can use               |                                  |                |
|                 |                 | EFFECTIVE                 |                                  |                |
|                 |                 | PERIOD of                 |                                  |                |
|                 |                 | 0D, 0M, OR                |                                  |                |
|                 |                 | 0Y in the                 |                                  |                |
|                 |                 | reminder<br>definition to |                                  |                |
|                 |                 | restrict view to          |                                  |                |
|                 |                 | current                   |                                  |                |
|                 |                 | medications               |                                  |                |
|                 |                 | only                      |                                  |                |
| Education Topic | V PATIENT ED    | LEVEL OF                  | 1 for Poor                       | I V=1          |
| (9999999.09)    | (9000010.06)    | UNDER-                    | 2 for Fair                       | I V=2          |
| ,               | , ,             | STANDING                  | 3 for Good                       | I V=3          |
|                 |                 |                           | 4 for Group-no Assessment        | I V=4          |
|                 |                 |                           | 5 for Refused                    | I V=5          |
| Exam            | V EXAM          | RESULT                    | A for Abnormal                   | I V="A"        |
| (9999999.15)    | (9000010.13)    |                           | N for Normal                     | I V="N"        |
| Health Factor   | V HEALTH FACTOR | LEVEL/SEVE                | M for Minimal                    | I V="M"        |
| (9999999.64)    | (9000010.23)    | RITY                      | MO for Moderate                  | I V="MO"       |
|                 |                 |                           | H for Heavy/Severe               | I V="H"        |
| Immunization    | V IMMUNIZATION  | SERIES                    | P for Partially Complete         | IV="P"         |
| (9999999.14)    | (9000010.11)    |                           | C for Complete                   | I V="C"        |
|                 |                 |                           | B for Booster                    | I V="B"        |
|                 |                 |                           | 1 for Series 1                   | I V=1          |
|                 |                 |                           | 2 for Series 2                   | I V=2          |
|                 |                 |                           | 3 for Series 3                   | I V=3          |
|                 |                 |                           | 4 for Series 4<br>5 for Series 5 | I V=4<br>I V=5 |
|                 |                 |                           | 6 for Series 6                   | I V=5<br>I V=6 |
|                 |                 |                           | 7 for Series 7                   | V=6<br>    V=7 |
|                 |                 |                           | 8 for Series 8                   | I V=7<br>I V=8 |
| Laboratory Test | LAB RESULTS in  | Number                    | 180                              | I V>130        |
| (60)            | "CH" node       | returned from             | 100                              | 1 7/100        |
| (00)            | OTT HOUC        | the Lab API               |                                  |                |
|                 |                 | as the lab                |                                  |                |
|                 |                 | result                    |                                  |                |

| Finding Type                      | Results File    | Result Fields<br>that can be<br>used in<br>CONDITION | Data example   | CONDITION field example  |
|-----------------------------------|-----------------|--|--|--|
| Location List                     | VISIT (9000010) | SERVICE<br>CATEGORY                                  | 'A' for AMBULATORY 'H' for HOSPITALIZATION 'I' 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 | V="A"<br>  V="H"<br>  V="C"<br>  V="T"<br>  V="N"<br>  V="S"<br>  V="O"<br>  V="E"<br>  V="E"<br>  V="B" |
| Mental health<br>Instrument (601) |                 | RAW SCORE<br>from API<br>based on a<br>scale         | 3 (CAGE)   | I V>2  |
| Orderable Item (101.43)           |                 |  |  |  |

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

- PXRMAGE patient's age
- PXRMDOB patient's date of birth in FileMan format
- PXRMLAD the last admission date in FileMan format, if there is no admission this will be null
- PXRMSEX patient's sex, in the format M for male or F for 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 PXRMAGE'>65 (in English if AGE is not greater than 65). You can combine these variables and the V in a CONDITION. Let's say we want a finding that is true for all patients whose BMI>25 and were born before 1955. Our finding is the VA-BMI finding, so the CONDITION is (I V>25)&(PXRMDOB<2550101).

When using PXRMSEX in a CONDITION, you can test for male patients with PXRMSEX="M" and for female patients with PXRMSEX="F". If we wanted to make the above example true only for female patients the CONDITION would be (I V>25)&(PXRMDOB<2550101)&(PXRMSEX="F").

In addition to the default values for finding type, which are referred to as V in the Condition statement, you can now use subscripted V values.

#### Examples:

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

The subscripts that can be used depend on the type of finding; the easiest way to determine what is available is to use the Reminder Test option and examine the FIEVAL array for the finding of interest.

Here is an example where the finding is an Education Topic.

```
FIEVAL(2)=1
FIEVAL(2,1)=1
FIEVAL(2,1,"COMMENTS")=
FIEVAL(2,1,"CSUB","COMMENTS") =
FIEVAL(2,1,"CSUB","LEVEL OF UNDERSTANDING")=1
FIEVAL(2,1,"CSUB","VALUE")=1
FIEVAL(2,1,"CSUB","VISIT")=3102
FIEVAL(2,1,"DAS")=83
FIEVAL(2,1,"DATE")=2990520.07292
FIEVAL(2,1,"LEVEL OF UNDERSTANDING")=1
FIEVAL(2,1,"VALUE")=1
FIEVAL(2,1,"VISIT")=3102
FIEVAL(2,"COMMENTS") =
FIEVAL(2, "CSUB", "COMMENTS") =
FIEVAL(2, "CSUB", "LEVEL OF UNDERSTANDING") =1
FIEVAL(2, "CSUB", "VALUE")=1
FIEVAL(2, "CSUB", "VISIT") = 3102
FIEVAL(2,"DAS")=83
FIEVAL(2, "DATE") = 2990520.07292
FIEVAL(2, "FILE NUMBER") = 9000010.16
FIEVAL(2, "FINDING") = 369; AUTTEDT(
FIEVAL(2, "LEVEL OF UNDERSTANDING")=1
FIEVAL(2, "VALUE")=1
FIEVAL(2, "VISIT") = 3102
```

Each array element that contains a "CSUB" (Condition Subscript) element can be used in a Condition statement, so for this finding, we could use V("COMMENTS"), V("LEVEL OF UNDERSTANDING"), V("VALUE"), or V("VISIT") in the Condition.

Some finding types may return multiple values for certain types of data; an example is qualifiers for vitals. In the Reminder 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." Again, the best way to find out what is available for a particular finding is to using the Reminder Test Option and see what comes back with a "CSUB" subscript. CONDITION CASE SENSITIVE. When this field is set to "NO" then the CONDITION will not be case-sensitive. The default is case-sensitive.

USE STATUS/COND IN SEARCH - Give this field a value of "YES", the default is "NO", if you want the STATUS LIST and/or CONDITION applied to each result found in the date range for this finding. Only results that have a status on the list or for which the CONDITION is true will be retained. The

maximum number to retain is specified by the OCCURRENCE COUNT. For example, if there are 7 occurrences of the finding in the date range, occurrences 1, 3, 6, and 7 have a status on the list, and the OCCURRENCE COUNT is 3 then occurrences 1, 3, and 6 will be returned. If USE STATUS/COND IN SEARCH is NO and the OCCURRENCE COUNT is 3 then findings 1, 2, and 3 will be returned but only finding 1 and 3 will be true.

Note - if the finding has both a STATUS LIST and a CONDITION the status check will be made first; the CONDITION will be applied only if the finding passes the status check.

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). Both FOUND TEXT and NOT FOUND TEXT can contain TIU objects. In both, you can control the output format by using \\ to force a line break.

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.

COMPUTED FINDING PARAMETER - This field applies only to computed findings and is used to pass a parameter into the computed finding. Acceptable values for this field depend on the computed finding and should be documented in the computed finding description.

# **Function Findings**

Function Findings (FF) do computations on the results from regular findings. Function Findings can be used just like regular findings with one exception, there is no date associated with an FF which means the Resolution Logic cannot be written so that it is made true solely by FFs. Besides providing new and expanded functionality, FFs can make custom logic much simpler to understand.

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 V.2.0.

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.

# Patch 26 changes to Function Findings

The executable help for the function string was upgraded by improving the text and using the Browser to display it.

Users reported that the display of function finding true/false values in the Clinical Maintenance output is useful to CACs, but confusing for clinical users. As a result, a change was made so that

the function finding true/false values will be displayed only in the Clinical Maintenance output in reminder test.

Remedy ticket #823815 reported an undefined error during function finding evaluation. The function string being evaluated was "UROLOGY PCU" ["URO". The error was occurring because a unary operator in the function string is flagged as being unary by appending the operator with a 'U'. The code checking for a unary operator was improperly interpreting the 'U' in UROLOGY as a flag for a unary operator which caused the undefined error. The code was corrected. Additional changes: A check was added for division; if none is found, then the logic string is evaluated using indirection; if division is found, then special logic evaluation is used to trap division by zero. This may give a slight improvement in execution speed. The function finding step-by-step output in reminder test was made a little more readable.

Output of function finding true or false values for function findings used in cohort or resolution logic was added in PXRM\*2.0\*24. The reminder definition VA-IRAQ & AFGHAN POST-DEPLOY SCREEN has a lot of found and not found text and the display of the function finding values in the Clinical Maintenance output was giving the display of the text a poor appearance. This is an example of how it looks without the function finding values:

Resolution:

- 1. PTSD Screening completed since service discharge
- 2. Depression Screening completed since service discharge
- 3. Alcohol Screening completed since service discharge Screening for at risk alcohol use using the AUDIT-C screening tool should be performed yearly for any patient who has consumed alcohol in the past year. No record of prior screening for alcohol use was found in this patient's record.
- 4A. Screen for GI symptoms done or not required.

  4A. Screen for GI symptoms done or not required.

  Screen for diarrhea or other GI complaints that might suggest giardia, amoebiasis or other GI infection.
- 4B. Screen for Fevers done or not required. Screen for unexplained fevers that might represent occult malaria or infection with leishmaniasis.
- 4C. Screen for Skin Rash done or not required. Screen for persistent rash that might represent infection with leishmaniasis.

This is how it looks with the function finding values displayed:

```
Resolution:

FF(16)=0

FF(2)=1

1. PTSD Screening completed since service discharge

FF(3)=1

2. Depression Screening completed since service discharge

FF(18)=0

FF(4)=1

3. Alcohol Screening completed since service discharge

Screening for at risk alcohol use using the AUDIT-C screening tool should be performed yearly for any patient who has consumed alcohol in the past year.

No record of prior screening for alcohol use was found in this patient's record.

FF(17)=0

FF(5)=1
```

```
4A. Screen for GI symptoms done or not required.
FF(5)=1
4A. Screen for GI symptoms done or not required.
Screen for diarrhea or other GI complaints that might suggest giardia,
amoebiasis or other GI infection.
FF(6)=1
4B. Screen for Fevers done or not required.
Screen for unexplained fevers that might represent occult malaria or
infection with leishmaniasis.
FF(7)=1
4C. Screen for Skin Rash done or not required.
Screen for persistent rash that might represent infection with leishmaniasis.
FF(10)=0
```

The output as of patch 26 looks like this:

#### Resolution:

- 1. PTSD Screening completed since service discharge
- 2. Depression Screening completed since service discharge
- 3. Alcohol Screening completed since service discharge Screening for at risk alcohol use using the AUDIT-C screening tool should be performed yearly for any patient who has consumed alcohol in the past year. No record of prior screening for alcohol use was found in this patient's record.
- 4A. Screen for GI symptoms done or not required. 4A. Screen for GI symptoms done or not required. Screen for diarrhea or other GI complaints that might suggest giardia, amoebiasis or other GI infection.
- 4B. Screen for Fevers done or not required. Screen for unexplained fevers that might represent occult malaria or infection with leishmaniasis.
- 4C. Screen for Skin Rash done or not required. Screen for persistent rash that might represent infection with leishmaniasis. FF(2)=1, FF(3)=1, FF(4)=1, FF(5)=1, FF(6)=1, FF(7)=1, FF(10)=0, FF(16)=0,

#### Patch 24 Changes to Function Findings

FF(17)=0, FF(18)=0

Remedy ticket #742674 showed the undefined error <UNDEFINED>MRD+2^PXRMFF0 \*FIEVAL("1") when trying to evaluate a function finding using the MRD function for a taxonomy finding. This was occurring because during the evaluation, a lock could not be obtained for the taxonomy expansion and the finding was not being set to false as it should have been. This was corrected.

Function findings were changed in PXRM\*2\*18 to allow the MUMPS division operators in the function string, which meant there is the possibility of division by 0. The function finding evaluation code was changed, to trap a division by 0 so it would not generate an error, and the function finding was set to false if there was a division by 0. During testing of PXRM\*2\*24, it was determined that this behavior was not optimal since only the portion of the function string involving the division by 0 should be set to false. The function finding evaluator was changed to do this and a new feature was added to reminder test that shows step-by-step how the function string is evaluated. Also the display of the reminder test was moved to the FileMan Browser to make it easier to view.

A fix was made for a problem reported in Remedy ticket #242214, which reported that reminder tests produced an error when either a patient or a reminder was not selected.

# **Patch 18 Changes to Function Findings**

All function findings were improved to handle the case when the findings they use are false. Functions will now return the value "UNDEF" when they cannot be evaluated.

An optional third argument of "NAV" was added to the DIFF\_DATE function. If this argument is present, the actual value instead of the absolute value is returned.

Two new functions, MAX\_VALUE and MIN\_VALUE, were added.

A new function DIFF\_DT which is a generalized version of DIFF\_DATE was added.

There were some CSUBs that could not be used in a function finding because they would not pass the input transform. "ADMISSION DATE/TIME" is an example of one that could not be used. It was not passing because of the space and the "/". The input transform was changed to allow all legitimate CSUBs.

Clin2 reported that a list type reminder that used the VALUE function in a function finding failed the validation when creating a reminder rule. This was because the validater was written before functions could have CSUB values as arguments. The validation code was changed to handle those cases.

### Creating a Function Finding

To define or edit a Function Finding, select the 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," enter a number. Function Finding number 1 is created in the following example:

```
FFTEST
Select Reminder Definition:
                                          LOCAL
    Select one of the following:
                   All reminder details
                   General
         В
                   Baseline Frequency
         F
                    Findings
                    Function Findings
         С
                   Custom date due
         D
                   Reminder Dialog
                   Web Addresses
         W
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// <Enter>
FUNCTION STRING: MRD(1,3)>MRD(11,8,4) Replace <Enter>
FOUND TEXT:
  No existing text
  Edit? NO// <Enter>
NOT FOUND TEXT:
 No existing text
  Edit? NO// <Enter>
USE IN RESOLUTION LOGIC: <Enter>
USE IN PATIENT COHORT LOGIC: <Enter>
REMINDER FREQUENCY: <Enter>
MINIMUM AGE: <Enter>
MAXIMUM AGE: <Enter>
RANK FREOUENCY: <Enter>
Select FUNCTION FINDING: <Enter>
```

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

```
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:
REMINDER FREQUENCY:
MINIMUM AGE:
MAXIMUM AGE:
RANK FREQUENCY:
```

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

# **Function Findings Primer**

Function findings operate on data from standard findings and return computed data. They can be used in patient cohort logic and resolution logic or for display as informational text. Function findings functions are stored in file #802.4, this file defines the functions that can be used in function finding strings.

- OPERATORS and GLOBAL VARIABLES
- MRD
- MAX\_DATE
- MIN\_DATE
- COUNT
- FI
- DUR
- DIFF DATE
- DTIME\_DIFF
- VALUE
- NUMERIC
- MAX\_VAL
- MIN\_VAL

#### **Operators and Global Variables**

The mathematical operators that can be used are as follows:

- + ADD
- Subtract
- \* Multiply
- / Divide by
- \ Integer division (remainder is dropped)
- \*\* Exponential
- # Modulus (remainder)
- > Greater than
- < Less than
- = Equals

The logical operators that can be used are as follows:

- & And
- ! Or
- ' Not
- [ Contains
- ] Follows

Please note that even though all of these operators may be used within function findings, it is not always clinically relevant to use them. We will list the operators for each function that would clinically apply.

For example, we could multiply the date of FI(1) by the date of FI(2) and do a comparison to some number, but that would not be clinically relevant.

Function string: MRD(1)\*MRD(2)>60

Clinically, there would be no reason to multiply two dates.

Certain **Global Variables** are set every time a reminder is evaluated on a patient. These are as follows:

```
PXRMAGE – Returns the patient's age
```

PXRMDOB – Returns the patients date of birth in FileMan format

PXRMDOD - Returns the patients date of death, if it exists, in FileMan format

PXRMLAD – Returns the patients last admission date, if it exists, in FileMan format

PXRMSEX – Returns the patients sex

Global variables may be used in function findings as part of the string.

Example: MRD(1)>MRD(2)&(PXRMAGE>50)

The Global Variables may NOT be the only part of the string.

#### **MRD**

This function returns the most recent date of the finding(s) in the argument list of the MRD string, and then makes a comparison based on the operator used to another MRD string or a reminder global variable. All mathematical operators may be used with MRD, but the relevant operators include:

```
Greater than - >
Less than - <
Equals - =
```

Relevant logical operators include:

```
Not – '
And - &
Or - !
```

These may be used in combinations as well; i.e. '<, '=, '>

# Examples:

- 1. MRD(1)'>MRD(2) This would be true if the date of finding 1 is less than or equal to the date of finding 2. This is because of the "NOT GREATER THAN" notation which implies "less than or equal to."
- 2. MRD(1,2)<MRD(3) This would be true if the most recent date of finding 1 and 2 is less than the date of finding 3. If both finding 1 and 2 are true, the function would return the most recent date of those two for the comparison to finding 3.
- 3. MRD(1,2)=MRD(3,4) This would be true if the most recent date of finding 1 and 2 is equal to the most recent date of finding 3 and 4. If both finding 1 and 2 are true, the function would return the most recent date of those two. The same would hold true for the second part of this string, where, for comparison, the most recent date of finding 3 or 4 would be returned.
- 4. MRD(1)>PXRMLAD This would be true if the date of finding 1 is more recent than the patient's last admission date.
- 5. (MRD(1,2) >MRD(4))&(PXRMDOB>2500101) This would be true if the most recent date of findings 1 and 2 is more recent than the date of finding 4, AND the patient's date of birth is after January 1, 1950.

Be aware that if you have a date range defined by Beginning Date/Time (BDT) and Ending Date/Time (EDT) set on the finding(s) that is part of the MRD string, it could affect the date returned. For example, your string is MRD(1,2)>MRD(3) and there is no EDT entry on either finding, then the function will work as described above. If there is an EDTentry, let's see how the outcome is affected.

FI(1) has ending date/time entry of T-1Y and FI(2) has NO EDT:

Dates of findings, and assuming today is 7/29/10 for the example:

| FI(1)   | FI(2)   |
|---------|---------|
| 7/24/10 | 6/18/10 |
| 2/3/10  | 4/8/10  |
| 6/1/09  | 3/20/08 |

Given these dates with the EDT entry on FI(1), the MRD that would be used to compare to FI(3) would be date of 6/18/10 from FI(2). Even though the FI(1) dates of 7/24/10 and 2/3/10 exist, because of the ending date/time entry of T-1Y, they are not considered in the evaluation.

Another caveat of the MRD functionality is the use of a finding in the MRD string that has a negative occurrence count.

Example: MRD(1)>MRD(2) and Finding 1 has a -1 occurrence count

| FI(1)   | FI(2)   |
|---------|---------|
| 7/24/10 | 8/18/10 |
| 2/3/10  | 4/8/10  |
| 6/1/09  | 3/20/08 |

With FI(1) having a -1 as occurrence count, the function string MRD(1)>MRD(2) would evaluate to false because the date of FI(1) would be 6/1/09, which is the OLDEST occurrence retrieved by use of the -1 in the occurrence count of FI(1).

MRD can be also combined with other functions and global variables as below:

MRD(1)>MIN\_DATE(2)&(COUNT(2)>3) MRD(2)>3100510!(PXRMAGE>45)

**CLASS: NATIONAL** 

#### MAX DATE

MAX\_DATE is just another name for MRD so everything in the above discussion of MRD applies to MAX\_DATE.

**CLASS: NATIONAL** 

## MIN\_DATE

This function finding returns the oldest date of the finding(s) in the argument list of the MIN\_DATE string, and then makes a comparison based on the operator used to another MIN\_DATE string or a global variable.

All mathematical operators may be used with MIN\_DATE but the relevant operators include:

Greater than -> Less than - < Equals - = Relevant logical operators include:

Not - '

And - &

Or -!

These may be used in combinations as well, i.e. '<, '=, '>

#### Examples:

- 1. MIN\_DATE(1)>MIN\_DATE(2) This would be true if the date of finding 1 is more recent than the date of finding 2
- 2. MIN\_DATE(1,2)<MIN\_DATE(3) This would be true if the oldest date of finding 1 and 2 is less than the date of 3. If both finding 1 and 2 are true, the function would use the oldest date of those two for the comparison to finding 3
- 3. MIN\_DATE(1,2)=MIN\_DATE(3,4) This would be true if the oldest date of finding 1 and 2 is equal to the oldest date of finding 3 and 4. If both finding 1 and 2 are true, the function would use the oldest date of those two. The same would hold true for the second part of this string where for comparison, the oldest date of finding 3 or 4 would be used.
- 4. MIN\_DATE(1)>PXRMLAD This would be true if the date of finding 1 is more recent than the patients last admission date.
- 5. (MIN\_DATE(1,2) > MIN\_DATE(4))&(PXRMDOB>2500101) This would be true if the oldest date of findings 1 and 2 is more recent than the date of finding 4 AND the patient s date of birth is after January 1, 1950.

Please note that if you have date range defined by Beginning Date/Time (BDT) and Ending Date/Time (EDT) on a finding it may impact your results. The date range will restrict the dates used for evaluation to only those occurring during the specified date range. So your oldest finding date will be the oldest one of those within the range.

For example, in the Function Finding of MIN\_DATE(1) > MIN\_DATE(2), below is a list of all the dates for each finding.

| <b>FI</b> (1) | <b>FI(2)</b> |
|---------------|--------------|
| 7/29/10       | 6/26/10      |
| 6/15/10       | 4/1/09       |
| 3/26/08       | 2/5/08       |

With no BDT defined on either finding the evaluation of MIN\_DATE(1) > MIN\_DATE(2) would be 7/29/10>6/26/0, thus the finding is TRUE.

If you had a BDT of T-1Y on FI(1) (given today is 7/29/10) the evaluation of MIN\_DATE(1) > MIN\_DATE(2) would now be 6/15/10 > 6/26/10, thus the FF is FALSE.

Another caveat of the MIN\_DATE functionality is the use of a finding in the MIN\_DATE string that has a negative occurrence count.

Example: MIN\_DATE(1)>MIN\_DATE(2) and Finding 1 has a -2 occurrence count

| FI(1)   | FI(2)   |
|---------|---------|
| 7/24/10 | 6/18/10 |
| 2/3/10  | 4/8/10  |
| 6/1/09  | 3/20/08 |

With FI(1) having a -2 as occurrence count, the function string MIN\_DATE(1)<MIN\_DATE(2) would evaluate to true because MIN\_DATE of FI(1) would be 6/1/09 and MIN\_DATE of FI(2) would be 6/18/10.

```
MIN_DATE can be also combined with other functions and global variables as below: MIN_DATE(1)>MIN_DATE(2)&(COUNT(2)>3)
MIN_DATE(2)>3100510!(PXRMAGE>45)
```

**CLASS: NATIONAL** 

#### **COUNT**

The COUNT Function Finding checks to see if there are a certain number of true occurrences of a particular finding. The syntax of this function finding is COUNT(N)>3. In this example, a check is done to see if there are more than 3 occurrences of FI(N). The COUNT function works in conjunction with the occurrence count parameter of the finding number that COUNT is looking at. If you have your COUNT string set as COUNT(1)>2, then on FI(1), you will need to ensure the occurrence count is set to at least 3. There are other factors that come into play as well, such as entries on the following fields: CONDITION, BEGINNING DATE/TIME, ENDING DATE/TIME, USE STATUS/COND IN SEARCH. These will be addressed below.

All mathematical operators that may be used with COUNT, but the relevant operators or operator combinations include:

```
Less than - <
Greater than - >
Equal to - =
NOT - '
AND - &
OR - !
```

With no entries on the above mentioned fields (CONDITION, BEGINNING DATE/TIME, ENDING DATE/TIME, USE STATUS/COND IN SEARCH), the COUNT works as follows:

FI(N) has occurrence count of 3

FF(N) has string of COUNT(N)>2

The FF(N) will be true if FI(N) has at least 3 occurrences

If FI(N) has dates defined on beginning date/time or ending date/time, then when COUNT is invoked, it will look for the number of occurrences designated by the entry in the occurrence count field within those date ranges and then based on what the string of COUNT is, will make a determination of TRUE or FALSE.

### With Use Status/Condition in Search set to NO

If FI(N) has a Condition or Status associated, then the number of returned occurrences will be less than or equal to the occurrence count. Each returned occurrence will have the condition applied so they may be true or false. Also, if there are entries on beginning date/time and ending date/time, those parameters will also be considered in the evaluation of the FF. Example: FI(1) is an A1C lab test with condition of I

V>9.0 and occurrence count of 5. Given a list of values within the date range specified by beginning date/time and ending date/time are as follows:

```
8.0, 7.5, 9.1, 9.2, 8.8, 8.4, 9.3, 9.4, 7.9, 9.1, 8.5
```

The value of COUNT(1) will be 2 because only the last five occurrences are considered. If you had a string of COUNT(1)>2, then the FF would be false.

#### With Use Status/Condition in Search set to YES

Again, assuming occurrence count of 5 on FI(N) (Lab test) and condition of I V>9.0, up to the last 5 occurrences that **actually meet** the condition within the date range will be returned. Given the same list of values as above, the number of occurrences up to the occurrence count that meet the condition will be returned.

```
8.0, 7.5, 9.1, 9.2, 8.8, 8.4, 9.3, 9.4, 7.9, 9.1, 8.5
```

The bold values will be returned and if the String of the FF was COUNT(N)=5, then the FF would be TRUE. Be careful with the use of USE STATUS/CONDITION in SEARCH as it will affect your outcome

COUNT can be also combined with other functions and global variables as below:

```
COUNT(1)>2&(COUNT(3)=1))
COUNT(4)=2!(MRD(2)>MRD(1))
COUNT(3)<5&(PXRMAGE>50!PXRMLAD>3100317)
```

**CLASS: NATIONAL** 

## FΙ

This function provides a way to logically string regular findings and/or other functions and/or reminder global variable combinations together. The function will be evaluated and return a TRUE or FALSE value. Complex strings can be written using parenthesis to group items together.

Below are some examples. In some of these examples you will see the use of the global variables and other functions:

```
FI(1)&FI(2)&(FI(3)!FI(4))

F(1)&FF(1)&'FF(2)

FI(2)&FF(1)&(MRD(1)>PXRMLAD)

FI(2)&FI(3)&FI(4)&'FF(1)&(PXRMSEX="F")&(PXRMDOB>2500101)
```

**CLASS: NATIONAL** 

#### **DUR** (Duration)

For findings that have a start and stop date (orderable items, medications), DUR will be the number of **days** between the start and stop date of the finding. For orders/medications that do not have a stop date, the current date is used as the stop date.

```
DUR(N)>60
```

Orderable Item example

```
FI(1)=OI.HEMATOLOGY CONSULT
FF(1)=DUR(1)>60
```

Here is an excerpt from a reminder test to show how this works for a finding with no stop date:

```
Orderable Item: HEMATOLOGY CONSULT
```

06/20/2006 Status: pending, Start date: 04/02/2004, Stop date: missing

The DUR would be 809 days:

FIEVAL("FF1","VALUE")=809 if the current date was 6/20/2006. The reminder calculates the number of days from 04/02/2004 (start date of consult) and stop date, which in this case we are using 06/20/2006 as the current date.

For findings that have only a single date, DUR works in conjunction with the Occurrence Count Field and is the number of days between the first and last occurrence. If there is only one occurrence, then DUR will be 0. The default value of the occurrence count field is 1, therefore, if you are using the DUR on a finding that only has 1 as the occurrence count, the DUR will always be 0. Your Occurrence Count Field setting will determine which findings are evaluated. For example, let's assume you have a specific Health Factor (HF) that is in a Veterans record 10 times. If your Occurrence Count is set to 5, the DUR will be only evaluated between the most recent date of the HF and that of the 5<sup>th</sup> most recent date of the HF. If your Occurrence Count is set to 99, then the most recent and the oldest dates of the HF are compared to give the DUR. Since the highest numerical value for the occurrence count field is 99, in theory, if you had 200 occurrences (of a blood pressure or pain score), then instead of getting the duration of the most recent occurrence and the 200<sup>th</sup> occurrence, you would in actuality get the duration of the most recent and the 99<sup>th</sup> occurrence.

Please note that if you have a Beginning Date Time (BDT) or Ending Date Time (EDT) on your finding, the Occurrence Count will only pull the specified number of entries during that time frame and then do the DUR evaluation on the First and Last dates of those "filtered" list of finding items.

Another example showing how your return value for DUR could be affected by occurrence count entry: Finding 1 is a Health Factor with given entry dates:

```
3100624 (June 24, 2010)
3090516 (May 16, 2009)
3080516 (May 16, 2008)
```

If the function finding string is DUR(1)>370 and if the occurrence count of FI(1) is set to a value of 2, then DUR would be true because difference would be 404, which is the difference between the most recent and second most recent entries. If occurrence count is set to -2, then DUR would be False because difference is 365, which is the difference between the oldest and second oldest entries.

DUR can be also combined with other functions and global variables as below:

```
DUR(1)>120&(DIFF_DATE(1,2)>100)
DUR(2)<50&((PXRMAGE>75)&(MRD(1)>3060910))
```

**CLASS: NATIONAL** 

#### **DIFF DATE**

This function returns the difference in days between the dates of the two findings listed as parameters. The default is to return the absolute value, but if the optional third parameter of "N" is present, the actual value is returned. If you want the actual value, be aware that if the date of the second parameter is more recent than the date of the first parameter, the result will be negative.

Syntax: DIFF\_DATE(M,N)>n where the "M" and "N" are findings and are also called parameters in this case and n is the number of days.

```
Some examples:
```

Given dates

```
FI(1)=3100710 (July 10, 2010)
FI(2)=3100720 (July 20, 2010)
```

DIFF\_DATE(1,2)>5 This will evaluate as TRUE because there are 10 days (absolute value) between FI(1) and FI(2)

DIFF\_DATE(1,2,"N")<-6 This will evaluate as TRUE because there are negative 10 (-10) days between FI(1) and FI(2). If we simply change the order of the parameters (FI(1) and FI(2)), it will change the evaluation as long as the "N" is left as a third parameter.

DIFF\_DATE(2,1,"N")<-6 This will evaluate as FALSE because there are 10 days between FI(1) and FI(2)

You **cannot** use reminder global variables directly in the DIFF\_DATE function since it only works on dates of regular findings. You **can** use the Computed Finding VA-FILEMAN DATE to create a regular finding with a specific date. For example, if you want to determine if the date of finding 1 occurred more than 20 days after the last admission, set up the computed finding (VA-FILEMAN DATE) with PXRMLAD in the Computed Finding Parameter field. If finding 2 is the computed finding, the function string would be DIFF\_DATE(1,2)>20. Another example would be to compare the date of FI(1) to today's date. Again, you would use the computed finding VA-FILEMAN DATE and enter TODAY or NOW (if you want the time included) into the computed finding parameter field. Then function string would be something like DIFF\_DATE(1,2)>200.

In the above examples, the assumption is made that there are no entries on beginning date/time and ending date/time fields. Again, as with other functions, having a date range on the finding could affect the dates that are used. Let's give an example.

FI(1) dates:

3100501

3090501

FI(2) dates:

3100525

FI(1) has an ENDING DATE/TIME entry of 3100430. FI(2) has no ENDING DATE/TIME entry. Given these dates and a DIFF\_DATE string of DIFF\_DATE(1,2)>30, the FF will be TRUE because for FI(1), the date that will be used is 3090501 due to the entry in ENDING DATE/TIME field. The comparison would be 389>30 which is true. The 389 value is the number of days between FI(1) and FI(2). If you remove the ENDING DATE/TIME entry, then the FF will be FALSE because for FI(1), the date that will be used is 3100501. The comparison would be 24>30 which is false. The 24 value is the number of days between FI(1) and FI(2).

DIFF\_DATE can be also combined with other functions and global variables as below: DIFF\_DATE(1,2)>100&(MRD(1,2)>MRD(3))
DIFF\_DATE(2,4)=0!(PXRMDOB>2450101)

**CLASS: NATIONAL** 

#### **DTIME DIFF**

This function is a generalized function that returns the difference in time between the dates of two findings. The difference in time can be displayed down to the second. It can be displayed by Days, Hours, Minutes or Seconds. This function also gives you the ability to look at specific occurrences and CSUB items. Note that if you want to compare an occurrence other than the first, you must set the occurrence count on that finding to be greaterr than 1. Also, fields such as BEGINNING DATE/TIME, ENDING DATE/TIME, CONDITION, USE STATUS/COND IN SEARCH can change the dates returned by the function.

Syntax: DTIME\_DIFF(F1,O1,C1,F2,O2,C2,U,"A") where F is finding number, O is occurrence number, C is CSUB item, U is units which can be D for Days, H for Hours, M for Minutes or S for Seconds. If A is present, then the absolute value of the difference will be returned. If A is omitted, then the result could be calculated as a negative value.

Any of the parameters in the DIFF\_DT function that are text must be in quotes.

Example: DTIME DIFF(1,1,"DATE",2,1,"DATE","D","A")

In this example the absolute value, in Days, the difference between finding 1, occurrence 1 DATE CSUB and finding 2, occurrence 1 DATE CSUB

# Some examples of DTIME\_DIFF

FI(1) has 3 occurrences and we have the occurrence count set to 3

Dates of occurrences:

3100409

3090409

3080409

**DTIME\_DIFF(1,1,"DATE",1,2,"DATE","D","A")>300** would evaluate to TRUE because the absolute difference in DAYS between the first occurrence of finding 1 date and the second occurrence of finding 1 date is 365 days, so 365>300.

**DTIME\_DIFF(1,1,"DATE",1,3,"DATE","H")>14400** would evaluate to TRUE because the difference in HOURS between the first occurrence of finding 1 date and the third occurrence of finding 1 date is 17520 hours, so 17520>14400

**DTIME\_DIFF(1,2,"DATE",1,1,"DATE","D")>50** would evaluate to FALSE because the difference in DAYS between the second occurrence of finding 1 date and the first occurrence of finding 1 date is -365 days, so -365>50 is FALSE. The reason the result is negative (-365) is because we did not specify the "A" parameter for absolute value.

```
DTIME_DIFF can be also combined with other functions and global variables as below:
```

DTIME DIFF(1,1,"DATE",1,2,"DATE","D")>60&(COUNT(2)=5)

DTIME DIFF(1,1,"DATE",2,1,"DATE","D","A")<400&(PXRMAGE>40)

**CLASS: NATIONAL** 

#### **VALUE**

The VALUE function returns any of the "CSUB" values of a particular occurrence of a finding for comparison to a different occurrence of the same finding or to an occurrence of a different finding. The argument list is the finding number, the occurrence and the CSUB of interest. For example, if you wanted to check to see if occurrence 1 of finding 4 was less than occurrence 2 of the same finding, the function string would be VALUE(4,1,"VALUE")<VALUE(4,2,"VALUE"). If you are comparing multiple occurrences of a particular finding, then you must remember to set the occurrence count on that finding to a value high enough to work in your function string. Note that fields BEGINNING DATE/TIME, ENDING DATE/TIME, CONDITION, USE STATUS/COND IN SEARCH may have significant impact on the data returned by the VALUE function. Also, using a negative number in the occurrence count will/could have a significant impact on the results returned.

Common operators used with the VALUE function are:

```
Greater than ->
```

Less than ->

Equals ->

AND - &

OR -!

NOT - '

#### Examples:

I. FI(1) is a lab test with occurrence count set to 3. Values are as follows

60

5.5

5.0

### VALUE(1,1,"VALUE")>(VALUE(1,2,"VALUE"))>(VALUE(1,3,"VALUE"))

6.0>5.5>5.0 would evaluate to TRUE which could be clinically significant because the value is trending upwards.

II. FI(1) is an education topic with occurrence count set to 2. The CSUB "Level of Understanding" values are as follows:

 $Occurrence \ 1-POOR$ 

Occurrence 2 – POOR

VALUE(1,1,"LEVEL OF UNDERSTANDING")="POOR"&(VALUE(1,2,"LEVEL OF UNDERSTANDING")="POOR")) This could be clinically significant because the last two education topics level of understanding was POOR

VALUE can be also combined with other function and global variables as below:

VALUE(1,1,"LEVEL OF UNDERSTANDING")="POOR"&(COUNT(2)=2)
VALUE(1,1,"LEVEL OF UNDERSTANDING")="POOR"!(PXRMLAD>3100909)

**CLASS: NATIONAL** 

#### **NUMERIC**

The NUMERIC function returns the first numeric portion of any CSUB value for a particular finding. For example, if the COMMENT field of a health factor contains a numeric value (i.e. an outside lab result), NUMERIC can be used test it.

Assume FI(1) is a Health Factor for an outside HGB A1C result. On the reminder dialog, there is a comment field associated with the dialog element. If a numeric value is entered into the comment field as a piece of the comment, then this becomes computable data for the NUMERIC function. This value in this comment field is stored in PCE associated with the health factor, so that when a reminder is evaluated, that value can be used as a possibility for cohort or resolution logic or displayed as informational text.

The syntax of NUMERIC is finding number, occurrence, CSUB.

NUMERIC(1,1,"COMMENT")>5.0 This essentially says the function will be true if the very first numeric portion of the comment field of finding 1, occurrence 1 is greater than 5.0. Please note that if the comment field entry is "A1C: 8.5", then the part of the comment that will be evaluated will the "1" part of "A1C", not the actual value of 8.5. It is strongly suggested that if you are using this function that you should provide education to the fact that the first part of the comment should be numeric. As with all functions, the BEGINNING DATE/TIME, ENDING DATE/TIME, CONDITION, USE STATUS/COND IN SEARCH fields could significantly impact your results so pay close attention to these entries.

NUMERIC can be also combined with other functions and global variables as below:

```
NUMERIC(1,1,"COMMENT")>4.0&'(MRD(2)'<3100909)
NUMERIC(2,2,"COMMENT")<5&(PXRMAGE>60)
```

**CLASS: NATIONAL** 

#### MAX VALUE

The MAX\_VALUE function returns the maximum value of *n* number of occurrences of a specific CSUB or multiple CSUB's of a single finding or multiple findings. The CSUB that is being requested must be a numeric value. Any CSUB requested that is not numeric will be treated as having a value of zero. For instance, if you want to know the largest A1C result a patient has, you can use the MAX\_VALUE function.

The syntax of the function is MAX\_VALUE(N,"CSUB")<operator><test value> where N is the finding number. In the above example with A1C, assume the A1C is FI(1), the function would be written as MAX\_VALUE(1,"VALUE"). Note that you have to set the occurrence count on FI(1) to a value greater than 1 or you will get the latest (most recent) result. If you wanted to look at the last 20 A1C values and see if the largest value is greater than 10, you would set the occurrence count to 20 on the finding and then use the string MAX\_VALUE(1,"VALUE)>10. The function finding will be true if the value returned from MAX\_VALUE is greater than 10.

When using the function with multiple findings and CSUB's, the syntax is a bit more complex. MAX\_VALUE(X,"CSUB",Y,"CSUB",Z,"CSUB")operator><test value>, where X,Y and Z are all separate findings. Again, for each finding, the number of results returned is only up to whatever value is set in the occurrence count of each finding. In this example, the largest value of all findings evaluated is returned and a comparison is made to the test value.

Example: FI(1) is lab test with occurrence count of 5 with the following values:

100

103

98

96

92

The MAX\_VALUE(1,"VALUE")>100 would be TRUE because the largest value returned from the last 5 occurrences is 103. If you did not set the occurrence count field entry, then the result would be FALSE because the largest value would be 100.

As with all functions, the BEGINNING DATE/TIME, ENDING DATE/TIME, CONDITION, USE STATUS/COND IN SEARCH fields could significantly impact your results so pay close attention to these entries.

MAX\_VALUE can be also combined with other functions and global variables as below:

```
MAX_VALUE(1,"VALUE")>10&(MRD(1,2)>MRD(4))!(COUNT(6)<3)
MAX_VALUE(1,"VALUE")<4.0&(PXRMAGE<40)&(PXRMSEX="F")
```

**CLASS: NATIONAL** 

## MIN\_VALUE

The MIN\_VALUE function returns the minimum value of *n* number of occurrences of a specific CSUB or multiple CSUB's of a single finding or multiple findings. The CSUB that is being requested must be a numeric value. Any CSUB requested that is not numeric will be treated as having a value of zero. For instance, if you want to know the smallest A1C result a patient has, you can use the MIN\_VALUE function.

The syntax of the function is MIN\_VALUE(N,"CSUB")operator><test value> where N is the finding number. In the above example with A1C, assume the A1C is FI(1). The function would be written as MIN\_VALUE(1,"VALUE"). Note that you have to set the occurrence count on FI(1) to a value greater than 1 or you will get the latest (most recent) result. If you wanted to look at the last 20 A1C values and see if the smallest value is greater than 10, you would set the occurrence count to 20 on the finding and then use the string MIN\_VALUE(1,"VALUE)>10. The function finding will be true if the value returned from MIN\_VALUE is greater than 10.

When using the function with multiple findings and CSUB's, the syntax is a bit more complex. MIN\_VALUE(X,"CSUB",Y,"CSUB",Z,"CSUB")operator<test value</pre>, where X,Y and Z are all separate findings. Again, for each finding, the number of results returned is only up to whatever value is set in the occurrence count of each finding. In this example, the smallest value of all findings evaluated is returned and a comparison is made to the test value.

Example: FI(1) is lab test with occurrence count of 5 with the following values:

100

103

98

96

92

The MIN\_VALUE(1,"VALUE")>99 would be FALSE because the smallest value returned from the last 5 occurrences is 92. If you did not set the occurrence count field entry, then the result would be TRUE because the smallest value would be 100.

As with all functions, the BEGINNING DATE/TIME, ENDING DATE/TIME, CONDITION, USE STATUS/COND IN SEARCH fields could significantly impact your results so pay close attention to these entries.

MIN VALUE can be also combined with other functions and global variables as below:

```
MIN_VALUE(1,"VALUE")>10&(MRD(1,2)>MRD(4)!COUNT(6)<3)
MIN_VALUE(1,"VALUE")<4.0&(PXRMAGE<40&PXRMSEX="F")
```

**CLASS: NATIONAL** 

#### Status List

Status List applies only to finding types that have a status:

- Inpatient pharmacy
- Outpatient pharmacy
- Orders
- Problem List
- Radiology
- Reminder Taxonomy
- Reminder Terms

If no Status List is specified, then certain defaults apply:

| Finding Type           | Default Status    |  |
|------------------------|-------------------|--|
| Inpatient Medications  | ACTIVE            |  |
| Orderable Item         | ACTIVE, PENDING   |  |
| Outpatient Medications | ACTIVE, SUSPENDED |  |
| Problem List           | ACTIVE            |  |
| Radiology Procedure    | COMPLETE          |  |

**Default View** (This example is for a Radiology Procedure as the Finding Item)

```
Statuses already defined for this finding item:
COMPLETE
    Select one of the following:
         A ADD STATUS
         D
                 DELETE A STATUS
         S
                  SAVE AND QUIT
                QUIT WITHOUT SAVING CHANGES
Enter response: S// ?
Display when adding a status
Enter response: S// a ADD STATUS
1 - * (WildCard)
2 - CANCELLED
3 - COM
4 - COMPLETE
5 - EXAMINED
6 - TRANSCRIBED
7 - WAITING FOR EXAM
Select a Radiology Procedure Status or enter '^' to Quit: (1-7): 2,3,6
Statuses already defined for this finding item:
CANCELLED
COM
COMPLETE
TRANSCRIBED
    Select one of the following:
         A ADD STATUS
                  DELETE A STATUS
         D
         S
                  SAVE AND QUIT
                 QUIT WITHOUT SAVING CHANGES
Enter response: S// ?
View when deleting a status
Enter response: S// d DELETE A STATUS
```

```
1 - CANCELLED
2 - COM
3 - COMPLETE
4 - TRANSCRIBED
Select which status to be deleted: (1-4): 2,4
Statuses already defined for this finding item:
CANCELLED
COMPLETE
    Select one of the following:
        A ADD STATUS
                  DELETE A STATUS
         D
                  SAVE AND QUIT
         S
                  QUIT WITHOUT SAVING CHANGES
Enter response: S//
```

**Tip:** Here is a tip that will make it work a little bit faster when you are using a Condition to check the status. The status is checked before the Condition is applied so if your status list does not contain the status you are checking for in the Condition the Condition will never be true. So when you are using a Condition set the status list to the wildcard "\*", this makes the status check faster.

# **Activate/Inactivate Reminders**

Use this option to make individual reminders active or inactive.

```
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
  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:
               INACTIVE
INACTIVE FLAG: 1
```

Inactivating a reminder will not remove it from CPRS cover sheet lists or health summaries. However when the cover sheet loads or the health summary is run the reminder will not be evaluated and a message showing the date and time the reminder was inactivated will be displayed.

# **Reminder Sponsor Management**

This option provides the functions for Reminder Sponsor Management.

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

# **List Reminder Sponsors**

Select Reminder Sponsor Management Option: SL List Reminder Sponsors
DEVICE: ANYWHERE Right Margin: 80//
REMINDER SPONSOR LIST JAN 28,2003 10:39 PAGE 1

CAN 20,2003 10.33 1AGE 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

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

Name: NEW Class: LOCAL

Name: Office of Quality & Performance

Class: NATIONAL

Name: QUERI IHD Class: NATIONAL Name: SLC OIFO DEVELOPMENT

Class: NATIONAL

Name: Women Veterans Health Program

Class: NATIONAL

## **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
                            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:
```

# Add/Edit Reminder Sponsor

```
Select Reminder Sponsor Management Option: SE Enter/Edit Reminder Sponsor
Select Reminder Sponsor: Office of Quality & Performance
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: ?
```

# Reminder Taxonomy Management

Reminder taxonomies, stored in file #811.2, provide a convenient way to create a set of coded values and give it a name. For example, the VA-DIABETES taxonomy contains a list of ICD diagnosis codes that signify the patient has a diagnosis of diabetes.

#### Changes made to Taxonomy Management by Patch 26 (PXRM\*2\*26)

In the past, taxonomies were based on pointers to the ICD diagnosis file (#80), the ICD Operation/ Procedure file (#80.1), and the CPT file (#81). Multiple ranges of codes (low code to high code) could be defined for each of these coding systems. When editing was finished, each range of codes was expanded to include all the codes from the low code to the high code. Some coding systems such as SNOMED CT do not assign any meaning to the codes, so they cannot be grouped by code and the concept of a range of codes is meaningless. In some cases, for coding systems that do support the concept of a range, code set updates have inserted an unrelated code into a range.

**New approach:** For the above reasons, the PXRM\*2\*26 patch changes taxonomies so that they are Lexicon-based. This is a general approach that allows Clinical Reminders taxonomies to support any coding system defined in Lexicon's Coding Systems file (#757.03), provided Lexicon maintains the coding system and patient data using the coding system is stored in VistA.

For each coding system it includes, the Coding Systems file defines a three-character abbreviation, nomenclature, source title, and source. Example: ICD, ICD-9-CM, International Classification of Diseases, Diagnosis, 9th Edition, and US Department of Health and Human Services. The three-character abbreviation provides a convenient way to refer to coding systems and is used by Clinical Reminders Taxonomies. The following coding systems are supported by Clinical Reminders:

| Abbreviation | Nomenclature |
|--------------|--------------|
| 10D          | ICD-10-CM    |
| 10P          | ICD-10-Proc  |
| CPT          | CPT-4        |
| CPC          | HCPCS        |
| ICD          | ICD-9-CM     |
| ICP          | ICD-9-Proc   |
| SCT          | SNOMED CT    |

#### **Changes to Reminder Dialogs**

**Before PXRM\*2\*26**, users created Reminder Dialogs by adding individual ICD-9-CM and/or CPT-4 codes. When using codes as Finding Items or Additional Finding Items in CPRS, the end user didn't select codes; codes were automatically filed to VistA when the element/group was selected in the Reminder Dialog. If the Reminder Dialog was set up to use a Taxonomy, it could only be used as a Finding Item; it created a pick list of codes for the user to pick from in CPRS.

The display in CPRS was controlled by the set-up in the Reminder Finding Parameter File (#801.45) and the Reminder Taxonomy File (#811.2). These controls determined if the Taxonomy should assign codes to the current encounter or an historical encounter and what prompts should be assigned to the Reminder Dialog in CPRS.

After PXRM\*2\*26, users will no longer be able to add ICD-9-CM and/or CPT-4 codes to a Reminder Dialog. Users will need to create a Taxonomy, assign codes, and then add the Taxonomy to the Reminder Dialog. To maintain similar end user functionality in CPRS, a new field named Taxonomy Pick List Display has been added to the dialog data dictionary. This field controls how Taxonomies display in CPRS.

When editing a dialog, a simple taxonomy editor is available. It is accessed from dialog management (either the element or group view). Codes added in this editor are automatically marked as Use In Dialog. If a code is deleted in this editor, the Use In Dialog designation is removed from the code.

See the Dialog Management section (page <u>287</u>) for further explanation of the changes and for examples of using the new Dialog Taxonomy functionality.

## **Reminder Taxonomy Management**

A new taxonomy management system replaces the previous taxonomy management menu. The new system uses a combination of List Manager, ScreenMan, and the Browser. List Manager should already be familiar to users of Clinical Reminders tools such as Dialog Management or Reminder Exchange. ScreenMan and the Browser may not be as familiar, but reviewing Appendix A of this manual or the FileMan documentation should give you enough knowledge to make using the taxonomy management system much easier.

#### ScreenMan Overview

ScreenMan is VA FileMan's *screen-oriented* data entry tool. It is an alternative to the Scrolling Mode approach. With ScreenMan, data is entered in *forms*. Each form field occupies a fixed position on the screen (instead of scrolling off!). You can see many data fields at once, and use simple key combinations to edit data and move from field to field on a screen. You can also move from one screen to another like turning through the pages of a book.

If you are not familiar with how to use ScreenMan, see Appendix A of this manual for a brief overview. For a detailed explanation of using ScreenMan and the Browser, please refer to the VA FileMan Getting Started manual.

#### **Browser Overview**

The Browser lets you view any text *on the screen* instead of *on paper*. Do this by printing your text to the **BROWSER** device instead of the HOME device or a printer.

The Browser makes it very easy to view text on screen. Its main features are:

- Scroll forwards *and backwards* through the text. This means you don't lose lines of text "off the top" of the screen, like you do when you print to the HOME device.
- Use the Search feature to find a text string and immediately jump to occurrences of the search string.
- Copy selected text from to the VA FileMan Clipboard; later, if you're editing a mail message or other WORD-PROCESSING-type field with the Screen Editor, you can paste from the clipboard.

# **Shortcuts and Screen setup Tips**

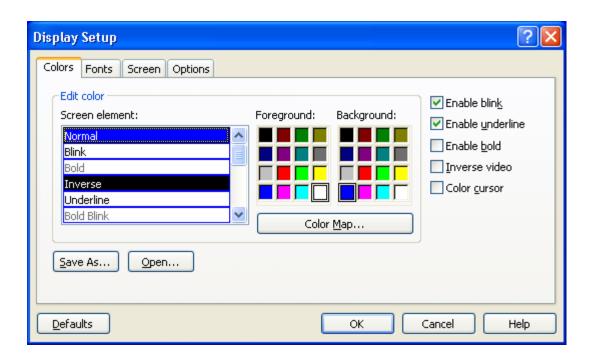
Both the Browser and ScreenMan have shortcuts that can save you a lot of time. Each shortcut begins by pressing the Num Lock (NL) key. (NOTE: some laptops don't have a NumLock key, so you would need to use Map Keyboard on your Reflections Utility menu to map a terminal key to the PC NumLock key.) Some Browser actions:

- (NL)B go to bottom
- (NL)E exit
- (NL)F find
- (NL)H help
- (NL)Q quit
- (NL)T go to top

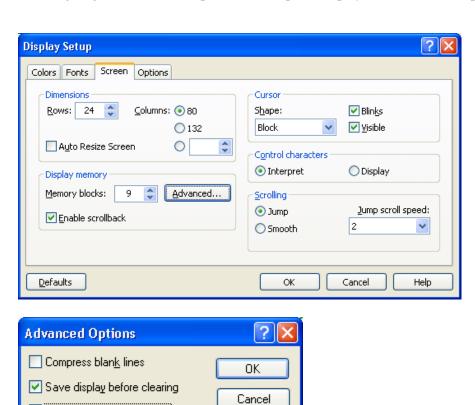
#### Some ScreenMan shortcuts:

- (NL)C close a screen
- (NL)E exit and save changes
- (NL)H help
- (NL)Q exit and do not save changes
- (NL)Z zoom editor

Your Reflections session setup makes a difference in the appearance of the ScreenMan display. The screen element Normal default is a white background and black foreground. Choosing a background color other than white and a foreground color that works well with the background color will provide a more readable ScreenMan display.



NOTE: For taxonomy inquiry print to display properly in Reflections, the setup must have Save from Scrolling Regions checked. Sequence is: Setup => Display => Screen => Display Memory Advanced.

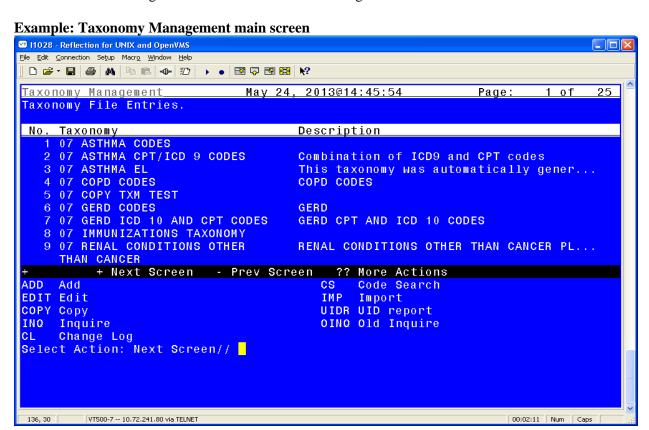


<u>H</u>elp

Save from scrolling regions

### Reminder Taxonomy Management Main Screen

When you select Taxonomy Management from the Clinical Reminders Managers Menu, you will go into a List Manager Taxonomy Management screen. It lists all of the taxonomies on your system. You can use the standard List Manager actions to search or scroll through the list.



## **Reminder Taxonomy Management Actions**

| Synonym | Action      | Description  |  |  |
|---------|-------------|--|--|--|
| ADD     | Add         | Use this action to create a new taxonomy.  |  |  |
| EDIT    | Edit        | Jse this action to edit an existing taxonomy.  |  |  |
| COPY    | Сору        | This action allows the user to copy an existing taxonomy into a new one. The new taxonomy must have a unique name.   |  |  |
| INQ     | Inquire     | Use this action to obtain a detailed report about a taxonomy. It lists all the codes that have been selected, the code's status, and shows if the code has been marked as Use In Dialog (UID). |  |  |
| CL      | Change Log  | Use this action to display a taxonomy's change log (edit history).   |  |  |
| CS      | Code Search | This action can be used to find all taxonomies that include a particular code.   |  |  |
| IMP     | Import      | Use this action to import codes from a CSV file.   |  |  |
| UIDR    | UID Report  | This action runs the UID report which displays all inactive codes marked as UID.   |  |  |

#### \*NOTE - KNOWN ANOMALY:

For any action that works with a list, you can select the list and then the action, or select the action and then the list. In the first case, the action uses List Manager's list selection, which returns the list as a string of items. If the list has too many items, it generates a range error.

The workaround is to select the action first.

For example, on the code selection screen, if you do an ICD-10 Lexicon search for diabetes, you will see a list of around 250 codes. If you enter 1-250, you'll get a range error. However, if you select Add, then you can enter 1-250 and not get the error.

| <u>Lexi</u> | con Selec  | tion         | Nov 1     | 14, 2013@11 | 1:16:15     | Page:        | 57 of     | 57  |
|-------------|------------|--------------|-----------|-------------|-------------|--------------|-----------|-----|
| Term        | /Code: dia | abetes       |           |             |             |              |           |     |
| 253         | ICD-10-CM  | codes were   | found.    |             |             |              |           |     |
| +No.        | Code       | Active       | Inactive  | Descripti   | <u>ion</u>  |              |           |     |
|             |            |              |           | Gestatior   | nal Diabet  | es           |           |     |
| 250         | P70.2      | 10/1/2014    |           | Neonatal    | diabetes    | mellitus     |           |     |
| 251         | Z13.1      | 10/1/2014    |           | Encounter   | for Scre    | ening for Di | iabetes   |     |
|             |            |              |           | Mellitus    |             |              |           |     |
| 252         | Z83.3      | 10/1/2014    |           | Family Hi   | istory of I | Diabetes Mel | llitus    |     |
| 253         | Z86.32     | 10/1/2014    |           | Personal    | History o   | f Gestationa | al Diabet | ces |
|             |            |              |           |             | -           |              |           |     |
|             |            |              |           |             |             |              |           |     |
|             |            |              |           |             |             |              |           |     |
|             | + No       | ext Screen   | - Prev Sc | creen ??    | More Acti   | ons          |           |     |
| ADD         | Add to ta  | axonomy      |           | UID         | Use in di   | alog         |           |     |
| RFT         | Remove fi  | rom taxonomy | /         | SAVE        | Save        |              |           |     |
| RFD         | Remove fi  | rom dialog   |           |             |             |              |           |     |
| Sele        | ct Action  | : Quit// 1-2 | 250       |             |             |              |           |     |
|             |            | • •          |           |             |             |              |           |     |
| >>>         | Range to   | o large: 1-2 | 250.      |             |             |              |           |     |

## **Reminder Taxonomy Actions**

## Add

Use this action to add a new taxonomy.

```
- Prev Screen
          + Next Screen
                                           ?? More Actions
ADD
     Add
                                         CS
                                              Code Search
EDIT Edit
                                              Import
COPY Copy
                                         UIDR UID report
    Inquire
INQ
                                         OINQ Old Inquire
     Change Log
Select Action: Next Screen// ADD
```

When you select Add, you are prompted to enter the Name and Class of the new taxonomy. Once these have been entered you will be taken to the ScreenMan edit form. This is the same form you enter when selecting the Edit action.

```
Are you adding 'JGTAXONOMY1' as a new REMINDER TAXONOMY (the 148TH)? No// Y (Yes)
```

# **Edit**

Use this action to edit the fields in a taxonomy definition. When you select Edit, a ScreenMan form opens.



# **Taxonomy Fields**

| NAME                     | DESCRIPTION  |
|--------------------------|--|
| NAME                     | This is the name of the taxonomy. It must be unique. Nationally distributed taxonomies start with "VA-".   |
| DESCRIPTION              | Use this word-processing field to give a complete description of the taxonomy. Topics to consider including are what the taxonomy represents and its intended usage.   |
| PATIENT DATA<br>SOURCE   | Specifies where to search in VistA for patient data. It is a string of commaseparated key words. The list of key words is given below.   |
| USE INACTIVE<br>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.  |
| PRIORITY LIST            | This field applies only to Problem List searches. It can be used to limit the problems that are included to those with the listed priorities. The possible values are:  A - acute C - chronic U - undefined Any combination of these letters can be used. For example, 'A' would limit the search to acute problems. 'CU' would include chronic problems and those whose priority is undefined. If this field is left blank then all priorities will be included.  |
| INACTIVE FLAG            | Enter "1" to inactivate the taxonomy.  |
| TERM/CODE<br>(multiple)  | Term/Code and a Coding System are passed to the Lexicon search utility, which returns a list of codes based on the users search criteria. Terms are descriptions for a concept and the code is a unique identifier assigned to that description. A concept can have one or more descriptions to express the concept. An example of this in SNOMED CT is the concept code 271807003 that has a fully specified name of "Eruption of Skin", a preferred name of "Eruption" and several synonyms "Rash", "Skin Eruption", "Skin Rash". For more information, see the Lexicon Utility User Manual. |
| CLASS                    | This is the class of the entry. Entries whose class is National 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 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.  |
| CHANGE LOG               | 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.  |

## **Patient Data Source Keywords**

| KEYWORD | MEANING   |  |
|---------|---|--|
| ALL     | All sources (default)                                 |  |
| EN      | All PCE encounter data (CPT-4 & ICD diagnosis)        |  |
| ENPP    | PCE encounter data, principal procedure (CPT-4) only  |  |
| ENPD    | PCE encounter data, principal diagnosis (ICD) only    |  |
| IN      | All PTF inpatient data (ICD diagnosis and procedures) |  |
| INDXLS  | PTF inpatient DXLS diagnosis (ICD) only               |  |
| INM     | PTF inpatient diagnosis (ICD) movement only           |  |
| INPD    | PTF inpatient principal diagnosis (ICD) only          |  |
| INPR    | PTF inpatient procedure (ICD) only                    |  |
| PL      | Problem List (ICD diagnosis and SNOMED-CT)            |  |
| RA      | Radiology (CPT-4) only                                |  |

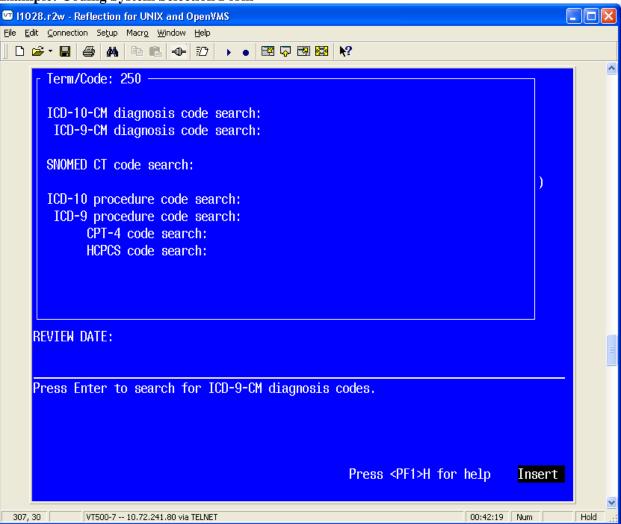
You may use any combination of these keywords. An example is EN,RA. This would cause the search to be made in V CPT and Radiology for CPT-4 codes. If PATIENT DATA SOURCE is left blank, the search is made in all the possible sources. You can also use a "-" to remove a source from the list; for example, IN,-INM.

It is important to remember that the link between CPT-4 codes and radiology procedures is maintained by sites. If this linkage is not kept current at your site then the recommendation is **do not use RA** in Patient Data Source. It will be much more reliable to use radiology procedures directly as findings.

When you navigate to some of the fields on the form, you may see help in the command area. If more detailed help is needed, type '?' or '??'.

Term/Code is a multiple of terms, codes, or code fragments that are used for a Lexicon search. In the above example, the code fragment 250 has been entered. When you press Enter you will be taken to a form where you select the coding system to search.

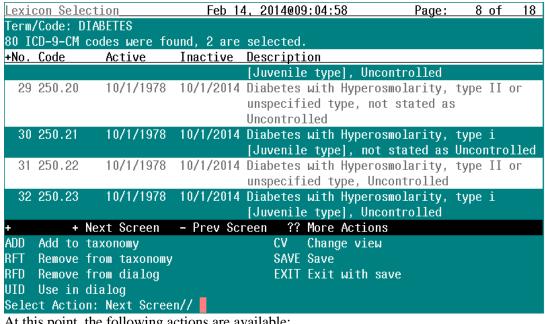
## **Example: Coding System Selection Form**



The top line displays the Term/Code that will be used in the search. You can scroll through the list to select a coding system for the search. When the cursor is on a coding system and you press Enter, the Term/Code and the coding system are passed to the Lexicon search engine, which returns a list of matching codes. The codes are displayed in a List Manager screen. At the top it shows you Term/Code and the number of codes found in the selected coding system.

#### **Example: List Manager Lexicon Selection Screen**

This example shows the results of a search for the Term/Code 250 in the ICD-9-CM coding system. The second line shows the Term/Code and the third line the number of codes found in the selected coding system.



At this point, the following actions are available:

| Synonym | Action   | Description  |  |
|---------|--|--|--|
| ADD     | Add to taxonomy  | nomy Adds the selected codes to the taxonomy.  |  |
| RFT     | Remove from taxonomy                                     | Removes the selected codes from the taxonomy.  |  |
| RFD     | Remove from dialog                                       | Removes UID from the selected codes.   |  |
| UID     | Use in dialog Marks the selected codes as Use in Dialog. |  |  |
| SAVE    | Save   | Saves the results of the other actions. You may do multiple adds, removes, etc., but nothing is actually saved until the Save action is performed. |  |

Note: You may select the action first, then the list of entries it applies to, or the list of entries and then the action. There are a number of ways to specify the selection list.

| Comma separated list of entries | 1,3,5  |
|---------------------------------|--------|
| Range of entries                | 4-8    |
| Combination                     | 3,9-12 |

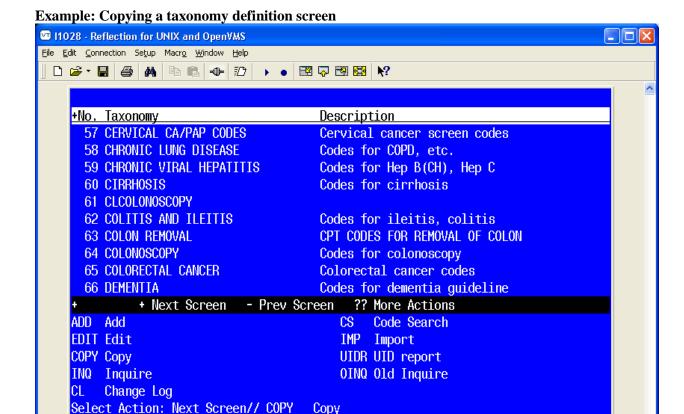
When you are finished, use the hidden action Quit to return to the coding system selection form. If desired, you can use the same Term/Code for searching another coding system, just move to the next coding system and press Enter. If you want to input another Term/Code then use either shortcut (NL)C (close) or (NL)Q (quit) to exit the coding system selection form and return to the main taxonomy edit form.

To edit some fields, such as Description, you must press Enter, and then a word-processing screen opens:

- To exit the word-processing screen, press <PF1>E (or the key you've mapped).
- Move down the edit screen by using the down arrow.

# Copy

Use this action to copy an existing taxonomy definition into a new entry. Once the taxonomy has been copied, you have the option of editing it.



If you choose to edit the taxonomy you've copied, you will enter the standard editing form.

The original reminder taxonomy CIRRHOSIS has been copied into JG-CIRRHOSIS.

Select taxonomy to copy: (1-255): 60 Enter a Unique Name: JG-CIRRHOSIS

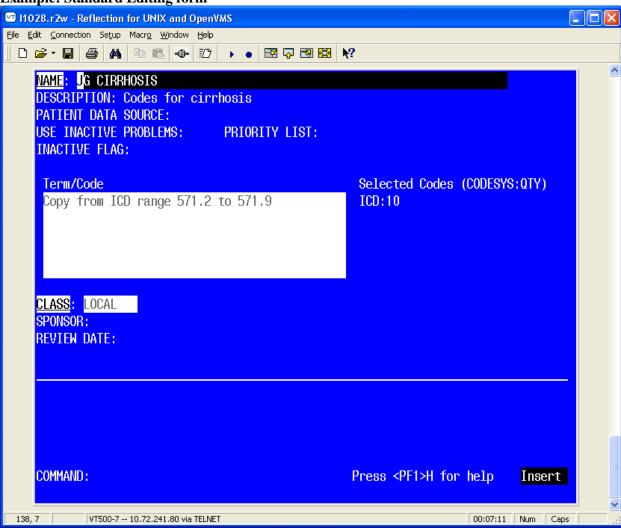
VT500-7 -- 10.72.241.80 via TELNET

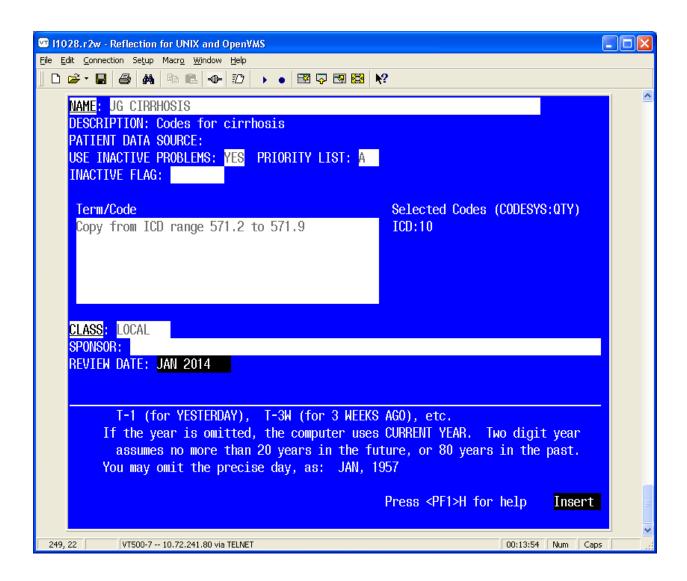
Do you want to edit it now?

306, 29

00:04:02 Num Caps

**Example: Standard Editing form** 



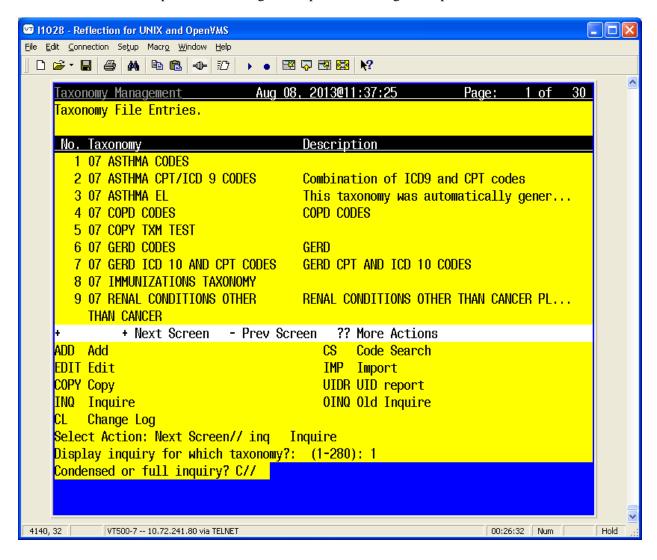


## Inquire about Taxonomy Item

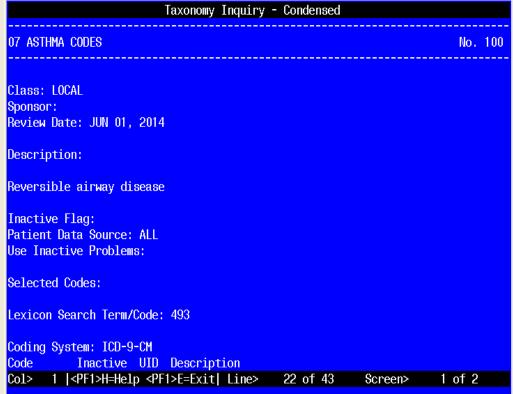
Use this action to get the details of a single taxonomy. You may select Condensed or Full.

The condensed displays each code on a single line with a column for code, inactive, UID, and the first 47 characters of the description.

You will also have the option of browsing the output or choosing an output device.

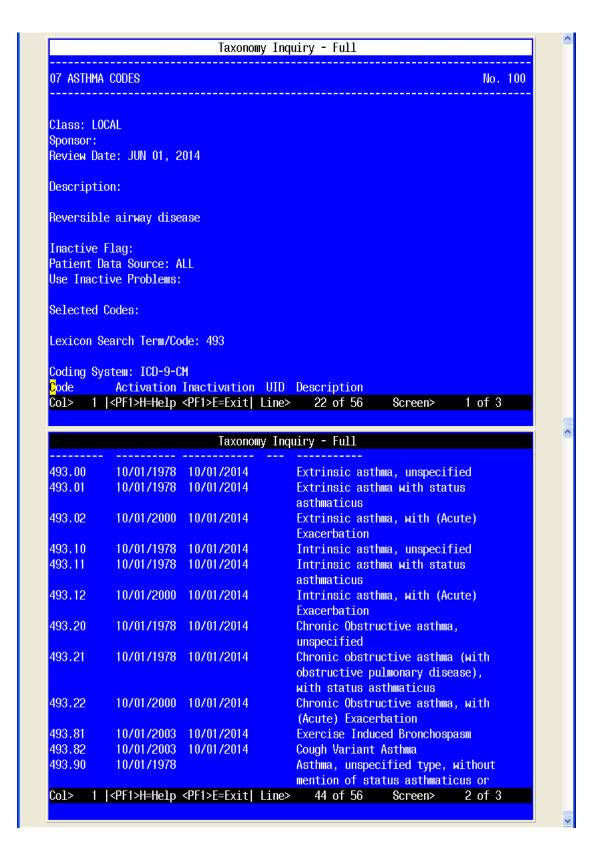


# **Examples: Browsing Taxonomy Inquiry**



| Code      | Inactive      | Taxonomy Inquiry - Condensed<br>UID Description       |
|-----------|---------------|---|
| 493.00    | Х             | Extrinsic asthma, unspecified                         |
| 493.01    | X             | Extrinsic asthma with status asthmaticus              |
| 493.02    | X             | Extrinsic asthma, with (Acute) Exacerbation           |
| 493.10    | X             | Intrinsic asthma, unspecified                         |
| 493.11    | X             | Intrinsic asthma with status asthmaticus              |
| 493.12    | X             | Intrinsic asthma, with (Acute) Exacerbation           |
| 493.20    | X             | Chronic Obstructive asthma, unspecified               |
| 493.21    | X             | Chronic obstructive asthma (with obstructive pulmo    |
| 493.22    | X             | Chronic Obstructive asthma, with (Acute) Exacerbation |
| 493.81    | X             | Exercise Induced Bronchospasm                         |
| 493.82    | X             | Cough Variant Asthma                                  |
| 493.90    |               | Asthma, unspecified type, without mention of statu    |
| 493.90    | X             | Asthma, unspecified Type, unspecified                 |
| 493.91    | X             | Asthma, unspecified type, with status asthmaticus     |
| 493.92    | X             | Asthma, unspecified, with (Acute) Exacerbation        |
|           |               |   |
|           |               | s the following numbers of codes:                     |
| ICD-9-CM  |               |   |
| Total nur | uber of codes | : 14  |

Example: Browsing Taxonomy Inquiry - Condensed



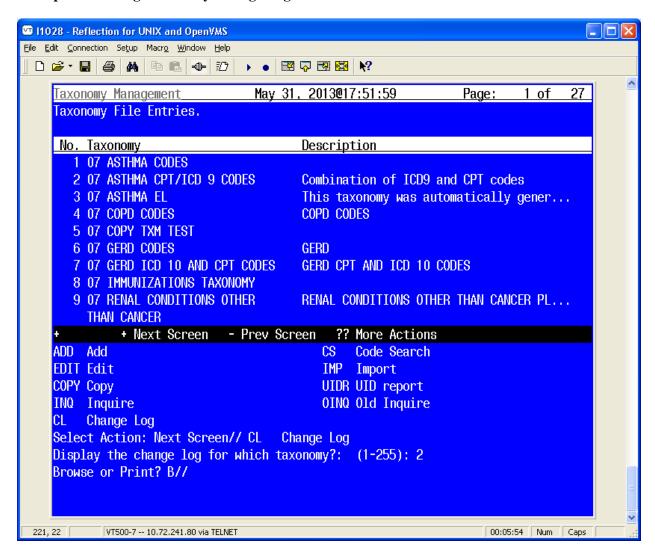
**Example: Browsing Taxonomy Inquiry - Full** 

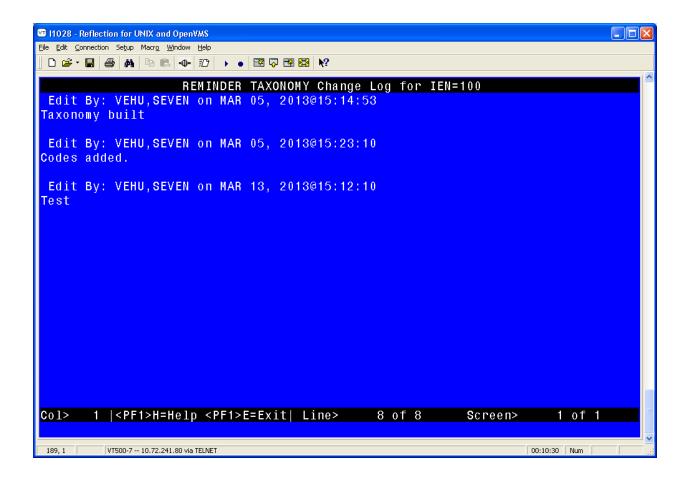
# **Change Log**

Use this action to see the historical details of a taxonomy; i.e., who created, edited, or copied it, and when. You will have the option of browsing the output or choosing an output device:

Browse or Print? B//

#### **Example: Browsing Taxonomy Change Log**

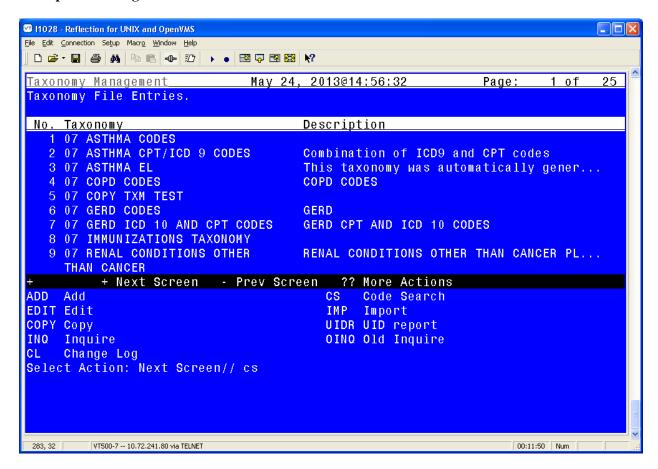




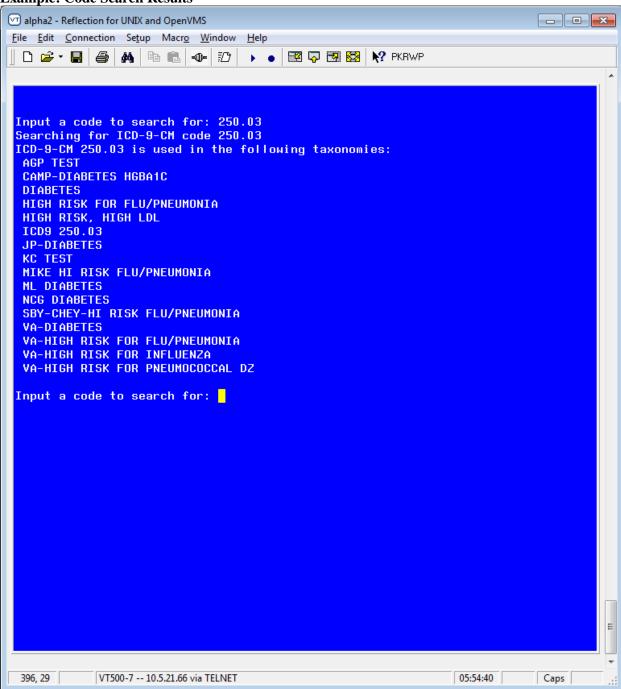
#### **Code Search**

This lets you find all taxonomies that contain a particular code. When you select this action, you are prompted to input a code from any of the supported coding systems. You only need to enter the code; the coding system will be automatically determined.

#### **Example: Selecting Code Search screen**



**Example: Code Search Results** 



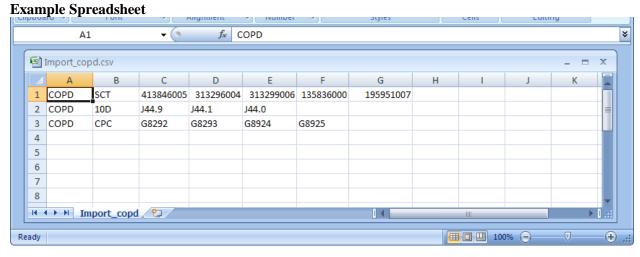
## **Import**

The Import action provides an easy way to import lists of codes into a taxonomy.

A CSV file (Comma Separated Values) is created from a spreadsheet. The first column is equivalent to the Term/Code, the second column is the three-character coding system abbreviation for one of the supported coding systems, and the rest of the columns are the codes to be imported for the Term/Code, coding system pair. The spreadsheet can have multiple rows, a row for each Term/Code, coding system, set of codes to be imported. The final step is to create a CSV file (comma-delimited text file), using the Save As action.

**NOTE:** The National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and the Centers for Medicare & Medicaid Services has created a Value Set Authority Center (<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>). These value sets contain lists of terms and their codes and they can be useful for creating taxonomies.

The Import action facilitates their use by allowing import of the codes into a taxonomy. To prepare the data for import, the original spreadsheet should be copied into a new spreadsheet that can be edited.



When the Import action is selected, you will be prompted to select a taxonomy to import into, and after it has been selected, you have the following choices:

```
Select one of the following:

HF CSV host file
PA CSV file paste
TAX Another taxonomy
WEB CSV file from a web site

Select the import method:

286, 27 VT500-7-10.72.241.80 via TELNET

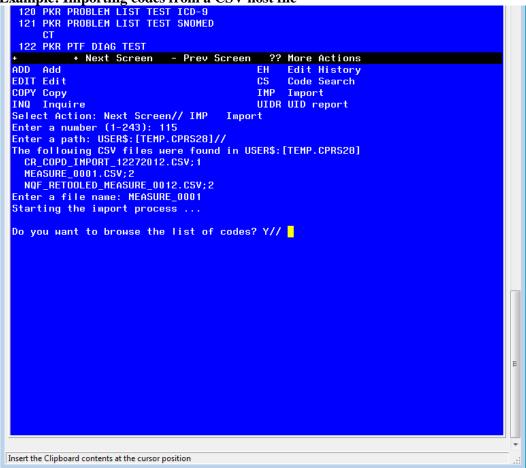
O0:13:10 Num
```

## **Import: CSV Host File**

If the CSV file has been saved as a host file, choose the HF option. You will then be prompted for a path. This is the directory/folder that contains the CSV file and it must be accessible from your VistA session. A list of all files with a '.CSV' extension in that directory will be displayed; enter the file name at the prompt, (you do not need to include the .csv extension).

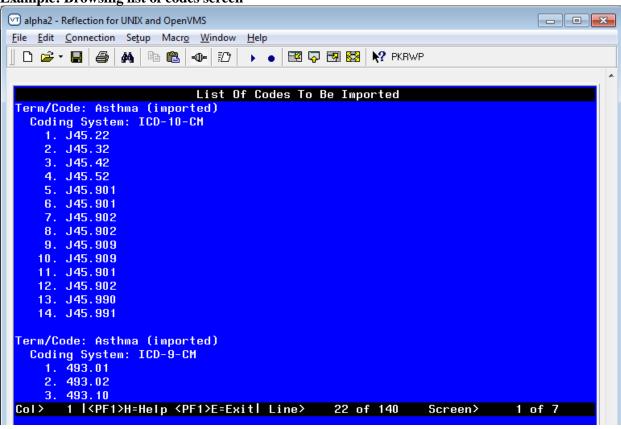
**NOTE:** Special privileges are required to access host file directories, so you may not be able to use this option.

Example: Importing codes from a CSV host file

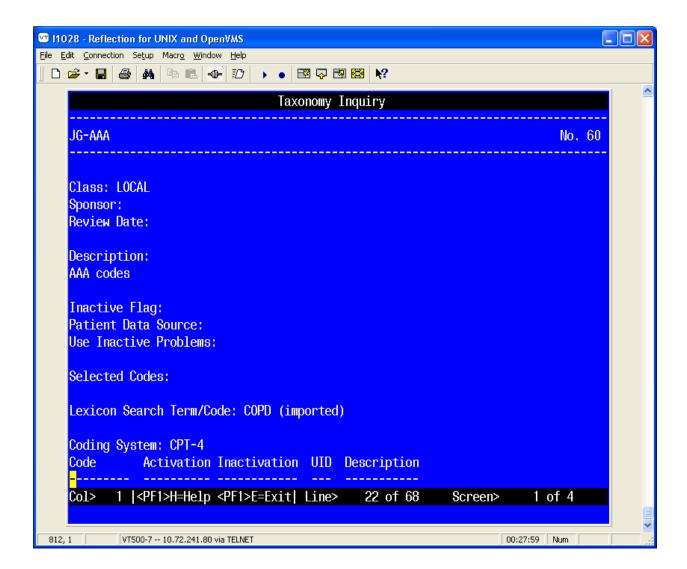


At this point you will have the option of browsing the list of codes.

**Example: Browsing list of codes screen** 



```
List Of Codes To Be Imported
       4. 135836000
       5. 195951007
   Term/Code: COPD (imported)
    Coding System: ICD-9-CM
   Invalid coding system code pair:
   Coding system is ICD, code is J44.9
   Invalid coding system code pair:
   Coding system is ICD, code is J44.1
   Invalid coding system code pair:
   Coding system is ICD, code is J44.0
   Term/Code: COPD (imported)
    Coding System: CPT-4
       1. 1015F
   This import includes the following numbers of codes:
   CPT-4: 1
   ICD-9-CM: 0
   SNOMED CT: 5
   Total number of codes: 6
   Col> 1 |<PF1>H=Help <PF1>E=Exit| Line> 27 of 27
                                                            Screen>
                                                                          2 of 2
668, 1
           VT500-7 -- 10.72.241.80 via TELNET
                                                                     00:26:48 Num
```



If you are satisfied, then when the Browser is exited, respond yes to this prompt:

## Do you want to save the imported codes? Y//

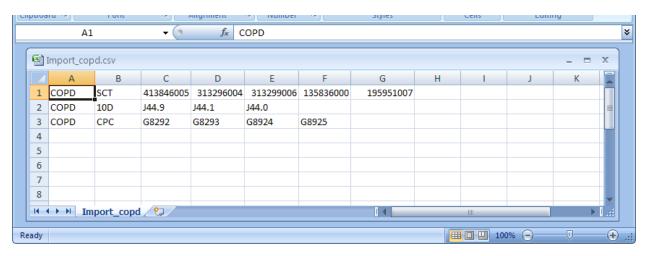
If there are problems with any of the codes, error messages will be displayed.

When the codes are imported into the taxonomy, each Term/Code will have "(imported)" appended to it so that you will know the codes were imported.

#### **Import: CSV Paste**

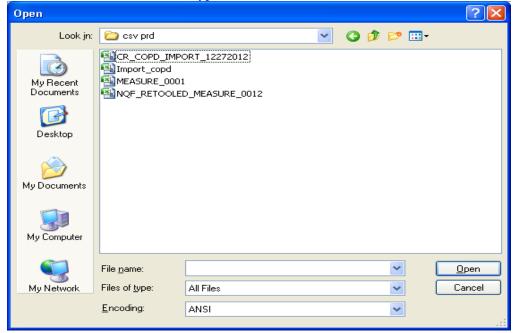
Another way to import a CSV file is the PA option. When you use this option, you open the CSV file on your workstation and copy it.

 Create an Excel Spreadsheet. The first column of the new spreadsheet is equivalent to the Term/Code, the second column is the three-character coding system abbreviation for one of the supported coding systems, and the rest of the columns are the codes to be imported for the Term/Code, coding system pair. The spreadsheet can have multiple rows, a row for each Term/Code, coding system, set of codes to be imported. The final step is to create a CSV file (comma-delimited text file), using the Save As action.

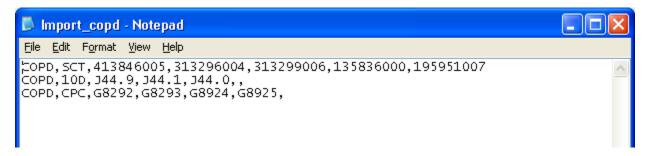


2. Save the imported files as a CSV.

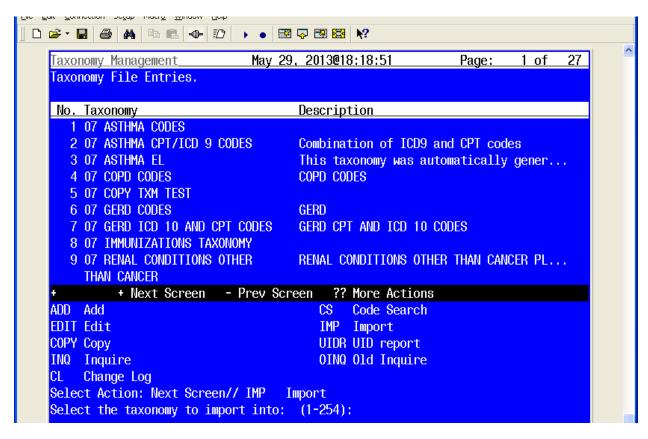
3. Open the CSV file, as a text file, using a text editor such as Notepad or Microsoft Word. (Select All Files in the Files of type box.)



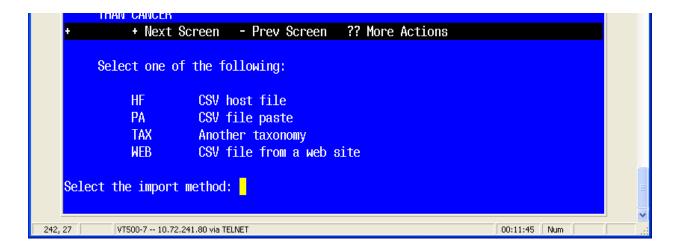
4. Open the desired csv file, and copy the contents so they are ready for pasting.



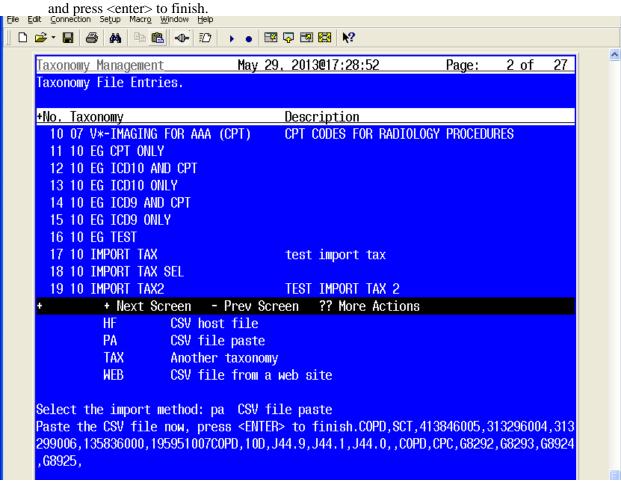
- 5. In Taxonomy Management, select the action IMP and press enter.
- 6. At the prompt, enter the number of the Taxonomy that the import file will be imported to.



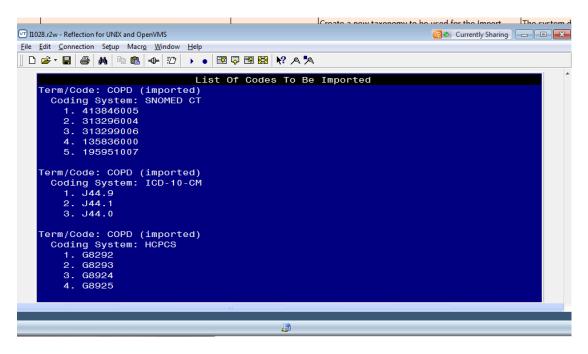
7. Select PA for the import method.



8. At the 'Paste the CSV file now prompt, click on Paste from the file menu (or select the Paste icon) and press <enter> to finish.



9. Next you will be given the opportunity to browse the list of codes that will be imported. If you are satisfied with the list, respond 'Y' to the following prompt to import the codes:

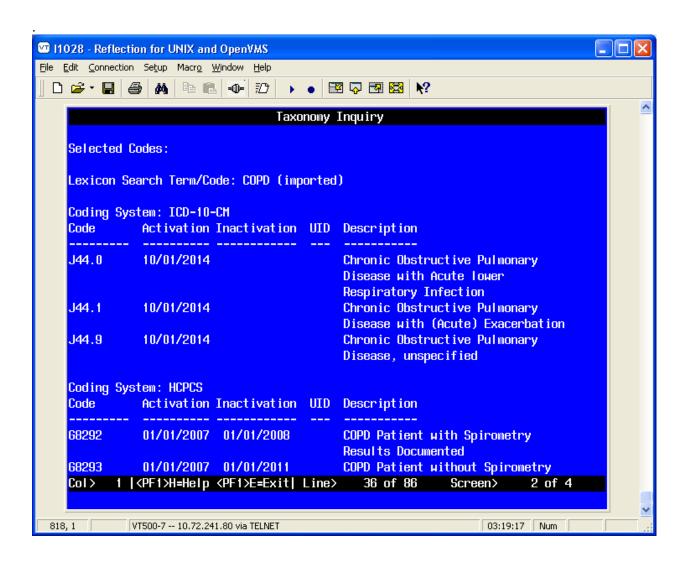


10. After browsing, you'll be asked if you want to save the codes.

#### Do you want to save the imported codes? Y//

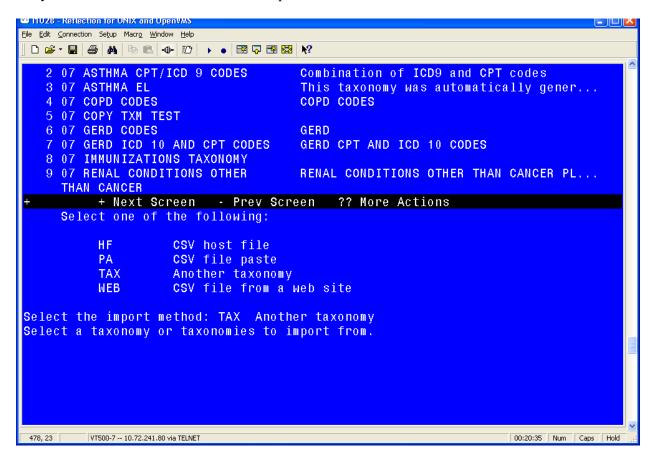
11. You can also do an inquiry on the taxonomy you imported the codes into, to verify that these have been entered.

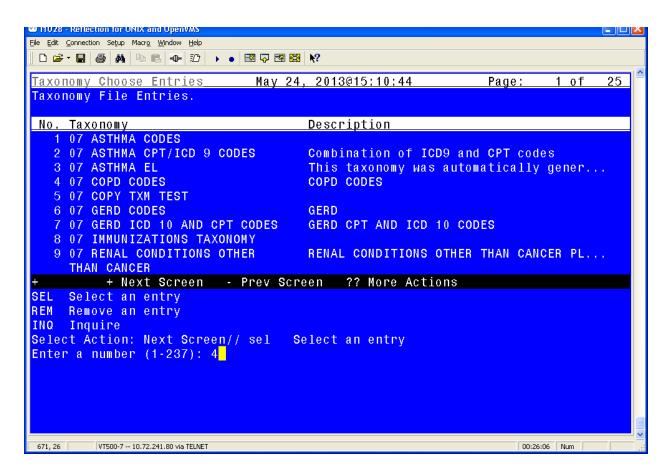
```
+ Next Screen
                          - Prev Screen
                                           ?? More Actions
ADD
    Add
                                              Code Search
EDIT Edit
                                         IMP Import
COPY Copy
                                         UIDR UID report
INQ
     Inquire
                                         OINQ Old Inquire
     Change Log
Select Action: Next Screen// inq
                                    Inquire
Display inquiry for which taxonomy?: (1-254): 105
```



# Import - TAX

If you choose the TAX option then you will be presented with a list of all the taxonomies on the system and you can create a list of taxonomies to import codes from.





The SEL action adds a taxonomy to the list and the REM action removes it from the list. Once the list is built use the DONE action. You will then see the following prompt for each selected taxonomy:

```
Ready to import codes from taxonomy (taxonomy name here)

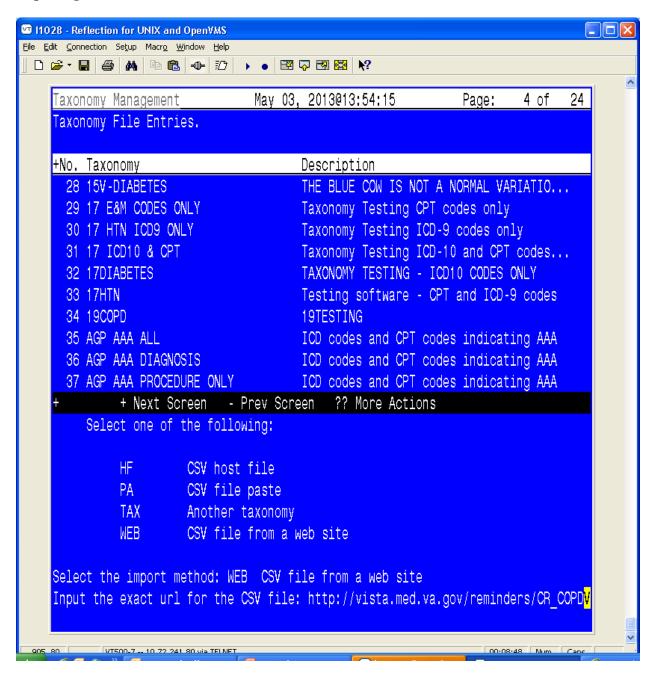
Select one of the following:

ALL All codes
SEL Selected codes

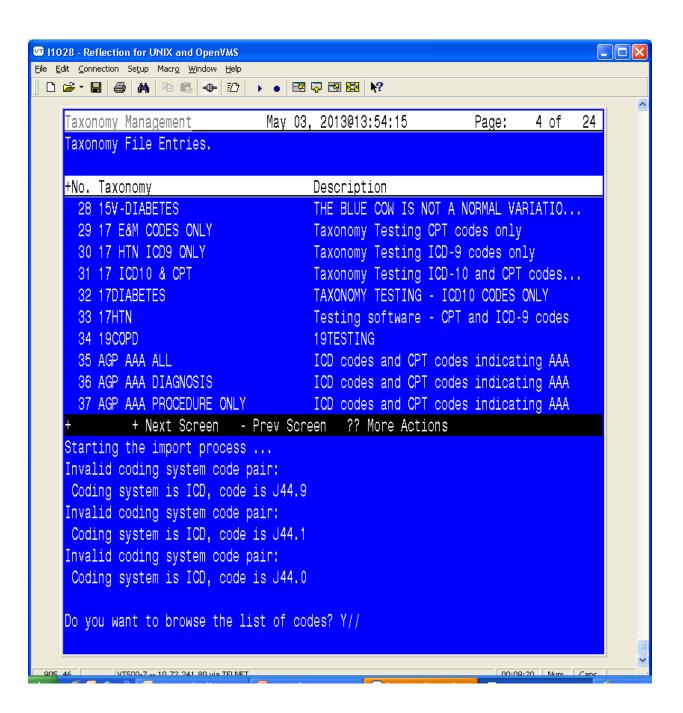
Enter response: ALL//
```

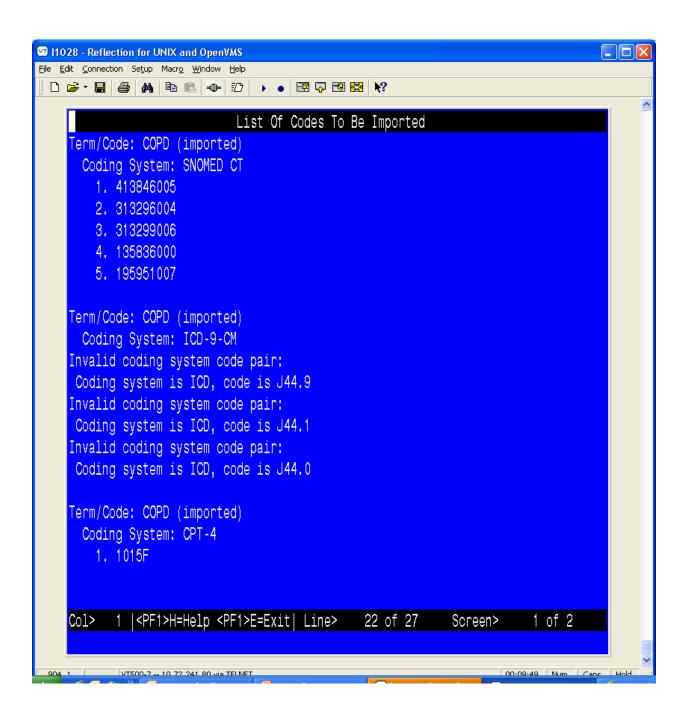
ALL will import all the codes and SEL will walk you through each Term/Coding System combination in the taxonomy and allow you to choose whether or not to import it.

## Importing a CSV file from a web site



Hint - If you have the url copied to the clipboard you can paste it at the Input prompt.

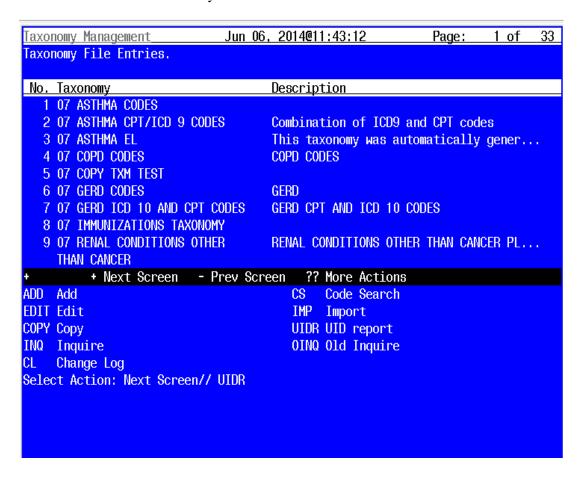




# **Use in Dialog Report (UIDR)**

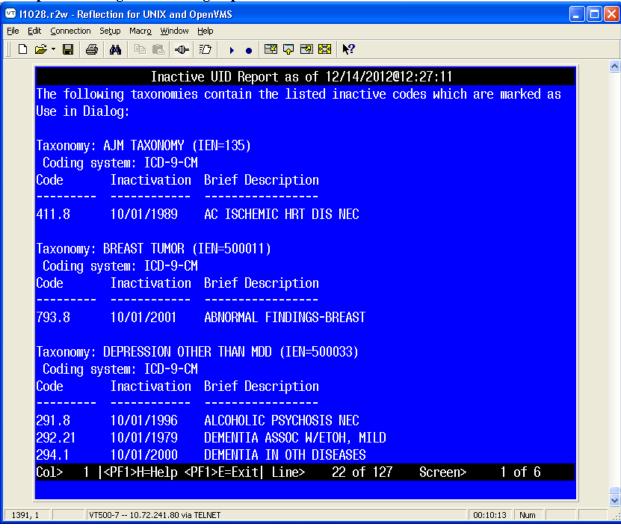
The Use in Dialog Report option searches all taxonomies for inactive codes that are marked as Use in Dialog. If any of these are found, a Browser window displays the taxonomies and information about the inactive code(s) they contain.

Select UIDR from the Taxonomy Selection screen:



Once the report is built a Browser screen will open displaying the report.

**Example: Browsing Use in Dialog Report** 



# **Code Set Versioning**

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 based upon a date that an event occurred with the Standards Development Organization (SDO)-established specific code and translation that existed on an event date.

Because of this, when reminder dialogs are processed the user can only select codes that are active on the encounter date. For historical entries the user may select a code that is currently inactive, but was active on the date of the historical encounter. In practical terms, this means that you may want to leave codes that have been recently inactivated marked as Use in Dialog (UID), but remove UID from codes that were inactivated some time ago.

Taxonomies are another matter; even though a code has been inactivated, it probably should still be left in the taxonomy, because you will still want to be able to find any patients that were given the code in the past when it was active.

When Lexicon code set updates are installed it triggers the generation of reports which are sent to the Clinical Reminders mail group defined in file #800. In the past, the content of these reports was based upon the use of expansion in taxonomies and the use of individual codes as findings or additional findings in reminder dialogs. Since expansion is no longer used and individual codes are no longer used in dialogs the content has changed and is much simpler. Now, it is very similar to the Use in Dialog Report and lists codes which are marked as Use in Dialog but are now inactive. When you receive the messages, review them to see what action should be taken, if any.

## **Example : Code Set Update Message**

```
Subj: Clinical Reminder taxonomy updates, ICD global was updated. [#95437]
11/27/12@15:32 159 lines
From: XXXXX,YYY (Yyy Xxxxxxx) In 'IN' basket. Page 1
There was an ICD code set update on 11/27/2012@15:32:39.
The following taxonomies contain the listed inactive codes which are marked as
Use in Dialog:
Taxonomy: AGP HYPERTENSION TEST (IEN=219)
Coding system: ICD-9-CM
       Inactivation Brief Description
-----
404.1
        10/01/1989 BEN HYPERT HRT/RENAL DIS
Taxonomy: AWAT CPT AND POV (IEN=660013)
Coding system: ICD-9-CM
Code Inactivation Brief Description
          _____
008.61 01/01/2012 ROTAVIRUS
```

Taxonomy: BREAST TUMOR (IEN=500011)

Coding system: ICD-9-CM

Code Inactivation Brief Description

793.8 10/01/2001 ABNORMAL FINDINGS-BREAST

Taxonomy: DEPRESSION OTHER THAN MDD (IEN=500033)

Coding system: ICD-9-CM

 Code
 Inactivation
 Brief Description

 291.8
 10/01/1996
 ALCOHOLIC PSYCHOSIS NEC

 292.21
 10/01/1979
 DEMENTIA ASSOC W/ETOH, MILD

 294.1
 10/01/2000
 DEMENTIA IN OTH DISEASES

Taxonomy: HF INJECTION OTHER (IEN=200)

Coding system: CPT-4

Code Inactivation Brief Description
----90772 01/01/2009 THER/PROPH/DIAG INJ, SC/IM

Please review the affected taxonomies and take appropriate action

Enter message action (in IN basket): Ignore//

# **Value Sets**

The National Library of Medicine has a Value Set Authority Center (VSAC) web site, where value sets can be obtained. From the web site: "Value sets are lists of specific values (terms and their codes) derived from single or multiple standard vocabularies used to define clinical concepts (e.g. patients with diabetes, clinical visit, reportable diseases) used in quality measures and to support effective health information exchange." These value sets cover many clinical areas of relevance to the VA and since they are very similar to taxonomies they can be used to automatically generate taxonomies.

To introduce value set functionality into VistA, patch PXRM\*2\*47 added the following files:

- NLM QUALITY MEASURE GROUPS (file #802.3),
- NLM VALUE SET CODING SYSTEMS (file #802.1),
- NLM VALUE SETS (file #802.2).

And on the PXRM MANAGERS MENU it added an option for Value Sets:

```
Select OPTION NAME: PXRM MANAGERS MENU
                                              Reminder Managers Menu
  CF
         Reminder Computed Finding Management ...
  RM
         Reminder Definition Management ...
  SM
         Reminder Sponsor Management ...
  MXT
         Reminder Taxonomy Management
  TRM
         Reminder Term Management ...
  LM
         Reminder Location List Management ...
  RX
         Reminder Exchange
  RT
         Reminder Test
  os
         Other Supporting Menus ...
  INFO
         Reminder Information Only Menu ...
  DM
         Reminder Dialog Management ...
  CР
         CPRS Reminder Configuration ...
  RP
         Reminder Reports ...
  MST
         Reminders MST Synchronization Management ...
  PL
         Reminder Patient List Menu ...
  PAR
         Reminder Parameters ...
  ROC
         Reminder Order Check Menu ...
         Reminder Extract Menu ...
  MX
  vs
         NLM Value Set Menu
  CQM
         NLM Clinical Quality Measures Menu
  GEC
         GEC Referral Report
```

When the VS option is selected it opens a List Manager screen:

| NLM                          | Value Set Menu Feb 19, 20            | -<br>)15@11:50 | : 18      | Page: | 1 of          | 191  |
|------------------------------|--------------------------------------|----------------|-----------|-------|---------------|------|
| NLM                          | Value Sets                           |                |           |       |               |      |
|                              |                                      |                |           |       |               |      |
| No.                          | Value Set                            |                |           | Ve    | <u>ersion</u> | Date |
| 1                            | Above Normal Follow-up               |                |           | Ji    | ul 01,        | 2014 |
|                              | (2.16.840.1.113883.3.600.1.1525)     |                |           |       |               |      |
| 2                            | 2 Above Normal Medications           |                |           | Ji    | ul 01,        | 2014 |
|                              | (2.16.840.1.113883.3.600.1.1498)     |                |           |       |               |      |
| 3                            | 3 ACE Inhibitor or ARB               |                |           | Ji    | ul 01,        | 2014 |
|                              | (2.16.840.1.113883.3.526.3.1139)     |                |           |       |               |      |
| 4                            | ACE Inhibitor or ARB Ingredient      |                |           | Ji    | ul 01,        | 2014 |
|                              | (2.16.840.1.113883.3.526.3.1489)     |                |           |       |               |      |
|                              | 5 Activation of Emergency Medical Sy |                | cation    | Aj    | pr 01,        | 2014 |
|                              | (2.16.840.1.113883.3.117.1.7.1.37    | 7)             |           |       |               |      |
| +                            | + Next Screen – Prev Screen          | ?? Mor         | e Actions |       |               |      |
| CT                           | Create Taxonomy                      | CS Cod         | e Search  |       |               |      |
| INQ                          | Inquire                              |                |           |       |               |      |
| Select Action: Next Screen// |                                      |                |           |       |               |      |
|                              |                                      |                |           |       |               |      |

The List Manger screen lists all the value sets contained in the NLM Value Set file. Since it is List Manager, all the standard List Manager actions such as SL (search list) are available. In addition to the standard List Manager actions, there are these actions:

# Create Taxonomy

This action will automatically generate a new taxonomy from a value set. Some value sets contain coding systems that are not supported in taxonomies so when a taxonomy is generated, these coding systems will not be included. When you select the CT action you are prompted for the value set, after it has been selected the value set is scanned for coding systems that can be imported into the taxonomy, they are listed. The default name for the new taxonomy is the name of the value set; you are given the opportunity to change it. The taxonomy is then created and the code list is populated. The description of the taxonomy will be populated with text stating it was automatically generated from a value set.

```
Taxonomy Inquiry - Condensed

COLON CANCER VALUE SET EXAMPLE

No. 416

Class: LOCAL
Sponsor:
Review Date:

Description:
This taxonomy was automatically generated from the value set:
Colon Cancer
OID - 2.16.840.1.113883.3.526.3.391
Version Date - May 01, 2015
```

#### Inquire

This action will display the contents of the selected value set. You have the option of a condensed or full inquiry. Both list all the codes in the value set, but in the condensed only the first 57 characters of the

code description are shown while the full inquiry lists the entire description. All the clinical quality measures that use the value set are listed at the end of the inquiry. In the condensed inquiry, only the name of the quality measures is displayed. In the full inquiry, comprehensive information about the quality measures is listed include its name, CMS ID, version number, GUID, NQF number, steward, and description.

#### Code Search

This action allows you to select from a list of NLM Value Set Coding Systems then input a code from that coding system and it returns a list of all the value sets that contain that code.

In addition to these explicit actions, the standard set of List Manager actions is available, you can see the list by typing "??". Initially the help for the visible actions is displayed in a FileMan Browser screen, after exiting that screen the hidden action help is displayed. Probably the three most useful actions are:

FS – First Screen

LS - Last Screen

SL – Search List; this is a non-case sensitive search of the text in the List Manager display. It is a convenient way to find value sets that have specified text in their name. You can find all the values sets that contain "mumps" in their name by typing "mumps" at the "Search for:" prompt.

# **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. When you add findings to this multiple, we call it "mapping" the term. All the findings that are mapped to the term should represent the same concept. 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 finding is used for the value of the term. If the most recent finding is false (which could happen as a result of a Condition), 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.

#### **Reminder Term Management Options**

| Synony<br>m | Option                         | Option Name          | Description   |
|-------------|--------------------------------|----------------------|---|
| TL          | List Reminder<br>Terms         | PXRM TERM<br>LIST    | This option allows a user to display a list of reminder terms that have been defined.           |
| TI          | Inquire about<br>Reminder Term | PXRM TERM<br>INQUIRY | This option allows a user to display the contents of a reminder term in an easy-to-read format. |
| TE          | Add/ Edit                      | PXRM TERM            | This option is used to edit reminder terms.   |

| Synony<br>m | Option                | Option Name       | Description   |
|-------------|-----------------------|-------------------|---|
|             | Reminder Term         | EDIT              | NOTE: Name the reminder terms using all capital letters because the names are casesensitive.                      |
| TC          | Copy Reminder<br>Term | PXRM TERM<br>COPY | This option allows a user to copy an existing reminder term into a new one. The new term must have a unique name. |

#### List Reminder Terms

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 hallucinosis, 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
List Reminder Terms, cont'd
                      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:
                  CN600 (FI(1) = DC(86))
   Findings:
                   CN609 (FI(2) = DC(395))
                   CN602 (FI(3) = DC(88))
                   CN601 (FI(4) = DC(87))
                   BUSPIRONE (FI(5) = DG(1165))
```

# Inquire about Reminder Term

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
______
Sponsor:
                NATIONAL Office of Quality & Performance JUL 23,2001
Date Created:
Review Date:
Description:
   This term represents patients diagnosed with Ischemic Heart Disease
   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
```

# Add/Edit Reminder Term

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.

Give the field USE STATUS/COND IN SEARCH a value of "YES" if you want the STATUS LIST and/or CONDITION applied to each result found in the date range for this finding. Only results that have a status on the list or for which the CONDITION is true will be retained. The maximum number to retain is specified by the OCCURRENCE COUNT.

If the finding has both a STATUS LIST and a CONDITION, the status check will be made first; the CONDITION will be applied only if the finding passes the status check.

## Reminder Term Edit Example

```
Mapping the local finding, HEPATITIS B SURFACE ANTIBODY, to the National term, HBs
Select Reminder Term: HBs
     1 HBs Ab positive
2 HBs Ag positive
                              NATTONAL
    1
                              NATIONAL
CHOOSE 1-2: 1 HBs Ab positive
                                   NATIONAL
                                                               This is where you enter
Select Finding: HEPATITIS B SURFACE ANTIBODY ←
                                                               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 STATUS/COND IN SEARCH: ?
     Enter a "Yes" if you want the Status List and/or Condition used in the finding
     search.
     Choose from:
            YES
       1
              NO
USE STATUS/COND IN SEARCH: Yes
Choose from:
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.

# **Copy Reminder Term**

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.

# **Reminder Location List Management**

Location Lists provide a way to give a name to a list of locations just as a Taxonomy provides a way to give a name to a list of codes.

When a Location List finding is evaluated, a search is made for a Visit (an entry in the Visit file #9000010) at one of the locations on the list in the specified date range (BEGINNING DATE/TIME, ENDING DATE/TIME).

A Location List is built from two types of entries: Hospital Location, file #44 and Clinic Stop, file #40.7. There is a multiple for Hospital Locations and a multiple for Clinic Stops in the Location List file, so when you build a list of locations, you can use Hospital Locations and/or Clinic Stops.

Clinic Stops are ultimately resolvable to a list of Hospital Locations, so when the search is done, it is all based on the Hospital Location recorded for the Visit. There is a CREDIT STOP (field #2503) associated with each Hospital Location. If there are certain Credit Stops that you want to exclude from the list of Hospital Locations associated with a Clinic Stop, then you put these in the CREDIT STOP TO EXCLUDE multiple for each Clinic Stop in the Location List.

# **Examples:**

- a) A Location List for primary care clinics can be created that searches for clinics with stop code 323 and excludes any 323 clinic associated with credit stop 710 (Flu shot only).
- b) A Location List for Cardiology clinics can be created that searches for clinics with stop code 303 and excludes any 303 clinic associated with credit stop 450 (used for a clinic dedicated to compensation and pension examination).

#### **National Location Lists**

VA-ALL LOCATIONS
VA-HOMELESSNESS STOP CODES
VA-IHD QUERI CLINIC STOPS
VA-MH NO SHOW APPT CLINICS LL
VA-MH QUERI MH CLINIC STOPS
VA-MH QUERI PC CLINIC STOPS
VA-MH STOP CODES FOR PTSD EVALUATION
VA-MHTC APPT STOP CODES LL
VA-MHTC EXCLUSIONS STOPS
VA-NEXUS CLINICS WITH OEF/OIF EXCLUSIONS
VA-OEF/OIF EXCLUSION STOPS
VA-SUD CLINICS

# **Reminder Location List Menu**

This menu provides options for creating and editing Reminder Location Lists.

| Syn. | Name                      | Option Name                | Description  |
|------|---------------------------|----------------------------|--|
| LL   | List Location Lists       | PXRM LOCATION<br>LIST LIST | This option is used to get a list of Location Lists.   |
| LI   | Location List Inquiry     | PXRM LOCATION LIST INQUIRY | This option is used to inquire about a Location List's details.  |
| LE   | Add/Edit Location<br>List | PXRM LOCATION<br>LIST EDIT | This option allows creation and editing of Location Lists  |
| LC   | Copy Location List        | PXRM LOCATION<br>LIST COPY | This option allows the user to copy an existing location list into a new location list; file #810.9. The original location list to be copied is selected first. The new name must be unique. If the new name is not unique, the user must enter a unique name for the new location list entry. If no name is provided, the new entry will not be created. Once a new name is defined for the new location list entry, the new location list entry can be edited to reflect the local location list definition. |

#### **List Location Lists**

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

```
Select Reminder Location List Management Option: 11 List Location Lists
DEVICE: ;;999 ANYWHERE Right Margin: 80//
                                             JUL 16,2012 14:08 PAGE 1
REMINDER LOCATION LIST LIST
                                REPORTING
 CLINIC STOP
                                STOP CODE
 HOSPITAL LOCATION
Name: TEST LOCATION LIST
Class: LOCAL
Clinic Stops:
 POST-DEPLOY INTGRTD CARE 135
Hospital Locations:
Name: VA-*LOCATION LIST EMERGENCY
Class: NATIONAL
Clinic Stops:
 EMERGENCY UNIT
                                 101
 ADMITTING/SCREENING
                                 102
Hospital Locations:
Name: VA-*LOCATION LIST NEXUS MENTAL HEALTH CLINICS
Class: NATIONAL
Clinic Stops:
                                 509
 PSYCHIATRY - INDIVIDUAL
 PSYCHOLOGY-INDIVIDUAL
                                 510
 MENTAL HEALTH CONSULTATION
                                 512
 PSYCHIATRY - GROUP
                                 557
 PSYCHOLOGY-GROUP
                                 558
 MENTAL HEALTH CLINIC-GROUP 550
MH INTERVALENCE:
 MH INTERVNTION BIOMED CARE IND 533
 MH INTERVENTION BIOMED GRP
                                 565
 SUBSTANCE USE DISORDR GRP
                                 560
 SUBSTANCE USE DISORDER IND
                                 513
 OPIOID SUBSTITUTION
                                 523
 PTSD CLINICAL TEAM PTS IND 540
 PCT-POST TRAUMATIC STRESS-GRP 561
 PSYCHOGERIATRIC - GROUP
                                 577
 PSYCHOGERIATRIC - INDIVIDUAL
                                 576
 PSYCHOSOCIAL REHAB - GROUP
                                 559
 PSYCHOSOCIAL REHAB - IND
                                 532
 PTSD - GROUP
                                 516
 PTSD - INDIVIDUAL
                                562
 SUBST USE DISORDER/PTSD TEAMS 519
 MH RESIDENTIAL CARE IND
                                 503
 RESIDENTIAL CARE (NON-MH)
                                 121
 MHICM - INDIVIDUAL
                                 552
 NON-ACTIVE DUTY SEXUAL TRAUMA
                                 589
 ACTIVE DUTY SEXUAL TRAUMA
                                 524
 DAY TREATMENT-INDIVIDUAL
                                 505
```

```
DAY HOSPITAL-INDIVIDUAL
                                 506
                                 547
 INTNSE SUB USE DSRDER GRP
 DAY TREATMENT-GROUP
                                 553
 DAY HOSPITAL-GROUP
                                 554
 PSYCHOGERIATRIC DAY PROGRAM
                                 578
 PTSD DAY HOSPITAL
                                 580
 PTSD DAY TREATMENT
                                 581
Hospital Locations:
Name: VA-*LOCATION LIST NEXUS PRIMARY CARE CLINICS
Class: NATIONAL
Clinic Stops:
                                 301
 GENERAL INTERNAL MEDICINE
 PRIMARY CARE/MEDICINE
                                 323
 PRIMARY CARE SHARED APPT
                                 348
                                 303
 CARDIOLOGY
 ENDO./METAB (EXCEPT DIABETES)
                                 305
 DIABETES
                                 306
 HYPERTENSION
                                 309
 INFECTIOUS DISEASE
                                 310
 PULMONARY/CHEST
                                 312
 COMP WOMEN'S HLTH
                                 322
 GERIATRIC PRIMARY CARE
                                350
 MH MED PRI CARE IND 2ND TO 323 531
 MH PRIMARY CARE - GROUP
Hospital Locations:
Name: VA-ALL LOCATIONS
Class: NATIONAL
Clinic Stops:
Hospital Locations:
Name: VA-IHD QUERI CLINIC STOPS
Class: NATIONAL
Clinic Stops:
 GENERAL INTERNAL MEDICINE
 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
 COMP WOMEN'S HLTH
                                 322
Hospital Locations:
Name: VA-MH NO SHOW APPT CLINICS LL
Class: NATIONAL
Clinic Stops:
 MENTAL HEALTH CLINIC - IND
                                502
 MH RESIDENTIAL CARE IND
                                 503
 DAY TREATMENT-INDIVIDUAL
                                 505
 DAY HOSPITAL-INDIVIDUAL
                                 506
 PSYCHIATRY - INDIVIDUAL
                                 509
 PSYCHOLOGY-INDIVIDUAL
                                 510
```

```
MENTAL HEALTH CONSULTATION
                                512
 SUBSTANCE USE DISORDER IND
                                513
 PTSD - GROUP
                                516
 SUBST USE DISORDER/PTSD TEAMS
                                519
 ACTIVE DUTY SEXUAL TRAUMA
                                524
 WOMEN'S STRESS DISORDER TEAMS
                              525
 HCHV/HCMI INDIV
                                529
 PSYCHOSOCIAL REHAB - IND
                                532
 MH INTGRTD CARE IND
                                534
 MH VOCATIONAL ASSISTANCE - IND 535
 PSYCHOLOGICAL TESTING
                                538
 MH INTGRTD CARE GRP
                                539
 PTSD CLINICAL TEAM PTS IND
                                540
 INTNSE SUB USE DSRDER GRP
                                547
 INTNSE SUB USE DSRDER IND
                                548
 MENTAL HEALTH CLINIC-GROUP
                                550
 MHICM - INDIVIDUAL
                                552
 DAY TREATMENT-GROUP
                                553
 DAY HOSPITAL-GROUP
                                554
 PSYCHIATRY - GROUP
                                557
 PSYCHOLOGY-GROUP
                                558
 PSYCHOSOCIAL REHAB - GROUP 559
SUBSTANCE USE DISORDR GRP 560
 PCT-POST TRAUMATIC STRESS-GRP 561
 PTSD - INDIVIDUAL
                                562
 MHICM - GROUP
                                567
 MH CWT/SE FACE TO FACE
                                568
 SERV-MH INDIVIDUAL
                                571
 SERV-MH GROUP
                                572
 MH INCENTIVE THERAPY F TO F
                                573
 MH CWT/TWE FACE TO FACE
                                574
 MH VOCATIONAL ASSISTANCE-GRP
                               575
 PSYCHOGERIATRIC - INDIVIDUAL
                               576
 PSYCHOGERIATRIC - GROUP
                                577
 PTSD DAY HOSPITAL
                                580
 PRRC INDIVIDUAL
                                582
 PRRC GROUP
                                583
 RRTP AFTERCARE IND
                                588
 RRTP AFTERCARE GRP
                                595
 RRTP ADMISSION SCREENING SRVCS 596
 RRTP PRE-ADMIT IND
                                598
 RRTP PRE-ADMIT GRP
                                599
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
 COMP WOMEN'S HLTH
                                322
 ENDO./METAB (EXCEPT DIABETES)
                              305
 PRIMARY CARE/MEDICINE
                                323
 DIABETES
                                306
```

```
HYPERTENSION
                                 309
                                 312
 PULMONARY/CHEST
 MH MED PRI CARE IND 2ND TO 323 531
Hospital Locations:
Name: VA-MH STOP CODES FOR PTSD EVALUATION
Class: NATIONAL
Clinic Stops:
 PTSD - GROUP
                                 516
 PTSD - INDIVIDUAL
                                 562
 PTSD CLINICAL TEAM PTS IND
                                 540
 PTSD DAY TREATMENT
                                 581
 PTSD POST-TRAUMATIC STRESS
                                 541
 SUBST USE DISORDER/PTSD TEAMS
                                 519
 MENTAL HEALTH CLINIC - IND
                                502
 MH RESIDENTIAL CARE IND
                                 503
 DAY TREATMENT-INDIVIDUAL
                                505
 DAY HOSPITAL-INDIVIDUAL
                                506
 PSYCHIATRY - INDIVIDUAL
                                509
 PSYCHOLOGY-INDIVIDUAL
                                510
 ACTIVE DUTY SEXUAL TRAUMA
                                512
                                 524
 WOMEN'S STRESS DISORDER TEAMS
                               525
 MENTAL HEALTH TELEPHONE PRI
                                 527
 TELEPHONE HCMI
                                 528
 HCHV/HCMI INDIV
                                 529
 TELEPHONE/HUD-VASH
                                 530
 PSYCHOSOCIAL REHAB - IND
                                 532
                              537
 TELEPHONE/PSYCHOSOCIAL REHAB
 TELEPHONE/PTSD
                                 542
 PHONE SUBSTNCE USE DSORDR
                                545
 TELEPHONE/MHICM
                                 546
 INTNSE SUB USE DSRDER GRP
                               547
 MENTAL HEALTH CLINIC-GROUP
                                550
 MHICM - INDIVIDUAL
                                 552
 DAY TREATMENT-GROUP
                                 553
 DAY HOSPITAL-GROUP
                                 554
 PSYCHIATRY - GROUP
                                 557
 PSYCHOLOGY-GROUP
                                 558
 PSYCHOSOCIAL REHAB - GROUP
                                 559
 PCT-POST TRAUMATIC STRESS-GRP
                                 561
 MH TEAM CASE MANAGEMENT
                                 564
 MHICM - GROUP
                                 567
 SERV-MH INDIVIDUAL
                                 571
                                 572
 SERV-MH GROUP
 PSYCHOGERIATRIC - INDIVIDUAL
                                 576
 PSYCHOGERIATRIC - GROUP
                                 577
 TELEPHONE/PSYCHOGERIATRICS
                                 579
 PTSD DAY HOSPITAL
                                 580
 PRRC INDIVIDUAL
                                 582
 PRRC GROUP
                                 583
 PRRC TELEPHONE
                                 584
Hospital Locations:
Name: VA-MHTC APPT STOP CODES LL
Class: NATIONAL
Clinic Stops:
 MENTAL HEALTH CLINIC - IND
                                 502
 MH RESIDENTIAL CARE IND
                                 503
```

```
504
 GRANT & PER DIEM GROUP
 DAY TREATMENT-INDIVIDUAL
                                505
 DAY HOSPITAL-INDIVIDUAL
                                506
 HUD/VASH GROUP
                                507
 HCHV/HCMI GROUP
                                508
 PSYCHIATRY - INDIVIDUAL
                                509
 PSYCHOLOGY-INDIVIDUAL
                                510
 GRANT & PER DIEM INDIV
                                511
 SUBSTANCE USE DISORDER IND
                                513
 SUB USE DISORDER HOME VST
                                514
 PTSD - GROUP
                                516
 SUBST USE DISORDER/PTSD TEAMS
                                519
 HUD/VASH INDIV
                                 522
 OPIOID SUBSTITUTION
                                 523
 ACTIVE DUTY SEXUAL TRAUMA
                                 524
 WOMEN'S STRESS DISORDER TEAMS
                                525
 HCHV/HCMI INDIV
                                529
 PSYCHOSOCIAL REHAB - IND
                                532
 MH VOCATIONAL ASSISTANCE - IND 535
 PTSD CLINICAL TEAM PTS IND 540
 INTNSE SUB USE DSRDER GRP
                                547
 INTNSE SUB USE DSRDER IND
                               548
 MENTAL HEALTH CLINIC-GROUP
                               550
 MHICM - INDIVIDUAL
                                552
 DAY TREATMENT-GROUP
                                553
 DAY HOSPITAL-GROUP
                                554
 PSYCHIATRY - GROUP
                                 557
 PSYCHOLOGY-GROUP
                                 558
 PSYCHOSOCIAL REHAB - GROUP
                                559
 SUBSTANCE USE DISORDR GRP
                                560
                              561
 PCT-POST TRAUMATIC STRESS-GRP
 PTSD - INDIVIDUAL
                                562
 MHICM - GROUP
                                567
 MH CWT/SE FACE TO FACE
                                568
 SERV-MH INDIVIDUAL
                                571
 SERV-MH GROUP
                                572
 MH INCENTIVE THERAPY F TO F 573
 MH CWT/TWE FACE TO FACE
                                574
 MH VOCATIONAL ASSISTANCE-GRP
                                575
 PSYCHOGERIATRIC - INDIVIDUAL
                                576
 PSYCHOGERIATRIC - GROUP
 PTSD DAY HOSPITAL
                                 580
 PRRC INDIVIDUAL
                                 582
 PRRC GROUP
                                 583
 RRTP AFTERCARE IND
                                588
Hospital Locations:
Name: VA-MHTC EXCLUSIONS STOPS
Class: NATIONAL
Clinic Stops:
 DES EXAM
                                448
 COMP & PENS (C&P) EXAMS
                                450
 SMOKING CESSATION
                                 707
 MOVE! PGM INDIV
                                 372
 MOVE! PGM GROUP
                                373
Hospital Locations:
ETC.
```

# **Location List Inquiry**

Select Reminder Location List Management Option: 1i Location List Inquiry Select LOCATION LIST: VA-MHTC APPT STOP CODES LL NATIONAL DEVICE: ;;999 HOME REMINDER LOCATION LIST INQUIRY Jul 20, 2012 10:45:36 am Page 1 VA-MHTC APPT STOP CODES LL No. 36 \_\_\_\_\_\_ Class: NATIONAL Sponsor: Office of Mental Health Services Review Date: Description: This is the Reminder Location List used for encounters to be included and excluded based on the stop code designations in designating Veterans who need a Mental Health Treatment Coordinator (MHTC). Edit History: Edit Date: JUL 2,2012 12:14 Edit By: TROST, DEBBIE Edit Comments: Edit Date: JUL 2,2012 12:16 Edit By: TROST, DEBBIE Edit Comments: Clinic Stops: MENTAL HEALTH CLINIC - IND 502 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO MH RESIDENTIAL CARE IND 503 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO GRANT & PER DIEM GROUP 504 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO DAY TREATMENT-INDIVIDUAL Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO DAY HOSPITAL-INDIVIDUAL Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO HUD/VASH GROUP 507 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO HCHV/HCMI GROUP Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO PSYCHIATRY - INDIVIDUAL 509 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

PSYCHOLOGY-INDIVIDUAL 510

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

GRANT & PER DIEM INDIV 511

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

SUBSTANCE USE DISORDER IND 513

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

SUB USE DISORDER HOME VST 514

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

PTSD - GROUP 516

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

SUBST USE DISORDER/PTSD TEAMS 519

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

HUD/VASH INDIV 522

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

OPIOID SUBSTITUTION 523

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

ACTIVE DUTY SEXUAL TRAUMA 5

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

WOMEN'S STRESS DISORDER TEAMS 525

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

HCHV/HCMI INDIV 529

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop:  ${\tt NO}$ 

PSYCHOSOCIAL REHAB - IND 532

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

MH VOCATIONAL ASSISTANCE - IND 535

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

PTSD CLINICAL TEAM PTS IND 540

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

INTNSE SUB USE DSRDER GRP 547

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO

INTNSE SUB USE DSRDER IND 548

Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS

Exclude locations with no credit stop: NO MENTAL HEALTH CLINIC-GROUP Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO MHICM - INDIVIDUAL 552 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO DAY TREATMENT-GROUP 553 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO DAY HOSPITAL-GROUP Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO PSYCHIATRY - GROUP 557 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO PSYCHOLOGY-GROUP 558 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO PSYCHOSOCIAL REHAB - GROUP 559 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO SUBSTANCE USE DISORDR GRP 560 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO PCT-POST TRAUMATIC STRESS-GRP 561 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO PTSD - INDIVIDUAL 562 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO MH CWT/SE FACE TO FACE 568 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO SERV-MH INDIVIDUAL 571 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop:  $\ensuremath{\text{NO}}$ SERV-MH GROUP Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO MH INCENTIVE THERAPY F TO F Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS

MH CWT/TWE FACE TO FACE

574

Exclude locations with no credit stop: NO

```
Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
    Exclude locations with no credit stop: NO
 MH VOCATIONAL ASSISTANCE-GRP
                                  575
   Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
   Exclude locations with no credit stop: NO
  PSYCHOGERIATRIC - INDIVIDUAL
                                  576
   Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
   Exclude locations with no credit stop: NO
  PSYCHOGERIATRIC - GROUP
                                  577
   Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
    Exclude locations with no credit stop: NO
  PTSD DAY HOSPITAL
                                  580
   Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
   Exclude locations with no credit stop: NO
  PRRC INDIVIDUAL
                                  582
   Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
   Exclude locations with no credit stop: NO
  PRRC GROUP
                                  583
   Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
   Exclude locations with no credit stop: NO
 RRTP AFTERCARE IND
    Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS
    Exclude locations with no credit stop: NO
Hospital Locations:
Select LOCATION LIST:
```

#### **Add/Edit Location List**

```
Select Reminder Location List Management Option: le Add/Edit Location List

Select Location List: TEST LOCATION LIST LOCAL

NAME: TEST LOCATION LIST// <Enter>
CLASS: LOCAL// <Enter>
DESCRIPTION:

1>test list
EDIT: No//: <Enter>
Select CLINIC STOP: CARDIOLOGY// <Enter>
Select CREDIT STOP TO EXCLUDE: ALCOHOL SCREENING
//<Enter>
Select CLINIC STOP: <Enter>
Select CLINIC STOP: <Enter>
Select LOCATION: OR 1// <Enter>
Select Location List: <Enter>
```

#### Create a new Location List

Use Add/Edit Location List to create a new list. You can set up a list of reminders associated with a particular location.

```
Select Reminder Location List Management Option: 1e Add/Edit Location List
Select Location List: jg-list
 Are you adding 'jg-list' as a new REMINDER LOCATION LIST (the 6TH)? No// y
  REMINDER LOCATION LIST CLASS: 1 LOCAL
NAME: jg-list// <Enter>
CLASS: LOCAL//<Enter>
DESCRIPTION:
 No existing text
 Edit? NO// <Enter>
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
 Are you adding 'ALCOHOL SCREENING' as
   a new CLINIC STOP LIST (the 1ST for this REMINDER LOCATION LIST)? No// y
  Select CREDIT STOP TO EXCLUDE: <Enter>
Select CLINIC STOP: alcohol tr
       ALCOHOL TREATMENT
    1
                                81
        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 CREDIT STOP TO EXCLUDE: <Enter>
Select CLINIC STOP: <Enter>
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? NO
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
Select HOSPITAL LOCATION: <Enter>
```

# **Copy Location List**

```
Select Reminder Location List Management Option: LC Copy Location List
Select the reminder location list to copy: CR-LOCATION LIST NEXUS MENTAL HEALTH
CLINICS
         LOCAL
PLEASE ENTER A UNIQUE NAME: NEXUS MENTAL HEALTH CLINICS
The original location list CR-LOCATION LIST NEXUS MENTAL HEALTH CLINICS has been
copied into NEXUS MENTAL HEALTH CLINICS.
Do you want to edit it now? YES
NAME: NEXUS MENTAL HEALTH CLINICS Replace
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
DESCRIPTION:
This location list are the NEXUS Mental Health Clinics. This list does
not include the original 11 clinics (actually 13) used for EPRP.
  Edit? NO//
Select CLINIC STOP: PTSD DAY TREATMENT//
 CLINIC STOP: PTSD DAY TREATMENT//
  Select CREDIT STOP TO EXCLUDE:
Select CLINIC STOP:
Select HOSPITAL LOCATION:
```

# **Reminder Exchange**

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

An effective way to use the Exchange Utility is through VISN web sites. 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.

**NOTE**: Some of the Reminder Exchange options require programmer access (@).

Reminder Exchange allows the exchange of clinical reminders and reminder dialogs from test account to production, between sites, and within VISNs,

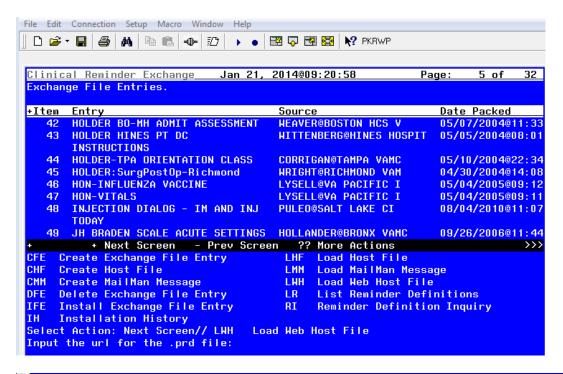
#### Changes made by patch 26

- Automatic packing of the source reminder for a dialog was removed.
- Finding lookup in Reminder Exchange was enhanced to handle mnemonic indexes. An example is the Laboratory Test file #60's Synonym field in the 'B' index. If two entries had the same Synonym and the .01 of one of the entries was identical to the Synonym, the lookup would fail and a duplicate warning message was issued. The code was changed to examine all the entries in the 'B' index and compare the .01 for each of them with the name Exchange is trying to find. If there is a single exact match of the name and a .01, the name is resolved and no duplicate warning will be given. If more than one .01 is identical to the name, the warning will still be given. Remedy ticket #783078.
- The selection range for the Reminder Exchange actions CHF, CMM, DFE, and IFE was changed so that it includes all Exchange file entries, not just those that are visible.
- For some entries in the Reminder Exchange file displaying installation history details for the first install was giving the following undefined error:
   <UNDEFINED>DDISP+31^PXRMEXIH ^PXD(811.8,29,130,1,1,"B",0)
   This happened for old entries for which the 'B' index on the Component List was never cleaned up. The unused indexes are removed.
- Reminder Exchange was updated to handle dialogs that were packed prior to patch 26. If the dialog contains codes, Reminder Exchange will create a new taxonomy when the dialog is installed. It will also replace the codes in the dialog with the new taxonomy. If the dialog contains a taxonomy, Reminder Exchange will update the new fields in the dialog file with the values from the installing site's Finding Parameters File. Because of these changes, the checksum of the installed dialog will always be different than the checksum of what is in the Exchange file.
- In the past, we have encountered problems, especially with Reminder Exchange, caused by using the tilde (~) character in the name of a reminder component. Reminder Exchange was modified to be able to handle the problem, but to prevent unforeseen problems from happening in the future, the input transform used for all the Clinical Reminders .01 fields was modified to not allow "~".

NOTE: If you think that "~" may have been used in the .01 of a reminder component at your site, you can use FileMan to find any such entries. There are two possible approaches. One is to use the verify fields function on the FileMan utilities menu and the other is to use the search function to search for any .01 fields that contain "~".

• The ability to load a Reminder Exchange prd file from a web site has been added. This can be used in conjunction with the Import from a Web site feature in Taxonomy Management. Note that the https protocol is not supported; only http works. Also, SharePoint sites cannot be accessed because that requires the user's Windows credentials and they are not available in VistA.

#### **Example:**





• Checking of the line length and a warning if a line exceeds 245 characters was added. The maximum value allowed by Kernel is 255 characters, but for FileMan word-processing fields it is 245. When a line exceeds this length, there is a very high probability that the Exchange entry will not install correctly. If the Exchange entry is transported as a host file, then 255 should work, but if is transported as a MailMan message, then 245 is the limit. The warning was added because

previously, when an Exchange entry would not install correctly due to the line length being exceeded, it was difficult to determine the reason. The solution was to shorten the length of the field being transported. Detailed information about the field that needs to be shortened is given in the warning; for example:

Warning the following line exceeds the VistA maximum allowed length of 245.

Therefore this Exchange entry will not transport correctly.

Line: 811.23;+619,+617,;.01~Telephone Assessment/Management by Nonphysician to Established

PT/Parent/Guardian not Originating from A/M Provided within Previous

7 Days Nor Leading to A/M Service/Procedure within Next 24 Hrs/Soonest Appt; 11-

20 Mins Medical Discussion

Its length is: 260

Component: REMINDER TAXONOMY

Name: PBM PHARMD PHONE VISIT CPT CODE 98967 V5\*1

IEN: 617

Field number: .01

Value: Telephone Assessment/Management by Nonphysician to Established PT/Parent/ Guardian not Originating from A/M Provided within Previous 7 Days Nor Leading to A/M Service/Procedure within Next 24 Hrs/Soonest Appt; 11-20 Mins Medical Discussion

# **Terminology**

**Packing:** When you create an Exchange File entry, you select one or more reminder component entries for packing. The packing process consists of going through the selected entries and building a list of everything they need to function. The entire list of items is included in the Exchange File entry. For example, if a reminder definition is being packed everything the definition needs to function is included. Some of the included components may not be transportable for various reasons such as being standardized, they will be included in the Exchange File entry so that we know they are used but they will not be installable.

**Exchange File (#811.8):** Stores entries of packed reminders and dialogs with their components Packed reminders can be exchanged through VistA MailMan or as a Host file. The default host file extension is .PRD (Packed Reminder Definition).

**VistA 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 containing reminders, dialogs, or other reminder components may be sent between sites for loading into the Clinical Reminders Exchange File (#811.8).

**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 the LWH action.

#### **Technical Overview**

In the Reminder Exchange utility, entries are 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 entries. When the receiving site loads a host file or MailMan message into its Exchange File, all the packed entries in the host file or MailMan message are put into the Exchange File. Different versions of the same packed entry may be stored in the Exchange File. They are differentiated by the Date Packed.

All the components used in the item selected for packing 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.)

# **Steps to Use Reminder Exchange**

**Summary of Steps**Detailed steps are provided in the following pages.

# **Export Steps**

| Step                              | Action                                   |
|-----------------------------------|--|
| Decide which items to pack        | LR – List Reminder Descriptions and RI – |
| •                                 | Reminder Inquiry                         |
| 2. Create the Exchange File entry | CFE – Create File Entry                  |
| 3. Export the packed entries      | CHF – Create Host File or                |
|                                   | CMM – Create MailMan Message             |

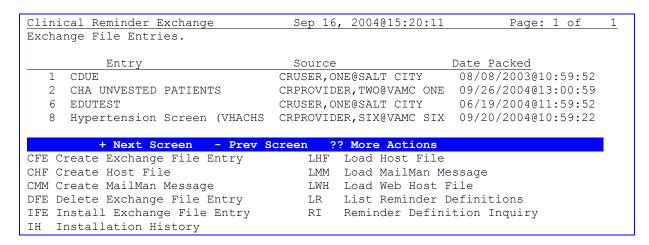
# **Import Steps**

| Step  | Action                     |
|---|----------------------------|
| 1. Import the packed items into your Exchange File  | LHF – Load Host File or    |
|   | LMM – Load MailMan Message |
|   | LWH – Load from a web site |
| 2. Install the Exchange File entry                  | IFE – Install File Entry   |
| 3. Review what you have done                        | IH – Installation History  |
| 4. Remove entries from your Exchange File when they | DFE – Delete File Entry    |
| are no longer needed                                | ·                          |

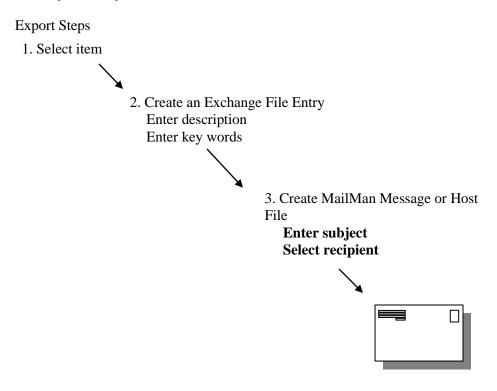
# Reminder Exchange Main Screen

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.



## A: Steps to Export Reminders

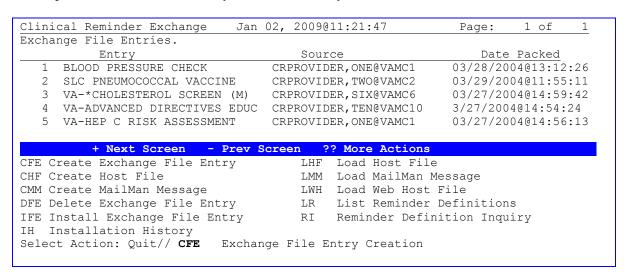


# **Detailed Steps to Export Reminders**

#### 1. Select an item that you want to exchange.

# 2. Create Exchange File Entry

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



```
Select from the following reminder files:

1 REMINDER COMPUTED FINDINGS

2 REMINDER COUNTING GROUP

3 REMINDER DEFINITION

4 REMINDER DIALOG

5 REMINDER EXTRACT COUNTING RULE

6 REMINDER EXTRACT DEFINITION

7 REMINDER LIST RULE

8 REMINDER LOCATION LIST

9 REMINDER SPONSOR

10 REMINDER TAXONOMY

11 REMINDER TERM
```

#### 12 REMINDER ORDER CHECK ITEMS GROUP

13 REMINDER ORDER CHECK RULES

```
Select a file: (1-13):
```

#### 3a. 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.

### Example of a valid path:

USER\$:[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@VAMC10 | 3/27/2004@14:54:24  |  |  |  |
| 5 VA-HEP C RISK ASSESSMENT      | CRPROVIDER, ONE@VAMC1  | 03/27/2004@14:56:13 |  |  |  |
|                                 |                        |                     |  |  |  |
| + Next Screen - Prev S          | Screen ?? More Actions |                     |  |  |  |
| CFE Create Exchange File Entry  | LHF Load Host Fil      | е                   |  |  |  |
| CHF Create Host File            | LMM Load MailMan       | Message             |  |  |  |
| CMM Create MailMan Message      | LWH Load Web Host      | File                |  |  |  |
| DFE Delete Exchange File Entry  | LR List Reminder       | Definitions         |  |  |  |
| IFE Install Exchange File Entry | RI Reminder Defi       | nition Inquiry      |  |  |  |
| IH Installation History         |                        |                     |  |  |  |
| Select Action: Quit// CHF       |                        |                     |  |  |  |
| Select Entry(s): (1-5): 2       |                        |                     |  |  |  |

```
Enter a path: USER$:[TEMP]// ?

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$:[TEMP]

Enter a path: USER$:[TEMP]// <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$:[TEMP]FILE.PRD

Enter a file name: DiabeticEye

Will save reminder to host file USER$:[TEMP]DiabeticEye.PRD?: Y//<Enter> ES
```

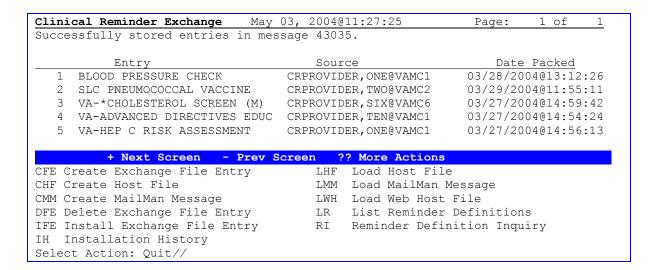
### 3b. CMM-Create MailMan Message

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@VAMC10 | 3/27/2004@14:54:24  |  |  |
| 5 VA-HEP C RISK ASSESSMENT                         | CRPROVIDER, ONE@VAMC1  | 03/27/2004@14:56:13 |  |  |
|  |                        |                     |  |  |
| + Next Screen - Prev S                             | creen ?? More Action   | ıs                  |  |  |
| CFE Create Exchange File Entry                     | LHF Load Host Fi       | le                  |  |  |
| CHF Create Host File                               | LMM Load MailMar       | Message             |  |  |
| CMM Create MailMan Message                         | LWH Load Web Hos       | st File             |  |  |
| DFE Delete Exchange File Entry                     | LR List Reminde        | er Definitions      |  |  |
| IFE Install Exchange File Entry                    | RI Reminder Def        | inition Inquiry     |  |  |
| IH Installation History                            |                        |                     |  |  |
| Select Action: Quit// cmm MailMan Message Creation |                        |                     |  |  |

**NOTE**: The number of packed entries you can send via a MailMan message is limited by the MailMan parameters set locally for the number of lines in a message. Please check with your IRM for the number of lines allowed.

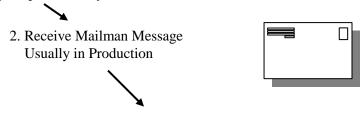
```
Select Entry(s): (1-5): 2
Enter a subject: [Enter a description of the Mail Message.]
Forward mail to: ?
Enter the recipient(s) of this message in any of the following formats:
                            for a user at this site
Lastname, first
Lastname, first@REMOTE-SITE for a user at another site
 (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
                             for a list of devices
Enter '??' for detailed help.
Forward mail to: [Enter a user or Mail Group.]
Select basket to send to: {\rm IN}//
And Forward to:
```



# **B. Steps to Import Reminders**

NOTE: After the installation of PXRM\*2\*26, you will also be able to load .prd files from a web site, using LWH – Load Web Host File.

1. Request packed entry



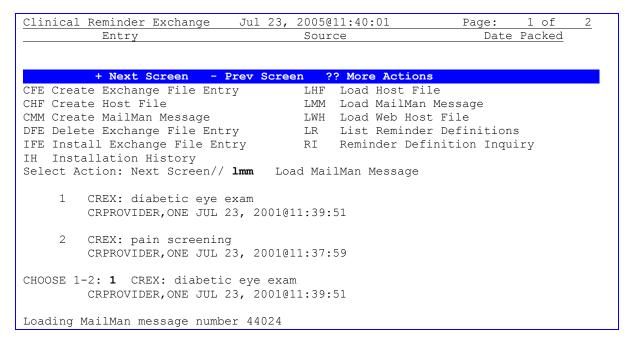
3. Forward Mailman Message
To test account (if necessary)



4. Load MailMan message Creates entry

# 1a. LMM - Load MailMan Message

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



#### 1b. LHF - Load Host File

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

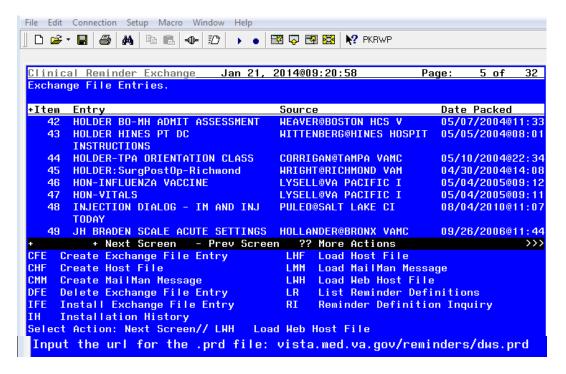
**NOTE**: Programmer access may be required to upload local host files, depending on how local file protections are set.

| 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@VAMC10 | 3/27/2004@14:54:24  |  |  |  |
| 5 VA-HEP C RISK ASSESSMENT                           | CRPROVIDER, ONE@VAMC1  | 03/27/2004@14:56:13 |  |  |  |
|  |                        |                     |  |  |  |
| + Next Screen - Prev S                               | Screen ?? More Actions |                     |  |  |  |
| CFE Create Exchange File Entry                       | LHF Load Host File     | •                   |  |  |  |
| CHF Create Host File                                 | LMM Load MailMan M     | lessage             |  |  |  |
| CMM Create MailMan Message                           | LWH Load Web Host      | File                |  |  |  |
| DFE Delete Exchange File Entry                       | LR List Reminder       | Definitions         |  |  |  |
| IFE Install Exchange File Entry                      | RI Reminder Defin      | ition Inquiry       |  |  |  |
| IH Installation History                              |                        |                     |  |  |  |
| Select Action: Quit// lhf Load H                     | Host File              |                     |  |  |  |
|  |                        |                     |  |  |  |
| Enter a path: USER\$:[TEMP]// <b><enter></enter></b> |                        |                     |  |  |  |
| The following PRD files were found in USER\$:[TEMP]  |                        |                     |  |  |  |
| DIABETICEYE.PRD;1                                    |                        |                     |  |  |  |
| Enter a file name: DIABETICEYE                       |                        |                     |  |  |  |
| Loading host file USER\$:[TEMP]DIABETICEYE.PRD       |                        |                     |  |  |  |
| Todating most title config.[tmm1stmm1ton1:tmm        |                        |                     |  |  |  |

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

#### 1c. LHF - Load Web Host File

This action lets you load a file containing packed entries from a web site. When you select this action you are prompted to input the URL for the web site. Note that the https protocol is not supported; only http works. Also, SharePoint sites cannot be accessed because that requires the user's Windows credentials and they are not available in VistA.



# 2a. Installing Reminders from the Exchange File

The action IFE allows a packed entry to be selected for installation from the Exchange File (#811.8). Details of the Exchange File entry are displayed. Individual components are displayed (grouped by type). All or individual components may be selected for installation.

CAUTION: Before starting an installation, you should examine the list of components in the packed entry 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
                   Install or Overwrite the current entry
         Т
         0
                   Quit the install
                   Skip, do not install this entry
Enter response: S// C reate a new entry by copying to a new name
Exchange File Components Aug 24, 2009@11:19:18
                                                                            3
     Component
                                                            Category
                                                                         Exists
Source: CRMANAGER@VAMCXXXX
Date Packed: 08/12/2009@11:07:26
Package Version: 2.0P12
Description:
Patient reminder due on anyone with 2 entries of a diagnosis of HTN in
the past 3 years. This reminder does not resolve. Additional text is
displayed to the patient if the last 3 BPs were <= 130/80, if the last BP
was >140/90 or if any of the last 3 BPs was >=160/100.
If you use a different taxonomy for HTN or for renal diseases, you can
substitute you local taxonomies into the national reminder term.
Keywords:
Components:
GMRV VITAL TYPE
     BLOOD PRESSURE
                                                                           Χ
REMINDER SPONSOR
   1 VA National Center for Health Promotion and
     Disease Prevention (NCP)
   2 Office of Quality & Performance
                                                                           Χ
   3 National Clinical Practice Guideline Council
                                                                           Χ
REMINDER TAXONOMY
  4 VA-DIABETES
                                                                           Χ
   5 VA-HYPERTENSION
                                                                           X
REMINDER TERM
   6 VA-BP >130/80 (ANY OF LAST 3)
     VA-BP >= 160/100
                                                                           Χ
   8 VA-BP >=140/90
                                                                           Χ
     VA-MHV DIABETES OR KIDNEY DISEASE
                                                                           Χ
 10 VA-MHV HYPERTENSION DX
                                                                           X
REMINDER DEFINITION
 11 VA-MHV HYPERTENSION
```

The "Exists" column indicates the component's existence on the system based on identical names. When any component that already exists is selected for installation, a checksum will be computed for the already installed version and it will be compared to the checksum of the component in the Exchange file.

If the checksums are identical, then the components are identical and the component will be automatically skipped.

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.

**NOTE**: Because computed findings contain executable code, programmer access (@) is required to install them.

When installing a reminder term the option looks like this:

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

Select one of the following:

C Create a new entry by copying to a new name

M Merge findings

O Overwrite the current entry

Q Quit the install

S Skip, do not install this entry

Enter response: S//
```

The merge option will preserve the existing mapping and will merge any additional findings that are in the packed entry.

#### 2b. Installing a Reminder Dialog

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

| Dialo | g Com | Jan 26, 2005@12:38:51                           | Page: 1 of | 1            |
|-------|-------|---|------------|--------------|
| Packe | d rem | inder dialog: SMOKING CESSATION EDUCATION       |            |              |
| Item  | Seq.  | Dialog Summary                                  | Type Ex    | <u>kists</u> |
| 1     | 1     | HF ACTIVATE PNEUMOCOCCAL VACCINE DONE ELSEWHERE | element    | X            |
| 2     | 2     | MH AIMS   | element    | X            |
| 3     | 3     | VM BLOOD PRESSURE DONE                          | element    | Χ            |
| 4     |       | SMOKING CESSATION EDUCATION                     | dialog     | X            |

|      | + Next Screen      | - Pi | rev Screen ?? More | Action | ıs               |
|------|--------------------|------|--------------------|--------|------------------|
| DD   | Dialog Details     | DT   | Dialog Text        | IS     | Install Selected |
| DF   | Dialog Findings    | DU   | Dialog Usage       | QU     | Quit             |
| DS   | Dialog Summary     | IA   | Install All        |        |                  |
| Sele | ect Action: Quit// |      |                    |        |                  |

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 PXRM 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 CPRS.

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.

# 3. 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 | Comp                                 | onents          |       | Jan 26,  | 2005@12:52:05 | 5      | Page      | e: 1   | of 1   |
|--------|--------------------------------------|-----------------|-------|----------|---------------|--------|-----------|--------|--------|
| Packed | remi                                 | nder dialog: DI | EMO R | EMINDER  | - SIMPLE      |        |           |        |        |
| Item   | Sea.                                 | Dialog Summary  | V     |          |               |        |           | Type   | Exists |
| 1      | •                                    | DEMO REMINDER   | •     | MPLE     |               |        |           | dialog | •      |
| 2      | 5                                    | IM HEP A DONE   |       |          |               |        |           | elemen | t      |
| 3      | 3 10 IM HEP A DONE ELSEWHERE element |                 |       |          | t             |        |           |        |        |
| 4      | 15                                   | IM HEP A CONTI  | RA    |          |               |        |           | elemen | t      |
|        | +                                    | Next Screen     | - Pr  | ev Scree | n ?? More     | Action | s         |        |        |
|        | _                                    | Details         |       | _        |               |        | Install   | Select | ed     |
|        |                                      | Findings        |       |          |               | QU     | Quit      |        |        |
|        | _                                    | Summary         |       |          |               |        |           |        |        |
| Select | Acti                                 | on: Quit// IA   | Ins   | tall All |               |        |           |        |        |
|        |                                      |                 |       |          |               |        |           |        |        |
|        | _                                    | components for  |       |          |               |        |           |        |        |
|        |                                      | inder dialog w  |       | _        |               |        |           |        |        |
|        |                                      | alog DEMO REMIN |       |          |               | ed to  | a reminde | er.    |        |
| Select | Remi                                 | nder to Link: 1 | LOCAL | HEP A I  | MMUNIZATION   |        |           |        |        |

| Dialog | Compo  | onents          | ·      | Jan 26, 2 | 2005@12 | :52:05 | 5       | Page     | e: 1    | of 1   |   |
|--------|--------|-----------------|--------|-----------|---------|--------|---------|----------|---------|--------|---|
| Packed | remir  | nder dialog: D1 | EMO RE | EMINDER - | - SIMPI | Ε      |         |          |         |        |   |
| DEMO R | EMINDE | ER - SIMPLE (re | eminde | er dialog | g) inst | alled  | from e  | exchange | file.   |        |   |
| Item   | Seq.   | Dialog Summary  | У      |           |         |        |         |          | Type    | Exists |   |
| 1      |        | DEMO REMINDER   | - SIN  | IPLE      |         |        |         |          | dialog  |        |   |
| 2      | 5      | IM HEP A DONE   |        |           |         |        |         |          | element | 5      |   |
| 3      | 10     | IM HEP A DONE   | ELSEV  | HERE      |         |        |         |          | element | 5      |   |
| 4      | 15     | IM HEP A CONTI  | RA     |           |         |        |         |          | element | 5      |   |
|        | +      | Next Screen     | - Pre  | v Scree   | n ??    | More A | Actions | 3        |         |        |   |
| DD D   | ialog  | Details         | DT     | Dialog '  | Text    |        | IS      | Install  | Selecte | ed     | _ |
| DF D   | ialog  | Findings        | DU     | Dialog (  | Usage   |        | QU      | Quit     |         |        |   |
| DS D   | ialog  | Summary         | IA     | Install   | All     |        |         |          |         |        |   |
| Select | Actio  | on: Quit//      |        |           |         |        |         |          |         |        |   |

# 4. IH - Installation History

Use this option to review the installation of an Exchange File entry.

| Clinical Reminder Exchange Ju<br>Exchange File Entries.   | 1 23, 2004@11:27:15  | Page: 1 of 2                   |
|---|--|--------------------------------|
| Entry Source  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                           |  | Date Packed                    |
| + Next Screen - Prev  | Screen ?? More Actions   |                                |
| CFE Create Exchange File Entry CHF Create Host File CMM Create MailMan Message DFE Delete Exchange File Entry IFE Install Exchange File Entry IH Installation History | LHF Load Host File<br>LMM Load MailMan M<br>LWH Load Web Host<br>LR List Reminder<br>RI Reminder Defir | Message<br>File<br>Definitions |
| Select Action: Next Screen// IH<br>Select Entry(s): (1-4): 2  | Installation History   |                                |

| Installation History                                  | Jul 23, 2004@11:27:27                   | Page:      | 1 of      | 1   |
|---|---|------------|-----------|-----|
| Entry   | Source G CRPROVIDER,ONE@VAMC1           | Date E     | Packed    |     |
| 07/23/2001@10:55:23                                   | CKFROVIDER, ONE WARCI                   |            |           |     |
| Installation Date                                     | Installed By                            |            |           |     |
| 1 07/23/2004@10:58:48                                 | CRPROVIDER, ONE                         |            |           |     |
| Enter ?? for more                                     |   |            |           |     |
| DH Delete Install History<br>Select Action: Quit// ID | ID Installation<br>Installation Details | Details    |           |     |
| A**A SG PAIN SCREENING<br>Component                   | 07/23/2001@10:55:2<br>Action New Name   | 3 07/23/20 | 001@10:58 | :48 |
| EDUCATION TOPICS 1 MANAGING PAIN                      | S                                       |            |           |     |
| HEALTH FACTORS  |   |            |           |     |

```
2 REMINDER FACTORS
   3 Pain New Category
   4 PAIN PATIENT DECLINED TO REPORT PAIN S
   5 PATIENT UNABLE TO REPORT PAIN SCORE S
   6 PAIN PATIENT REPORTS NEW PAIN
  7 PATIENT REPORTS NEW PAIN
  8 HF.SG PATIENT NEEDS PAIN ASSESSMENT S
TIU TEMPLATE FIELD
                                         S
  9 S's OLD/NEW
Installation Detail
                             Jul 23, 2004@11:27:39
                                                            Page: 2 of
      Entry
                                        Date Packed
                                                            Date Installed
REMINDER DEFINITION
 10 A**A SG PAIN SCREENING
        Enter ?? for more actions
Select Action:Quit//
```

# 7. Delete Exchange File Entry

Use this option to delete selected entries from the Reminder Exchange file #811.8.

| Select Reminder Managers Menu Opti  |   |   |  |              |  |
|---|---|---|--|--------------|--|
| Select Reminder Managers Menu Option: RX Reminder Exchange  |   |   |  |              |  |
|   | 21, 2004@12:09:19   | Page:   | 1 of   | 3            |  |
| Exchange File Entries.  |   |   |  |              |  |
|   |   |   |  |              |  |
| Entry Source Date Packed  |   |   |  |              |  |
| 1 BLOOD PRESSURE CHECK  | CRPROVIDER, ONE@VAMC1   | 03/28/20  |  |              |  |
| 2 SLC PNEUMOCOCCAL VACCINE  | CRPROVIDER, TWO@VAMC2   | 03/29/20  | -  |              |  |
| 3 VA-*CHOLESTEROL SCREEN (M)  | CRPROVIDER, SIX@VAMC6   | 03/27/20  |  |              |  |
| 4 VA-ADVANCED DIRECTIVES EDUC   | CRPROVIDER, TEN@VAMC10  | 3/27/200  | -  |              |  |
| 5 VA-HEP C RISK ASSESSMENT  | CRPROVIDER, ONE@VAMC1   | 03/27/20  | 04@14:56   | 5:13         |  |
| + Next Screen - Prev S  |   |   |  |              |  |
| CFE Create Exchange File Entry  | LHF Load Host File  |   |  |              |  |
| CHF Create Host File  | LMM Load MailMan M  |   |  |              |  |
| CMM Create MailMan Message  | LWH Load Web Host   | -   |  |              |  |
| DFE Delete Exchange File Entry  | LR List Reminder  |   | -  |              |  |
| IFE Install Exchange File Entry   | RI Reminder Defir   | ittion Inqu   | ıry  |              |  |
| IH Installation History Select Action: Next Screen// DFE  | Doloto Evahanga Eila Er   | +   |  |              |  |
|   | Delete Exchange File En   | ICLY  |  |              |  |
| Select Entry(s): $(1-5)$ : 1  |   |   |  |              |  |
| Clinical Pomindor Evolungo Tun 21 2004012:00:47 Page: 1 of 3  |   |   |  |              |  |
| Clinical Reminder Exchange Jun  | 21, 2004@12:09:47   | Page:   | 1 of   | 3            |  |
| Clinical Reminder Exchange Jun Deleted 1 Exchange File entry.   | 21, 2004@12:09:47   | Page:   | 1 of   | 3            |  |
|   | 21, 2004@12:09:47   | Page:   | 1 of   | 3            |  |
| Deleted 1 Exchange File entry.  Entry   | Source  | Date  | Packed   |              |  |
| Deleted 1 Exchange File entry.  Entry 1 SLC PNEUMOCOCCAL VACCINE  | Source<br>CRPROVIDER,TWO@VAMC2  | Date<br>03/29/20  | Packed<br>04@11:55                                     | 5:11         |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M)  | Source<br>CRPROVIDER, TWO@VAMC2<br>CRPROVIDER, SIX@VAMC6  | Date<br>03/29/20<br>03/27/20  | Packed<br>04011:55<br>04014:59                         | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC  | Source CRPROVIDER, TWO@VAMC2 CRPROVIDER, SIX@VAMC6 CRPROVIDER, TEN@VAMC10   | Date<br>03/29/20<br>03/27/20<br>3/27/200  | Packed<br>04011:55<br>04014:54                         | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC 4 VA-HEP C RISK ASSESSMENT   | Source CRPROVIDER, TWO@VAMC2 CRPROVIDER, SIX@VAMC6 CRPROVIDER, TEN@VAMC10 CRPROVIDER, ONE@VAMC1   | Date<br>03/29/20<br>03/27/20  | Packed<br>04011:55<br>04014:54                         | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC 4 VA-HEP C RISK ASSESSMENT  + Next Screen - Prev S   | Source  CRPROVIDER, TWO@VAMC2  CRPROVIDER, SIX@VAMC6  CRPROVIDER, TEN@VAMC10  CRPROVIDER, ONE@VAMC1  Screen ?? More Actions   | Date<br>03/29/20<br>03/27/20<br>3/27/200<br>03/27/20                            | Packed<br>04011:55<br>04014:54                         | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC 4 VA-HEP C RISK ASSESSMENT  + Next Screen - Prev S CFE Create Exchange File Entry  | Source  CRPROVIDER, TWO@VAMC2 CRPROVIDER, SIX@VAMC6 CRPROVIDER, TEN@VAMC10 CRPROVIDER, ONE@VAMC1 Screen ?? More Actions IH Installation   | Date<br>03/29/20<br>03/27/20<br>3/27/200<br>03/27/20                            | Packed<br>04011:55<br>04014:54                         | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC 4 VA-HEP C RISK ASSESSMENT  + Next Screen - Prev S CFE Create Exchange File Entry CHF Create Host File   | Source  CRPROVIDER,TWO@VAMC2 CRPROVIDER,SIX@VAMC6 CRPROVIDER,TEN@VAMC10 CRPROVIDER,ONE@VAMC1 Screen ?? More Actions IH Installation LHF Load Host Fil                                   | Date<br>03/29/20<br>03/27/20<br>3/27/200<br>03/27/20<br>History                 | Packed<br>04011:55<br>04014:54                         | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC 4 VA-HEP C RISK ASSESSMENT  + Next Screen - Prev S CFE Create Exchange File Entry CHF Create Host File CMM Create MailMan Message                                | Source  CRPROVIDER, TWO@VAMC2 CRPROVIDER, SIX@VAMC6 CRPROVIDER, TEN@VAMC10 CRPROVIDER, ONE@VAMC1 Screen ?? More Actions IH Installation LHF Load Host Fil LMM Load MailMan              | Date<br>03/29/20<br>03/27/20<br>3/27/200<br>03/27/20<br>History<br>e<br>Message | Packed<br>04011:55<br>04014:59<br>4014:54:<br>04014:56 | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC 4 VA-HEP C RISK ASSESSMENT  + Next Screen - Prev S CFE Create Exchange File Entry CHF Create Host File CMM Create MailMan Message DFE Delete Exchange File Entry | Source  CRPROVIDER,TWO@VAMC2 CRPROVIDER,SIX@VAMC6 CRPROVIDER,TEN@VAMC10 CRPROVIDER,ONE@VAMC1 Screen ?? More Actions IH Installation LHF Load Host Fil LMM Load MailMan LR List Reminder | Date<br>03/29/20<br>03/27/20<br>3/27/200<br>03/27/20<br>History<br>e<br>Message | Packed<br>04011:55<br>04014:59<br>4014:54:<br>04014:56 | 5:11<br>9:42 |  |
| Deleted 1 Exchange File entry.  Entry  1 SLC PNEUMOCOCCAL VACCINE 2 VA-*CHOLESTEROL SCREEN (M) 3 VA-ADVANCED DIRECTIVES EDUC 4 VA-HEP C RISK ASSESSMENT  + Next Screen - Prev S CFE Create Exchange File Entry CHF Create Host File CMM Create MailMan Message                                | Source  CRPROVIDER, TWO@VAMC2 CRPROVIDER, SIX@VAMC6 CRPROVIDER, TEN@VAMC10 CRPROVIDER, ONE@VAMC1 Screen ?? More Actions IH Installation LHF Load Host Fil LMM Load MailMan              | Date<br>03/29/20<br>03/27/20<br>3/27/200<br>03/27/20<br>History<br>e<br>Message | Packed<br>04011:55<br>04014:59<br>4014:54:<br>04014:56 | 5:11<br>9:42 |  |

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

## Tips for exchanging reminders

- Try at least one simple one first and check the dialog!
- A Category for a health factor must exist to install the health factor.
- 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.
- Some sites have Web pages set up for review use the web before requesting reminders.
- Test!

### **NOTE: Reminder Exchange Tip**

If you try to exchange 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, which will need to be corrected.)

```
REMINDER LOCATION LIST entry NEXUS STOP CODES FY05 is NEW, what do you want to do?
     Select one of the following:
                    Create a new entry by copying to a new name
          Т
                    Install
          0
                    Quit the install
                    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
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.
```

## **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 CPRS or Health Summary.

The output from the Reminder Test 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 Clinical Reminder Maintenance output 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 a reminder called EDUTEST.

```
Select Reminder Definition Management Option: RI Inquire about Reminder Definition
Select Reminder Definition: EDUTEST
                                                   Dec 24, 2008 11:00:10 am Page 1
EDUTEST
                                                               No. 660020
Print Name:
                      Education Test
Class:
                       LOCAL
                       NONE
Sponsor:
Review Date:
Rescission Date:
Usage:
                       CPRS
Related VA-* Reminder:
Reminder Dialog:
                     EXCHANGE 4
Priority:
Description:
Technical Description:
Baseline Frequency:
     Do In Advance Time Frame: Wait until actually DUE
            Sex Specific:
```

```
Ignore on N/A:
     Frequency for Age Range: 1 month for ages 25 to 60
                Match Text: This is the age match text for age range 25
                           to 60. Patient is in age range. Line 2.
              No Match Text: Patient is not in age range. Line 2
     Frequency for Age Range: 1 year for ages 61 to 70
                Match Text: This is match text for 61 to 70. The
                           patient's age is |AGE|.
              No Match Text: This is no match text for 61 to 70, the
                           patient's age is |AGE|.
Findings:
 ---- Begin: VA-SUBSTANCE ABUSE (FI(1)=ED(1)) ------
              Finding Type: EDUCATION TOPICS
           Occurrence Count: -4
 --- End: VA-SUBSTANCE ABUSE -----
 ---- Begin: VA-EXERCISE SCREENING (FI(2)=ED(11)) ------
              Finding Type: EDUCATION TOPICS
     Use in Resolution Logic: OR
           Occurrence Count: 2
                Found Text: VA-EXERCISE SCREENING FOUND TEXT. Lets test
                           out some objects. The patient was seen on
                           |VISIT DATE|. His last blood pressure was
                           |BLOOD PRESSURE|. His last weight was
                           |PATIENT WEIGHT|.
             Not Found Text: VA-EXERCISE SCREENING NOT FOUND TEXT.
 ---- End: VA-EXERCISE SCREENING ------
 ---- Begin: VA-EXERCISE (FI(3)=ED(363)) ------
              Finding Type: EDUCATION TOPICS
           Occurrence Count: 2
 --- End: VA-EXERCISE -----
 ---- Begin: VA-EXERCISE (FI(4)=ED(363)) ------
              Finding Type: EDUCATION TOPICS
         Beginning Date/Time: T-5M
 ---- End: VA-EXERCISE -----
 ---- Begin: VA-DIABETES (FI(5)=ED(360)) ------
              Finding Type: EDUCATION TOPICS
 ---- End: VA-DIABETES ------
 ---- Begin: EDUTEST (FI(8)=RT(660006)) ------
              Finding Type: REMINDER TERM
           Occurrence Count: 3
                    Mapped Findings:
                 Mapped Finding Item: ED.VA-SUBSTANCE ABUSE
                 Mapped Finding Item: ED.VA-EXERCISE SCREENING
                 Mapped Finding Item: ED.VA-EXERCISE
                 Mapped Finding Item: ED.VA-ADVANCE DIRECTIVES
```

```
--- End: EDUTEST -----
Function Findings:
 ---- Begin: FF(1)------
           Function String: MRD(1,2)>MRD(5)
    Expanded Function String:
     MRD (VA-SUBSTANCE ABUSE, VA-EXERCISE SCREENING) > MRD (VA-DIABETES)
     Use in Resolution Logic: AND
 ---- End: FF(1) ------
 ---- Begin: FF(2)-----
           Function String: FI(1)&(FI(4)!FI(5))
    Expanded Function String:
     FI(VA-SUBSTANCE ABUSE) & (FI(VA-EXERCISE) !FI(VA-DIABETES))
 ---- End: FF(2) ------
 ---- Begin: FF(3)-----
           Function String: COUNT(2)>1
    Expanded Function String:
     COUNT (VA-EXERCISE SCREENING) > 1
     Use in Resolution Logic: AND
 ---- End: FF(3) -----
                        -----
 ---- Begin: FF(4)-----
           Function String: DIFF DATE(1,2)>625
    Expanded Function String:
     DIFF DATE (VA-SUBSTANCE ABUSE, VA-EXERCISE SCREENING) > 625
 --- End: FF(4) -----
General Patient Cohort Found Text:
   This is the general cohort found text.
General Patient Cohort Not Found Text:
   This is general cohort not found text. Line two of not found. Line 3 of
   not found. Patient's age is |AGE|.
General Resolution Found Text:
   This is the general resolution found text. Second line of resolution
   found text.
General Resolution Not Found Text:
   This is the general resolution not found text. Second line of not found.
   Third line of not found.
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(2)&FF(1)&FF(3)
Expanded Resolution Logic:
FI (VA-EXERCISE SCREENING) &FF (1) &FF (3)
```

```
Web Sites:

Web Site URL: Influenza Directive

Web Site Title:

Description:
```

#### Test option output for this reminder

```
Select Reminder Managers Menu Option: RT Reminder Test
Select Patient: CRPATIENT, TWO 10-10-72 666554444
                                                               YES
                                                                       ACTIVE DUTY
Enrollment Priority: GROUP 1
                                Category: IN PROCESS
                                                       End Date:
Select Reminder: edutest
                               LOCAL
Enter date for reminder evaluation: Dec 24, 2008// (DEC 24, 2008)
Display all term findings? N// y YES
The elements of the FIEVAL array are:
FIEVAL(1)=1
FIEVAL(1,1)=1
FIEVAL(1,1,"COMMENTS") =
FIEVAL(1,1,"CSUB", "COMMENTS") =
FIEVAL(1,1,"CSUB","DATE")=2980700
FIEVAL(1,1,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(1,1,"CSUB","VALUE")=
FIEVAL(1,1,"CSUB","VISIT")=3935
FIEVAL(1,1,"DAS")=200
FIEVAL(1,1,"DATE")=2980700
FIEVAL(1,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(1,1,"VALUE") =
FIEVAL(1,1,"VISIT")=3935
FIEVAL(1,2)=1
FIEVAL(1,2,"COMMENTS") =
FIEVAL(1,2,"CSUB","COMMENTS")=
FIEVAL(1,2,"CSUB","DATE")=3000000
FIEVAL(1,2,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(1,2,"CSUB","VALUE") =
FIEVAL (1, 2, "CSUB", "VISIT") = 3997
FIEVAL(1,2,"DAS")=212
FIEVAL(1,2,"DATE")=3000000
FIEVAL(1,2,"LEVEL OF UNDERSTANDING") =
FIEVAL(1,2,"VALUE")=
FIEVAL(1,2,"VISIT")=3997
FIEVAL(1,3)=1
FIEVAL(1,3,"COMMENTS")=
FIEVAL(1,3,"CSUB","COMMENTS")=
FIEVAL(1,3,"CSUB","DATE")=3000202.15
FIEVAL(1,3,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"CSUB","VALUE")=3
FIEVAL(1,3,"CSUB","VISIT")=3693
FIEVAL(1, 3, "DAS") = 159
FIEVAL(1,3,"DATE")=3000202.15
FIEVAL(1,3,"LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"VALUE")=3
FIEVAL(1,3,"VISIT")=3693
FIEVAL(1,4)=1
FIEVAL(1,4,"COMMENTS") =
FIEVAL(1,4,"CSUB","COMMENTS") =
FIEVAL(1,4,"CSUB","DATE")=3000217.085926
```

```
FIEVAL(1,4,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,4,"CSUB","VALUE")=3
FIEVAL(1, 4, "CSUB", "VISIT") = 3720
FIEVAL(1,4,"DAS")=151
FIEVAL (1, 4, "DATE") = 3000217.085926
FIEVAL(1,4,"LEVEL OF UNDERSTANDING")=3
FIEVAL(1, 4, "VALUE") = 3
FIEVAL(1,4,"VISIT")=3720
FIEVAL(1, "COMMENTS") =
FIEVAL(1, "CSUB", "COMMENTS") =
FIEVAL(1,"CSUB","DATE")=2980700
FIEVAL(1, "CSUB", "LEVEL OF UNDERSTANDING") =
FIEVAL(1, "CSUB", "VALUE") =
FIEVAL(1, "CSUB", "VISIT") = 3935
FIEVAL(1,"DAS")=200
FIEVAL(1,"DATE")=2980700
FIEVAL(1, "FILE NUMBER") = 9000010.16
FIEVAL(1, "FINDING") = 1; AUTTEDT(
FIEVAL(1, "LEVEL OF UNDERSTANDING") =
FIEVAL(1,"VALUE") =
FIEVAL(1, "VISIT") = 3935
FIEVAL(2)=1
FIEVAL(2,1)=1
FIEVAL(2,1,"COMMENTS") =
FIEVAL(2,1,"CSUB","COMMENTS") =
FIEVAL(2,1,"CSUB","DATE")=3000317.08
FIEVAL(2,1, "CSUB", "LEVEL OF UNDERSTANDING") =
FIEVAL(2,1,"CSUB","VALUE") =
FIEVAL(2,1,"CSUB","VISIT")=3787
FIEVAL(2,1,"DAS")=214
FIEVAL(2,1,"DATE")=3000317.08
FIEVAL(2,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(2,1,"VALUE")=
FIEVAL(2,1,"VISIT")=3787
FIEVAL(2,2)=1
FIEVAL(2,2,"COMMENTS") =
FIEVAL(2,2,"CSUB","COMMENTS") =
FIEVAL(2,2,"CSUB","DATE")=3000106.131524
FIEVAL(2,2,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(2,2,"CSUB","VALUE")=3
FIEVAL(2,2,"CSUB","VISIT")=3646
FIEVAL(2,2,"DAS")=119
FIEVAL(2,2,"DATE")=3000106.131524
FIEVAL(2,2,"LEVEL OF UNDERSTANDING")=3
FIEVAL(2,2,"VALUE")=3
FIEVAL(2,2,"VISIT")=3646
FIEVAL(2, "COMMENTS") =
FIEVAL(2, "CSUB", "COMMENTS") =
FIEVAL(2, "CSUB", "DATE") = 3000317.08
FIEVAL(2, "CSUB", "LEVEL OF UNDERSTANDING") =
FIEVAL(2, "CSUB", "VALUE") =
FIEVAL(2, "CSUB", "VISIT") = 3787
FIEVAL(2,"DAS") = 214
FIEVAL(2, "DATE") = 3000317.08
FIEVAL(2, "FILE NUMBER") = 9000010.16
FIEVAL(2, "FINDING") = 11; AUTTEDT(
FIEVAL(2, "LEVEL OF UNDERSTANDING") =
FIEVAL(2, "VALUE") =
FIEVAL(2, "VISIT") = 3787
FIEVAL(3)=1
FIEVAL(3,1)=1
FIEVAL(3,1,"COMMENTS") =
FIEVAL(3,1,"CSUB","COMMENTS") =
```

```
FIEVAL(3,1,"CSUB","DATE")=3000317.08
FIEVAL(3,1,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(3,1,"CSUB","VALUE")=
FIEVAL(3,1,"CSUB","VISIT")=3787
FIEVAL(3,1,"DAS")=215
FIEVAL(3,1,"DATE")=3000317.08
FIEVAL(3,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(3,1,"VALUE") =
FIEVAL(3,1,"VISIT")=3787
FIEVAL(3,2)=1
FIEVAL(3,2,"COMMENTS") =
FIEVAL(3,2,"CSUB", "COMMENTS") =
FIEVAL(3,2,"CSUB","DATE")=3000000
FIEVAL(3,2,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(3,2,"CSUB","VALUE") =
FIEVAL(3,2,"CSUB","VISIT")=3997
FIEVAL(3,2,"DAS")=210
FIEVAL(3,2,"DATE")=3000000
FIEVAL(3,2,"LEVEL OF UNDERSTANDING") =
FIEVAL(3,2,"VALUE")=
FIEVAL (3, 2, "VISIT") = 3997
FIEVAL(3, "COMMENTS") =
FIEVAL(3, "CSUB", "COMMENTS") =
FIEVAL(3, "CSUB", "DATE") = 3000317.08
FIEVAL(3,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(3, "CSUB", "VALUE") =
FIEVAL(3, "CSUB", "VISIT") = 3787
FIEVAL(3,"DAS")=215
FIEVAL(3,"DATE")=3000317.08
FIEVAL(3,"FILE NUMBER")=9000010.16
FIEVAL(3, "FINDING") = 363; AUTTEDT(
FIEVAL(3,"LEVEL OF UNDERSTANDING") =
FIEVAL(3,"VALUE") =
FIEVAL(3, "VISIT") = 3787
FIEVAL(4) = 0
FIEVAL(4, "FINDING") = 363; AUTTEDT(
FIEVAL(5)=1
FIEVAL(5,1)=1
FIEVAL(5,1,"COMMENTS")=
FIEVAL(5,1,"CSUB","COMMENTS") =
FIEVAL(5,1,"CSUB","DATE")=3000317.08
FIEVAL(5,1, "CSUB", "LEVEL OF UNDERSTANDING") =
FIEVAL(5,1,"CSUB","VALUE") =
FIEVAL(5,1,"CSUB","VISIT")=3787
FIEVAL(5,1,"DAS") = 203
FIEVAL(5,1,"DATE")=3000317.08
FIEVAL(5,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(5,1,"VALUE")=
FIEVAL (5, 1, "VISIT") = 3787
FIEVAL(5, "COMMENTS") =
FIEVAL(5, "CSUB", "COMMENTS") =
FIEVAL(5, "CSUB", "DATE") = 3000317.08
FIEVAL(5,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(5,"CSUB","VALUE")=
FIEVAL(5, "CSUB", "VISIT") = 3787
FIEVAL(5,"DAS")=203
FIEVAL (5, "DATE") = 3000317.08
FIEVAL(5, "FILE NUMBER") = 9000010.16
FIEVAL (5, "FINDING") = 360; AUTTEDT (
FIEVAL(5, "LEVEL OF UNDERSTANDING") =
FIEVAL(5, "VALUE") =
FIEVAL(5, "VISIT") = 3787
FIEVAL(8)=1
```

```
FIEVAL(8,1)=1
FIEVAL(8,1,"COMMENTS") =
FIEVAL(8,1,"CSUB","COMMENTS") =
FIEVAL(8,1,"CSUB","DATE")=3000317.08
FIEVAL(8,1,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(8,1,"CSUB","VALUE") =
FIEVAL (8, 1, "CSUB", "VISIT") = 3787
FIEVAL(8,1,"DAS")=201
FIEVAL(8,1,"DATE")=3000317.08
FIEVAL(8,1,"FILE NUMBER")=9000010.16
FIEVAL(8,1,"FINDING")=1;AUTTEDT(
FIEVAL(8,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(8,1,"VALUE") =
FIEVAL(8,1,"VISIT")=3787
FIEVAL(8,2)=1
FIEVAL(8,2,"COMMENTS") =
FIEVAL(8,2,"CSUB","COMMENTS") =
FIEVAL(8,2,"CSUB","DATE")=3000317.08
FIEVAL(8,2,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(8,2,"CSUB","VALUE") =
FIEVAL(8,2,"CSUB","VISIT")=3787
FIEVAL(8, 2, "DAS") = 214
FIEVAL(8,2,"DATE")=3000317.08
FIEVAL(8,2,"FILE NUMBER")=9000010.16
FIEVAL(8,2,"FINDING")=11;AUTTEDT(
FIEVAL(8,2,"LEVEL OF UNDERSTANDING") =
FIEVAL(8,2,"VALUE")=
FIEVAL(8,2,"VISIT")=3787
FIEVAL(8,3)=1
FIEVAL(8,3,"COMMENTS")=
FIEVAL(8,3,"CSUB","COMMENTS") =
FIEVAL(8,3,"CSUB","DATE")=3000317.08
FIEVAL(8,3,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(8,3,"CSUB","VALUE") =
FIEVAL(8,3,"CSUB","VISIT")=3787
FIEVAL(8,3,"DAS") = 215
FIEVAL(8,3,"DATE")=3000317.08
FIEVAL(8,3,"FILE NUMBER") = 9000010.16
FIEVAL(8,3,"FINDING")=363;AUTTEDT(
FIEVAL(8,3,"LEVEL OF UNDERSTANDING") =
FIEVAL(8,3,"VALUE")=
FIEVAL(8,3,"VISIT")=3787
FIEVAL(8, "COMMENTS") =
FIEVAL(8, "CSUB", "COMMENTS") =
FIEVAL(8, "CSUB", "DATE") = 3000317.08
FIEVAL(8, "CSUB", "LEVEL OF UNDERSTANDING") =
FIEVAL(8, "CSUB", "VALUE") =
FIEVAL(8, "CSUB", "VISIT") = 3787
FIEVAL(8, "DAS") = 201
FIEVAL(8, "DATE") = 3000317.08
FIEVAL(8, "FILE NUMBER") = 9000010.16
FIEVAL(8, "FINDING") = 1; AUTTEDT(
FIEVAL(8,"LEVEL OF UNDERSTANDING") =
FIEVAL(8, "TERM") = EDUTEST^^^3001206
FIEVAL(8, "TERM IEN") = 660006
FIEVAL(8, "VALUE") =
FIEVAL(8, "VISIT") = 3787
FIEVAL("AGE")=1
FIEVAL("AGE", 1) = 1
FIEVAL("AGE", 2) = 0
FIEVAL("DFN")=54
FIEVAL ("EVAL DATE/TIME") = 3081224
FIEVAL("FF1")=0
```

```
FIEVAL("FF1", "DETAIL") = 0^MRD(1,2) > MRD(5) ^3000317.08 > 3000317.08
FIEVAL ("FF1", "FINDING") =1; PXRMD (802.4,
FIEVAL("FF1","NUMBER")=1
FIEVAL("FF2")=1
FIEVAL ("FF2", "DETAIL") = 1^FI(1) & (FI(4)!FI(5)) ^1& (0!1)
FIEVAL ("FF2", "FINDING") =5; PXRMD (802.4,
FIEVAL ("FF2", "NUMBER") =2
FIEVAL("FF3")=1
FIEVAL("FF3", "DETAIL") = 1 ^ COUNT(2) > 1 ^ 2 > 1
FIEVAL("FF3", "FINDING") = 2; PXRMD(802.4,
FIEVAL("FF3", "NUMBER")=3
FIEVAL ("FF4") =0
FIEVAL("FF4", "DETAIL") = 0^DIFF DATE(1,2) > 625^625 > 625
FIEVAL ("FF4", "FINDING") = 7; PXRMD (802.4,
FIEVAL("FF4", "NUMBER")=4
FIEVAL("PATIENT AGE")=56
FIEVAL("SEX")=1
Term findings:
Finding 8:
TFIEVAL(8,1)=1
TFIEVAL(8,1,1)=1
TFIEVAL(8,1,1,"COMMENTS") =
TFIEVAL(8,1,1,"CSUB","COMMENTS") =
TFIEVAL(8,1,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,1,1,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,1,1,"CSUB","VALUE") =
TFIEVAL(8,1,1,"CSUB","VISIT")=3787
TFIEVAL(8,1,1,"DAS")=201
TFIEVAL(8,1,1,"DATE")=3000317.08
TFIEVAL(8,1,1,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,1,1,"VALUE")=
TFIEVAL(8,1,1,"VISIT")=3787
TFIEVAL(8,1,2)=1
TFIEVAL(8,1,2,"COMMENTS") =
TFIEVAL(8,1,2,"CSUB","COMMENTS") =
TFIEVAL(8,1,2,"CSUB","DATE")=3000217.085926
TFIEVAL(8,1,2,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,2,"CSUB","VALUE")=3
TFIEVAL(8,1,2,"CSUB","VISIT")=3720
TFIEVAL(8,1,2,"DAS")=151
TFIEVAL(8,1,2,"DATE")=3000217.085926
TFIEVAL(8,1,2,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,2,"VALUE")=3
TFIEVAL(8,1,2,"VISIT")=3720
TFIEVAL(8,1,3)=1
TFIEVAL(8,1,3,"COMMENTS") =
TFIEVAL(8,1,3,"CSUB", "COMMENTS") =
TFIEVAL(8,1,3,"CSUB","DATE")=3000202.15
TFIEVAL(8,1,3,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,3,"CSUB","VALUE")=3
TFIEVAL(8,1,3,"CSUB","VISIT")=3693
TFIEVAL(8,1,3,"DAS")=159
TFIEVAL(8,1,3,"DATE")=3000202.15
TFIEVAL(8,1,3,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,3,"VALUE")=3
TFIEVAL(8,1,3,"VISIT")=3693
TFIEVAL(8,1,"COMMENTS")=
TFIEVAL(8,1,"CSUB","COMMENTS") =
TFIEVAL(8,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,1,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,1,"CSUB","VALUE") =
TFIEVAL(8,1,"CSUB","VISIT")=3787
```

```
TFIEVAL(8,1,"DAS")=201
TFIEVAL(8,1,"DATE")=3000317.08
TFIEVAL(8,1,"FILE NUMBER")=9000010.16
TFIEVAL(8,1,"FINDING")=1;AUTTEDT(
TFIEVAL(8,1,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,1,"VALUE") =
TFIEVAL(8,1,"VISIT")=3787
TFIEVAL(8,2)=1
TFIEVAL(8, 2, 1) = 1
TFIEVAL(8,2,1,"COMMENTS") =
TFIEVAL(8,2,1,"CSUB","COMMENTS") =
TFIEVAL(8,2,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,2,1,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,2,1,"CSUB","VALUE") =
TFIEVAL(8,2,1,"CSUB","VISIT")=3787
TFIEVAL(8,2,1,"DAS")=214
TFIEVAL(8,2,1,"DATE")=3000317.08
TFIEVAL(8,2,1,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,2,1,"VALUE")=
TFIEVAL(8,2,1,"VISIT")=3787
TFIEVAL(8,2,2)=1
TFIEVAL(8,2,2,"COMMENTS") =
TFIEVAL(8,2,2,"CSUB","COMMENTS") =
TFIEVAL(8,2,2,"CSUB","DATE")=3000106.131524
TFIEVAL(8,2,2,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,2,2,"CSUB","VALUE")=3
TFIEVAL(8,2,2,"CSUB","VISIT")=3646
TFIEVAL (8, 2, 2, "DAS") =119
TFIEVAL(8,2,2,"DATE")=3000106.131524
TFIEVAL(8,2,2,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,2,2,"VALUE")=3
TFIEVAL(8,2,2,"VISIT")=3646
TFIEVAL(8,2,3)=1
TFIEVAL(8,2,3,"COMMENTS") =
TFIEVAL(8,2,3,"CSUB", "COMMENTS") =
TFIEVAL(8,2,3,"CSUB","DATE")=3000000
TFIEVAL(8,2,3,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,2,3,"CSUB","VALUE")=
TFIEVAL(8,2,3,"CSUB","VISIT")=3997
TFIEVAL(8,2,3,"DAS") = 213
TFIEVAL(8,2,3,"DATE")=3000000
TFIEVAL(8,2,3,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,2,3,"VALUE")=
TFIEVAL(8,2,3,"VISIT")=3997
TFIEVAL(8,2,"COMMENTS")=
TFIEVAL(8,2,"CSUB","COMMENTS") =
TFIEVAL(8,2,"CSUB","DATE")=3000317.08
TFIEVAL(8,2,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,2,"CSUB","VALUE") =
TFIEVAL(8,2,"CSUB","VISIT")=3787
TFIEVAL(8,2,"DAS")=214
TFIEVAL(8,2,"DATE")=3000317.08
TFIEVAL(8,2,"FILE NUMBER")=9000010.16
TFIEVAL(8,2,"FINDING")=11;AUTTEDT(
TFIEVAL(8,2,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,2,"VALUE")=
TFIEVAL(8,2,"VISIT")=3787
TFIEVAL(8,3)=1
TFIEVAL(8,3,1)=1
TFIEVAL(8,3,1,"COMMENTS") =
TFIEVAL(8,3,1,"CSUB","COMMENTS") =
TFIEVAL(8,3,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,3,1,"CSUB","LEVEL OF UNDERSTANDING") =
```

```
TFIEVAL(8,3,1,"CSUB","VALUE")=
TFIEVAL(8,3,1,"CSUB","VISIT")=3787
TFIEVAL(8,3,1,"DAS")=215
TFIEVAL(8,3,1,"DATE")=3000317.08
TFIEVAL(8,3,1,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,3,1,"VALUE") =
TFIEVAL(8,3,1,"VISIT")=3787
TFIEVAL (8, 3, 2) = 1
TFIEVAL(8,3,2,"COMMENTS")=
TFIEVAL(8,3,2,"CSUB","COMMENTS") =
TFIEVAL(8,3,2,"CSUB","DATE")=3000000
TFIEVAL(8,3,2,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,3,2,"CSUB","VALUE") =
TFIEVAL(8,3,2,"CSUB","VISIT")=3997
TFIEVAL(8,3,2,"DAS")=210
TFIEVAL(8,3,2,"DATE")=3000000
TFIEVAL(8,3,2,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,3,2,"VALUE")=
TFIEVAL(8,3,2,"VISIT")=3997
TFIEVAL(8,3,3)=1
TFIEVAL(8,3,3,"COMMENTS") =
TFIEVAL(8,3,3,"CSUB","COMMENTS")=
TFIEVAL(8,3,3,"CSUB","DATE")=2990318.100853
TFIEVAL(8,3,3,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,3,3,"CSUB","VALUE")=
TFIEVAL(8,3,3,"CSUB","VISIT")=2852
TFIEVAL(8,3,3,"DAS") = 73
TFIEVAL(8,3,3,"DATE")=2990318.100853
TFIEVAL(8,3,3,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,3,3,"VALUE")=
TFIEVAL(8,3,3,"VISIT")=2852
TFIEVAL(8,3,"COMMENTS")=
TFIEVAL(8,3,"CSUB","COMMENTS") =
TFIEVAL(8,3,"CSUB","DATE")=3000317.08
TFIEVAL(8,3,"CSUB","LEVEL OF UNDERSTANDING") =
TFIEVAL(8,3,"CSUB","VALUE")=
TFIEVAL(8,3,"CSUB","VISIT")=3787
TFIEVAL(8,3,"DAS")=215
TFIEVAL (8, 3, "DATE") = 3000317.08
TFIEVAL(8,3,"FILE NUMBER")=9000010.16
TFIEVAL(8,3,"FINDING")=363;AUTTEDT(
TFIEVAL(8,3,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,3,"VALUE") =
TFIEVAL(8,3,"VISIT")=3787
TFIEVAL (8, 4) = 1
TFIEVAL(8, 4, 1) = 1
TFIEVAL(8,4,1,"COMMENTS")=
TFIEVAL(8,4,1,"CSUB","COMMENTS") =
TFIEVAL (8, 4, 1, "CSUB", "DATE") = 3000211.153525
TFIEVAL(8,4,1,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,1,"CSUB","VALUE")=3
TFIEVAL(8,4,1,"CSUB","VISIT")=3716
TFIEVAL(8,4,1,"DAS")=147
TFIEVAL(8,4,1,"DATE")=3000211.153525
TFIEVAL(8,4,1,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,1,"VALUE")=3
TFIEVAL(8,4,1,"VISIT")=3716
TFIEVAL(8, 4, 2) = 1
TFIEVAL(8,4,2,"COMMENTS")=
TFIEVAL(8,4,2,"CSUB","COMMENTS") =
TFIEVAL(8,4,2,"CSUB","DATE")=3000113.160726
TFIEVAL(8,4,2,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,2,"CSUB","VALUE")=3
```

```
TFIEVAL(8,4,2, "CSUB", "VISIT") = 3662
TFIEVAL(8,4,2,"DAS")=132
TFIEVAL(8,4,2,"DATE")=3000113.160726
TFIEVAL(8,4,2,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,2,"VALUE")=3
TFIEVAL(8,4,2,"VISIT")=3662
TFIEVAL (8, 4, "COMMENTS") =
TFIEVAL(8,4,"CSUB","COMMENTS") =
TFIEVAL(8,4,"CSUB","DATE")=3000211.153525
TFIEVAL(8,4,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,"CSUB","VALUE")=3
TFIEVAL (8, 4, "CSUB", "VISIT") = 3716
TFIEVAL(8,4,"DAS")=147
TFIEVAL (8, 4, "DATE") = 3000211.153525
TFIEVAL(8,4,"FILE NUMBER")=9000010.16
TFIEVAL(8,4,"FINDING")=338;AUTTEDT(
TFIEVAL(8,4,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,"VALUE")=3
TFIEVAL(8,4,"VISIT")=3716
The elements of the ^TMP(PXRMID, $J) array are:
^TMP(PXRMID, $J, 660020, "PATIENT COHORT LOGIC") = 1^(SEX) & (AGE) ^ (1) & (1)
^TMP(PXRMID, $J, 660020, "REMINDER NAME") = Education Test
^TMP(PXRMID,$J,660020,"RESOLUTION LOGIC")=0^(0)!FI(2)&FF(1)&FF(3)^(0)!1&0&1
^TMP(PXRMID,$J,660020,"zFREQARNG")=1M^25^60^8aseline
The elements of the ^TMP("PXRHM", $J) array are:
^TMP("PXRHM", $J,660020, "Education Test") = DUE NOW^DUE NOW^unknown
^TMP("PXRHM",$J,660020,"Education Test","TXT",1)=Frequency: Due every 1 month fo
r ages 25 to 60.
^{TMP}("PXRHM", $J,660020,"Education Test","TXT",2)=This is the age match text for
age range 25 to 60. Patient is in age
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 3) = range. Line 2.
^TMP("PXRHM",$J,660020,"Education Test","TXT",4)=This is no match text for 61 to
70, the patient's age is 56.
^TMP("PXRHM",$J,660020,"Education Test","TXT",5)=This is the general cohort foun
d text.
^TMP("PXRHM", $J,660020, "Education Test", "TXT",6)=This is the general resolution
not found text. Second line of not
^TMP("PXRHM", $J,660020, "Education Test", "TXT",7) = found. Third line of not found.
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 8) =
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 9) = Resolution:
^TMP("PXRHM",$J,660020,"Education Test","TXT",10) = Education Topic: Exercise Scr
eening
^TMP("PXRHM",$J,660020,"Education Test","TXT",11) = 03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",12) = 01/06/2000 level of understa
nding - GOOD
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 13) =
^TMP("PXRHM",$J,660020,"Education Test","TXT",14) = VA-EXERCISE SCREENING FOUND
TEXT. Lets test out some objects. The
^TMP("PXRHM",$J,660020,"Education Test","TXT",15) = patient was seen on 03/17/00
08:00. His last blood pressure was
^TMP("PXRHM",$J,660020,"Education Test","TXT",16) = Blood Pressure: 120/76 (01/1
1/2001 19:24). His last weight was 233
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 17) = lb [105.9 kg] (03/30/2000 14
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 18) =
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 19) = Information:
^TMP("PXRHM",$J,660020,"Education Test","TXT",20) = Education Topic: Substance Ab
^TMP("PXRHM",$J,660020,"Education Test","TXT",21) = 07/00/1998
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 22) = 00/00/2000
```

```
^TMP("PXRHM",$J,660020,"Education Test","TXT",23) = 02/02/2000 level of understa
nding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",24) = 02/17/2000 level of understa
nding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",25) =
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 26) = Education Topic: Exercise
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 27) = 03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",28) = 00/00/2000
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 29) =
^TMP("PXRHM",$J,660020,"Education Test","TXT",30) = Education Topic: Diabetes
^TMP("PXRHM",$J,660020,"Education Test","TXT",31) = 03/17/2000
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 32) =
^TMP("PXRHM",$J,660020,"Education Test","TXT",33)= Reminder Term: EDUTEST
^TMP("PXRHM",$J,660020,"Education Test","TXT",34) = Education Topic: Substance A
buse
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 35) =
                                                      03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",36)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",37) = Education Topic: Exercise Sc
reening
^TMP("PXRHM",$J,660020,"Education Test","TXT",38) =
                                                      03/17/2000
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 39) =
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 40) = Education Topic: Exercise
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 41) =
                                                      03/17/2000
^TMP("PXRHM", $J, 660020, "Education Test", "TXT", 42) =
Formatted Output:
                                     --STATUS-- --DUE DATE-- --LAST DONE--
Education Test
                                      DUE NOW
                                                  DUE NOW
                                                                unknown
Frequency: Due every 1 month for ages 25 to 60.
This is the age match text for age range 25 to 60. Patient is in age
range. Line 2.
This is no match text for 61 to 70, the patient's age is 56.
This is the general cohort found text.
This is the general resolution not found text. Second line of not
found. Third line of not found.
Resolution:
Education Topic: Exercise Screening
  03/17/2000
  01/06/2000 level of understanding - GOOD
 VA-EXERCISE SCREENING FOUND TEXT. Lets test out some objects. The
 patient was seen on 03/17/00 08:00. His last blood pressure was
 Blood Pressure: 120/76 (01/11/2001 19:24). His last weight was 233
 lb [105.9 kg] (03/30/2000 14:15).
Information:
Education Topic: Substance Abuse
  07/00/1998
  00/00/2000
  02/02/2000 level of understanding - GOOD
  02/17/2000 level of understanding - GOOD
 Education Topic: Exercise
  03/17/2000
 00/00/2000
 Education Topic: Diabetes
  03/17/2000
```

```
Reminder Term: EDUTEST
Education Topic: Substance Abuse
03/17/2000

Education Topic: Exercise Screening
03/17/2000

Education Topic: Exercise
03/17/2000
```

#### **Reminder Test Explained**

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

- 1. The first section is the FIEVAL (Finding EVALuation) array, which corresponds to the findings in the reminder definition. If we look back at our definition inquiry, we see there are 6 findings in this reminder.
- Five Education Topics
- One Reminder Term

The entries in FIEVAL(1) show us what was found for finding 1:

```
The elements of the FIEVAL array are:
                                                      The 1 tells us the finding is true.
FIEVAL(1)=1
                                                      A 0 would mean it is false.
FIEVAL(1,1)=1
FIEVAL(1,1,"COMMENTS")=
FIEVAL(1,1,"CSUB","COMMENTS") =
                                                          This is the first occurrence of finding 1.
FIEVAL(1,1,"CSUB","DATE")=2980700
                                                          There are four occurrences.
FIEVAL(1,1,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(1,1,"CSUB","VALUE") =
FIEVAL(1,1,"CSUB","VISIT")=3935
FIEVAL(1,1,"DAS")=200
                                                      The date of the finding in FileMan
FIEVAL(1,1,"DATE")=2980700
                                                      format.
FIEVAL(1,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(1,1,"VALUE") =
FIEVAL(1,1,"VISIT")=3935
                                                    This is the second occurrence of
FIEVAL(1,2)=1
                                                    finding 1.
FIEVAL(1,2,"COMMENTS")=
FIEVAL(1,2,"CSUB","COMMENTS") =
FIEVAL(1,2,"CSUB","DATE")=3000000
FIEVAL(1,2,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(1,2,"CSUB","VALUE") =
                                                                   This entry in the Visit File is
FIEVAL (1, 2, "CSUB", "VISIT") = 3997
FIEVAL(1,2,"DAS")=212
                                                                   3997.
FIEVAL(1,2,"DATE")=3000000
FIEVAL(1,2,"LEVEL OF UNDERSTANDING") =
FIEVAL(1,2,"VALUE")=
FIEVAL(1,2,"VISIT")=3997
FIEVAL(1,3)=1
                                                             This section shows the final value
FIEVAL(1,3,"COMMENTS") =
FIEVAL(1,3,"CSUB","COMMENTS") =
                                                             for the three occurrences.
FIEVAL(1,3,"CSUB","DATE")=3000202.15
FIEVAL(1,3,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"CSUB","VALUE")=3
```

```
FIEVAL(1,3,"CSUB","VISIT")=3693
FIEVAL(1,3,"DAS")=159
FIEVAL(1,3,"DATE")=3000202.15
FIEVAL(1,3,"LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"VALUE")=3
FIEVAL(1,3,"VISIT")=3693
FIEVAL(1,4)=1
FIEVAL(1,4,"COMMENTS")=
FIEVAL(1,4,"CSUB","COMMENTS") =
FIEVAL(1,4,"CSUB","DATE")=3000217.085926
FIEVAL(1,4,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,4,"CSUB","VALUE")=3
FIEVAL (1, 4, "CSUB", "VISIT") = 3720
FIEVAL(1,4,"DAS")=151
FIEVAL(1,4,"DATE")=3000217.085926
FIEVAL(1,4,"LEVEL OF UNDERSTANDING")=3
FIEVAL(1,4,"VALUE")=3
FIEVAL (1, 4, "VISIT") = 3720
FIEVAL(1,"COMMENTS") =
FIEVAL(1, "CSUB", "COMMENTS") =
FIEVAL (1, "CSUB", "DATE") = 2980700
FIEVAL(1, "CSUB", "LEVEL OF UNDERSTANDING") =
FIEVAL(1, "CSUB", "VALUE") =
FIEVAL(1, "CSUB", "VISIT") = 3935
                                                    200 is the DA string in the Patient
FIEVAL(1,"DAS")=200
                                                    Education file/education topic (see
FIEVAL (1, "DATE") = 2980700
                                                    the Clinical Reminders Index
FIEVAL(1, "FILE NUMBER") = 9000010.16
                                                    Ttechnical Manual for info on the
FIEVAL(1, "FINDING") = 1; AUTTEDT(
FIEVAL(1, "LEVEL OF UNDERSTANDING") =
                                                    DA strings )
FIEVAL(1, "VALUE") =
FIEVAL(1, "VISIT") = 3935
```

NOTE: When a Reminder Test is run, some elements of the FIEVAL array have a "*CSUB*" subscript. Example for an orderable item finding:

```
FIEVAL (5, "CSUB", "DURATION") = 1774

FIEVAL (5, "CSUB", "ORDER") = 3366^CA ULTRA^546;99RAP

FIEVAL (5, "CSUB", "RELEASE DATE") = 3010917.1625

FIEVAL (5, "CSUB", "START DATE") = 3010917

FIEVAL (5, "CSUB", "STATUS") = PENDING

FIEVAL (5, "CSUB", "STOP DATE") =

FIEVAL (5, "CSUB", "VALUE") = PENDING
```

Each of the subscripts following "CSUB" may be used in a Condition (hence the abbreviation Condition SUBscript). For example:

```
I V("DURATION")>90
```

The use of "CSUB" data has expanded beyond Condition statements.

Below is a snippet of how the evaluation appears if "Yes" is entered at the prompt "Display all term findings". Note that this is not the complete reminder test output. Only the vital parts of the reminder test output are displayed here, to save on space. In a live situation, you will have the entire reminder test output displayed, which can be lengthy.

```
Display all term findings? N// YES
```

```
The elements of the FIEVAL array are:
FIEVAL(1)=1
FIEVAL(1,1)=1
FIEVAL(1,1,"CLINICAL TERM") =
FIEVAL (1, 1, "CODEP") = 12989
FIEVAL(1,1,"COMMENTS") =
FIEVAL(1,1,"CONDITION")=1
FIEVAL(1,1,"CSUB","CLINICAL TERM") =
FIEVAL(1,1,"CSUB","COMMENTS") =
FIEVAL(1,1,"CSUB","DATE OF INJURY") =
FIEVAL(1,1,"CSUB", "MODIFIER") =
FIEVAL (1, 1, "CSUB", "PRIMARY/SECONDARY") =S
FIEVAL(1,1,"CSUB", "PROBLEM LIST ENTRY") =
FIEVAL(1,1,"CSUB", "PROVIDER NARRATIVE") = 3906
FIEVAL(1,1,"CSUB","VISIT")=5161991
FIEVAL(1,1,"DAS")=3238132
FIEVAL(1,1,"DATE")=3050615.103
FIEVAL(1,1,"DATE OF INJURY") =
FIEVAL(1,1,"FILE NUMBER")=9000010.07
FIEVAL(1,1,"FILE SPECIFIC")=S
FIEVAL(1,1,"FINDING")=52;PXD(811.2,
FIEVAL(1,1,"MODIFIER") =
FIEVAL(1,1,"PRIMARY/SECONDARY")=S
FIEVAL(1,1,"PROBLEM LIST ENTRY") =
FIEVAL(1,1,"PROVIDER NARRATIVE")=3906
FIEVAL(1,1,"VISIT")=5161991
FIEVAL(1,2)=1
FIEVAL(1,2,"CLINICAL TERM") =
FIEVAL(1,2,"CODEP")=2507
FIEVAL(1,2,"COMMENTS") =
FIEVAL(1,2,"CONDITION")=1
FIEVAL(1,2,"CSUB","CLINICAL TERM") =
FIEVAL(1,2,"CSUB", "COMMENTS") =
FIEVAL(1,2,"CSUB", "DATE OF INJURY") =
FIEVAL(1,2,"CSUB", "MODIFIER") =
FIEVAL(1,2,"CSUB","PRIMARY/SECONDARY") = P
FIEVAL(1,2,"CSUB", "PROBLEM LIST ENTRY") =
FIEVAL(1,2,"CSUB","PROVIDER NARRATIVE")=1082
FIEVAL(1,2,"CSUB","VISIT")=3970337
FIEVAL(1,2,"DAS")=1896973
FIEVAL (1, 2, "DATE") = 3020913.131038
FIEVAL(1,2,"DATE OF INJURY") =
FIEVAL(1,2,"FILE NUMBER")=9000010.07
FIEVAL(1,2,"FILE SPECIFIC")=P
FIEVAL(1,2,"FINDING")=52; PXD(811.2,
FIEVAL(1,2,"MODIFIER") =
FIEVAL(1,2,"PRIMARY/SECONDARY")=P
FIEVAL(1,2,"PROBLEM LIST ENTRY") =
FIEVAL(1,2,"PROVIDER NARRATIVE")=1082
FIEVAL(1,2,"VISIT")=3970337
FIEVAL(1,3)=1
FIEVAL(1,3,"CLINICAL TERM") =
FIEVAL(1,3,"CODEP")=2507
FIEVAL(1,3,"COMMENTS") =
FIEVAL(1,3,"CONDITION")=1
FIEVAL(1,3,"CSUB", "CLINICAL TERM") =
FIEVAL(1,3,"CSUB","COMMENTS") =
FIEVAL(1,3,"CSUB","DATE OF INJURY") =
FIEVAL(1,3,"CSUB", "MODIFIER") =
FIEVAL(1,3,"CSUB","PRIMARY/SECONDARY") = P
FIEVAL(1,3,"CSUB","PROBLEM LIST ENTRY") =
FIEVAL(1,3,"CSUB","PROVIDER NARRATIVE")=1082
```

```
FIEVAL(1,3,"CSUB","VISIT")=3967489
FIEVAL(1,3,"DAS")=1893712
FIEVAL(1,3,"DATE")=3020911.131046
FIEVAL(1,3,"DATE OF INJURY") =
FIEVAL (1, 3, "FILE NUMBER") = 9000010.07
FIEVAL(1,3,"FILE SPECIFIC")=P
FIEVAL (1, 3, "FINDING") = 52; PXD (811.2,
FIEVAL(1,3,"MODIFIER") =
FIEVAL(1,3,"PRIMARY/SECONDARY")=P
FIEVAL(1,3,"PROBLEM LIST ENTRY") =
FIEVAL(1,3,"PROVIDER NARRATIVE")=1082
FIEVAL(1,3,"VISIT")=3967489
FIEVAL(1, "CLINICAL TERM") =
FIEVAL (1, "CODEP") = 12989
FIEVAL(1, "COMMENTS") =
FIEVAL(1, "CONDITION")=1
FIEVAL(1, "CSUB", "CLINICAL TERM") =
FIEVAL(1, "CSUB", "COMMENTS") =
FIEVAL(1, "CSUB", "DATE OF INJURY") =
FIEVAL(1, "CSUB", "MODIFIER") =
FIEVAL (1, "CSUB", "PRIMARY/SECONDARY") = S
FIEVAL(1, "CSUB", "PROBLEM LIST ENTRY") =
FIEVAL(1, "CSUB", "PROVIDER NARRATIVE") = 3906
FIEVAL(1, "CSUB", "VISIT") = 5161991
FIEVAL(1,"DAS")=3238132
FIEVAL(1,"DATE")=3050615.103
FIEVAL(1, "DATE OF INJURY") =
FIEVAL (1, "FILE NUMBER") = 9000010.07
FIEVAL(1, "FILE SPECIFIC") =S
FIEVAL(1, "FINDING") = 52; PXD(811.2,
FIEVAL(1, "MODIFIER") =
FIEVAL(1,"PRIMARY/SECONDARY")=S
FIEVAL(1,"PROBLEM LIST ENTRY") =
FIEVAL(1, "PROVIDER NARRATIVE") = 3906
FIEVAL(1, "TERM") = VA-IHD DIAGNOSIS^^^3010723
FIEVAL(1, "TERM IEN") = 26
FIEVAL (1, "VISIT") =5161991
FIEVAL(2) = 0
FIEVAL(3) = 0
FIEVAL(3, "TERM") = VA-OUTSIDE LDL < 100^^^3011113
FIEVAL(3, "TERM IEN") = 35
FIEVAL(4) = 0
FIEVAL(4,"TERM")=VA-OUTSIDE LDL 100-119^^^3010910
FIEVAL(4,"TERM IEN")=34
FIEVAL(5) = 0
FIEVAL(5,"TERM")=VA-OUTSIDE LDL 120-129^^^3010925
FIEVAL(5, "TERM IEN") = 52
FIEVAL(6) = 0
FIEVAL(6, "TERM") = VA-OUTSIDE LDL > 129^^^3011113
FIEVAL(6, "TERM IEN") = 36
FIEVAL(7, "TERM") = VA-ORDER LIPID PROFILE HEALTH FACTOR^^^3020131
FIEVAL(7,"TERM IEN")=61
FIEVAL(8) = 0
FIEVAL(8, "TERM") = VA-REFUSED LIPID PROFILE^^^3011022
FIEVAL(8, "TERM IEN")=40
FIEVAL(9) = 0
FIEVAL(9,"TERM")=VA-OTHER DEFER LIPID PROFILE^^^3011022
FIEVAL(9, "TERM IEN")=41
FIEVAL(10) = 0
FIEVAL(10, "TERM") = VA-UNCONFIRMED IHD DIAGNOSIS^^3011017
FIEVAL(10,"TERM IEN")=42
FIEVAL(12)=0
```

```
FIEVAL(12, "TERM") = VA-LIPID LOWERING MEDS^^^3011007
FIEVAL(12, "TERM IEN")=54
FIEVAL(14)=0
FIEVAL ("AGE") =1
FIEVAL("AGE", 1) = 1
FIEVAL ("DFN") = 36167
FIEVAL ("EVAL DATE/TIME") = 3060125
FIEVAL("FF1")=1
FIEVAL("FF1", "FINDING") =1; PXRMD(802.4,
FIEVAL("FF1", "NAME") =
FIEVAL("FF1", "VALUE")=1
FIEVAL ("PATIENT AGE") = 86
FIEVAL ("SEX") =1
Term findings:
Finding 1:
TFIEVAL(1,1)=1
TFIEVAL(1, 1, 1) = 1
TFIEVAL(1,1,1,"CLINICAL TERM") =
TFIEVAL (1, 1, 1, "CODEP") = 12989
TFIEVAL (1, 1, 1, "COMMENTS") =
TFIEVAL(1,1,1,"CONDITION")=1
TFIEVAL(1,1,1,"CSUB","CLINICAL TERM") =
TFIEVAL(1,1,1,"CSUB","COMMENTS") =
TFIEVAL(1,1,1,"CSUB","DATE OF INJURY") =
TFIEVAL(1,1,1,"CSUB","MODIFIER") =
TFIEVAL (1,1,1,"CSUB", "PRIMARY/SECONDARY") =S
TFIEVAL(1,1,1,"CSUB", "PROBLEM LIST ENTRY") =
TFIEVAL(1,1,1,"CSUB", "PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,1,"CSUB","VISIT")=5161991
TFIEVAL(1,1,1,"DAS")=3238132
TFIEVAL(1,1,1,"DATE")=3050615.103
TFIEVAL(1,1,1,"DATE OF INJURY") =
TFIEVAL(1,1,1,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,1,"FILE SPECIFIC")=S
TFIEVAL(1,1,1,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,1,"MODIFIER")=
TFIEVAL(1,1,1,"PRIMARY/SECONDARY")=S
TFIEVAL(1,1,1,"PROBLEM LIST ENTRY") =
TFIEVAL(1,1,1,"PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,1,"VISIT")=5161991
TFIEVAL (1, 1, 2) = 1
TFIEVAL(1,1,2,"CLINICAL TERM") =
TFIEVAL(1,1,2,"CODEP")=2507
TFIEVAL(1,1,2,"COMMENTS")=
TFIEVAL(1,1,2,"CONDITION")=1
TFIEVAL(1,1,2,"CSUB", "CLINICAL TERM") =
TFIEVAL(1,1,2,"CSUB","COMMENTS") =
TFIEVAL(1,1,2,"CSUB","DATE OF INJURY") =
TFIEVAL(1,1,2,"CSUB", "MODIFIER") =
TFIEVAL(1,1,2,"CSUB","PRIMARY/SECONDARY")=P
TFIEVAL(1,1,2,"CSUB", "PROBLEM LIST ENTRY") =
TFIEVAL(1,1,2,"CSUB", "PROVIDER NARRATIVE")=1082
TFIEVAL(1,1,2,"CSUB","VISIT")=3970337
TFIEVAL(1,1,2,"DAS")=1896973
TFIEVAL(1,1,2,"DATE")=3020913.131038
TFIEVAL(1,1,2,"DATE OF INJURY") =
TFIEVAL(1,1,2,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,2,"FILE SPECIFIC")=P
TFIEVAL(1,1,2,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,2,"MODIFIER")=
TFIEVAL(1,1,2,"PRIMARY/SECONDARY")=P
TFIEVAL(1,1,2,"PROBLEM LIST ENTRY") =
```

```
TFIEVAL(1,1,2,"PROVIDER NARRATIVE")=1082
TFIEVAL(1,1,2,"VISIT")=3970337
\texttt{TFIEVAL}\,(1,1,3) = 1
TFIEVAL(1,1,3,"CLINICAL TERM") =
TFIEVAL(1,1,3,"CODEP")=2507
TFIEVAL(1,1,3,"COMMENTS") =
TFIEVAL(1,1,3,"CONDITION")=1
TFIEVAL(1,1,3,"CSUB", "CLINICAL TERM") =
TFIEVAL(1,1,3,"CSUB","COMMENTS") =
TFIEVAL(1,1,3,"CSUB","DATE OF INJURY") =
TFIEVAL(1,1,3,"CSUB","MODIFIER")=
TFIEVAL (1, 1, 3, "CSUB", "PRIMARY/SECONDARY") = P
TFIEVAL(1,1,3,"CSUB", "PROBLEM LIST ENTRY") =
TFIEVAL (1, 1, 3, "CSUB", "PROVIDER NARRATIVE") = 1082
TFIEVAL(1,1,3,"CSUB","VISIT")=3967489
TFIEVAL(1,1,3,"DAS")=1893712
TFIEVAL(1,1,3,"DATE")=3020911.131046
TFIEVAL(1,1,3,"DATE OF INJURY") =
TFIEVAL(1,1,3,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,3,"FILE SPECIFIC")=P
TFIEVAL(1,1,3,"FINDING") = 52; PXD(811.2,
TFIEVAL(1,1,3,"MODIFIER")=
TFIEVAL(1,1,3,"PRIMARY/SECONDARY")=P
TFIEVAL(1,1,3,"PROBLEM LIST ENTRY") =
TFIEVAL(1,1,3,"PROVIDER NARRATIVE")=1082
TFIEVAL(1,1,3,"VISIT")=3967489
TFIEVAL(1,1,"CLINICAL TERM") =
TFIEVAL (1, 1, "CODEP") = 12989
TFIEVAL(1,1,"COMMENTS")=
TFIEVAL(1,1,"CONDITION")=1
TFIEVAL(1,1,"CSUB", "CLINICAL TERM") =
TFIEVAL(1,1,"CSUB","COMMENTS") =
TFIEVAL(1,1,"CSUB","DATE OF INJURY") =
TFIEVAL(1,1,"CSUB", "MODIFIER") =
TFIEVAL(1,1,"CSUB","PRIMARY/SECONDARY")=S
TFIEVAL(1,1,"CSUB", "PROBLEM LIST ENTRY") =
TFIEVAL(1,1,"CSUB","PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,"CSUB","VISIT")=5161991
TFIEVAL(1,1,"DAS")=3238132
TFIEVAL (1, 1, "DATE") = 3050615.103
TFIEVAL(1,1,"DATE OF INJURY") =
TFIEVAL(1,1,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,"FILE SPECIFIC")=S
TFIEVAL(1,1,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,"MODIFIER")=
TFIEVAL(1,1,"PRIMARY/SECONDARY")=S
TFIEVAL(1,1,"PROBLEM LIST ENTRY") =
TFIEVAL(1,1,"PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,"VISIT")=5161991
Formatted Output:
                                     --STATUS-- --DUE DATE-- --LAST DONE--
IHD Lipid Profile
                                     DUE NOW DUE NOW
                                                               unknown
Frequency: Due every 1 year
Cohort:
Reminder Term: VA-IHD DIAGNOSIS
 Encounter Diagnosis:
   06/15/2005 414.00 COR ATHEROSCL UNSP TYP-VES rank: SECONDARY
   09/13/2002 414.9 CHR ISCHEMIC HRT DIS NOS rank: PRIMARY
  Prov. Narr. - CHRONIC ISCHEMIC HEART DISEASE, UNSPECIFIED
```

```
09/11/2002 414.9 CHR ISCHEMIC HRT DIS NOS rank: PRIMARY
Prov. Narr. - CHRONIC ISCHEMIC HEART DISEASE, UNSPECIFIED
```

Parts of the reminder test have been removed for brevity's sake. Under the Term Evaluation part of the reminder test, you will notice the TFIEVAL and subscripts. This looks very similar to the results of the FIEVAL, except that it is the results of each mapped finding within the term. There is a minimum of two subscripts for each mapped finding. The first subscript is the number of the actual finding (the term). The second subscript is the number of the mapped finding. In this instance, the evaluation of the mapped finding is "True."

```
TFIEVAL(1,1)=1
```

Sometimes there may be three subscripts. This third subscript is the occurrence of the mapped finding. In the above example (the complete reminder test output), you will notice there are three occurrences for mapped finding number 1. This is because the reminder term has an occurrence count of 3. This is also displayed in the clinical maintenance section of the reminder test output.

**Note**: The "CSUB" values of an occurrence of a mapped finding can be used in a Condition of a finding just as the "CSUB" values of a regular finding can be.

```
TFIEVAL(1,1,1)=1
TFIEVAL(1,1,1,"CLINICAL TERM") =
TFIEVAL(1,1,1,"CODEP")=12989
TFIEVAL(1,1,1,"COMMENTS") =
TFIEVAL(1,1,1,"CONDITION")=1
TFIEVAL(1,1,1,"CSUB", "CLINICAL TERM") =
TFIEVAL(1,1,1,"CSUB","COMMENTS") =
TFIEVAL(1,1,1,"CSUB","DATE OF INJURY") =
TFIEVAL(1,1,1,"CSUB", "MODIFIER") =
TFIEVAL(1,1,1,"CSUB","PRIMARY/SECONDARY")=S
TFIEVAL(1,1,1,"CSUB", "PROBLEM LIST ENTRY") = TFIEVAL(1,1,1,"CSUB", "PROVIDER NARRATIVE") = 3906
TFIEVAL(1,1,1,"CSUB","VISIT")=5161991
TFIEVAL(1,1,1,"DAS")=3238132
TFIEVAL(1,1,1,"DATE")=3050615.103
TFIEVAL(1,1,1,"DATE OF INJURY") =
TFIEVAL(1,1,1,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,1,"FILE SPECIFIC")=S
TFIEVAL(1,1,1,"FINDING")=52; PXD(811.2,
TFIEVAL(1,1,1,"MODIFIER")=
TFIEVAL(1,1,1,"PRIMARY/SECONDARY")=S
TFIEVAL(1,1,1,"PROBLEM LIST ENTRY") =
TFIEVAL(1,1,1,"PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,1,"VISIT")=5161991
```

2. This section shows the cohort logic, reminder name, resolution logic, and how the frequency was determined.

```
The elements of the ^TMP(PXRMID,$J) array are:

^TMP(PXRMID,$J,660020,"PATIENT COHORT LOGIC")=1^(SEX)&(AGE)^(1)&(1)

^TMP(PXRMID,$J,660020,"REMINDER NAME")=Education Test

^TMP(PXRMID,$J,660020,"RESOLUTION LOGIC")=0^(0)!FI(2)&FF(1)&FF(3)^(0)!1&0&1

^TMP(PXRMID,$J,660020,"zFREQARNG")=1Y^61^70^Baseline
```

The first piece of the logic display shows if the logic evaluates to true or false. In this example, the cohort logic is true and the resolution logic is false. The second piece shows the logic string just like it is

displayed in the reminder inquiry. The third piece shows the true or false values of the findings in the logic string.

3. The next section shows how the data is returned in ^TMP("PXRHM",\$J) to the calling application. This is mainly of interest to developers.

```
The elements of the 'TMP("PXRHM", $J) array are:
^TMP("PXRHM",$J,660020,"Education Test")=DUE NOW^DUE NOW^unknown
^TMP("PXRHM",$J,660020,"Education Test","TXT",1)=Frequency: Due every 1 year for
ages 61 to 70.
^TMP("PXRHM",$J,660020,"Education Test","TXT",2)=Patient is not in age range. Li
^TMP("PXRHM",$J,660020,"Education Test","TXT",3)=This is match text for 61 to 70
. The patient's age is 62.
^TMP("PXRHM",$J,660020,"Education Test","TXT",4)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",5)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",6)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",7)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",8)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",9)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",10)=This is the general cohort fou
nd text. The patient's age is 62.
^TMP("PXRHM",$J,660020,"Education Test","TXT",11)=The patient's active medicatio
ns are: Active Outpatient Medications (excluding
^TMP("PXRHM",$J,660020,"Education Test","TXT",12)=Supplies):
^TMP("PXRHM",$J,660020,"Education Test","TXT",13)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",14)=
                                                      Pending Outpatient Medica
                              Status
^TMP("PXRHM",$J,660020,"Education Test","TXT",15)================================
^TMP("PXRHM",$J,660020,"Education Test","TXT",16)=1) ACETAMINOPHEN ELIXIR 160M
G/5ML 16OZ TAKE 1 TABLET BY PENDING
^TMP("PXRHM",$J,660020,"Education Test","TXT",17)=
                                                        MOUTH TWICE A DAY
^TMP("PXRHM",$J,660020,"Education Test","TXT",18)=2)
                                                      ERGOTAMINE & CAFFEINE SUP
P. INSERT Y SUPPOSITORY (IES) PENDING
^TMP("PXRHM",$J,660020,"Education Test","TXT",19)=
                                                         IN RECTUM
^TMP("PXRHM",$J,660020,"Education Test","TXT",20)=3)
                                                       HYDROCHLOROTHIAZIDE 50MG
TAKE ONE TABLET BY MOUTH
                              PENDING
^TMP("PXRHM",$J,660020,"Education Test","TXT",21)=
                                                         EVERY DAY
^TMP("PXRHM",$J,660020,"Education Test","TXT",22)=4)
                                                       WARFARIN 2.5MG TAKE ONE T
ABLET BY MOUTH TWICE A DAY
                              PENDING
^TMP("PXRHM",$J,660020,"Education Test","TXT",23)=
                                                         FOR 6 DAYS, THEN TAKE O
NE TABLET EVERY DAY FOR 2
^TMP("PXRHM",$J,660020,"Education Test","TXT",24)=
                                                         DAYS
^TMP("PXRHM",$J,660020,"Education Test","TXT",25)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",26)=
                                                       Active Non-VA Medications
                              Status
^TMP("PXRHM",$J,660020,"Education Test","TXT",27) =====
^TMP("PXRHM",$J,660020,"Education Test","TXT",28)=1)
                                                      Non-VA ACETAMINOPHEN 325M
G 650MG MOUTH EVERY 4 HOURS ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",29)=2)
                                                      Non-VA ACETAMINOPHEN ELIX
IR 160MG/5ML 160Z 1 TABLET
                            ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",30)=
                                                         MOUTH
^TMP("PXRHM",$J,660020,"Education Test","TXT",31)=3)
                                                       Non-VA ACETAMINOPHEN/CODE
INE TAB MOUTH
                             ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",32)=4)
                                                       Non-VA ACETAMINOPHEN/PROP
OXYPHENE TAB MOUTH
                             ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",33)=5)
                                                       Non-VA ACETAZOLAMIDE CAP,
SA MOUTH
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",34)=6)
                                                      Non-VA ACETIC ACID OTIC S
```

```
OLN 2%, 60ML 2 DROPS RIGHT
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",35)=
                                                         EAR
^TMP("PXRHM",$J,660020,"Education Test","TXT",36)=7)
                                                       Non-VA ACETOHEXAMIDE TAB
1JFKDJF MOUTH 6XD
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",37)=8)
                                                       Non-VA ACTICORT LOTION, TO
P AFFECTED AREA
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",38)=9)
                                                       Non-VA ACYCLOVIR 5% OINT
15GM LEG AFFECTED AREA EVERY ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",39)=
                                                         4 HOURS
^TMP("PXRHM",$J,660020,"Education Test","TXT",40)=10) Non-VA ACYCLOVIR CAP,ORAL
3M ORAL DAILY
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",41)=11) Non-VA LINDANE SHAMPOO A
FFECTED AREA
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",42)=12) Non-VA TRETINOIN CREAM,TO
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",43)=13) Non-VA ZZDOCUSATE CAP,ORA
L TES MOUTH
                              ACTIVE
^TMP("PXRHM",$J,660020,"Education Test","TXT",44)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",45)=17 Total Medications
^TMP("PXRHM",$J,660020,"Education Test","TXT",46) =
^TMP("PXRHM",$J,660020,"Education Test","TXT",47)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",48)=This is the general resolution
not found text. Second line of not found. Third
^TMP("PXRHM",$J,660020,"Education Test","TXT",49)=line of not found.
^TMP("PXRHM",$J,660020,"Education Test","TXT",50)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",51)=Resolution:
^TMP("PXRHM",$J,660020,"Education Test","TXT",52) = Education Topic: Exercise Scr
^TMP("PXRHM",$J,660020,"Education Test","TXT",53) = 03/17/2000@08:00
^TMP("PXRHM",$J,660020,"Education Test","TXT",54) = 01/06/2000@13:15:24 level of
understanding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",55)=
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 56) = VA-EXERCISE SCREENING FOUND
TEXT. Lets test out some objects. The patient was
^TMP("PXRHM",$J,660020,"Education Test","TXT",57)= seen on 03/17/00 08:00. His
last blood pressure was Blood Pressure: 120/76
^TMP("PXRHM",$J,660020,"Education Test","TXT",58)= (01/11/2001 19:24). Test an
extra pipe The OBJECT . His last height and
^TMP("PXRHM",$J,660020,"Education Test","TXT",59) = weight was was NOT found...
Contact IRM.PATIENT HEIGHTThe OBJECT and was
^TMP("PXRHM", $J,660020, "Education Test", "TXT",60) = NOT found...Contact IRM.PATI
ENT WEIGHTThe OBJECT . was NOT found...Contact
^TMP("PXRHM",$J,660020,"Education Test","TXT",61)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",62)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",63)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",64)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",65)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",66) =
^TMP("PXRHM",$J,660020,"Education Test","TXT",67)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",68)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",69)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",70)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",71) = FF(1)=0
^TMP("PXRHM",$J,660020,"Education Test","TXT",72) = Function finding 1 not found
text, patient's age is 62.
^TMP("PXRHM",$J,660020,"Education Test","TXT",73)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",74)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",75)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",76)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",77)=
^TMP("PXRHM", $J,660020, "Education Test", "TXT", 78) = FF(3)=1
^TMP("PXRHM",$J,660020,"Education Test","TXT",79) =
^TMP("PXRHM",$J,660020,"Education Test","TXT",80)=Information:
```

```
^TMP("PXRHM",$J,660020,"Education Test","TXT",81) = Education Topic: Substance Ab
^TMP("PXRHM",$J,660020,"Education Test","TXT",82) = 07/00/1998
^TMP("PXRHM",$J,660020,"Education Test","TXT",83) = 00/00/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",84) = 02/02/2000@15:00 level of un
derstanding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",85) = 02/17/2000@08:59:26 level of
understanding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",86)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",87) = Education Topic: Exercise
^TMP("PXRHM",$J,660020,"Education Test","TXT",88)=
                                                    03/17/2000@08:00
^TMP("PXRHM",$J,660020,"Education Test","TXT",89)=
                                                    00/00/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",90)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",91) = Education Topic: Diabetes
^TMP("PXRHM",$J,660020,"Education Test","TXT",92)=
                                                    03/17/2000@08:00
^TMP("PXRHM",$J,660020,"Education Test","TXT",93)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",94) = Reminder Term: EDUTEST
^TMP("PXRHM",$J,660020,"Education Test","TXT",95) = Education Topic: Substance A
buse
^TMP("PXRHM",$J,660020,"Education Test","TXT",96)=
                                                     03/17/2000@08:00
^TMP("PXRHM",$J,660020,"Education Test","TXT",97)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",98) = Education Topic: Exercise Sc
reening
^TMP("PXRHM",$J,660020,"Education Test","TXT",99)=
                                                     03/17/2000@08:00
^TMP("PXRHM",$J,660020,"Education Test","TXT",100) =
^TMP("PXRHM",$J,660020,"Education Test","TXT",101) = Education Topic: Exercise
^TMP("PXRHM",$J,660020,"Education Test","TXT",102)=
                                                      03/17/2000@08:00
^TMP("PXRHM",$J,660020,"Education Test","TXT",103)=
```

4. The final section shows the formatted Clinical Maintenance output. This is what you would see in CPRS or Health Summary.

```
Maintenance Output:
                                     --STATUS-- --DUE DATE-- --LAST DONE--
Education Test
                                     DUE NOW
                                                 DUE NOW
                                                                unknown
Frequency: Due every 1 year for ages 61 to 70.
Patient is not in age range. Line 2
This is match text for 61 to 70. The patient's age is 62.
This is the general cohort found text. The patient's age is 62.
The patient's active medications are: Active Outpatient Medications (excluding
Supplies):
    Pending Outpatient Medications
                                                             Status
1)
    ACETAMINOPHEN ELIXIR 160MG/5ML 160Z TAKE 1 TABLET BY
                                                             PENDING
      MOUTH TWICE A DAY
2)
     ERGOTAMINE & CAFFEINE SUPP. INSERT Y SUPPOSITORY (IES)
                                                             PENDING
      IN RECTUM
    HYDROCHLOROTHIAZIDE 50MG TAKE ONE TABLET BY MOUTH
                                                             PENDING
3)
      EVERY DAY
4)
    WARFARIN 2.5MG TAKE ONE TABLET BY MOUTH TWICE A DAY
                                                             PENDING
      FOR 6 DAYS, THEN TAKE ONE TABLET EVERY DAY FOR 2
       DAYS
    Active Non-VA Medications
                                                             Status
    Non-VA ACETAMINOPHEN 325MG 650MG MOUTH EVERY 4 HOURS
                                                             ACTIVE
1)
2)
    Non-VA ACETAMINOPHEN ELIXIR 160MG/5ML 160Z 1 TABLET
                                                             ACTIVE
      MOUTH
3)
    Non-VA ACETAMINOPHEN/CODEINE TAB MOUTH
                                                             ACTIVE
4)
    Non-VA ACETAMINOPHEN/PROPOXYPHENE TAB MOUTH
                                                             ACTIVE
    Non-VA ACETAZOLAMIDE CAP, SA MOUTH
                                                             ACTIVE
```

| 6)              | Non-VA ACETIC ACID OTIC SOLN 2%, 60ML 2 DROPS RIGHT EAR  | ACTIVE  |
|-----------------|--|---|
| 7)              | Non-VA ACETOHEXAMIDE TAB 1JFKDJF MOUTH 6XD   | ACTIVE  |
| 8)              | Non-VA ACTICORT LOTION, TOP AFFECTED AREA  | ACTIVE  |
| 9)              | Non-VA ACYCLOVIR 5% OINT 15GM LEG AFFECTED AREA EVERY 4 HOURS  |   |
| 10)             | Non-VA ACYCLOVIR CAP, ORAL 3M ORAL DAILY   | ACTIVE  |
| 11)             | Non-VA LINDANE SHAMPOO AFFECTED AREA   | ACTIVE  |
|                 | Non-VA TRETINOIN CREAM, TOP  | ACTIVE  |
| -               | Non-VA ZZDOCUSATE CAP,ORAL TES MOUTH   | ACTIVE  |
| 17 т            | otal Medications   |   |
|                 | is the general resolution not found text. Second line of not found. $% \left( 1\right) =\left( 1\right) \left( 1\right)$ | of not found. Third                                       |
|                 | lution:  |   |
|                 | cation Topic: Exercise Screening   |   |
|                 | /17/2000@08:00<br>/06/2000@13:15:24 level of understanding - GOOD  |   |
| se<br>(0)<br>we | -EXERCISE SCREENING FOUND TEXT. Lets test out some objection on 03/17/00 08:00. His last blood pressure was Blood 1/11/2001 19:24). Test an extra pipe The OBJECT. His light was was NOT foundContact IRM.PATIENT HEIGHTTHE ToundContact IRM.PATIENT WEIGHTTHE OBJECT. was NOM.  | d Pressure: 120/76<br>.ast height and<br>e OBJECT and was |
|                 | (1)=0 nction finding 1 not found text, patient's age is 62.  |   |
| FF              | (3)=1  |   |
| Info            | rmation:   |   |
| Edu             | cation Topic: Substance Abuse  |   |
| 07              | /00/1998   |   |
| 00              | /00/2000   |   |
| 02              | /02/2000@15:00 level of understanding - GOOD   |   |
| 02              | /17/2000@08:59:26 level of understanding - GOOD  |   |
| Edu             | cation Topic: Exercise   |   |
| 03              | /17/2000@08:00   |   |
| 00              | /00/2000   |   |
|                 | cation Topic: Diabetes<br>/17/2000@08:00   |   |
| 03              | /1//2000@00.00   |   |
| Rem             | inder Term: EDUTEST  |   |
| 1               | ucation Topic: Substance Abuse<br>3/17/2000@08:00  |   |
| 1               | ucation Topic: Exercise Screening<br>3/17/2000@08:00   |   |

Education Topic: Exercise 03/17/2000@08:00

#### **Reminder Evaluation in CPRS**

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

HINT: Keeping one or more terminal emulator (e.g., KEA) screens open with the List Manager Reminder Management menu, along with an open CPRS 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.

#### **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.

#### **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**: PCE 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.

#### **General Testing of Clinical Reminders**

(Thanks to Kathryn C. Corrigan, MD, ACOS Ambulatory Care, Tampa VAMC, from 2007 VeHU presentation)

The accuracy of clinical display of reminders as well as the accuracy of reports is dependent upon creation and implementation of accurate reminders. One critical role of the reminders champion" is assisting the clinical informatics specialist in testing the reminder.

In this portion of the presentation, I would like to introduce some general concepts of "testing.". This is not meant to be a detailed instruction manual on testing. I would refer you to the clinical reminders coordinator at your site for more details.

In general, when testing a clinical reminder, you want to test the reminder on patients who fit the cohort definition as well as on patients who do NOT fit the cohort definition. Is the reminder applicable when it

should be? You also want to test the reminder for patients who are in cohort and have the reminder resolved as well as for patients who are in cohort and do NOT have the reminder resolved. In the first round, this is usually best done using test patients set up by clinical informatics. This is usually done in a test account which is a mirror image of the production account at your site.

Testing can be done by using the reminder test on an individual patient. The reminder test is a clinical reminders menu option available in Vista which gives detailed information on findings, file locations where the data has been found, logic and other highly technical information. It is generally not understandable by a non-techie.

Most clinicians will find using CPRS to determine if the reminder is due most helpful. The information in the Reminder Maintenance can be analyzed during testing as well as troubleshooting to determine why a specific reminder is due for a specific patient and what resolves the reminder.

An important step is testing the reminder Dialog. The clinician should test all groups and elements in a dialog to ensure that the dialog text is clear, concise, and accurate and that the dialog works as expected. Next, the dialog should be carefully tested to ensure that the progress note text which is inserted is clear, concise, and accurate. Checking the spelling is tedious but important.

The dialog should also be tested to analyze if anything is missing. Think like a clinician: When I see patients in the clinic, which patients obviously can't have this procedure either because it is impossible or it is not indicated. A clear example is the diabetic foot exam. On first pass, most clinicians would say it's due for ALL patient with diabetes. However, it is technically not possible to perform a monofilament exam on a patient with bilateral amputees. It is also not clinically useful to perform this exam on a diabetic with a spinal cord injury which has resulted in loss of sensation to the lower extremities. Assuming the reminder passes the testing in the first phase, it is reasonable to move on to a second phase in the test account using reminders reports

Run detailed reports for short interval in a clinic where you would expect to have the reminder due. For example;

- Diabetes clinic for A1C>9 (Many uncontrolled diabetics would expect to be referred to diabetes clinic)
- Comp and Pension Clinic (high likelihood of patients who are not enrolled in primary care and may not have had reminders addressed)

Run a report listing all patients in the clinic. Check CPRS for accuracy for patients who have the reminder due and who do not have the reminder due.

Run summary and/or detailed reports in a clinic where you expect a specific reminder to be resolved. Example:

• There is a high likelihood that close to 100% of all patients seen in Retinal clinic have had a retinal examination done.

Another good clinic to check is a primary care provider whom you know to be diligent in processing clinical reminders who also has stable patient panel and is not seeing a lot of new patients.

Clinically review records as needed.

# **Other Supporting Menus**

This menu and its options are included on the Clinical Reminders Manager Menu to provide easier access to related tools from other *VISTA* packages for setting up and maintaining clinical reminders.

| Syno-<br>nym | Option                               | Option Name                       | Description  |
|--------------|--------------------------------------|-----------------------------------|--|
| ТМ           | PCE Table<br>Maintenance             | PXTT TABLE<br>MAINTENANCE         | The options on this menu are used to add or edit the clinical terminology used to represent types of data to be collected by PCE such as Health Factors, Patient Education, Immunizations, Skin Tests, etc.  |
| PC           | PCE Coordinator<br>Menu              | PX PCE<br>COORDINATOR<br>MENU     | This menu for PCE ADPACS includes all of the user interface options as well as the options for file maintenance.   |
| HS           | Health Summary<br>Coordinator's Menu | GMTS<br>COORDINATOR               | This menu includes options for creating Health Summaries, Health Summary Types, and the option to set parameters for nightly batch printing of Health Summaries by Location.  NOTE: When making Clinical Reminder option assignments, consider the assignment of the GMTS COORDINATOR menu option as a separate issue, leaving it or removing it from the Clinical Reminder menu as desired. |
| EF           | Print Blank<br>Encounter Form        | IBDF PRINT BLNK<br>ENCOUNTER FORM | This option allows the user to select a clinic, and if an encounter form is defined for use with an embossed patient card, the form will be printed.   |
| QO           | Enter/edit quick orders              | ORCM QUICK<br>ORDERS              | This option lets you create or change quick orders.  |

# **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.

| Syno-<br>nym | Option                               | Option Name             | Description  |
|--------------|--------------------------------------|-------------------------|--|
| RL           | List Reminder<br>Definitions         | PXRM DEFINITION LIST    | This option provides a brief summary of selected Clinical Reminder definitions.                        |
| RI           | Inquire about<br>Reminder Definition | PXRM DEFINITION INQUIRY | Allows a user to display a clinical reminder definition in an easy to read format.                     |
| TXL          | List Taxonomy<br>Definitions         | PXRM TAXONOMY<br>LIST   | This option lists the current definitions of all the taxonomies defined in the REMINDER TAXONOMY file. |
| TXI          | Inquire about<br>Taxonomy Item       | PXRM TAXONOMY INQUIRY   | This option provides a detailed report of a Taxonomy item's definition.                                |
| TRI          | List Reminder<br>Terms               | PXRM TERM LIST          | This option is used to give a brief listing of reminder terms.   |
| TR           | Inquire about<br>Reminder Term       | PXRM TERM<br>INQUIRY    | This option allows a user to display the contents of a reminder term in an easy to read format.        |
| SL           | List Reminder<br>Sponsors            | PXRM SPONSOR LIST       | This option is used to get a list of Reminder Sponsors.  |

# **Reminder Dialog Management**

Reminder Dialogs are used in CPRS 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 CPRS GUI.

### **Changes to Reminder Dialogs in Patch 26**

Dialogs Will Now Use Taxonomies Exclusively

- Individual codes will no longer be used as findings or additional findings
- Taxonomies for dialogs will be automatically generated
- Name example:
  - o ICD9 250.53
- Description:
  - o This taxonomy was automatically generated from Reminder Dialog IEN: 5343
- *In the past*, users created Reminder Dialogs containing ICD-9-CM and/or CPT-4 codes. When using codes as Finding Items or Additional Finding Items in CPRS, the end user didn't select codes; codes were automatically filed to VistA when the element/group was selected in the Reminder Dialog.
- A Taxonomy could only be used as a Finding Item; it created a pick list of codes for the user to pick from in CPRS. The display in CPRS was controlled by the set-up in the Reminder Finding Parameter File (#801.45) and the Reminder Taxonomy File (#811.2). These controls determined if the Taxonomy should assign codes to the current encounter or an historical encounter. The controls also determined what prompts were assigned to the Reminder Dialog in CPRS.
- New approach: Users will no longer be able to add ICD-9-CM and/or CPT-4 codes to a Reminder Dialog. Users will need to create a Taxonomy, assign codes, and then add the Taxonomy to the Reminder Dialog. To maintain similar end user functionality in CPRS, a new prompt called Taxonomy Pick List Display has been added to the dialog editor. This controls how Taxonomies should display in CPRS.
- When accessing a reminder dialog that contains an inactive taxonomy or a taxonomy that does not match the dialog structure, the taxonomy will not show in CPRS and a MailMan message will be sent to the Clinical Reminders mail group listing the problems with the dialog and the taxonomy.
- New checking functionality has been added. The checker is run automatically when the taxonomy is saved during an editing session, from the dialog checker report, and when packing up a dialog in Reminder Exchange. It will determine if there is a mismatch between a dialog and the taxonomy that is a finding item.
- Reminder dialogs will now allow taxonomies to be used in a group as a finding item. In a group the Taxonomy Pick List Display field can only be set to None, Procedure Only, or Diagnosis Only.

- The patch init conversion routine has been updated to give more detail when updating the dialog file. The
  conversion routine will also send pre and post-conversion messages listing the details of the dialogs that
  are being updated.
- Patch PXRM\*2\*26 will release updates to national dialogs that contain ICD and CPT codes. This also requires new taxonomies for the dialogs. These items will be installed using Reminder Exchange. The name of the Exchange file entry is File "PXRM PATCH 26 DIALOGS UPDATES".
- When the VA-AAA SCREENING reminder dialog was released in patch PXRM\*2\*17, it included a new local forced value named ADD TO PROBLEM LIST. Patch PXRM\*2\*26 changes the forced value to national and renames it to PXRM FV ADD TO PROBLEM LIST.

## 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 VISN exchanged entries, and local manually created entries. Nationally distributed entries have their name prefixed with PXRM or "VA-". 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.

### **Dialog Component Definitions**

#### **Dialog Elements**

A dialog element is defined primarily to represent sentences to display in the CPRS 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 PCE updates, orders, vitals, mental health tests,

and Women's Health Notifications. The updates won't occur on the CPRS 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, 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.

#### **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 CPRS GUI window until the dialog group is checked off.

#### **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 PXRM and the mental health test name. Sites may copy them and modify their local versions as needed.

#### **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 and one MH Scale. The dialog element for the test will have its RESULT GROUP 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.

#### **Prompts**

A prompt is used to have the user enter certain data for the patient. The data that is entered into the prompt will update the progress and the update other files (e.g., PXRM DATE would update the Vist file by creating a new encounter entries for an historical update). Some prompts can be restricted to certain finding items. PXRM WH NOTE TYPE will only work if the finding item or additional finding item is a WH Notification entry.

#### Forced Value

A forced value is way for forcing a certain type of update. A common use for a forced value is to automatically set a diagnosis as the primary diagnosis.

## **Reminder Dialog Management Menu**

| Syn. | Name              | Option Name                    | Description  |
|------|-------------------|--------------------------------|--|
| DP   | Dialog Parameters | PXRM DIALOG<br>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                          |
| DI   | Reminder Dialogs  | PXRM DIALOG/<br>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    | PXRM DIALOG<br>TOOLS MENU      | This sub-menu contains three options that can<br>be used as dialog maintenance tools:<br>Reminder Dialog Elements Orphan Report,<br>Empty Reminder Dialog Report, and Check<br>Reminder Dialog for invalid items |

# **Dialog Parameters**

Before you can create dialogs, the entries in the Dialog Parameters must be appropriate for the dialog you are creating. Although the autogeneration process inserts pre-defined elements from entries in the dialog parameters files, these may not all be appropriate for a specific dialog. Therefore, you should review these dialog parameters and edit them, as necessary.

| Syn. Name Option |                                    | Option Name                       | Description  |
|------------------|------------------------------------|-----------------------------------|--|
| RS               | Reminder<br>Resolution<br>Statuses | PXRM RESOLUTION<br>EDIT/INQ       | This option lists the hierarchy of resolution status values used by CPRS.  |
| HR               | Health Factor<br>Resolutions       | PXRM HEALTH FACTOR<br>RESOLUTIONS | For each health factor, one or more resolution statuses may be selected. When generating a reminder dialog for a reminder with a health factor finding, dialog items will only be generated for the resolution statuses selected.  |
| FP               | General Finding Type Parameters    | PXRM PARAMETER EDIT               | This option lists the finding parameters used by Create Dialog from Reminder Definition.   |
| FI               | Finding Item<br>Parameters         | PXRM FINDING ITEM                 | If a reminder finding item will always be resolved by the same sentence (dialog element) or set of sentences (dialog group), an entry should be made in the finding item parameter file linking the reminder finding item to the dialog element or group. When a reminder dialog is generated, it will include the sentences defined in this file instead of generating a dialog using the FINDING TYPE PARAMETERS file. |

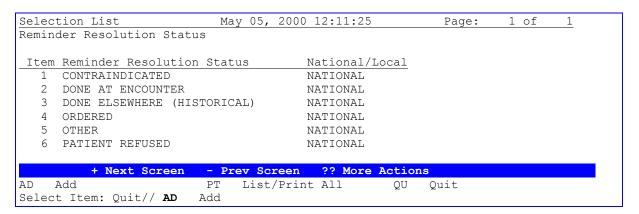
#### **Reminder Resolution Statuses**

Reminder resolution statuses are maintained using this option. A national set of resolution statuses is released with the reminder package. Local resolution statuses may be defined, but must be linked to a national status.

The first screen in this option displays the existing resolution statuses:

| Selec  | tion List                     | May 05, 2000 15:15:26 | Page:  | 1 of | 1 |
|--------|-------------------------------|-----------------------|--------|------|---|
| Remin  | der Resolution Status         |                       |        |      |   |
|        |                               |                       |        |      |   |
| Item 1 | Reminder Resolution Status    | National/Local        |        |      |   |
| 1      | CONTRAINDICATED               | NATIONAL              |        |      |   |
| 2      | DONE AT ENCOUNTER             | NATIONAL              |        |      |   |
| 3      | DONE ELSEWHERE (HISTORICAL)   | NATIONAL              |        |      |   |
| 4      | INACTIVATE                    | NATIONAL              |        |      |   |
| 5      | INFORMATIONAL                 | NATIONAL              |        |      |   |
| 6      | LOCAL                         | LOCAL                 |        |      |   |
| 7      | ORDERED                       | NATIONAL              |        |      |   |
| 8      | OTHER                         | NATIONAL              |        |      |   |
| 9      | OTHER - DUE TO CLINICIAN DECI | SION LOCAL            |        |      |   |
| 10     | OTHER - DUE TO COHORT AGE     | LOCAL                 |        |      |   |
| 11     | PATIENT REFUSED               | NATIONAL              |        |      |   |
|        | + Next Screen - Prev Sc       | reen ?? More Actions  |        |      |   |
| AD 2   | Add PT List                   | :/Print All Q         | U Quit |      |   |
| Selec  | t Item: Quit//                |                       |        |      |   |

#### AD - Add a new local resolution status



```
Select new RESOLUTION STATUS name: ?
Answer with REMINDER RESOLUTION STATUS NAME
Choose from:
CONTRAINDICATED
DONE AT ENCOUNTER
DONE ELSEWHERE (HISTORICAL)
ORDERED
OTHER
PATIENT REFUSED

You may enter a new REMINDER RESOLUTION STATUS, if you wish
Answer must be 3-40 characters in length.

Select new RESOLUTION STATUS name: OTHER-DUE TO LIFE EXPECTANCY
Are you adding 'OTHER-DUE TO LIFE EXPECTANCY' as
a new REMINDER RESOLUTION STATUS (the 7TH)? No// Y (Yes)
```

```
NAME: OTHER-DUE TO LIFE EXPECTANCY Replace <Enter>
DESCRIPTION:
 1>Other due to life expectancy
  2><Enter>
EDIT Option: <Enter>
ABBREVIATED NAME: OTHER - LIFE EXPECT
REPORT COLUMN HEADING: OTHER - LIFE EXPECT
INACTIVE FLAG: <Enter>
This resolution status must be linked to a national status
SELECT NATIONAL RESOLUTION STATUS: OTHER
         ...OK? Yes// <Enter> (Yes)
Selection List
                               May 05, 2000 12:15:50
                                                                        1 of
                                                               Page:
Reminder Resolution Status
Item Reminder Resolution Status
                                        National/Local
     CONTRAINDICATED
                                        NATIONAL
   2 DONE AT ENCOUNTER
                                        NATIONAL
   3 DONE ELSEWHERE (HISTORICAL)
                                        NATIONAL
   4 ORDERED
                                        NATIONAL
   5 OTHER
                                        NATIONAL
   6 OTHER-DUE TO LIFE EXPECTANCY
                                        LOCAL
   7 PATIENT REFUSED
                                        NATIONAL
                         - Prev Screen ?? More Actions
          + Next Screen
    Add
                               List/Print All
Select Item: Quit// <Enter>
```

#### **ED - Edit resolution status**

When you select a specific resolution status (for example, #6 in the list above), details of that status are displayed. You can then perform any of the actions listed below on that status. National statuses may not be added or deleted. Column headings are used in Reminder Activity Reports. Local statuses must be mapped to a national status.

```
Edit List
                   May 05, 2000 12:18:05
                                                            Page:
                                                                     1 of
Reminder Resolution Status Name:
                                 OTHER - DUE TO LIFE EXPECTANCY
Resolution Status: OTHER - DUE TO LIFE EXPECTANCY
Resolution Status Description
    Other due to life expectancy.
  Related National Status: OTHER
         Abbreviated name: OTHER - LIFE EXPECT
    Report Column Headings: OTHER - LIFE EXPECT
            Inactive Flag:
         + Next Screen - Prev Screen ?? More Actions
    Edit
                         INQ Inquiry/Print
                                                   OU
                                                        Quit
Select Action: Quit// ED
```

```
Edit List May 05, 2000 12:18:05 Page: 1 of 1
REMINDER RESOLUTION STATUS NAME: OTHER-DUE TO LIFE EXPECTANCY

Resolution Status: OTHER-DUE TO LIFE EXPECTANCY

Resolution Status Description
Other due to life expectancy
```

Related National Status: OTHER

Abbreviated name: OTHER - LIFE EXPECT Report Column Headings: OTHER - LIFE EXPECT

Inactive Flag:

+ Next Screen - Prev Screen ?? More Actions

ED Edit INQ Inquiry/Print

Select Action: Quit// ED Edit

NAME: OTHER-DUE TO LIFE EXPECTANCY Replace <Enter>

DESCRIPTION:

1>Other due to life expectancy

EDIT Option: <Enter>

ABBREVIATED NAME: OTHER - LIFE EXPECT// <Enter>

REPORT COLUMN HEADING: OTHER - LIFE EXPECT// OTHER - LIFE EXPECT with OTHER -

LIFE EXP. <Enter> INACTIVE FLAG: <Enter>

Edit List May 05, 2000 12:20:02 1 of 1 Page: REMINDER RESOLUTION STATUS NAME: OTHER-DUE TO LIFE EXPECTANCY

Resolution Status: OTHER-DUE TO LIFE EXPECTANCY

Resolution Status Description Other due to life expectancy

Related National Status: OTHER
Abbreviated name: OTHER - LIFE EXPECT
Report Column Headings: OTHER - LIFE EXP.

Inactive Flag:

+ Next Screen - Prev Screen ?? More Actions

ED Edit INQ Inquiry/Print QU Quit

Select Action: Quit// ED Edit

NAME: OTHER-DUE TO LIFE EXPECTANCY Replace @

SURE YOU WANT TO DELETE THE ENTIRE 'OTHER-DUE TO LIFE EXPECTANCY' REMINDER R Y (Yes)

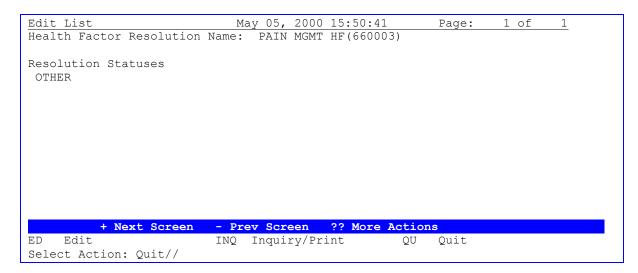
#### **Health Factor Resolutions**

This option this is used when creating a reminder dialog from a reminder definition. For reporting purposes, all health factors included in CPRS reminder dialogs must be mapped to a resolution status. This option is used to maintain these mappings. If a health factor is not mapped to a resolution status, it will be ignored by dialog generation (except where an entry exists in the FINDING ITEM PARAMETER file #801.43).

The first screen in this option displays the current mappings:

| Selection List May 05, 2000 15:39:50 Page: 1 of | 1  |
|---|----|
| Health Factor Resolutions                       |    |
| Item Health Factors Resolution Status           |    |
| 1 ALCOHOL USE OTHER                             |    |
| 2 BINGE DRINKING OTHER                          |    |
| 3 CURRENT SMOKER PATIENT REFUSED                |    |
| 4 DRINKING ALONE OTHER                          |    |
| 5 FAMILY HX OF ALCOHOL ABUSE OTHER              |    |
| 6 NUTRITION OTHER                               |    |
| 7 PAIN MGMT OTHER                               |    |
| 8 TOBACCO DONE AT ENCOUNTER/DONE ELSEWHER       | .E |
|   |    |
|   |    |
|   |    |
|   |    |
|   |    |
| + Next Screen - Prev Screen ?? More Actions     |    |
| AD Add PT List/Print All QU Quit                |    |
| Select Item: Quit//                             |    |

When you select a health factor resolution by number, an edit screen appears that displays the related resolution statuses and lets you edit or delete them. A health factor may be associated with more than one resolution status.



## Allocating Resolution Statuses for all Health Factors on a reminder

The option HR Health Factor Resolutions allows selection of reminders:

```
May 05, 2000 10:14:51
Selection List
                                                                      1 of
                                                                              2
                                                              Page:
Health Factor Resolutions
Item Health Factors
                                      Resolution Status
     ACTIVATE TOBACCO USE SCREEN
                                       OTHER
   2 ALCOHOL USE
                                       OTHER
   3 BINGE DRINKING
                                       OTHER
   4 CURRENT NON-SMOKER
                                       OTHER
     CURRENT SMOKER
                                       OTHER
   6 CURRENTLY PREGNANT
                                       OTHER
     DRINKING ALONE
                                       OTHER
   8 FAMILY HX OF ALCOHOL ABUSE
                                       OTHER
   9 INACTIVATE BREAST CANCER SCREEN
                                      OTHER
  10
     INACTIVATE EXERCISE SCREEN
                                       OTHER
     INACTIVATE FOBT CANCER SCREEN
  11
                                       OTHER
     INACTIVATE PNEUMOCOCCAL VACCINE
                                      OTHER
     LIFETIME NON-SMOKER
                                       OTHER
     LIFETIME NON-TOBACCO USER
                                       OTHER
                                       DONE AT ENCOUNTER
  15 NO RISK FACTORS FOR HEP C
     NUTRITION
                                       OTHER
          + Next Screen - Prev Screen ?? More Actions
                                                   QU
AD Add
                         PT
                              List/Print All
                                                       Quit
Select Item: Next Screen// AD Add
```

```
I Individual Health Factor
A All Health Factors for a Selected Reminder

SELECTION OPTION: I// All Health Factors for a Selected Reminder

SELECT REMINDER: TOBACCO USE SCREEN

HEALTH FACTORS: <Enter>

ACTIVATE TOBACCO USE SCREEN (Resolution defined)
INACTIVATE TOBACCO USE SCREEN

MODIFY resolution status for ACTIVATE TOBACCO USE SCREEN: N//<Enter> O
ADD resolution status for INACTIVATE TOBACCO USE SCREEN: N// YES
NAME: INACTIVATE TOBACCO USE SCREEN// <Enter>
Select RESOLUTION STATUS: OTHER
...OK? Yes// <Enter> (Yes)

Select RESOLUTION STATUS: <Enter>
```

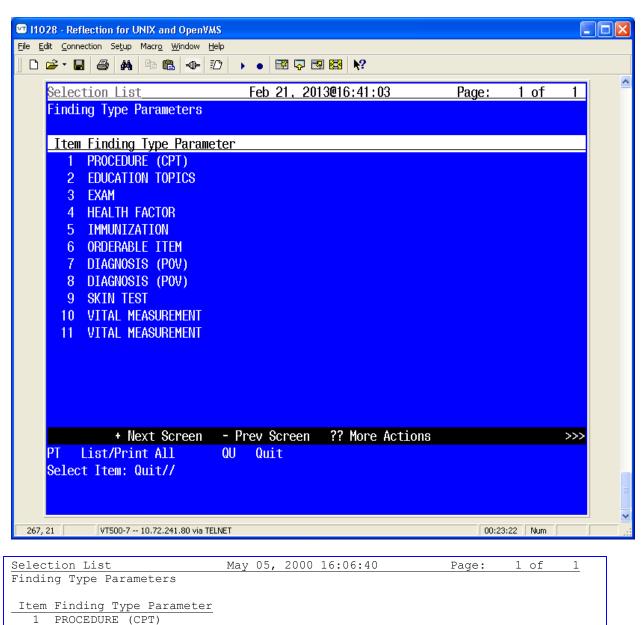
## **General Finding Type Parameters (FP)**

This option allows display of the REMINDER FINDING TYPE PARAMETER file #801.45 used in generating reminder dialogs. There is limited edit on this file to allow customization of prefix and suffix text. Parameters may also be disabled if not required at your site.

The file is structured by finding type and within that resolution status. A generated reminder dialog will include a sentence (dialog element) for each resolution type enabled in the finding type parameter file.

The sentence text is constructed as: prefix\_finding item name\_suffix. Health factors are treated slightly differently. Health factors are linked to resolution statuses by the Health Factor Resolutions option. For reminders with health factors, sentences are only generated if there is a resolution mapping AND an enabled finding type parameter.

The first screen in this option displays the finding types held in this file:



```
2 EDUCATION TOPICS
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//
```

When you select an item from this screen, all of the finding type parameters for the finding type selected are displayed. The reminder dialog generation process uses this file to create dialog as follows:

For each finding item on the reminder, the REMINDER FINDING TYPE PARAMETER file is checked to see if there are any "enabled" resolution statuses for the finding type. If an enabled resolution status exists, then a dialog element (sentence) is added to the reminder dialog with sentence text generated from the finding name concatenated with prefix and suffix text

Example: Patient had ALCOHOL USE education at this encounter

Clicking on the checkbox displayed with this sentence in CPRS causes the finding item (from the original reminder definition) to be posted to this patient's record.

Additional prompts are also added to the dialog element as specified in the finding type parameter file.

Note: Dialog elements created by reminder dialog generation are given a standard name based on the finding type, finding name, and resolution status (from the REMINDER FINDING TYPE PARAMETER file)

### **Example: ED ALCOHOL USE DONE ELSEWHERE**

The dialog elements created are shared by reminder dialogs for reminders with the same finding item.

The example below is the finding type parameter for education findings:

```
May 05, 2000 16:11:10
Finding Type Parameter List
                                                                              1
                                                             Page:
                                                                      1 of
Finding Type Parameter Name: ED - EDUCATION TOPIC
  Resolution Status
                            Prefix//Suffix & Prompts/Values/Actions
                                                                      Status
1 DONE AT ENCOUNTER
                             Patient had/
                                                                     Enabled
                             /at this encounter
                             1] PXRM COMMENT
                             2] PXRM LOU (EDUCATION)
2 DONE ELSEWHERE (HISTORICAL) Patient indicated/
                                                                    Disabled
                             /was received outside the VA
                             1] PXRM COMMENT
                             2] PXRM VISIT DATE
                             3] PXRM OUTSIDE LOCATION
3 PATIENT REFUSED
                             Patient declined/
                                                                    Disabled
                             /at this encounter
                             1] PXRM REFUSED (forced value)
                             2] PXRM COMMENT
         + Next Screen - Prev Screen ?? More Actions
INQ Inquiry/Print
                          QU
                               Quit
Select number of Resolution Status to Edit: Quit//
```

If a number is entered to select a resolution status, the following fields can be edited:

```
ED - EDIT FINDING TYPE PARAMETER

Finding Type Parameter Name: ED - EDUCATION TOPIC

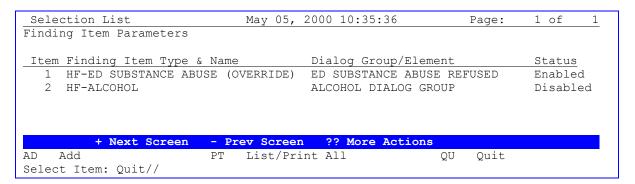
RESOLUTION STATUS: DONE AT ENCOUNTER

DISABLE RESOLUTION STATUS: DISABLED// <Enter>
PREFIX TEXT: Patient had// <Enter>
SUFFIX TEXT: at this encounter// <Enter>
Select ADDITIONAL PROMPTS: PXRM LOU (EDUCATION)// <Enter>
DISABLE ADDITIONAL PROMPT: <Enter>
OVERRIDE PROMPT CAPTION: <Enter>
START NEW LINE: <Enter>
EXCLUDE FROM PN TEXT: <Enter>
REQUIRED: <Enter>
```

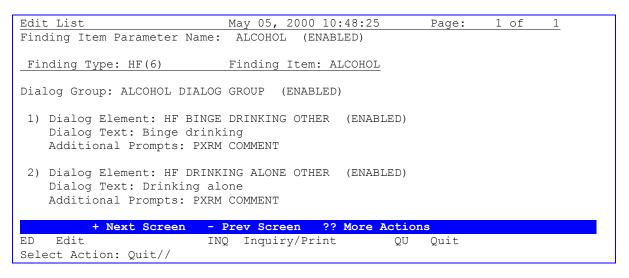
## Finding Item Parameters (FI)

This file allows reminder finding items to be linked to a specific dialog element (i.e. sentence and prompts) or a group of dialog elements. The reminder dialog generated for a reminder with a finding item entry in this file will include the dialog element or dialog group specified in this file instead of creating a dialog using the REMINDER FINDING TYPE PARAMETER file.

The first screen in this option displays the finding items held in this file:



When you select a specific finding item parameter, details of the selected finding item parameter are displayed. You can then edit:



In the example above, the dialog elements have been previously generated automatically as part of another reminder dialog. A dialog group (ALCOHOL DIALOG GROUP) has then been created in Dialog Edit using these existing dialog elements. Finally an entry has been created in the finding item parameter to link HF(6) to the dialog group.

## **Reminder Dialogs**

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 autogenerate a dialog for the reminder or link the reminder to an existing dialog. Alternatively, you can select the action CV Change View, which will allow you to select from any of the following:

#### **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)

Reminder dialogs are linked to reminders by a field (REMINDER DIALOG) on the reminder definition. The reminder dialog may be executed by CPRS 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, in the Dialog view. The reminder dialog may be created manually or autogenerated from the reminder definition using the General Finding Type Parameters.

#### 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 CPRS.  |  |
| ED     | Edit/Delete Dialog       | Edit or delete this reminder dialog. Allows addition and deletion of existing dialog elements from this reminder dia |  |

|     |   | Allows the sequence numbers to be changed. Also enable/disable dialog. |
|-----|---|--|
| INQ | Inquiry/Print (for Reminder Dialogs only) | Print details of this reminder dialog.                                 |

## **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. When editing any of the sub items, a list is presented that displays any other dialogs, groups, or elements that are using the item that is being edited. 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*
      Seq.
               Dialog Summary
           Element: VA-TEXT DEPRESSION EVAL INSTRUCTIONS
 2
           Element: VA-TEXT BLANK LINE WITH TEMPLATE FIELD
  3
          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
       12.5
              Element: VA-TEXT PHQ 9
  6
       15 Element: VAA-TEXT BLANK LINE
       20 Group: VA-GP DEP ASSESSMENT RESULTS
         + Next Screen - Prev Screen ?? More Actions
ADD
    Add Element/Group
                          DS Dialog Summary
                                                    INQ
                                                        Inquiry/Print
                         DO
СО
     Copy Dialog
                               Dialog Overview
                                                    OU
                                                         Quit
DD
     Detailed Display
                         DT
                               Dialog Text
                         ΕD
                              Edit/Delete Dialog
    Progress Note Text
Select Item: Next Screen//
```

## **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
REMINDER DIALOG NAME: VA-DEPRESSION ASSESSMENT [NATIONAL] *LIMITED EDIT*
Item Seq. Dialog Overview
          Element: VA-TEXT DEPRESSION EVAL INSTRUCTIONS
 2
          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
      24 Element: VAA-TEXT BLANK LINE
      30 Element: VA-HF PT FOLLOWED FOR DEPRESSION
         + Next Screen - Prev Screen ?? More Actions
                                                  INQ Inquiry/Print
ADD
    Add Element/Group
                         DS Dialog Summary
                             Dialog Overview
CO
    Copy Dialog
                         DO
                                                  QU
                                                       Quit
DD
    Detailed Display
                        DT Dialog Text
    Progress Note Text
                        ED
                            Edit/Delete Dialog
Select Item: Next Screen//
```

#### **Result Dialogs**

Result dialogs contain progress note text that is added to a progress note, based on the results of dialog processing. NOTE: Only Mental Health Instrument results can be used.

Some reminder definitions have Finding Items for MH Instruments. When dialog entries are generated for these reminders, a dialog element will be created for each MH Instrument finding. If a site doesn't want to see mental health instrument questions and answers added into the progress note, they can control whether to include the questions and answers by answering Yes to the EXCLUDE MH TEST FROM PN TEXT field in the dialog element. If a site wants the mental health instrument questions and answers added to the progress note text, the reminder manager must answer No at the the EXCLUDE MH TEST FROM THE PN TEXT field.

```
EXCLUDE MH TEST FROM PN TEXT 0;14 SET

'1' FOR YES;

'0' FOR NO;

HELP-PROMPT: Enter Y to stop test questions and answers from being added to the note text.

DESCRIPTION: This flag is used to control whether or not mental health test questions and answers will be excluded from the progress note text when the test is taken.
```

When the user enters answers to a mental health instrument, the answers are automatically passed to the Mental Health package to calculate a result, which may be referenced as SCORE. For example, CAGE test has a SCORE from 1-4 and GAF has a SCORE from 1-99.

For most Mental Health tests, progress note text can be automatically generated that summarizes or includes the results (SCORE). Default text is distributed in the REMINDER DIALOG file #801.41 for sites to use for each Mental Health instrument processed in the reminder resolution process. This text may be copied and modified to reflect the site's preferences for text. The default text is defined in Mental Health Result Dialog Elements. The reminder manager must add the Result Dialog Group to the MH Instruments Dialog Element RESULT GROUP SEQUENCE field. This result dialog may define further processing to conditionally generate progress note text based on the SCORE.

The Result Dialog Elements provide a number of fields for flexible use of progress note text.

RESULT CONDITION: Enter M code which, when evaluated to 1, would generate the progress note text and create finding entries defined in the RESULT DIALOG ELEMENT. Currently, The logic can only use the value stored in an M local variable called SCORE.

PROGRESS NOTE TEXT: Enter the word processing text to add to the progress note. Use a blank space in the first character of a line when you want the line to be printed as it appears in the text. The "|" (vertical bar) may be used around the M variable SCORE to include the score within the text (MH Tests only). Response values may be included in the text for the AIMS test only, and limited to the variables specified in the default AIMS text.

## **Example of one of the CAGE Result Dialog Elements distributed with the package:**

```
NAME: CAGE RESULT ELEMENT 1 Replace <Enter>
RESULT CONDITION: I SCORE<2// <Enter>
PROGRESS NOTE TEXT: <Enter>
An alcohol screening test (CAGE) was negative (score=|SCORE|).
```

## **Mental Health Result Dialogs**

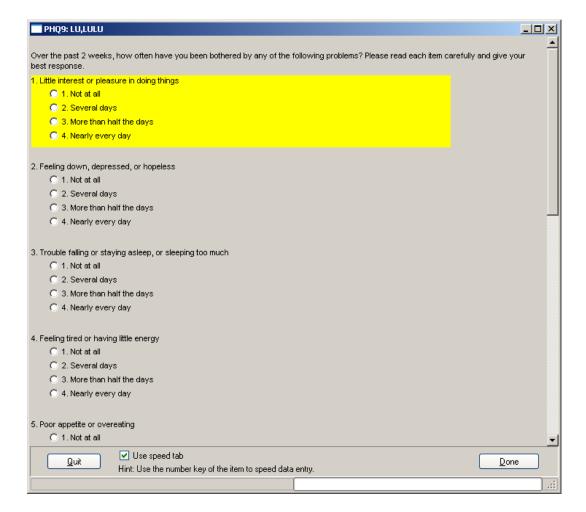
Dialogs for mental health tests can be set up in Clinical Reminders. A reminder definition can include any mental health instrument.

#### Changes to be made by CPRS 29

CPRS will use the MH dlls exclusively to evaluate reminders and not rely on the older mental health reminder dialogs when the MH dlls are not installed on the client machine. This change will be part of CPRS v29.

This change will affect the warning message presented to the user along with one parameter and one RPC. The parameter and RPC will no longer be used and therefore will be removed from the system upon install of v29. The parameter is OR USE MH DLL. The RPC is ORQQPXRM MHDLLDMS.

With CPRS 27 and MH DLL:



#### **IMPORTANT NOTE:**

Mental Health patches YS\*5.01\*103 and YS\*5.01\*105 included a number of new instruments. Of these new instruments, the following utilize complex scoring algorithms.

| 24 MHA tests with complex scoring or reporting with the release of patches: YS*5.01*103 and YS*5.01*105 |           |          |         |  |  |
|---|-----------|----------|---------|--|--|
| AUDC  | BAI       | BAM      | BAM-C   |  |  |
| BAM-R   | BASIS-24  | BDI2     | BHS     |  |  |
| BSI   | CDR       | FAST     | ISMI    |  |  |
| MINICOG   | MMPI-2-RF | NEO-PI-3 | PC PTSD |  |  |
| PHQ-2   | POQ       | QOLI     | SBR     |  |  |
| STMS  | VR-12     | WHODAS 2 | WHYMPI  |  |  |

Eighteen of these do not score accurately in Clinical Reminders and Health Summary.

| ĺ | 18 MHA te       | ests not scoring accurately | in Clinical Reminders and Health Summary |
|---|-----------------|-----------------------------|--|
|   | <b>packages</b> | <del>-</del>                |  |

(BAI) Beck Anxiety Inventory

(BAM-C) Brief Addiction Monitor Consumption

(BAM-R) Brief Addiction Monitor Revised

(BASIS-24) Behavior And Symptom Identification Scale-24

(BHS) Beck Hopelessness Scale

(BSI) Beck Scale for Suicide Ideation

(CDR) Clinical Dementia Rating

(FAST) Functional Assessment Stage Test

(ISMI) Internalized Stigma of Mental Illness

**MINICOG** 

(MMPI-2-RF) Minnesota Multiphasic Personality Inventory - Restructured Form

(NEO-PI-3) NEO-Personality Inventory

(POQ) Pain Outcomes Questionnaire

(QOLI) Quality of Life Index

(STMS) Short Test of Mental Status

(VR-12) Veterans Rand 12 Item Mental Health Survey

(WHODAS 2) World Health Organization Disability Assessment Schedule

(WHYMPI) West Haven-Yale Multidimensional Pain Inventory

#### PROBLEMS WITH REMINDER DIALOGS

If you administer any of these 18 instruments within a Reminder Dialog template, the score that is displayed in the Progress Note will be incorrect. However, the correct score is displayed when reviewing the results in MHA3.

#### PROBLEMS WITH MH SCORE HEALTH SUMMARY COMPONENT

The scores of these instruments will not display correctly using the MH SCORE Health Summary component, regardless of the tool used to administer the instrument (Reminder Dialog template OR MHA3 GUI). If you review the scores under the Reports Tab, via an ADHOC Health Summary using the MH SCORE item, the scores displayed are incorrect. Any Health Summary Patient Data objects that have been created, using the MH SCORE health summary element with these instruments will display incorrect scores as well in note templates using the Patient Data object.

#### PROBLEMS WITH REMINDER DEFINITIONS

Any reminder definitions for Coversheet reminders or reports using the above instruments as finding items would display incorrect scores in the Clinical Maintenance output. Any Conditions using the scores of these instruments would evaluate incorrectly.

It is strongly suggested that sites NOT use the above instruments within a Reminder Dialog template for administration and NOT use them in any Health Summary. They should NOT be used in a Reminder Definition for any purpose other than verifying that the instrument was administered. In other words, there should be no use of the score.

#### **Dialog Branching Logic**

Branching/conditional logic allows display of alternate checkboxes in dialogs (as seen in CPRS), depending on whether defined conditions meet certain criteria.

The following three fields 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 occur. 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 CPRS to determine if the Dialog text should be stored between patients or not. This field must have a value of YES in order for branching logic to work.

#### **Process**

CPRS 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, CPRS will then look at the Replacement Reminder Element/Group Field. If something is defined here, CPRS will display the element/group that is defined. If nothing is defined in the Replacement Reminder Element/Group field, then CPRS will not display the current element/group.

#### Example 1

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

```
NAME: VA-WH PAP RESULTS//
DISABLE:
CLASS: NATIONAL//
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:
  No existing text
  Edit? NO//
EXCLUDE FROM PROGRESS NOTE: NO//
SUPPRESS CHECKBOX: SUPPRESS//
Select ADDITIONAL FINDINGS:
RESULT GROUP/ELEMENT:
```

```
Select SEQUENCE: 5//
SEQUENCE: 5//
ADDITIONAL PROMPT/FORCED VALUE: PXRM WH PAP RESULT PROMPT
//
OVERRIDE PROMPT CAPTION: This report indicates:
Replace
START NEW LINE: YES//
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 UNPROCCESS
```

If the reminder term returns a value of false, the dialog element AGP WH PAP SMEAR REVIEW UNPROCESS will display in CPRS. 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:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
FINDING ITEM:
GROUP CAPTION:
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:
```

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

## **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).

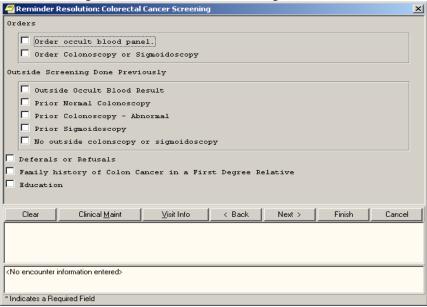
Element 1 in the replacement group has a reminder term that looks for the sex=M. If true, element 1 is displayed with the instructions that the man has a score of 4-7 and needs an intervention. If false, then the replacement element is displayed which has instructions that the woman's score was 3-7.

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.

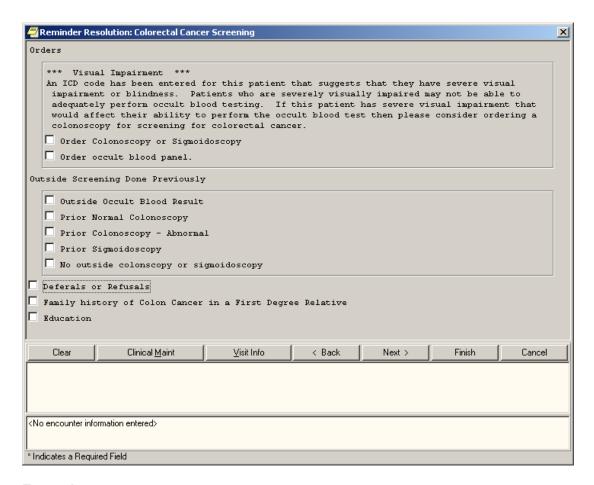
For example, the reminder dialog could show one version for patients who had never had a pneumovax administration before, and then if they had their one shot, and needed the booster 5 years later because of their age, the dialog could show a totally different version, including different health factors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

## Example 3

Standard dialog for Colorectal cancer screening Reminder Resolution: Colorectal Cancer Screening

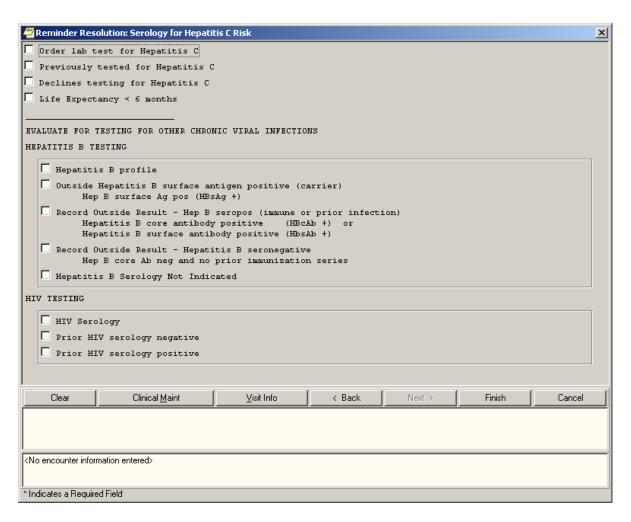


Same reminder, but the first dialog group is replaced by a different one if the patient has an ICD code that suggests visual impairment.

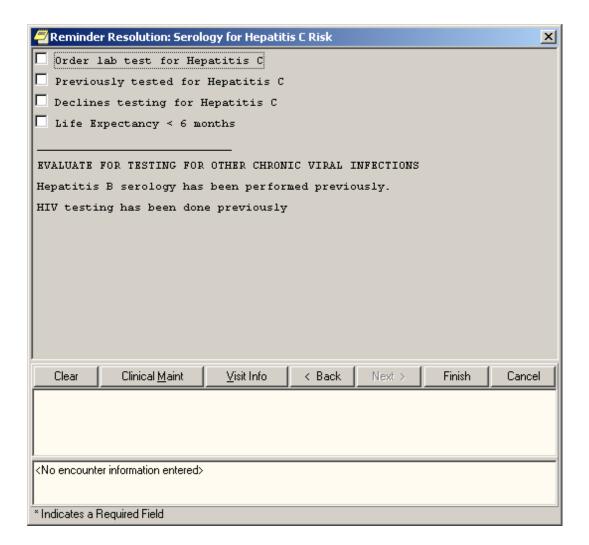


## **Example 4**

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.



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.

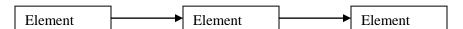


#### **Branching logic problem**

Ways that are acceptable 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.



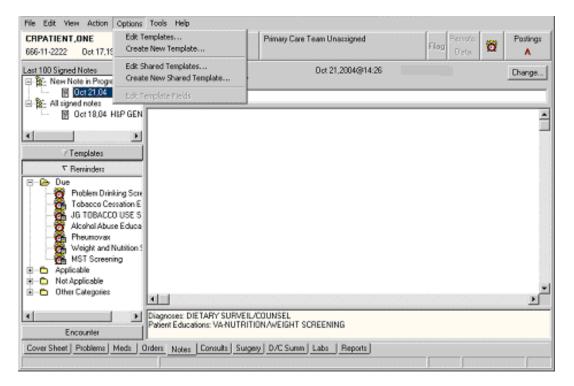
Reported questions/problems and solutions:

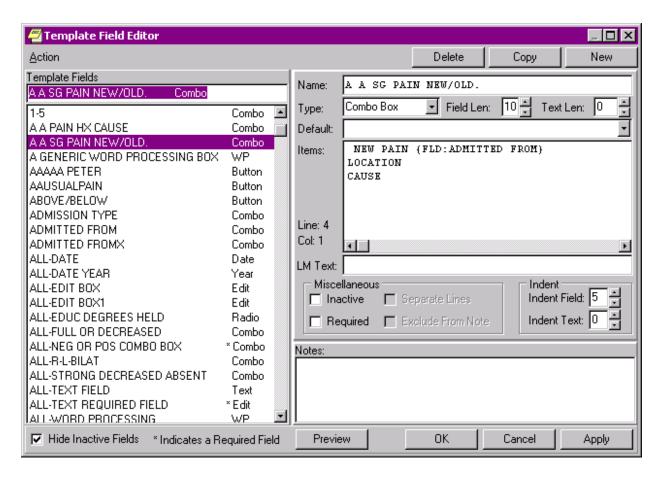
- **Q** I assigned a Reminder Term, added a value to the Reminder Term Status field, and assigned a replacement element and the dialog is not changing from patient to patient.
- **A** Make sure the PATIENT SPECIFIC field is set to True; this field can be found by editing the dialog itself.
- **Q** I 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.

## **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 CPRS GUI Notes tab:

The Edit Template Fields option can be used to create sets of checkboxes, radio buttons, etc., which can be used in reminder dialogs.





In order to use the Edit Template Fields option to edit template fields used in Reminder Dialogs, the following are required:

- 1. New option: TIU Template Reminder Dialog Parameter, on the CPRS Parameter menu on the Reminder Manager Menu
- 2. TIU parameter TIU FIELD EDITOR CLASSES
- 3. User Class of Clinical Coordinator

#### **TIU parameter TIU FIELD EDITOR CLASSES**

```
Select OPTION NAME: xpar edit
        XPAR EDIT BY TEMPLATE
                                    Edit Parameter Values with Template
        XPAR EDIT KEYWORD
                                Edit Parameter Definition Keyword
                                                                      edit
                             Edit Parameter Values
        XPAR EDIT PARAMETER
                                                            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 Ed
itor User Classes
TIU FIELD EDITOR CLASSES may be set for the following:
                       USR
    1
        User
                              [choose from NEW PERSON]
         Service
                       SRV
                              [choose from SERVICE/SECTION]
```

```
Division
                     DIV
                             [choose from INSTITUTION]
         Divio-
System
                       SYS [DVF.FO-SLC.MED.VA.GOV]
     5
         Package
                       PKG [TEXT INTEGRATION UTILITIES]
Enter selection: u User NEW PERSON
Select NEW PERSON NAME: CRUSER 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//
User Class: Clin
        Clinical And Laboratory Immuno CLINICAL AND LABORATORY IMMUNOLOGIST Clinical Biochemical Geneticis CLINICAL BIOCHEMICAL GENETICIST
        Clinical Biochemical Molecular CLINICAL BIOCHEMICAL MOLECULAR
GENETICIST
        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
Select Sequence Number: ?
                                           Value
     Sequence Number
                                           CLINICAL COORDINATOR
Select Sequence Number:
```

#### **User Class of Clinical Coordinator**

```
Select OPTION NAME: TIU Maintenance Menu TIU IRM MAINTENANCE MENU
TIU Maintenance Menu
         TIU Parameters Menu ...
         Document Definitions (Manager) ...
         User Class Management ...
   3
   4
         TIU Template Mgmt Functions ...
         TIU Alert Tools
Select TIU Maintenance Menu Option: 3 User Class Management
                     --- User Class Management Menu ---
         User Class Definition
         List Membership by User
         List Membership by Class
         Manage Business Rules
Select User Class Management Option: 2 List Membership by User
Select USER: CRPROVIDER, ONE CHIEF, MEDICAL SERVICE
                             Jan 23, 2003@14:55:15
Current User Classes
                                                                  Page: 1 of
                                CRPROVIDER, ONE
                                                                   2 Classes
    User Class
                                                        Effective Expires
    Clinical Coordinator
                                                        04/28/00
    Physician
                                                        11/16/98
                                                                   04/11/15
         + Next Screen - Prev Screen ?? More Actions
    Add
                              Remove
                                                        Quit
                              Change View
```

# 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 Cl            | ass                        |                           |             |
| 2 Business Rule Manager              |                            | 09/22/0                   |             |
| 3 Medical Administration             |                            | 09/11/0                   | )1          |
| 4 Social Worker Superviso            | r                          |                           |             |
|                                      |                            |                           |             |
|                                      | rev Screen ?? More Actions |                           |             |
| Add                                  | Remove                     | Quit                      |             |
| Edit                                 | Change View                |                           |             |
| Select Action: Quit// add            | Add                        |                           |             |
| 0.1                                  |                            |                           |             |
| Select USER CLASS: Clin              | town Towns CLINICAL SYS I  | 3 D O D 3 E O D 1/2 - T 1 | MINOLOGI OF |
|                                      | tory Immuno CLINICAL AND L |                           |             |
|                                      | l Geneticis CLINICAL BIOCH |                           |             |
|                                      | l Molecular CLINICAL BIOCH | EMICAL MOLEC              | CULAR       |
| GENETICIST                           | NICH CIERV                 |                           |             |
| 4 Clinical Clerk CLI                 |                            |                           |             |
|                                      | r CLINICAL COORDINATOR     |                           |             |
| Press <return> to see more,</return> | •                          |                           |             |
| CHOOSE 1-5: 5 CLINICAL COOR          |                            |                           |             |
| EFFECTIVE DATE: t (JAN 23,           | ·                          |                           |             |
| EXPIRATION DATE: t+1 (JAN 2          | 4, 2003)                   |                           |             |
| Select Another USER CLASS:           |                            |                           |             |
|                                      |                            |                           |             |
| Rebuilding membership list.          |                            |                           |             |
| Current User Classes                 | Jan 23, 2003@14:55:15      | Page:                     | 1 of 1      |
| Current Oser Classes                 | CRUSER, TWO                |                           | Classes     |
| User Class                           | CROBLITY I WO              | Effective                 |             |
| 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                  | 31,20,00    |
| 5 Social Worker Superviso            | -                          | 33,11,01                  |             |
|                                      | Prev Screen ?? More Actio  | ns                        |             |
| Add                                  | Remove                     | Ouit                      |             |
| Edit.                                | Change View                | Quit                      |             |
| 2410                                 |                            |                           |             |

## **Dialog Reports**

| <b>Option Name</b> |             | Synonym | Description                            |
|--------------------|-------------|---------|--|
| Reminder Dialog    | PXRM DIALOG | OR      | This option is used to run the         |
| Elements Orphan    | ORPHAN REP  |         | Reminder Dialog Elements Orphan        |
| Report             | ORT         |         | Report.                                |
| Reminder Dialog    | PXRM DIALOG | SEA     | This option enables the user to search |
| Search Report      | SEARCH      |         | for Reminder Dialogs containing        |
|                    | REPORT      |         | search criteria define by the user.    |
| Empty Reminder     | PXRM DIALOG | ER      | This Option will run the Empty         |
| Dialog Report      | EMPTY       |         | Reminder Dialog report.                |
|                    | REPORT      |         |  |
| Check Reminder     | PXRM DIALOG | СН      | This option runs a routine that checks |
| Dialog for invalid | CHECKER     |         | a selected reminder dialog for         |
| items              |             |         | invalid sub-dialog items, invalid      |
|                    |             |         | finding items, invalid TIU Objects,    |
|                    |             |         | and/or invalid Template Fields.        |
| Check All Active   | PXRM DIALOG | ALL     | This option screens all active         |
| Reminder Dialog    | CHECKER ALL |         | reminder dialogs for invalid items.    |
| for invalid items  |             |         |  |
|                    |             |         |  |

## **Reminder Dialog Elements Orphan Report**

```
Select Reminder Managers Menu Option: DM Reminder Dialog Management
         Dialog Parameters ...
  DI
         Reminder Dialogs
  DR
         Dialog Reports ...
         Inactive Codes Mail Message
Select Reminder Dialog Management Option: DR Dialog Reports
         Reminder Dialog Elements Orphan Report
       Empty Reminder Dialog Report
  CH
        Check Reminder Dialog for invalid items
  ALL Check All Reminder Dialogs for invalid items
Select Dialog Reports Option: OR Reminder Dialog Elements Orphan Report
DEVICE: HOME// ;;99999999 ANYWHERE
                                    Right Margin: 80//
```

```
ZZVA-WV TEST FORCED VALUE
   a 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
   PXRM AIMS RESULT GROUP
   PXRM AUDC RESULT GROUP
   PXRM AUDIT RESULT GROUP
   PXRM BDI RESULT GROUP
   PXRM CAGE RESULT GROUP
   PXRM DOM80 RESULT GROUP
   PXRM DOMG RESULT GROUP
   PXRM MISS RESULT GROUP
   PXRM 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 PXRM COMMENT
   PR SG PAIN SCREENING NOT DONE
   PXRM FORCE VALUE TEST
   PXRM WH REVIEW RESULT COMMENT
   PXRM*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
PXRM FORCE DATE TEST
PXRM WH NOTIFICATION TYPE
PYRM SERIES FORCED
WH NOTIFICATION FORCE VALUE
a new forced value

Enter RETURN to continue or '^' to exit:

OR Reminder Dialog Elements Orphan Report
ER Empty Reminder Dialog Report
CH Check Reminder Dialog for invalid items
```

#### **Reminder Dialog Search Report**

```
Select Dialog Reports <TEST ACCOUNT> Option: sea Reminder Dialog Search Report
Search for coding system? N// O
Search for Finding Item(s) used in dialog component(s)? N// YES
Select from the following reminder findings (* signifies standardized):
   1 - EDUCATION TOPICS
   2 - EXAM
   3 - HEALTH FACTOR
   4 - IMMUNIZATION
   5 - MENTAL HEALTH
    6 - ORDER DIALOG
   7 - REMINDER TAXONOMY
   8 - SKIN TEST
   9 - VITAL TYPE
  10 - WH NOTIFICATION PURPOSE
Enter your list for the report: (1-10): 5
Search for all or selected MENTAL HEALTHS?
     Select one of the following:
          1
                    ALL
          2
                    SELECTED
Enter response: SELECTED//
Select MENTAL HEALTH: AUDC
        AUDC
    2
        AUDCR
CHOOSE 1-2: 1 AUDC
Select MENTAL HEALTH:
Search for specific Reminder Dialog component(s)? N// O
Search for Reminder Dialog by CPRS parameter(s)? N// YES
   1 - Division
   2 - Location
   3 - Service
   4 - System
   5 - User
    6 - User Class
Enter your list for the report: (1-6): 5
```

```
Select User: CPRS, USER
                                  UC
                                              COMPUTER SPECIALIST
Select User:
Display match criteria on the report? N// YES
Browse or Print? B// Print
DEVICE: HOME// ;;999999 TELNET PORT
Clinical Reminders Dialogs search report.
CPRS Cover Sheet Reminder Dialogs for User (CPRS, USER):
   Dialog: UC ICD10 TAX
    Match Criteria:
     Dialog Result Group: PXRM AUDC RESULT GROUP
        Finding: MH.AUDC
     Dialog Element: AGP AUDC 1
        Finding: MH.AUDC
   Dialog: UC TEMPL DLG
    Match Criteria:
     Dialog Result Group: PXRM AUDC RESULT GROUP
        Finding: MH.AUDC
     Dialog Element: AGP MH
        Finding: MH.AUDC
   Dialog: VA-ALCOHOL USE SCREENING (AUDIT-C)
    Match Criteria:
      Dialog Result Group: PXRM AUDC RESULT GROUP
        Finding: MH.AUDC
     Dialog Element: VA-MH AUDC
        Finding: MH.AUDC
   Dialog: VA-IRAQ & AFGHANISTAN POST DEPLOYMENT SCREEN
    Match Criteria:
      Dialog Result Group: PXRM AUDC RESULT GROUP
        Finding: MH.AUDC
     Dialog Element: VA-MH AUDC
        Finding: MH.AUDC
CPRS Template Dialogs:
   Dialog: UC NEW DIALOG TEST
    Match Criteria:
     Dialog Result Group: PXRM AUDC RESULT GROUP
        Finding: MH.AUDC
     Dialog Element: UC AUDC 1
       Finding: MH.AUDC
   Dialog: MH TEST
    Match Criteria:
     Dialog Element: MH AUDC
        Finding: MH.AUDC
      Dialog Result Group: PXRM AUDC RESULT GROUP
        Finding: MH.AUDC
   Dialog: VA-IRAQ & AFGHANISTAN POST DEPLOYMENT SCREEN
    Match Criteria:
     Dialog Result Group: PXRM AUDC RESULT GROUP
        Finding: MH.AUDC
      Dialog Element: VA-MH AUDC
        Finding: MH.AUDC
Press ENTER to continue:
```

## **Empty Reminder Dialog Report**

```
Select Dialog Reports Option: ER Empty Reminder Dialog Report
DEVICE: HOME// ;;9999999999 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:
        Reminder Dialog Elements Orphan Report
        Empty Reminder Dialog Report
        Check Reminder Dialog for invalid items
Select Dialog Reports Option:
```

## Check Reminder Dialog for Invalid Items

This option scans the selected dialog items for invalid sub-items, findings, TIU Objects, and/or TIU Templates. If any invalid items are found in the dialog, the results will be displayed to the user. This option allows for any dialog items to be selected, except for Additional Prompts and Forced Values.

The dialog checker report will check for the following items.

- 1. Disabled dialog items in the selected dialog.
- 2. Incomplete sequences in the selected dialog.
- 3. All sub-items in the selected dialog are pointing to valid entry on the system.
- 4. All finding items, additional finding items, and orderable items are pointing to a valid entry on the system.
- 5. Result groups are pointing to a valid MH Test and an MH scale has been defined for the result group.
- 6. An odd number of "|" characters in a dialog text field. If this is the case, it would not be possible to determine which part is a TIU Object.
- 7. Progress Note Text and the Alternate Progress Note text fields have valid TIU Objects and TIU Template Field.

#### Example of output

```
Select Reminder Dialog Management <TEST ACCOUNT> Option: DR Dialog Reports

OR Reminder Dialog Elements Orphan Report
ER Empty Reminder Dialog Report
ALL Check all active reminder dialog for invalid items
CH Check Reminder Dialog for invalid items

Select Dialog Reports Option: CH Check Reminder Dialog for invalid items

Select Dialog Definition: EXCHANGE DIALOG reminder dialog LOCAL
...OK? Yes// (Yes)

EXCHANGE DIALOG contains the following errors.
```

The dialog element INACTIVE OBJECT contains a reference to a TIU Object NP TIUHS OBJECT TEST in the Dialog Text field. This TIU Object is inactive.

## **Check All Reminder Dialogs for Invalid Items**

Select Dialog Reports Option: ALL Check all active reminder dialog for invalid items COPY OF AGE TEST contains the following errors. The dialog group HF BINGE DRINKING OTHER is disabled. AGP INDENT TEST contains the following errors. The dialog element 123456789 123456789 123456789 123456789 123456789 123456789 123 contains a pointer to an additional finding item that does not exist on the system. ZZPJH REMINDER contains the following errors. The dialog element WH PAP, ANNUAL DUE. contains an a pointer to the finding item that does not exist on the system. PHARMACY DISCHARGE MEDICATIONS contains the following errors. The dialog element PHARMACY DISCHARGE MEDS QUESTIONS contains a reference to a TIU Object OUTPATIENT MEDS in the Dialog Text field. This TIU Object does not exist on the system. The dialog group GRP MOVE! SCREENING 5/2007 contains a reference to a TIU Object BMI (BODY MASS INDEX %) in the Dialog Text field. This TIU Object does not exist on the system. Pap Smear (local) contains the following errors. The dialog element EX PAP DONE contains a reference to a TIU Object PAP SMEAR in the Dialog Text field. This TIU Object does not exist on the system. ETC.

\*\*DONE\*\*

## **Dialog Taxonomy Changes**

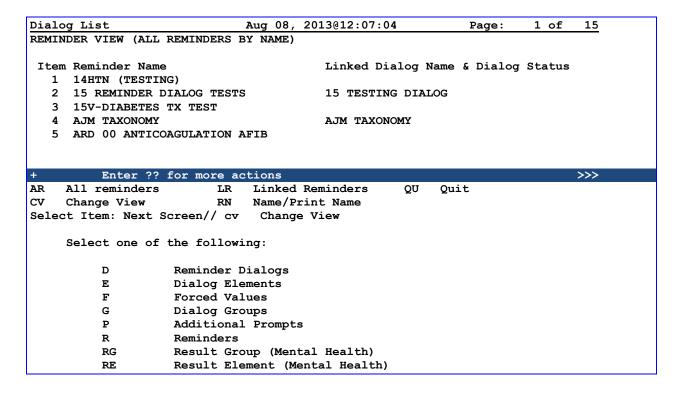
**Before PXRM\*2\*26**, users created Reminder Dialogs by adding individual ICD-9-CM and/or CPT-4 codes. When using codes as Finding Items or Additional Finding Items in CPRS, the end user didn't select codes; codes were automatically filed to VistA when the element/group was selected in the Reminder Dialog. If the Reminder Dialog was set up to use a Taxonomy, it could only be used as a Finding Item; it created a pick list of codes for the user to pick from in CPRS.

The display in CPRS was controlled by the set-up in the Reminder Finding Parameter File (#801.45) and the Reminder Taxonomy File (#811.2). These controls determined if the Taxonomy should assign codes to the current encounter or an historical encounter and what prompts should be assigned to the Reminder Dialog in CPRS.

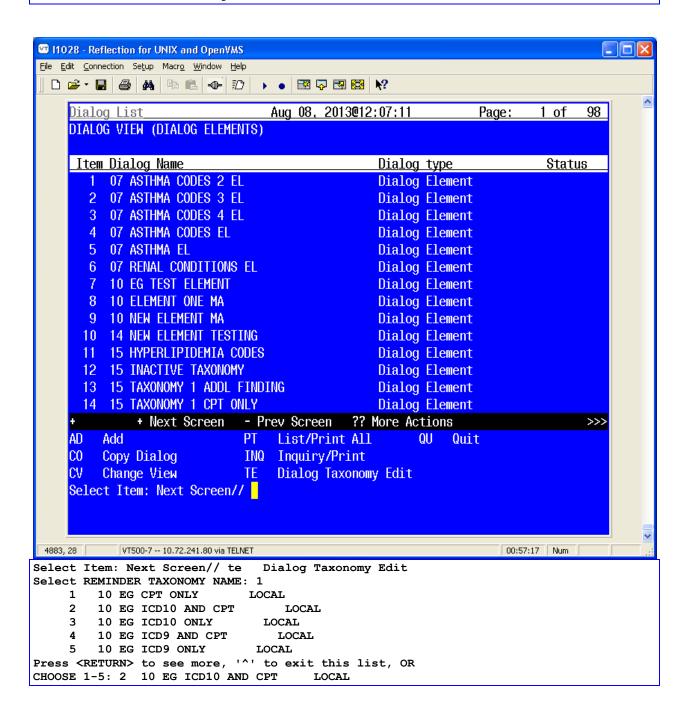
After PXRM\*2\*26, users will no longer be able to add ICD-9-CM and/or CPT-4 codes to a Reminder Dialog. Users will need to create a Taxonomy, assign codes, and then add the Taxonomy to the Reminder Dialog. To maintain similar end user functionality in CPRS, a new field called Taxonomy Pick List Display has been added to the dialog editor. This controls how Taxonomies should display in CPRS.

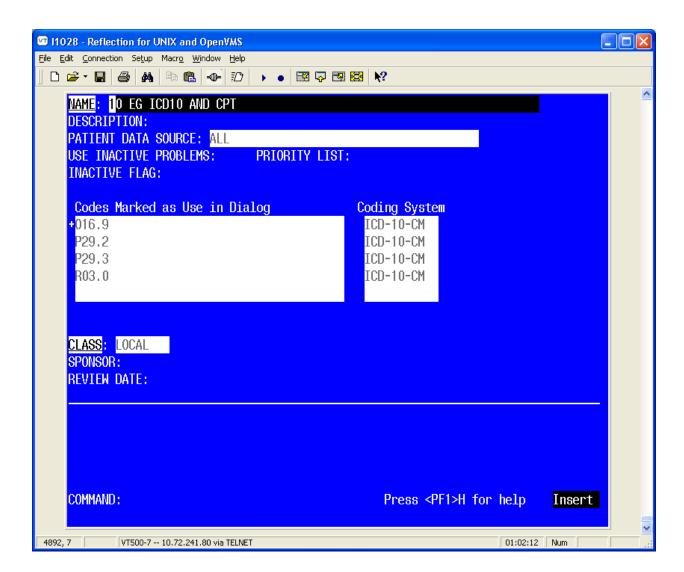
#### **Dialog Taxonomy Editor**

A simple taxonomy editor that is accessed from the Dialog Management menu (either the element or group view) is available. Codes added in this editor are automatically marked as Use In Dialog (UID). If the code already exists in the Selected Codes multiple, all instances of it are marked as UID. If the code does not already exist, it is added to the Selected Codes multiple with TERM/CODE set to the code and the code is marked as UID. If a code is deleted in this editor, UID is removed from all instances of the code but it is not deleted from the Selected Codes multiple. You must use the regular taxonomy editor to actually delete the code.



TYPE OF VIEW: R// e Dialog Elements





#### **New Fields**

**Taxonomy Pick List Display** - This field controls if and what pick lists should appear in CPRS. The possible values for the option are based on the setup of the Taxonomy in the Finding Item Field. If a pick list is set to not display, then the active codes marked to be used in a dialog will automatically be filed to PCE for the encounter date for that element when the finish button is clicked. Possible values for this field:

- $\bullet$  All = A pick list will display for each code type (ICD/10D and CPT) in taxonomy.
- Diagnosis Only = A pick list will display only for ICD/10D codes
- Procedure Only = A pick list will display only for CPT codes
- None = Will not display a pick list

*Diagnosis Header* - This field displays text that will be used for the Taxonomy Checkbox. The prompt is only available if the Taxonomy Selection Value is set to All. The default value is from the Reminder Finding Type Parameter.

**Procedure Header** - This field displays text that will be used for the Taxonomy Checkbox. The prompt is only available if the Taxonomy Selection Value is set to All. The default value is from the Reminder Finding Type Parameter.

Also, after PXRM\*2.0\*26 is installed, users will no longer be able to set one Taxonomy Element to prompt for both Current and Historical Encounter Data. Users will need to create an element for each encounter type, Current and Historical. If the element Resolution Type is set to Done Elsewhere, then the editor will prompt the user to accept the default prompts for the taxonomy which includes prompts for historical data. prompt for historical data. Any other resolution type or no resolution type will prompt data for the current encounter date.

For the ICD-10 implementation, Reminder Dialogs will display ICD-9-CM or ICD-10-CM in a pick list based on the code set versioning rules. Reminder Dialogs determine what codes to display using the following rules:

- Current encounters= active codes for that encounter date; Addendums will use the parent note Encounter date.
- Historical encounters= active codes for system date

#### **Examples:**

An example Taxonomy that is a copy of VA-ADB AORTIC; this example has additional codes set to be used in a dialog.

```
AAA TAX DEMO

Class: LOCAL
Sponsor:
Review Date:

Description:
ICD codes and CPT codes indicating AAA
Inactive Flag:
Patient Data Source:
Use Inactive Problems:

Selected Codes:
```

#### Lexicon Search Term/Code: Abdominal aortic aneurysm

#### Lexicon Search Term/Code: Copy from CPT range 34800 to 34805

| Coding System: CPT-4 |                         |     |                                   |
|----------------------|-------------------------|-----|-----------------------------------|
| Code                 | Activation Inactivation | UID | Description                       |
|                      |                         |     |                                   |
| 34800                | 01/01/2001              | X   | Endovascular Repair of Infrarenal |

|       |            | Abdominal Aortic Aneurysm or        |
|-------|------------|-------------------------------------|
|       |            | Dissection; using Aorto-Aortic      |
|       |            | Tube Prosthesis                     |
| 34802 | 01/01/2001 | X Endovascular Repair of Infrarenal |
|       |            | Abdominal Aortic Aneurysm or        |
|       |            | Dissection; using Modular           |
|       |            | Bifurcated Prosthesis (one Docking  |
|       |            | Limb)                               |
| 34803 | 01/01/2005 | X Endovascular Repair of Infrarenal |
|       |            | Abdominal Aortic Aneurysm or        |
|       |            | Dissection; using Modular           |
|       |            | Bifurcated Prosthesis (two Docking  |
|       |            | Limbs)                              |
| 34804 | 01/01/2001 | X Endovascular Repair of Infrarenal |
|       |            | Abdominal Aortic Aneurysm or        |
|       |            | Dissection; using Unibody           |
|       |            | Bifurcated Prosthesis               |
| 34805 | 01/01/2004 | X Endovascular Repair of Infrarenal |
|       |            | Abdominal Aortic Aneurysm or        |
|       |            | Dissection; using Aorto-Uniiliac    |
|       |            | or Aorto-Unifemoral Prosthesis      |

# Lexicon Search Term/Code: Copy from CPT range 34825 to 34832

| Coding System: CPT-4 |            |              |     |  |
|----------------------|------------|--------------|-----|--|
| Code                 | Activation | Inactivation | UID | Description  |
| 34825                | 01/01/1989 | 01/01/1990   |     | Placement of Proximal or Distal Extension Prosthesis for Endovascular Repair of Infrarenal Abdominal Aortic Anuerysm; Initial Vessel   |
|                      | 01/01/2001 |              |     | Placement of Proximal or Distal Extension Prosthesis for Endovascular Repair of Infrarenal Abdominal Aortic or Iliac Aneurysm, False Aneurysm, or  |
| 34826                | 01/01/1989 | 01/01/1990   |     | Dissection; Initial Vessel Placement of Proximal or Distal Extension Prosthesis for Endovascular Repair of Infrarenal Abdominal Aortic Aneurysm; each  |
|                      | 01/01/2001 |              |     | additional Vessel Placement of Proximal or Distal Extension Prosthesis for Endovascular Repair of Infrarenal Abdominal Aortic or Iliac Aneurysm, False Aneurysm, or Dissection; each additional Vessel |
| 34830                | 01/01/2001 |              |     | (List Separately in addition to<br>Code for Primary Procedure)<br>Open Repair of Infrarenal Aortic<br>Aneurysm or Dissection, plus<br>Repair of Associated Arterial<br>Trauma, Following Unsuccessful  |
| 34831                | 01/01/2001 |              |     | Endovascular Repair; Tube Prosthesis Open Repair of Infrarenal Aortic Aneurysm or Dissection, plus Repair of Associated Arterial Trauma, Following Unsuccessful  |

| Trauma, Following Unsuccessful<br>Endovascular Repair; | 34832 | 01/01/2001 | Endovascular Repair; Aorto-Bi-Iliac Prosthesis Open Repair of Infrarenal Aortic Aneurysm or Dissection, plus Repair of Associated Arterial Trauma, Following Unsuccessful Endovascular Repair; |  |
|--|-------|------------|--|--|
|--|-------|------------|--|--|

### Lexicon Search Term/Code: Copy from CPT range 35081 to 35103

| Coding Sy | Coding System: CPT-4    |        |   |  |  |
|-----------|-------------------------|--------|---|--|--|
| Code      | Activation Inactivation | on UID | Description   |  |  |
| 35081     | 06/01/1994              |        | Direct Repair of Aneurysm, Pseudoaneurysm, or Excision (Partial or Total) and Graft Insertion, with or without Patch Graft; for Aneurysm and Associated   |  |  |
| 35082     | 06/01/1994              |        | Occlusive Disease, Abdominal Aorta Direct Repair for Ruptured Aneurysm involving the Abdominal Aorta  |  |  |
| 35091     | 06/01/1994              |        | Direct Repair of Aneurysm, Pseudoaneurysm, or Excision (Partial or Total) and Graft Insertion, with/without Patch Graft; for Aneurysm and Associated Occlusive Disease, Abdominal Aorta involving Visceral Vessels                              |  |  |
| 35092     | 06/01/1994              |        | (Mesenteric, Celiac, Renal) Direct Repair for Ruptured Aneurysm involving the Mesenteric, Celiac or Renal Arterial Branch of the Abdominal Aorta  |  |  |
| 35102     | 06/01/1994              |        | Direct Repair of Aneurysm, Pseudoaneurysm, or Excision (Partial or Total) and Graft Insertion, with/without Patch Graft; for Aneurysm and Associated Occlusive Disease, Abdominal Aorta involving Iliac Vessels (Common, Hypogastric, External) |  |  |
| 35103     | 06/01/1994              |        | Direct Repair for Ruptured Aneurysm involving the Iliac Vessels (Common, Hypogastric, External) of the Abdominal Aorta  |  |  |

# Lexicon Search Term/Code: Copy from CPT range 75952 to 75953

| Coding System: CPT-4 |                         |     |                                   |  |
|----------------------|-------------------------|-----|-----------------------------------|--|
| Code                 | Activation Inactivation | UID | Description                       |  |
|                      |                         |     |                                   |  |
| 75952                | 01/01/2001              |     | Endovascular Repair of Infrarenal |  |
|                      |                         |     | Abdominal Aortic Aneurysm or      |  |
|                      |                         |     | Dissection, Radiological          |  |

|       |            |            | Supervision and Interpretation    |
|-------|------------|------------|-----------------------------------|
|       |            |            | -                                 |
| 75953 | 01/01/1989 | 01/01/1990 | Placement of Proximal or Distal   |
|       |            |            | Extension Prosthesis for          |
|       |            |            | Endovascular Repair of Infrarenal |
|       |            |            | Abdominal Aortic Aneurysm,        |
|       |            |            | Radiological Supervision and      |
|       |            |            | Interpretation                    |
|       | 01/01/2001 |            | Placement of Proximal or Distal   |
|       |            |            | Extension Prosthesis for          |
|       |            |            | Endovascular Repair of Infrarenal |
|       |            |            | Aortic or Iliac Artery Aneurysm,  |
|       |            |            | Pseudoaneurysm, or Dissection,    |
|       |            |            | Radiological Supervision and      |
|       |            |            | Interpretation                    |

#### Lexicon Search Term/Code: Copy from ICD range 441.3 to 441.4

Below are screen shots of how CPRS will display the taxonomy using different values.

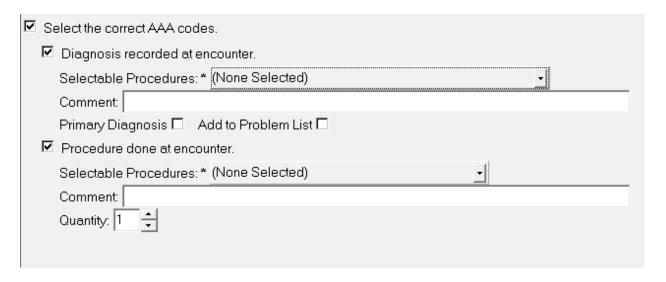
#### Example 1

Setting a Taxonomy as a finding item to display pick lists for both ICD-9, ICD-10 and CPT codes, for current encounters only.

```
NAME: AAA DEMO ELEMENT//
DISABLE:
CLASS: L
         LOCAL
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
FINDING ITEM: TX.AAA AAA TAX DEMO
                                      LOCAL
        ...OK? Yes// (Yes)
Additional findings: none
Select ADDITIONAL FINDING:
     Select one of the following:
         Α
                   All
                   ICD Diagnoses Only
         P
                   CPT Procedures Only
         N
                   None
Taxonomy Pick List Display: A// 11
     Select one of the following:
```

```
С
                    CURRENT ENCOUNTER
          н
                    HISTORICAL ENCOUNTER
                    BOTH CURRENT AND HISTORICAL ENCOUNTERS
Diagnosis Header: Diagnosis recorded at encounter. Replace
Procedure Header: done.//
Default prompts for the taxonomy:
Prompt: PXRM COMMENT
Prompt: PXRM VISIT DATE
  Required: Yes
Prompt: PXRM OUTSIDE LOCATION
Prompt: PXRM PRIMARY DIAGNOSIS
Prompt: PXRM QUANTITY
Prompt: PXRM ADD TO PROBLEM LIST
     Select one of the following:
          Y
                    Yes
          N
                    No
Add Prompts to the dialog: Yes//
DIALOG/PROGRESS NOTE TEXT:
 No existing text
 Edit? NO// Select the correct AAA codes.
```

With these settings, the user is able to pick from a pick list of diagnoses and procedure codes to add to the current encounter.



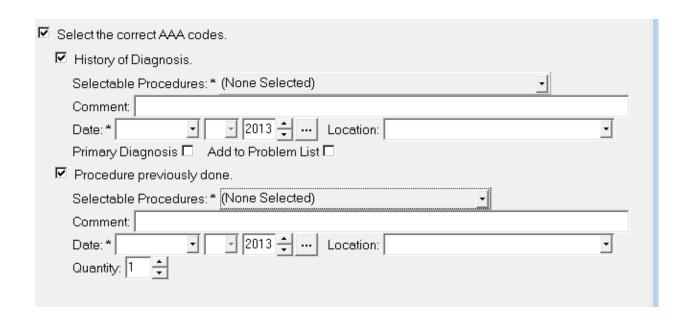
#### Example 2

Setting a Taxonomy as a finding item to display pick lists for both ICD-10 and CPT codes for historical encounters only.

```
NAME: AAA DEMO ELEMENT//
DISABLE:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE: DONE ELSEWHERE (HISTORICAL)
```

```
ORDERABLE ITEM:
Finding item: TX AAA TAX DEMO
FINDING ITEM: AAA TAX DEMO//
Additional findings: none
Select ADDITIONAL FINDING:
    Select one of the following:
                   A11
          Α
          D
                   ICD Diagnoses Only
                    CPT Procedures Only
          Р
Taxonomy Pick List Display: A// 11
Diagnosis Header: History of Diagnosis. Replace
Procedure Header: previously done.//DIALOG/PROGRESS NOTE TEXT:
Select the correct AAA codes.
 Edit? NO//
ALTERNATE PROGRESS NOTE TEXT:
 No existing text
 Edit? NO//
EXCLUDE FROM PROGRESS NOTE:
SUPPRESS CHECKBOX:
Select SEQUENCE: 6//
 SEQUENCE: 6//
 ADDITIONAL PROMPT/FORCED VALUE: PXRM ADD TO PROBLEM LIST
 OVERRIDE PROMPT CAPTION:
 START NEW LINE:
 EXCLUDE FROM PN TEXT:
 REQUIRED:
Select SEQUENCE:
REMINDER TERM:
Input your edit comments.
Edit? NO//
```

With these settings, the user is able to assign diagnosis and/or procedure codes to a historical encounter. The historical date will be created based on the Date prompt for both the diagnosis and the procedure checkboxes.



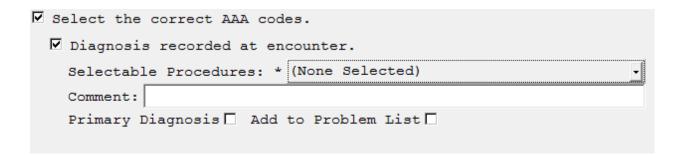
Example 3
Setting a Taxonomy as a finding item to display pick lists for only ICD-10 codes for the current encounters.

```
NAME: AAA DEMO ELEMENT//
DISABLE:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
Finding item: TX AAA TAX DEMO
FINDING ITEM: AAA TAX DEMO//
Additional findings: none
Select ADDITIONAL FINDING:
     Select one of the following:
                    All
          Α
          D
                    ICD Diagnoses Only
          P
                    CPT Procedures Only
          N
                    None
Taxonomy Pick List Display: A// d ICD Diagnoses Only
Diagnosis Header: Diagnosis recorded at encounter.
 Replace
DIALOG/PROGRESS NOTE TEXT:
Select the correct AAA codes.
 Edit? NO//
ALTERNATE PROGRESS NOTE TEXT:
 No existing text
 Edit? NO//
EXCLUDE FROM PROGRESS NOTE:
SUPPRESS CHECKBOX:
Select SEQUENCE: 6//
  SEQUENCE: 6//
```

```
ADDITIONAL PROMPT/FORCED VALUE: PXRM ADD TO PROBLEM LIST

//
OVERRIDE PROMPT CAPTION:
START NEW LINE:
EXCLUDE FROM PN TEXT:
REQUIRED:
Select SEQUENCE:
REMINDER TERM:
Input your edit comments.
Edit? NO//
```

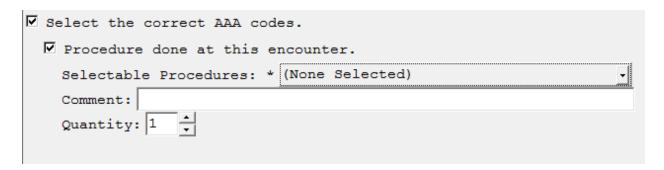
With these settings, the user will be able to pick diagnosis codes to add to the current encounter. The active procedure codes that were marked to be used in a dialog will automatically be filed to the current encounter. No historical data will be stored for this element.



# Example 4 Setting a Taxonomy as a finding item to display pick lists for CPT codes only for the current encounters.

```
NAME: AAA DEMO ELEMENT//
DISABLE:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
Finding item: TX AAA TAX DEMO
FINDING ITEM: AAA TAX DEMO//
Additional findings: none
Select ADDITIONAL FINDING:
     Select one of the following:
          Α
                    All
          D
                    ICD Diagnoses Only
          P
                    CPT Procedures Only
                    None
Taxonomy Pick List Display: D// p CPT Procedures Only
Procedure Header: done.// Procedure done at this encounter.
DIALOG/PROGRESS NOTE TEXT:
Select the correct AAA codes.
 Edit? NO//
ALTERNATE PROGRESS NOTE TEXT:
 No existing text
 Edit? NO//
EXCLUDE FROM PROGRESS NOTE:
SUPPRESS CHECKBOX:
Select SEQUENCE: 6//
 SEQUENCE: 6//
 ADDITIONAL PROMPT/FORCED VALUE: PXRM ADD TO PROBLEM LIST
 OVERRIDE PROMPT CAPTION:
 START NEW LINE:
 EXCLUDE FROM PN TEXT:
 REOUIRED:
Select SEQUENCE:
REMINDER TERM:
Input your edit comments.
Edit? NO//
```

With these settings, the user will be able to pick the Procedure codes to assign to the current encounter. The active diagnosis codes marked to be used in the dialog will automatically be assigned to the encounter. No historical data will be stored for this element.



#### Example 5

Setting a Taxonomy as a finding item to display no pick list set to display.

```
NAME: AAA DEMO ELEMENT//
DISABLE:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
Finding item: TX AAA TAX DEMO
FINDING ITEM: AAA TAX DEMO//
Additional findings: none
Select ADDITIONAL FINDING:
     Select one of the following:
                    All
          D
                    ICD Diagnoses Only
                    CPT Procedures Only
          P
                    None
Taxonomy Pick List Display: P// n None
DIALOG/PROGRESS NOTE TEXT:
Select the correct AAA codes.
 Edit? NO//
ALTERNATE PROGRESS NOTE TEXT:
 No existing text
 Edit? NO//
EXCLUDE FROM PROGRESS NOTE:
SUPPRESS CHECKBOX:
Select SEQUENCE: 6//
 SEQUENCE: 6//
 ADDITIONAL PROMPT/FORCED VALUE: PXRM ADD TO PROBLEM LIST
 OVERRIDE PROMPT CAPTION:
 START NEW LINE:
 EXCLUDE FROM PN TEXT:
 REQUIRED:
Select SEQUENCE:
REMINDER TERM:
Input your edit comments.
Edit? NO//
```

With this setting, all active diagnosis/procedure codes marked to be used in a dialog will automatically be filed to the current encounter.

| 굣 | Select the correct AAA codes Co | mment                 |
|---|---------------------------------|-----------------------|
|   | Primary Diagnosis 🗆 Quantity: 1 | Add to Problem List 🗆 |

Note: In the first example the software added the following prompts to the dialog element.

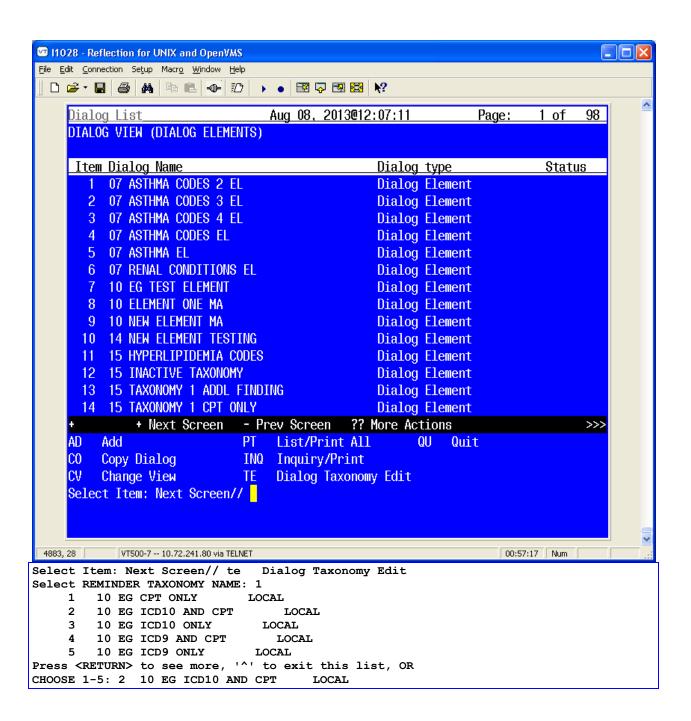
Prompt: PXRM COMMENT
Prompt: PXRM VISIT DATE
Prompt: PXRM OUTSIDE LOCATION
Prompt: PXRM PRIMARY DIAGNOSIS
Prompt: PXRM QUANTITY
Prompt: PXRM ADD TO PROBLEM LIST

In examples 2-5, the prompts were not changed. CPRS will determine which prompts to show, based on the prompts assigned to the element, the codes in the taxonomy, and the Resolution Status Field. However, it is good practice to remove prompts that are not being used by the dialog.

#### **Taxonomy Editor**

A simple taxonomy editor that is accessed from dialog management (either the element or group view) is also available. Codes added in this editor are automatically marked as Use In Dialog. If a code is deleted in this editor, the Use In Dialog designation is removed from the code.

```
Aug 08, 2013@12:07:04
Dialog List
                                                               Page:
                                                                        1 of
                                                                                15
REMINDER VIEW (ALL REMINDERS BY NAME)
Item Reminder Name
                                          Linked Dialog Name & Dialog Status
  1 14HTN (TESTING)
   2 15 REMINDER DIALOG TESTS
                                          15 TESTING DIALOG
   3 15V-DIABETES TX TEST
   4 AJM TAXONOMY
                                          AJM TAXONOMY
   5 ARD 00 ANTICOAGULATION AFIB
          Enter ?? for more actions
                                                                               >>>
    All reminders LR Linked Reminders Change View RN Name/Print Name
AR
                                                     QΨ
                                                           Quit
Select Item: Next Screen// cv
                               Change View
     Select one of the following:
          D
                    Reminder Dialogs
          E
                    Dialog Elements
                    Forced Values
          G
                    Dialog Groups
          P
                    Additional Prompts
          R
                    Reminders
          RG
                    Result Group (Mental Health)
                    Result Element (Mental Health)
TYPE OF VIEW: R// e Dialog Elements
```



# **CPRS Reminder Configuration Menu**

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

| Syn | Option                                       | Option Name                        | Description  |
|-----|--|------------------------------------|--|
| CA  | Add/Edit Reminder<br>Categories              | PXRM CATEGORY<br>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 Lookup<br>Categories                    | PXRM CPRS<br>LOOKUP<br>CATEGORIES  | Reminder Categories to be displayed in the Other Categories folder of the note tab are entered here.   |
| CS  | CPRS Cover Sheet<br>Reminder List            | PXRM CPRS<br>COVER SHEET<br>LIST   | Use this option to enter reminders that will be displayed on the CPRS cover sheet if the New Reminders Parameter is NOT set to Yes.  |
| МН  | Mental Health<br>Dialogs Active              | PXRM MENTAL<br>HEALTH ACTIVE       | 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  | Progress Note<br>Headers                     | PXRM PN<br>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  | Reminder GUI<br>Resolution Active            | PXRM GUI<br>REMINDERS<br>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. |
| DL  | Default Outside<br>Location                  | PXRM DEFAULT<br>LOCATION           | Allows the default outside location for reminder dialogs to be specified at user, service, division, or system level.  |
| PT  | Position Reminder<br>Text at Cursor          | PXRM TEXT AT<br>CURSOR             | Allows the position reminder note text at cursor feature to be enabled at user, service, division, or system level.  |
| WH  | WH Print Now<br>Active                       | PXRM WH PRINT<br>NOW               | This option allows sites to include the Print Now button on Women's Health dialogs for notification letters.   |
| GEC | GEC Status Check<br>Active                   | PXRM GEC<br>STATUS CHECK           | 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.  |
| TIU | TIU Template<br>Reminder Dialog<br>Parameter | PXRM TIU<br>DIALOG<br>TEMPLATE     | This option lets users edit the TIU TEMPLATE REMINDER DIALOG parameter.  |
| NP  | New Reminder<br>Parameters                   | PXRM NEW<br>REMINDER<br>PARAMETERS | This option allows a user to modify the ORQQPX NEW REMINDER PARAMS parameter, which controls usage and management of cover sheet reminder list.  |

#### **Add/Edit Reminder Categories**

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 on page 304.

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

#### **Actions**

- **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.

```
Edit List
                          Apr 18, 2000 15:04:41
                                                          Page:
                                                                   1 of
                                                                        1
Reminder Category Name: SLC DEMO CATEGORY
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 PNEUMOCOCCAL VACCINE
Sequence: 90 Reminder: SLC DIABETIC FOOT CARE ED
Sequence: 99 Reminder: MHTEST
Sub-category: SUBSTANCE ABUSE
                                                 Sequence: 3
    Sequence: 1 Reminder: TOBACCO EDUCATION
                  Reminder: TOBACCO USE SCREEN
```

```
Sequence: 3 Reminder: VA-*PROBLEM DRINKING SCREEN

+ Next Screen - Prev Screen ?? More Actions

ED Edit INQ Inquiry/Print QU Quit

Select Action: Quit//ED
```

#### **Actions**

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

#### CPRS Lookup Categories

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

```
Select CPRS Reminder Configuration Menus Option: CL CPRS Lookup Categories
Reminder Categories for Lookup may be set for the following:
         User USR [choose from NEW PERSON]
Location LOC [choose from HOSPITAL LOCATION]
Service SRV [choose from SERVICE/SECTION]
Division DIV [ISC SALT LAKE]
System SYS [DEVCUR.ISC-SLC.VA.GOV]
     1
     2
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
                                                SUBSTANCE ABUSE
                                                HEPATITIS C
     10
                                                WEIGHT AND NUTRITION
                                                SLC REMINDER CATEGORY
     15
     20
                                                Usability Test Reminders
Select Display Sequence: 25
Are you adding 25 as a new Display Sequence? Yes//<Enter>
                                                                     YES
Display Sequence: 25// <Enter> 25
Reminder Category: ??
Choose from:
   Acute Pain
   Cancer Pain
   Chronic Pain
   HEPATITIS C
   Pain Management
   SLC REMINDER CATEGORY
   SUBSTANCE ABUSE
   USH POLICY
   Usability Test Reminders
   WEIGHT AND NUTRITION
Reminder Category: CRPROVIDER'S REMINDER CATEGORY
```

```
...OK? Yes// <Enter> (Yes)

Select Display Sequence: <Enter>
```

#### **CPRS Cover Sheet Reminder List**

Use this option to enter reminders that will be displayed on the CPRS 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; see the description on the next page), you won't use this option; instead you will manage the cover sheet list through the CPRS GUI.

```
Select CPRS Reminder Configuration Menus Option: CS CPRS 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 (STATE OF SERVICE (STATE OF SERVICE (STATE OF SERVICE OF SERVICE (STATE OF SERVICE OF SERVI
                           Service SRV [choose from SERVICE/SECTION]
Division DIV [ISC SALT LAKE]
System SYS [DEVCUR.ISC-SLC.VA.GOV]
                 4
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, ONE
                                                                                                                                                            jg
----- Setting Clinical Reminders for Search for User: CRPROVIDER, ONE -----
Select Display Sequence: ?
                                                                                                                                                 Value
                 Display Sequence
                                                                                                                                                 VA-DIABETIC FOOT CARE ED.
                 1
                 2
                                                                                                                                                 VA-TOBACCO EDUCATION
                                                                                                                                                 VA-*PNEUMOCOCCAL VACCINE
                 5
                 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>
Clinical Reminder: MENTAL HEALTH TESTS
Select Display Sequence: <Enter>
```

#### **New Reminder Parameters - Edit Cover Sheet Reminder List**

This option lets you set the parameter ORQQPX NEW REMINDER PARAMS for editing cover sheet reminders. If this option is set to YES, you won't use the option CPRS Cover Sheet Reminder List.

#### **New Reminder Parameters Example**

There are two possible cover sheet lists for a user, one when ORQQPX NEW REMINDER PARAMS is "NO" and one when it is "YES." Determining the value of ORQQPX NEW REMINDER PARAMS for a user is not always a straightforward exercise. For a basic understanding of how parameters work in CPRS, see the CPRS Technical Manual or Kernel Toolkit documentation.

The precedence for ORQQPX NEW REMINDER PARAMS is shown in the above example.

- If it is defined at the User level, then that takes precedence.
- If is not defined at the User level, then a check is made at the Service level.
- If it is not defined at the Service level, then a check is made at the Division level, and so on until a value is determined.
- If the checking proceeds all the way to the Package level and nothing is defined at that level, then it defaults to "NO."

There are two kinds of users with respect to the management of cover sheet lists.

- Regular users
- Reminder managers

A reminder manager is anyone who has PXRM MANAGERS MENU as a primary or secondary menu option. A regular user can only edit their own cover sheet list, while a reminder manager can edit and manage cover sheet lists at all levels.

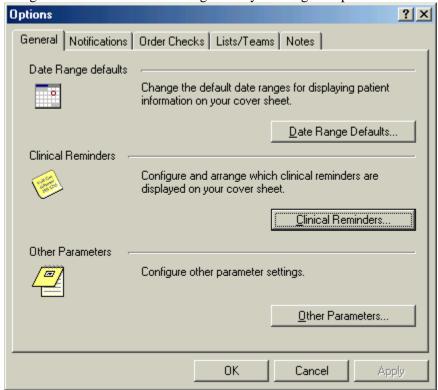
We recommend that ORQQPX NEW REMINDER PARAMS be set to "YES" for all users, because of the enhanced functionality that it makes available.

It is possible that a site may choose to use the old cover sheet list functionality, so we will start with a discussion of how things work when ORQQPX NEW REMINDER PARAMS is "NO."

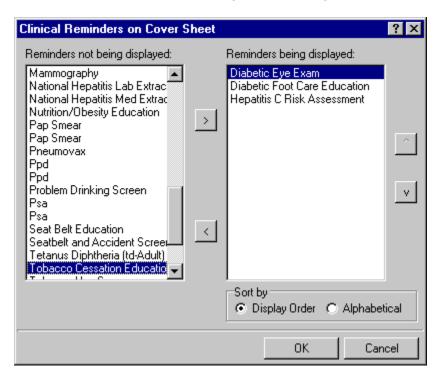
If your site is using the new cover sheet list functionality, then you can skip the following section.

#### **ORQQPX NEW REMINDER PARAM set to "NO"**

A regular user accesses the editing form by clicking on Options under the tools menu



Then click on Clinical Reminders to get to the editing form.



Highlight an item in the **Reminders not being displayed** field and then click the Add arrow ">" to add it to the **Reminders being displayed** field. You may hold down the Control key and select more than one reminder at a time. When you have all of the desired reminders in the **Reminders being displayed** field, you may highlight a reminder and use the up and down buttons on the right side of the dialog to change the order in which the reminders will be displayed on the Cover Sheet.

#### Sort by

Select Display Order to display the reminders in the order that you choose. Click Alphabetical to have the reminders displayed in alphabetic order.

This list is the list defined at the user level and takes precedence over any lists defined at higher levels, i.e. Location, Service, Division, System, or Package. A regular user cannot edit the list at any of these higher levels. A reminder manager can edit the list at these higher levels through the CPRS Cover Sheet Reminder List (CS) option described above (page 305).

#### **ORQQPX NEW REMINDER PARAM set to "YES"**

The new type of cover sheet list provides a great deal of flexibility, allowing the reminder manager to build lists at the User, User Class, Location, Service, Division, and System levels. Note that these levels are not exactly the same as with the old type of list, where they were User, Location, Service, Division, and Package.

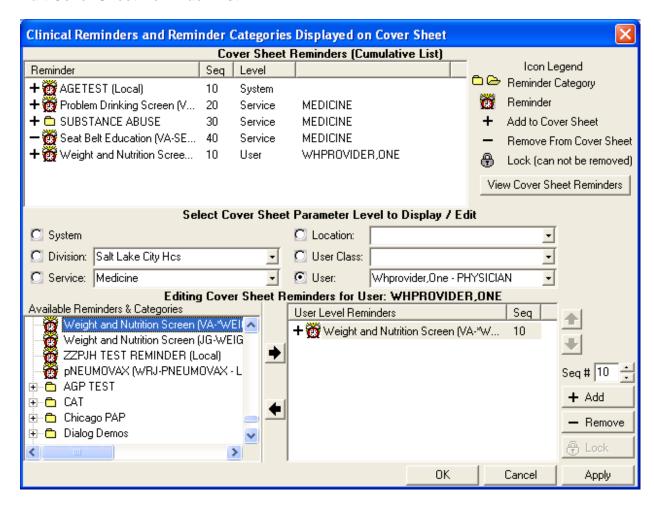
An important distinction between the new type of list and the old type is the new list is cumulative and removable. For example, if a list is defined at the system level, reminders can be added to or removed from the list at the User level. There may be certain reminders that should be on all users' coversheet lists and these can be locked by the reminder manager.

The reminder manager accesses this functionality by clicking on the reminder button next to the CWAD button in the upper right hand corner of the CPRS GUI.



Click on Action then click on Edit Cover Sheet Reminder List.

#### **Edit Cover Sheet Reminder List**



This reminder manager form provides very extensive cover sheet list management capabilities. It 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 have been 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.

#### 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 can't remove reminder (mandatory)

#### **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 are listed by level (System, Division, Service, Location, User class, User).

#### **Available Reminders & 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.

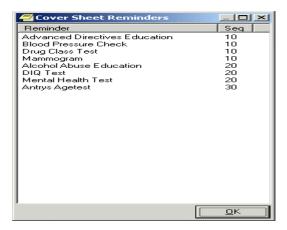
#### Select Cover Sheet Parameter Level to Display / Edit

This section has radio buttons for System, Division, Service, Location, User Class, and User. When one of the radio buttons is clicked, the list of reminders included at that parameter level appears in the box on the lower right-hand side of the form. You can then perform any of the following editing actions:

- To add a reminder, highlight the desired reminder in the Available Reminders & Categories field and click the right arrow button.
- To delete a reminder, highlight the reminder and click the left arrow.
- To make a reminder mandatory, select a reminder and then click on the Lock button.
- To make a mandatory reminder no longer mandatory, click on either the Add or Remove buttons, depending on if you want it to remain on the list or be removed.
- To determine the order in which the reminders will be displayed on the Cover Sheet, change the reminder's Sequence number. To do this click on the reminder and then change its sequence number in the sequence number box.

#### **View Cover Sheet Reminders**

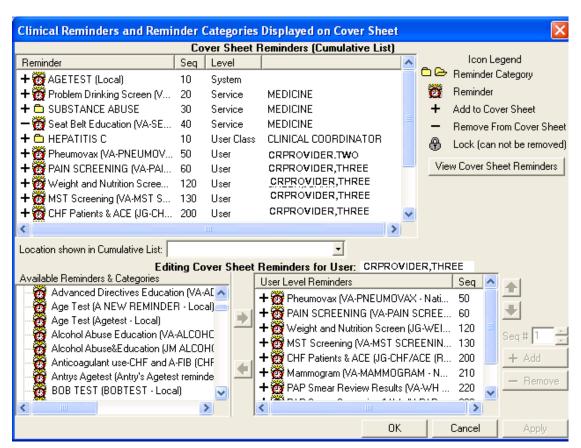
Since the cover sheet list is cumulative and removable, it is not always easy to determine exactly which reminders will be on a user's cover sheet list. Clicking on the **View Cover Sheet Reminders** button will display the final list for the user that has been selected at the User parameter level.



#### **User level Cover Sheet Reminder Screen**

A user level editing form is also available by clicking on the Tools menu, then options, then Clinical Reminders. This is the same sequence as shown in the previous section for getting to the user editing form.

This form lets the user add or remove reminders (with the exception of locked reminders) to their cover sheet list. The functionality is basically the same as that described above.



#### **Setting User and System Levels**

The following Forum dialog might clarify some issues about setting levels:

#### Subj: CPRS COVERSHEET REMINDERS SETUP THRU GUI

We are having some problems with appropriate clinical reminders showing on coversheet when set up at SYSTEM or SERVICE level in GUI. Reminders set for SYSTEM are also showing for a user in a service that is also set up (EX: Medical). In other words, all of the reminders set for Medical Service show on coversheet as well as those set under SYSTEM. When I completely remove the GUI setup for SYSTEM, users no longer have those clinical reminders show on coversheet. I need the SYSTEM setting for those not set up in a service.

Per NOIS CAH-1003-31162, site had a similar problem and resolution stated there was a specific hierarchy (that seems to be different from others). I thought that if there was something set at USER level, that would take precedence over SERVICE or SYSTEM, but that doesn't seem to be true in this case.

MY QUESTION IS THIS: Can someone explain what the hierarchy is when setting clinical reminders in GUI vs VISTA. Should we only have setup in one or the other? I cannot find anything on this in documentation.

- 1. The hierarchy for reminders displaying on the GUI cover sheet is cumulative, so there is really no hierarchy, only the ability to add to the list at different levels. System displays to all users, division adds to system for users in that division, service adds to division and/or system for users in that service, etc.
  - There used to be a hierarchy but that changed some time ago.
- 2. Check out HUN-0701-20018 RESTRICTED REMINDERS You can have it both ways Cumulative and Restricted.
- 3. You just have to remember you have two different set-ups if you add or subtract reminders.
- 4. You have to have the parameter for using the new reminder parameters set to yes to take advantage of this:

Q Our mental health providers should only see certain reminders due on a patient. I have them set under service to see:

```
Setting ORQQPX COVER SHEET REMINDERS for Service: MENTAL HEALTH -----
Select Display Sequence: ?

Display Sequence Value
```

| 10 | LR1006   |
|----|----------|
| 20 | LR581016 |
| 30 | LR581011 |
| 40 | LR581002 |
| 50 | LR581007 |
|    |          |

They are seeing all reminders set at SYSTEM level + the additional reminders. Is something set up wrong or is this now cumulative? Is there a way so that they will only see the reminders relative to their service?

These can be set to YES or NO at any of the levels. I suggested they set the Mental Health and Optometry service to NO. Hopefully, now they will only see their DUE reminders and not everyone else's. The other alternative is to set the ORQQPX REMINDER FOLDERS to Other Categories for these services. Then within the Other Categories, set up specific category names for the service's specific reminders. This would group the reminders together.

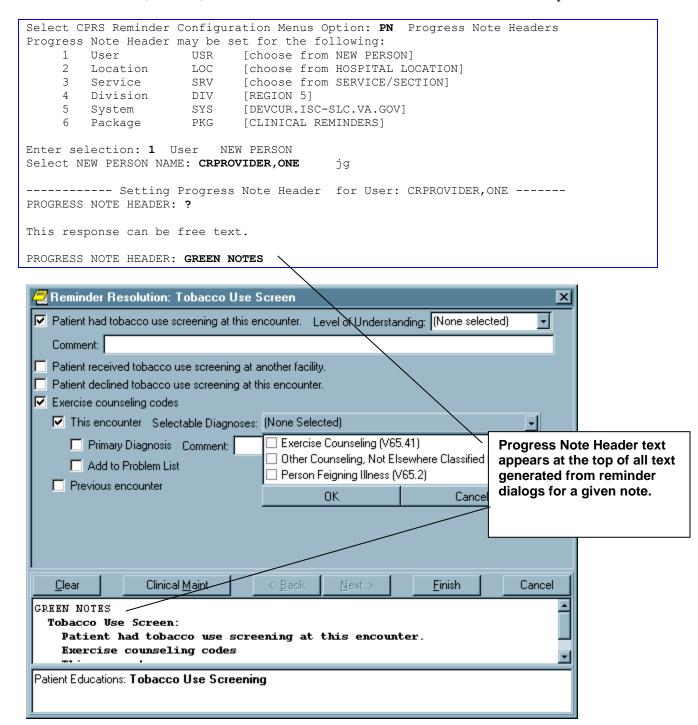
#### **Mental Health Dialogs Active**

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:
         User USR [choose from NEW PERSON]
Service SRV [choose from SERVICE/SECTION]
Division DIV [choose from INSTITUTION]
System SYS [DEVCUR.ISC-SLC.VA.GOV]
     1
     2
     3
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, SIX
----- Setting Mental Health Active for User: CRPROVIDER, SIX -----
MENTAL HEALTH ACTIVE: YES// <Enter>
          Add/Edit Reminder Categories
   CA
   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
   PΤ
           Position Reminder Text at Cursor
   NP
           New Reminder Parameters
Select CPRS Reminder Configuration Option: <Enter>
```

#### **Progress Note Headers**

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.



#### **Reminder GUI Resolution Active**

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.

#### **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 PXRM 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 CPRS. If a number is entered as the free-text value, CPRS will attempt to locate an entry in the Institution file (#4) with the same internal entry number.

#### **Example**

```
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
 ----- Setting Default Outside Locations for User: CRPROVIDER, ONE -----
Select Display Sequence: 1
Display Sequence: 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
Outside Physician's Office
```

#### Default Location as it appears in CPRS:



Note that Seattle, WA and Palo Alto are entries in the institution file with internal entry numbers of 663 and 640, respectively.

#### **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]
                    DIV
    4
       Division
                           [choose from INSTITUTION]
    5 System
                     SYS [DEVCUR.ISC-SLC.VA.GOV]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: <Enter>
                                CRPROVIDER, ONE
----- 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
```

#### **TIU Template Reminder Dialog Parameter**

This option lets users edit the TIU TEMPLATE REMINDER DIALOG parameter.

```
Select CPRS Reminder Configuration Option: tiu TIU Template Reminder Dialog Parameter
Reminder Dialogs allowed as Templates 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]
       System
                    SYS [DVF.FO-SLC.MED.VA.GOV]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, TWO
--- Setting Reminder Dialogs allowed as Templates for User: CRCOORDINATOR, ONE ---
Select Display Sequence: ??
Contains Reminder Dialogs that are allowed to be used as TIU Templates.
This parameter is different than most others in that each level is
cumulative, so all Reminder Dialogs at the System, Division, Service
and User levels can be used in Templates.
Select Display Sequence: 1
Are you adding 1 as a new Display Sequence? Yes// YES
Display Sequence: 1//
                     1
Clinical Reminder Dialog: JG DIABETIC EYE EXAM
                                                reminder dialog
                                                                     LOCAL
Select Display Sequence:
```

#### **GEC Status Check Active**

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. See Appendix C for more information about GEC Referral and GEC Reports.

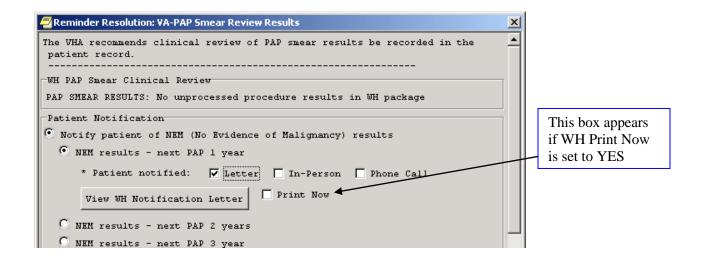
#### **WH Print Now Active**

The "Print Now" button on the Women's Health review reminders is optional. A parameter can be set (at the system level) to allow the "Print Now" button to be added to the dialog. By default, "Print Now" is turned off: the CPRS Reminder Configuration Option called WH Print Now Active is released with a Value of NO. If the value is changed to YES, the "Print Now" button will appear on the dialog. Whether the "Print Now" button is added to the dialog or not, the default will always be that the letter is queued to the WH package.

The text in the progress note will be one of the following:

Print Now Active/**Yes**: Letter queued to print at Device Name on finish Date/Time Print Now Active/**No**: Letter queued to WH package Date/Time

```
Select CPRS Reminder Configuration Option: WH WH Print Now Active
WH Print Now Option Active may be set for the following:
                           [DVF.FO-SLC.MED.VA.GOV]
                     SYS
    1
        System
        Division
                     DIV
                            [choose from INSTITUTION]
        Location
                     LOC
                            [choose from HOSPITAL LOCATION]
     4
        Service
                     SRV
                            [choose from SERVICE/SECTION]
        Team (OE/RR) OTL
    5
                             [choose from OE/RR LIST]
                     USR
                            [choose from NEW PERSON]
        User
Enter selection: 6 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, ONE
----- Setting WH Print Now Option Active for User: CRPROVIDER, ONE -----
Value: ?
Enter either 'Y' or 'N'.
Value: YES
```



#### Reminder Reports

The Reports menu contains Clinical Reminder reports that Clinical Reminders Managers and/or clinicians can use for summary and detailed level information about patients' due and satisfied reminders. This menu also contains reports that clinical coordinators can use to review extracted data, based on reminder definitions

The EPI extract finding list and total options are specific to the Hepatitis C Extract project. 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.

The Extract QUERI totals option reports reminder and finding totals from extract summaries created by automatic QUERI extract runs.

The GEC Referral Report option is used to generate GEC Reports. Clinical Reminders V.2.0 includes a nationally standardized computer instrument called VA Geriatric Extended Care (GEC), which replaces paper forms for evaluating Veterans for extended care needs.

# Changes made by PXRM\*2\*26 Finding Usage Report

The finding multiple in file #801.41 had the pointer to file #811.2 defined as Taxonomy instead of Reminder Taxonomy. The caused the finding usage report to have selections for Reminder Taxonomy and Taxonomy. It was renamed to Reminder Taxonomy and the problem was eliminated.

The Finding Usage Report did not have the ability to search for reminder definitions and reminder terms that are used in a Reminder List Rule. That ability was added. There was a bug in the Order Check term search that was corrected. Also, the ability to search Order Check rules for definitions was added. Previously, when the report was run, the user had the option to have it delivered as a MailMan message or have it written to the screen. That was changed, so that the user has the option to browse or print it, and then has the option to have it delivered as a MailMan message.

#### Reminder Reports menu

| Syn. | Display Name                        | Option Name                      | Description  |
|------|-------------------------------------|----------------------------------|--|
| D    | Reminders Due<br>Report             | PXRM REMINDERS<br>DUE            | For a selected patient and reminder(s), the report lists any reminders that are currently due.   |
| DRU  | Reminders Due<br>Report (User)      | PXRM REMINDERS<br>DUE (USER)     | Reminders Due Reports may be run from any report template allocated to a specific user.  |
| DRT  | User Report<br>Templates            | PXRM REPORT<br>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. |
| EPT  | Extract EPI Totals                  | PXRM EXTRACT<br>EPI TOTALS       | 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.              |
| EPF  | Extract EPI List by Finding and SSN | PXRM EXTRACT<br>EPI FINDING LIST | This option allows you to print extract results. Extracted data is listed by finding item and social security number.  |

| Syn. | Display Name            | Option Name                    | Description  |
|------|-------------------------|--------------------------------|--|
| EQT  | Extract Queri Totals    | PXRM EXTRACT<br>QUERI TOTALS   | This option prints reminder and finding totals for extract summaries created by automatic extracts.  |
| REV  | Review Date Report      | PXRM REVIEW<br>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. |
| FUR  | Finding Usage<br>Report | PXRM FINDING<br>USAGE REPORT   | This provides a report of where selected Clinical Reminder findings are used in reminder definitions, reminder terms, and reminder dialogs.  |
| GEC  | GEC Referral<br>Report  | PXRM GEC<br>REFERRAL<br>REPORT | 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.   |

#### **Multiple Uses for Reminder Reports**

Reminder reports can be used for a variety of purposes:

#### 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?

#### 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; e.g., on warfarin, amiodarone, etc.
- Track annual PPD due (Employee Health)

#### **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)

#### **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

#### **Employee Performance & Evaluation**

- Re-credentialing data for providers
- Annual Proficiency Nursing
- Support for Special Advancement
- Support for Bonuses
- Employee Rewards & Recognition

#### How date range searching works

- 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

As noted above, you can use dates like T-3M for the beginning date/time and T for the ending date/time. Since T stands for today, this tells Clinical Reminders to search between today and 3 months ago for results. When you run a reminder report, one of the prompts is for EFFECTIVE DUE DATE, and when a reminder report is run, "today" becomes whatever date is input in response to the EFFECTIVE DUE DATE prompt.

For example, if the beginning date/time was T-3M and the ending date/time was T and the effective due date was April 1, 2004, Clinical Reminders would search for results between January 1, 2004 and April 1, 2004. If you use an actual, as opposed to a symbolic, date/time, then it is never affected by what is input for EFFECTIVE DUE DATE. Each finding in the definition can have different values for beginning date/time and ending date/time, so you can search in different date ranges, as appropriate.

The key thing to remember is that "T" in a symbolic date is set to the value input for EFFECTIVE DUE DATE.

#### **Reminders Due Report option**

For a selected reminder, the report lists any reminders that are currently due.

Available report options are:

- Individual Patient
- Reminder Patient List
- Hospital Location (all patients with encounters)
- OE/RR Team (all patients in team)
- PCMM Provider (all practitioner patients)
- PCMM Team (all patients in team)

A SUMMARY report displays totals of how many patients of those selected have reminders due.

Alternatively, a DETAILED report displays patients with reminders due in alphabetical order. The report displays for each patient the date the reminder is due, the date the reminder was last done, and next appointment date. The detailed report can also list all future appointments.

A DETAILED report may be saved as a local patient list.

#### Example

```
Select Reminder Managers Menu Option: rp Reminder Reports
       Reminders Due Report
  RDU Reminders Due Report (User)
  RDT User Report Templates
  EPT Extract EPI Totals
  EPF Extract EPI List by Finding and SSN
  EQT Extract QUERI Totals
      GEC Referral Report
  REV
         Review Date Report
  FUR
         Finding Usage Report
Select Reminder Reports Option: Rd Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue:
    Select one of the following:
                  Individual Patient
                 Reminder Patient List
         L
                 Location
                 OE/RR Team
                  PCMM Provider
                  PCMM Team
PATIENT SAMPLE: L// Select Reminder Reports Option: d Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue:
    Select one of the following:
                  Individual Patient
         R
                  Reminder Patient List
         Τ.
                  Location
                OE/RR Team
```

```
PCMM Provider
                   PCMM Team
         Т
PATIENT SAMPLE: L// o OE/RR Team
Select TEAM: CRPROVIDER1
                               teamqa
Select another TEAM:
Enter EFFECTIVE DUE DATE: Aug 25, 2009// (AUG 25, 2009)
    Select one of the following:
                   Detailed
                   Summary
TYPE OF REPORT: S// ummary
    Select one of the following:
                   Individual Teams only
                   Individual Teams plus Totals by Facility
                   Totals by Facility only
REPORT TOTALS: I// r Individual Teams plus Totals by Facility
Print locations with no patients? YES//
Print percentages with the report output? NO// y YES
Select a REMINDER CATEGORY: CRWH REPORTS
        ...OK? Yes// (Yes)
Select another REMINDER CATEGORY: CR TEST
         ...OK? Yes// (Yes)
Select another REMINDER CATEGORY:
Select individual REMINDER:
VA-WH PAP SMEAR SCREENING NATIONAL
Select another REMINDER:
Create a new report template: N// y YES
STORE REPORT LOGIC IN TEMPLATE NAME: CR-wh
 Are you adding 'jg-wh' as a new REMINDER REPORT TEMPLATE (the 109TH)? No// y
  (Yes)
  REMINDER REPORT TEMPLATE REPORT TITLE: CR-wh
Changes to template 'CR-wh' have been saved
Print delimited output only: N// O
Include deceased patients on the list? N// O
Include test patients on the list? N// y YES
Save due patients to a patient list: N// O
DEVICE: HOME// HOME
Collecting patients from OE/RR List -
Evaluating Reminders /
```

Evaluating reminders /

Elapsed time for reminder evaluation: 4 secs

Aug 25, 2009 9:42:34 am Page 1

Clinical Reminders Due Report - Summary Report

Report Title: cr1-wh Patient Sample: OE/RR Team OE/RR Team: teamqa

Reminder Category: CRWH REPORTS Individual Reminder: WH SCREEN

VA-MAMMOGRAM

VA-WH PAP SMEAR SCREENING

Effective Due Date: 8/25/2009

Date run: CR-wh 8/25/2009 9:38:35 am

Template Name:

Summary report: Individual Teams plus Totals by Facility

Enter RETURN to continue or '^' to exit:

Aug 25, 2009 9:42:37 am Page 2

Clinical Reminders Due Report - Summary Report Reminders due for TEAM\_1A+2B for 8/25/2009

| Remi | nders due for TEAM_1A+2<br># Patie |             | 8/25/2009<br>ith Remino |       |      |       |
|------|------------------------------------|-------------|-------------------------|-------|------|-------|
|      | Applica                            |             | Due                     | %Appl | %Due | %Done |
| 1    | MST Screening                      |             |                         |       |      |       |
| 2    | Breast Cancer Screen               | 37          | 31                      | 87    | 84   | 16    |
| ۷    | bleast cancel screen               | 9           | 9                       | 21    | 100  | 0     |
| 3    | Breast Cancer Screen               |             | 0                       | 0.1   | 100  | 0     |
| 4    | Mammogram                          | 9           | 9                       | 21    | 100  | 0     |
|      |                                    | 9           | 9                       | 21    | 100  | 0     |
| 5    | ITC 2001 Mammogram Exa             | ample<br>9  | 9                       | 21    | 100  | 0     |
| 6    | CR MAM                             | 9           | 9                       | 21    | 100  | 0     |
| _    |                                    | 0           | 0                       | 0     | 0    | 0     |
| 7    | NONVA test DFN=37                  | 43          | 43                      | 100   | 100  | 0     |
| 8    | Pap Smear-Screening                | 10          |                         | 200   | 200  | · ·   |
| 9    | Dan Crass Danies of Da             | 13          | 13                      | 31    | 100  | 0     |
| 9    | Pap Smear-Review of Re             | esults<br>6 | 2                       | 14    | 34   | 66    |
| 10   | Pap Smear-F/U of Abnor             |             |                         | _     | _    | _     |
| 11   | WH SCREEN                          | 0           | 0                       | 0     | 0    | 0     |
|      | WII GONDEN                         | 41          | 41                      | 96    | 100  | 0     |
| 12   | PAP Smear Screening                | 1 2         | 1.0                     | 21    | 100  | 0     |
|      |                                    | 13          | 13                      | 31    | 100  | 0     |

Report run on 43 patients.

End of the report. Press ENTER/RETURN to continue...

## Reminders Due Report - Patient List Template

```
Select Reminder Reports Option: d Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue: jgtest
                                                                     HEP C
         ...OK? Yes//
          Report Title:
                               HEP C
          Report Type:
                              Summary Report
          Patient Sample:
                              Location
         Facility:
                               SALT LAKE CITY HCS
          Location:
                               All Outpatient Locations (Prior Encounters)
          Print Locations without Patients:YES
          Print percentages with the output:NO
                               1 LABTEST
          Reminder:
                               2 VA-NATIONAL EPI LAB EXTRACT
                               3 VA-NATIONAL EPI RX EXTRACT
          Template Name:
                               iatest
          Date last run:
                              AUG 04, 2001@18:39:04
          Service categories: A,I
            A - AMBULATORY
            I - IN HOSPITAL
Enter ENCOUNTER BEGINNING DATE: t-2Y
This must be a past date. For detailed help type ??.
Enter ENCOUNTER BEGINNING DATE: T-3Y (AUG 25, 2006)
Enter ENCOUNTER ENDING DATE: T (AUG 25, 2009)
Enter EFFECTIVE DUE DATE: Aug 25, 2009// (AUG 25, 2009)
     Select one of the following:
                   Individual Locations only
                   Individual Locations plus Totals by Facility
                   Totals by Facility only
REPORT TOTALS: I// R Individual Locations plus Totals by Facility
Print delimited output only: N// O
Include deceased patients on the list? N// O
Include test patients on the list? N// YES
Save due patients to a patient list: N// O
DEVICE: HOME// HOME
Building hospital locations list -
Elapsed time for building hospital locations list: 0 secs
Building patient list /
Elapsed time for building patient list: 0 secs
Removing invalid encounter(s) /
Elapsed time for removing invalid encounter(s): 0 secs
Evaluating Reminders |
```

```
Evaluating reminders /
Elapsed time for reminder evaluation: 0 secs
                                                Aug 25, 2009 12:36:04 pm Page 1
                 Clinical Reminders Due Report - Summary Report
          Report Title: HEP C
          Patient Sample: Location
Location: All Outpatient Locations (Prior Encounters)
Date Range: 8/25/2006 to 8/25/2009
                               8/25/2006 to 8/25/2009
          Effective Due Date: 8/25/2009
                              8/25/2009 12:34:40 pm
          Date run:
          Summary report: jgtest
Service Jndivic
                                Individual Locations plus Totals by Facility
          Service categories: A,I
            A - AMBULATORY
             I - IN HOSPITAL
Enter RETURN to continue or '^' to exit:
                                                 Aug 25, 2009 12:36:08 pm Page 2
                 Clinical Reminders Due Report - Summary Report
Facility: SALT LAKE CITY HCS 660
Reminders due 8/25/2009 - CARDIOLOGY for 8/25/2006 to 8/25/2009
                                                   # Patients with Reminders
                                                  Applicable Due
    LABTEST
                                                          3
1
    National Hepatitis Lab Extract
    National Hepatitis Med Extract
                                                           3
                                                                       3
Report run on 3 patients.
Enter RETURN to continue or '^' to exit:
                                                 Aug 25, 2009 12:36:16 pm Page 3
                 Clinical Reminders Due Report - Summary Report
Facility: SALT LAKE CITY HCS 660
Reminders due 8/25/2009 - TOTAL REPORT for 8/25/2006 to 8/25/2009
                                                   # Patients with Reminders
                                                  Applicable
                                                           3
1
    LABTEST
                                                                       3
                                                                       3
                                                           3
2
    National Hepatitis Lab Extract
3
                                                           3
                                                                       3
    National Hepatitis Med Extract
Report run on 3 patients.
Report timing data:
Elapsed time for building hospital locations list: 0 secs
Elapsed time for building patient list: 0 secs
Elapsed time for reminder evaluation: 0 secs
Elapsed time for removing invalid encounter(s): 0 secs
```

```
End of the report. Press ENTER/RETURN to continue...
```

## Reminders Due Report - Patient List

```
Select Reminder Managers Menu Option: RP Reminder Reports
         Reminders Due Report
  RD
  RDU Reminders Due Report (User)
  RDT
         User Report Templates
         Extract EPI Totals
         Extract EPI List by Finding and SSN
         Extract QUERI Totals
  GEC
         GEC Referral Report
  REV Review Date Report
  FUR Finding Usage Report
Select Reminder Reports Option: Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue:
    Select one of the following:
                   Individual Patient
                   Reminder Patient List
                   Location
         Ο
                   OE/RR Team
                  PCMM Provider
         P
                  PCMM Team
PATIENT SAMPLE: L// r Reminder Patient List
Select REMINDER PATIENT LIST:
 CRPROVIDER, ONE
Select another PATIENT LIST:
Enter EFFECTIVE DUE DATE: Aug 25, 2009// (AUG 25, 2009)
    Select one of the following:
         D
                   Detailed
         S
                   Summary
TYPE OF REPORT: S// ummary
Print locations with no patients? YES//
Print percentages with the report output? NO//
Select a REMINDER CATEGORY: AGP TEST
       ...OK? Yes// (Yes)
Select another REMINDER CATEGORY: ??
: slc REMINDER CATEGORY
        ...OK? Yes// (Yes)
Select another REMINDER CATEGORY: iRAQ AFGHAN
        ...OK? Yes// (Yes)
```

```
Select another REMINDER CATEGORY:
Select individual REMINDER:
                            VA-WH PAP SMEAR SCREENING
                                                          NATTONAL
Select another REMINDER: va-depRESSION SCREENING NATIONAL
Select another REMINDER: VA-WH MAMMOGRAM SCREENING NATIONAL
Select another REMINDER:
Create a new report template: N// O
Print delimited output only: N// O
Include deceased patients on the list? N// O
Include test patients on the list? N// y YES
Save due patients to a patient list: N// O
DEVICE: HOME// HOME
Collecting patients from Reminder Patient List /
Evaluating reminders /
Elapsed time for reminder evaluation: 6 secs
                                              Aug 25, 2009 12:43:46 pm Page 1
                Clinical Reminders Due Report - Summary Report
         Patient Sample: Patient List
         Patient List:
                              CRPROVIDER, ONE
         Reminder Category: AGP TEST
         Individual Reminder: VA-WH PAP SMEAR SCREENING
                     VA-DEPRESSION SCREENING
                    VA-WH MAMMOGRAM SCREENING
         Effective Due Date: 8/25/2009
         Date run:
                              8/25/2009 12:41:18 pm
Enter RETURN to continue or '^' to exit:
                                               Aug 25, 2009 12:43:57 pm Page 3
                Clinical Reminders Due Report - Summary Report
Patient List: CRPROVIDER, ONE for 8/25/2009
                                                 # Patients with Reminders
                                                Applicable
                                                                 Due
                                                                   ---
    AGP ERROR
1
    NONVA test DFN=37
                                                        14
                                                                    14
2
3
    Pap Smear-Screening
4
    Pap Smear-Review of Results
                                                         2
5
                                                         Ω
    Pap Smear-F/U of Abnormal Results
6
    PAIN SCREENING
                                                         Ω
                                                                    Ω
7
    ITC Pneumovax
                                                        13
                                                                    13
8
    SLC Life style Education
                                                         6
                                                                     6
9
    new reminder
                                                         Ω
10
    Hepatitis C Risk Assessment
                                                        14
                                                                    12
11
    Influenza Vaccine
                                                        12
                                                                    12
12
    Smoking Cessation Education
                                                         4
                                                                    4
   Pheumovax
1.3
                                                        13
                                                                    10
   ITC 2001 diabetes example
14
                                                         1
                                                                     1
15 ITC 2001 Mammogram Example
                                                         3
                                                                     3
16 SLC Diabetic Foot Care Education
```

| 17  | Diabetic Eye Exam                             | 14 | 14 |  |  |  |  |
|---|---|----|----|--|--|--|--|
| 18  | SLC Cancer Screen                             | 5  | 5  |  |  |  |  |
| 19  | Ischemic HD/Post MI Follow Up                 | 0  | 0  |  |  |  |  |
| 20  | Breast Exam                                   | 4  | 4  |  |  |  |  |
| 21  | Advanced Directives Education                 | 14 | 13 |  |  |  |  |
| 22  | LTC Oversight Visit                           | 14 | 14 |  |  |  |  |
| 2.3   | Weight and Nutrition Screen                   | 13 | 13 |  |  |  |  |
| 24  | IHD Lipid Profile                             | 2  | 2  |  |  |  |  |
| 25  | EXCHANGE CHANGES                              | 0  | 0  |  |  |  |  |
| 26  | Tobacco Cessation Education                   | 11 | 11 |  |  |  |  |
| 27  | JG TOBACCO USE SCREEN                         | 14 | 14 |  |  |  |  |
| 28  | Problem Drinking Screen                       | 14 | 14 |  |  |  |  |
| 29  | Weight and Nutrition Screen                   | 13 | 13 |  |  |  |  |
| 30  | Alcohol Abuse Education                       | 14 | 14 |  |  |  |  |
| 31  | Weight  | 14 | 14 |  |  |  |  |
| 32  | Exercise Education                            | 14 | 14 |  |  |  |  |
| 33  | JG-Weight                                     | 14 | 14 |  |  |  |  |
| 34  | Taxonomy Test                                 | 14 | 14 |  |  |  |  |
| 35  | Patch5 VA-Pain Screening                      | 14 | 14 |  |  |  |  |
| 36  | PAP Smear Review Results                      | 2  | 2  |  |  |  |  |
| 37  | Iraq&Afghan Post-Deployment Screen            | 1  | 1  |  |  |  |  |
| 38  | PAP Smear Screening                           | 3  | 3  |  |  |  |  |
| 39  | Depression Screening                          | 14 | 14 |  |  |  |  |
| 40  | Mammogram Screening                           | 2  | 2  |  |  |  |  |
| Report run on 14 patients.  |   |    |    |  |  |  |  |
| Report timing data:<br>Elapsed time for reminder evaluation: 6 secs |   |    |    |  |  |  |  |
| End (   | of the report. Press ENTER/RETURN to continue |    |    |  |  |  |  |

#### **Extract EPI Totals**

Extract EPI Total reports are generated each month by a Lab package LREPI run that processes the following national reminders related to Hepatitis C:

VA-NATIONAL EPI DB UPDATE VA-NATIONAL EPI LAB EXTRACT VA-NATIONAL EPI RX EXTRACT.

#### 2) QUERI (IHD and MH)

Extracts of this type are prefixed VA-IHD or VA-MH. The following is an example of IHD lookup information:

```
1 VA-IHD QUERI 2000 M2 Nov 27,2002@13:20:26
2 VA-IHD QUERI 2000 M3 Nov 27,2002@13:24:08
3 VA-IHD QUERI 2000 M4 Nov 27,2002@13:25:13
```

The year and month of the extract are included in the extract name. The date and time of the run is an identifier.

START WITH NAME: FIRST// LREPI 05/02

GO TO NAME: LAST//

DEVICE: ;;999 TCP Right Margin: 80//

JAN 6,2006 16:30 PAGE 1 REMINDER EXTRACT TOTALS

\_\_\_\_\_\_

LREPI 05/02 031505 Date Range: FEB 1,2005-FEB 28,2005

Extract Date: MAR 15,2005 22:16

Total Patients Evaluated: 766 Total Patients with Findings: 718

| Totals by Finding Item         | Finding | Unique Patient |
|--------------------------------|---------|----------------|
|                                | Count   | Count          |
| INTERFERON ALFA-2B             | 1       | 1              |
| HEPATITIS C ANTIBODY           | 207     | 207            |
| TOT. BILIRUBIN                 | 190     | 190            |
| RIBAVIRIN                      | 35      | 35             |
| AST                            | 192     | 192            |
| ALT                            | 198     | 198            |
| VA-HEPATITIS C INFECTION       | 127     | 127            |
| INTERFERON BETA-1B             | 4       | 4              |
| INTERFERON BETA-1A             | 18      | 18             |
| INTERFERON ALFACON-1           | 5       | 5              |
| RISK FACTOR FOR HEPATITIS C    | 110     | 110            |
| NO RISK FACTORS FOR HEP C      | 319     | 319            |
| DECLINED HEP C RISK ASSESSMENT | 8       | 8              |

LREPI 05/03 041505 Date Range: MAR 1,2005-MAR 31,2005

Extract Date: APR 15,2005 22:12
Total Patients Evaluated: 841 Total Patients with Findings: 802

| Totals by Finding Item         | Finding | Unique Patient |
|--------------------------------|---------|----------------|
|                                | Count   | Count          |
| INTERFERON ALFA-2B             | 2       | 2              |
| HBSAG                          | 1       | 1              |
| HEPATITIS C ANTIBODY           | 446     | 223            |
| RIBAVIRIN                      | 47      | 47             |
| VA-HEPATITIS C INFECTION       | 119     | 119            |
| INTERFERON BETA-1B             | 9       | 9              |
| INTERFERON BETA-1A             | 16      | 16             |
| INTERFERON ALFACON-1           | 8       | 8              |
| HBSAB                          | 33      | 33             |
| RISK FACTOR FOR HEPATITIS C    | 132     | 132            |
| NO RISK FACTORS FOR HEP C      | 372     | 372            |
| DECLINED HEP C RISK ASSESSMENT | 3       | 3              |
| Press RETURN to continue       |         |                |

#### **Extract QUERI Totals**

```
Reminders Due Report
  DRU Reminders Due Report (User)
  DRT User Report Templates
  EPT Extract EPI Totals
  EPF Extract EPI List by Finding and SSN
  EQT Extract QUERI Totals
  GEC GEC Referral Report
  REV Review Date Report
  FUR Finding Usage Report
Select Reminder Reports Option: EQT Extract QUERI Totals
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.
                    LREPI 00/05 061500 Jun 15,2000@14:52:36
LREPI 00/06 073100 Jul 15,2000@14:55:40
LREPI 00/07 081500 Aug 15,2000@15:42:24
LREPI 00/05 082200 Aug 22,2000@02:44:54
LREPI 00/08 082500 Aug 25,2000@14:24:59
                  LREPI 00/05 061500
         162
         163
         164
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 OUERI 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
                                               0
                                                          20
                                    20
    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

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

003 Sequence:

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:

N/A Total Applicable Due Not Due

004 Sequence:

Finding Group: VA-POS DEPRESSION SCREEN FOLLOW UP DEPRESSION TO BE MANAGED IN PC Group Type: MOST RECENT FINDING PATIENT COUNT

Group Status: TOTAL PATIENTS Finding Count by Reminder Status:

> Applicable N/A Due Not Due Total

Extract Sequence: 003

Reminder: VA-ANTIPSYCHOTIC MED SIDE EFF EVAL

Station: CRSITE HCS

Patient List: VA-MH QUERI 2000 M2 QUALIFYING VISIT

Reminder Totals: N/A Due Not Due Total Applicable 1000 3 997 1

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:

> Applicable N/A Due Not Due Total

002 Sequence:

Finding Group: VA-ANTIPSYCHOTIC DRUGS 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
MOST RECENT FINDING PATIENT COUNT Group Type:

Group Status: TOTAL PATIENTS Finding Count by Reminder Status:

## **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.

## **GEC Referral Report**

GEC Referral Reports display the percentage of patients referred to select GEC programs who meet the eligibility criteria as outlined in the Under Secretary for Health's Information Letter IL 10-2003-005 and VHA Handbook 1140.2.

VA GEC Reports provide quarterly statistical reports on the following VA-funded programs.

- Homemaker/Home Health Aide, when Funding Source=VA
- Adult Day Health Care, when Funding Source=VA
- VA In-Home Respite, when Funding Source=VA
- Care Coordination, when Funding Source=VA

When sites submit their quarterly reports, the national office will be able to generate a report for the General Accounting Office/Office of Inspector General that demonstrates compliance with the standards for assessing patients prior to placement in VA-funded programs.

These same reports can be used at the local level to evaluate how well a site is performing in meeting compliance standards for placement of patients in VA funded GEC programs.

## **Changes in Patch 4**

- An undefined error, <UNDEFINED>CALCMON+12<>PXRMG2M1, occurred when the scheduled event fired off at the beginning of each month. That has now been repaired.
- Several of the GEC Reports were not showing a complete list of patients or providers. This has now been corrected. The division and age of the patient has been added to some reports to help in identifying the patient.
- There is a new choice in the GEC reports menu that will give the sites the option to open a closed referral, merge two referrals, or close an open referral.
- The GEC Care Recommendation Dialog has been modified to allow more than one selection when a person wants to refer a patient to more than one location.
- A problem with the user being able to take some editing actions on GEC dialogs have been corrected, so the user is not able to copy or delete dialog groups from the GEC dialogs.
- Geriatric Extended Care Reports were not collecting the correct data. This was corrected.
- The email addresses of the remote members of mail group GEC NATIONAL ROLLUP are updated.
- As requested by the primary GEC stakeholder, several reminder dialog entries were moved from the Nursing Assessment GEC dialog to the Care Recommendation GEC dialog. A post-install routine changes several Health Factors from one GEC dialog to another.

#### Example

```
Select Reminder Reports Option: GEC GEC Referral Report
All Reports will print on 80 Columns
     Select one of the following:
         1
                   Category
                  Patient
         3
                  Provider by Patient
                 Referral Date
         4
         5
                  Location
         6
                 Referral Count Totals
         7
                  Category-Referred Service
                 Summary (Score)
                  'Home Help' Eligibility
         10
                  Restore or Merge Referrals
Select Option or ^ to Exit: 8// <Enter> Summary (Score)
Select a Beginning Historical Date.
BEGINNING date or ^ to exit: (1/1/1988 - 6/30/2004): T-60//<Enter>(MAY 01, 2004)
Select Ending Date.
ENDING date or ^ to exit: (5/1/2004 - 6/30/2004): T//\langle Enter \rangle (JUN 30, 2004)
    Select one of the following:
                  All Patients
        A
         M
                  Multiple Patients
Select Patients or ^ to exit: A//<Enter> 11 Patients
    Select one of the following:
        F Formatted
                 Delimited
Select Report Format or ^ to exit: F//<Enter> ormatted
DEVICE: HOME//<Enter> ANYWHERE Right Margin: 80// <Enter>
______
GEC Patient-Summary (Score)
Data on Complete Referrals Only
From: 05/01/2004 To: 06/30/2004
                                           Basic Skilled Patient TOTAL
                              Finished
                   SSN Date IADL ADL Care Behaviors ACROSS
_____
CRPATIENT, ONE (666809999) 06/15/2004 0 0 2 4
CRPATIENT, ONE (666809999) 06/15/2004 0 7 9 5
CRPATIENT, TWO (666809999) 05/04/2004 0 0 0
CRPATIENT, SIX (666009999) 05/11/2004 0 0 0
CRPATIENT, SIX (666009999) 05/11/2004 0 0 0
CRPATIENT, SIX (666009999) 05/11/2004 0 0 0
                                                                      21
                                                                      0
                                                                       0
                                                                        0
                                Totals > > 0 7 11
                                                                 4.5
9.8
                   Means >> 0.0 1.2 1.8 1.5
Standard Deviations >> 0.0 3.1 4.1 2.9
Enter RETURN to continue or '^' to exit: <Enter>
```

## **Finding Usage Report**

This report provides a listing of the reminder definitions, reminder terms, and reminder dialogs in which selected Clinical Reminder findings are used. This can help you troubleshoot when new reminders and dialogs are distributed to replace existing ones.

The report can be sent as a mail message to designated recipients.

#### Changes made by PXRM\*2\*26:

- The finding multiple in file #801.41 had the pointer to file #811.2 defined as Taxonomy instead of Reminder Taxonomy. The caused the finding usage report to have selections for Reminder Taxonomy and Taxonomy. It was renamed to Reminder Taxonomy and the problem was eliminated.
- The Finding Usage Report did not have the ability to search for reminder definitions and reminder terms that are used in a Reminder List Rule. That ability was added.
- There was a bug in the Order Check term search that was corrected.
- The ability to search Order Check rules for definitions was added.
- Previously, when the report was run, the user had the option to have it delivered as a MailMan message or have it written to the screen. That was changed, so that the user has the option to browse or print it, and then has the option to have it delivered as a MailMan message.

```
Select Reminder Reports Option: Finding Usage Report
Clinical Reminders Finding Usage Report
Select from the following reminder findings (* signifies standardized):
   1 - DRUG
    2 - EDUCATION TOPICS
   3 - EXAM
    4 - HEALTH FACTOR
    5 - ICD9 DIAGNOSIS
    6 - IMMUNIZATION *
    7 - LABORATORY TEST
   8 - MENTAL HEALTH
   9 - MH TESTS AND SURVEYS
  10 - ORDER DIALOG
  11 - ORDERABLE ITEM
  12 - PROCEDURE
  13 - RADIOLOGY PROCEDURE
  14 - REMINDER COMPUTED FINDING
  15 - REMINDER DEFINITION
  16 - REMINDER LOCATION LIST
  17 - REMINDER TAXONOMY
  18 - REMINDER TERM
  19 - SKIN TEST *
   20 - TAXONOMY
   21 - VA DRUG CLASS *
   22 - VA GENERIC *
   23 - VITAL MEASUREMENT *
   24 - VITAL TYPE *
   25 - WH NOTIFICATION PURPOSE
Enter your list for the report.: (1-21): 5
Search for all or selected ICD9 DIAGNOSIS
```

```
Select one of the following:
        1
               ALL
                SELECTED
Enter response: ALL// 1
SORT DONE
Browse or Print? B// Print
DEVICE: HOME// HOME
Clinical Reminders finding usage report.
The following ICD DIAGNOSIS(s) are used as follows:
_____
ICD DIAGNOSIS - 100.9 (IEN=3)
   Is used in the following Reminder Dialog(s):
    Dialog element POV DIAG 1 (IEN=660113), used in the
     Finding Item field
_____
ICD DIAGNOSIS - 103.3 (IEN=15)
_____
   Is used in the following Reminder Dialog(s):
    Dialog element CODE SET ICD9 FIND (IEN=336), used in the
     Finding Item field
______
ICD DIAGNOSIS - 174.1 (IEN=335)
   Is used in the following Reminder Dialog(s):
    Dialog element POV 174.1 DONE (IEN=441), used in the
     Finding Item field
    Dialog element POV 174.1 DONE ELSEWHERE (IEN=581), used in the
      Finding Item field
Etc.
Press ENTER to continue:
Deliver the report as a MailMan message? Y// y
```

#### MailMan Report

```
Subj: Clinical Reminders Finding Usage Report [#49717] 05/08/09@16:02 70 lines
From: POSTMASTER (Sender: CRUSER, THIRTEEN) In 'IN' basket. Page 1 *New*
Clinical Reminder finding usage report.
The following IMMUNIZATIONs are used as Clinical Reminder findings:
_____
IMMUNIZATION - INFLUENZA (IEN=12)
  INFLUENZA is used in the following Definitions:
    VA-*INFLUENZA IMMUNIZATION (IEN=8)
      Finding number 1
    VA-INFLUENZA VACCINE (IEN=26)
     Finding number 1
    IMMTEST1 (IEN=71)
     Finding number 14
______
    MHV INFLUENZA VACCINE (IEN=208)
     Finding number 1
    jg FLU VACCINE (IEN=209)
     Finding number 1
   MHV INFLUENZA VACCINE2 (IEN=246)
     Finding number 1
    INFLUENZA GOOD (IEN=264)
     Finding number 1
    INFLUENZA BAD (IEN=265)
     Finding number 1
    ERROR (IEN=275)
     Finding number 14
    AGP IMMUNIZATION (IEN=361)
      Finding number 1
    IMMTEST (IEN=660008)
      Finding number 14
  INFLUENZA is used in the following Terms:
    INFLUENZA IMMUNIZATION (IEN=491)
      Finding number 3
    PKR LONG IMM TEST (IEN=766)
      Finding number 3
  INFLUENZA is used in the following Dialogs:
```

```
Dialog element ZZPJH TIME DONE (IEN=496), used in the
      Finding Item field
    Dialog element AGP INSTALL ELEMENT (IEN=1060), used in the
      Finding Item field
    Dialog element IM INFLUENZA DONE ELSEWHERE (IEN=660065), used in
    the
      Finding Item field
    Dialog element IM INFLUENZA CONTRA (IEN=660066), used in the
     Finding Item field
    Dialog element CONTRAINDICATION TEST (IEN=660000137), used in the
     Finding Item field
    Dialog element TEST PLAN IMMUNIZATION (IEN=660000139), used in the
      Finding Item field
    Dialog element DEMO ELEMENT 1 (IEN=660000173), used in the
      Finding Item field
Enter message action (in IN basket): Ignore//
```

# **MST Synchronization Management Project**

The Millennium Healthcare and Benefit Act, Public Law 106-117, Section 115, Counseling and Treatment for Veterans Who Have Experienced Sexual Trauma, includes provisions for development of a formal mechanism for reporting on outreach activities and require the Veterans Administration (VA) to provide counseling and appropriate care and services for treatment of Military Sexual Trauma (MST). As a result, the Women Veterans Health Program (WVHP) requested Veterans Health Information System and Technology Architecture (VistA) enhancements to support the screening of all Veterans (men and women) for MST, identification of non-VA workload associated with MST, and enhanced national reporting of MST data. Veterans Health Administration (VHA) Directive 2000-008 and VHA Directive 99-039 provided guidance in the screening, tracking, and documentation of MST in all enrolled Veterans who utilize VHA. Additionally, a "Best Practice" manual provided field guidance on creating local Implementation Support Teams (IST), developing MST screening processes, and documenting screening results using the VistA Military Sexual Trauma database within the Patient Registration Package.

In FY1999, VistA enhancements provided the ability to record or edit Veterans' MST status in VistA and also created an MST "outpatient classification code" similar to Agent Orange. Once a Veteran has reported MST, the classification code triggers the staff via VistA prompts when they are checking out an encounter to be prompted for whether the encounter is related to MST. VistA began including the MST status and classification code in Patient Care Encounter (PCE) transmissions in May 2000. The Patient Treatment File (PTF) patch was released to sites on March 6, 2001.

## **MST Scope of Changes**

The effort for implementing the MST section of the Millennium Healthcare and Benefits Act (Mill Bill) impacted Fee Basis, Women Health (WH), Health Eligibility Center (HEC/Enrollment), Clinician Desktop, Patient Information Management Systems (PIMS), the Corporate Databases, and VistA software packages.

The enhancements provided a means for identifying non-VA MST workload in the Fee Basis application, clinical reminders to clinicians, and specifications for the VA and non-VA workload reports to be generated at the Austin Automation Center (AAC). Also, PIMS and HEC will manage the MST status sharing between sites to minimize the instances in which a veteran is repeatedly asked about MST status. HEC will act as the authoritative database source.

The data for MST will be entered locally in the VistA system and will be shared with the HEC as part of the current HL7 messaging capabilities. The information entered in the VistA system is sent to the HEC so that it can be transmitted to other VA health care facilities of record. Locally, MST-related, non-VA care will be entered into the Fee Basis system. This information will be sent to Central Fee, where Outpatient non-VA data will be used for national reporting. Inpatient non-VA care is sent to PTF. The system requirements, identified in this document, include additions and modifications to existing field entries on the VistA, HEC, Fee Basis, and Central Fee. There will be no changes to the NPCD or PTF database. NPCD will continue to accept and store MST data.

### **MST System Features**

There are multiple objectives with Mill Bill MST. To determine the amount of care being provided to Veterans who have experienced MST, the Fee Basis system will locally keep track of MST related non-VA care. This information will be sent to Central Fee so that reports reflecting the national experience can be generated. In order to improve data quality, redundant fields in the WVH application and PIMS will be synchronized. Legislation mandates that all Veterans be screened for MST. To reduce the number of times a Veteran would be screened for MST, VAMCs, via PIMS, will provide the HEC with MST status as it is derived. The HEC will be the authoritative database source for MST status and be able to provide other VAMCs with a Veteran's MST status upon request. Clinical reminders provides a mechanism to screen Veterans who do not have a MST status for MST and assists with the entry of that information. VHA wants to have reports from the National Databases (NPCD and Central Fee) that will look at the population and trending of MST across VHA.

## CLINICAL REMINDERS MST FUNCTIONALITY (Patch PXRM\*1.5\*7)

This patch, released in January 2002, provided new functionality for Clinical Reminders to help sites meet the mandate to collect Military Sexual Trauma (MST) data. The patch included:

- A new reminder definition, VA-MST SCREENING, and the findings used by the definition. The findings include:
- Three reminder terms: VA-MST DECLINES REPORT, VA-MST NEGATIVE REPORT, and VA-MST POSITIVE REPORT
- A computed finding: VA-MST STATUS
- Four health factors: MST CATEGORY, MST DECLINES TO ANSWER, MST NO DOES NOT REPORT, and MST YES REPORTS
- A reminder dialog: VA-MST SCREENING.

The reminder dialog has three elements that update PCE with health factor findings (MST NO DOES NOT REPORT, MST YES REPORTS and MST DECLINES TO ANSWER). You will be able to capture data directly to the MST HISTORY file, #29.11, using this reminder dialog.

If your site is already capturing MST data via health factors, education topics, or exams, there is functionality in this patch that will help you synchronize this data with the data in the MST HISTORY file, #29.11. Before the synchronization can be done, you must map your local findings to the appropriate VA-MST reminder term. If you have been using health factors that are similar to those listed above, you may consider renaming your health factors to match the names listed above. The renaming must be done BEFORE the patch is installed or it will not work. If you choose not to do this, or your site has been using education topics or exams, you will need to map your findings to these terms before the initial synchronization can be done.

If your site is already capturing MST data via local health factors, education topics, and exams, the national dialog and component elements and groups may be copied to local dialogs, which may then be modified to use local findings. *The national dialog and component elements and groups may not be edited.* Alternatively, if you already have reminder dialogs for MST, you may continue to use these if the findings in these dialogs are mapped to the new VA-MST terms.

## **Reminders MST Synchronization Management Menu**

This patch also included a new option on the Reminder Managers Menu called Reminders MST Synchronization Management. There are two options on this menu: one for doing the synchronization (Reminders MST Synchronization), and one for checking on the synchronization (Reminders MST Synchronization Report). The first option will allow you to schedule a background job that does the synchronization. The report option will give you data on the initial synchronization and the last daily synchronization.

| Syn. | Name                                       | Option Name                 | Description  |
|------|--|-----------------------------|--|
| SYN  | Reminders MST<br>Synchronization           | PXRM MST<br>SYNCHRONIZATION | This option is used to run the Clinical Reminders MST synchronization. The synchronization should not be run until the site has finished mapping the MST reminder terms. |
| REP  | Reminders MST<br>Synchronization<br>Report | PXRM MST REPORT             | This option runs the Clinical Reminders MST synchronization report.  |

### **Reminders MST Synchronization Example**

```
Select Reminder Managers Menu Option: MST Reminders MST Synchronization Management

SYN Reminders MST Synchronization
REP Reminders MST Synchronization Report

Select Reminders MST Synchronization Management Option: SYN Reminders MST Synchronization
Queue the Clinical Reminders MST synchronization.
Enter the date and time you want the job to start.
It must be after 09/11/2001@09:01:33 T@1
Do you want to run the MST synchronization at the same time every day? Y// NO
Task number 594549 queued.
```

#### **Reminders MST Synchronization Report**

The report option gives you data on the initial synchronization and the last daily synchronization.

#### Example

### Reminder Parameters Menu

This menu contains three options: Edit Site Disclaimer, Edit Web Sites, and Edit Number of MH Questions.

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           | PXRM EDIT SITE DISCLAIMER | This option allows the site disclaimer used in Health Summary components to be modified.                              |
| EWS  | Edit Web Sites                 | PXRM EDIT WEB<br>SITES    | This option allows the reminder web sites used in CPRS GUI to be modified.  |
| МН   | Edit Number of MH<br>Questions | PXRM MH<br>QUESTIONS      | This option allows the site to select the maximum number of MH questions to be used as Reminder Dialog Finding Items. |

## **Edit Site Disclaimer Example**

## **Edit Web Sites Example**

```
Select Reminder Parameters Option: ews Edit Web Sites

Choose from:
    http://vista.med.va.gov/reminders
    http://vaww.archive.oqp.med.va.gov/CPGintra/cpg/cpg.htm

Select URL: ?
    Answer with WEB SITES URL
    Choose from:
    http://vista.med.va.gov/reminders

    You may enter a new WEB SITES, if you wish
    Enter the URL for the web site.

Select URL: http://vista.med.va.gov/reminders
```

## **Edit Number of MH Tests Example**

This option allows the site to select the Maximum number of MH questions to be used as a Reminder Dialog Finding Items. If the number of question in the selected MH test exceed the number in this parameter than the MH test cannot be used in the reminder dialog.

```
ESD Edit Site Disclaimer
EWS Edit Web Sites
MH Edit Number of MH Questions

Select Reminder Parameters Option: MH Edit Number of MH Questions

MAXIMUM NUMBER OF MH QUESTIONS: 100//

ESD Edit Site Disclaimer
EWS Edit Web Sites
MH Edit Number of MH Questions

Select Reminder Parameters Option:
```

# **Reminder Patient List Management**

New tools for creating and managing reminder patient lists were introduced with Clinical Reminders V2.0. The patient list functionality provides a way to identify patients with specific findings or combinations of findings, without having to search one-by-one through every patient registered on the system.

### Patient List summary (from Patty Hoey, Puget Sound HCS)

Clinical Reminder patient lists and extracts represent a watershed advance in VA's clinical information armamentarium. Before their creation, front-line clinicians wishing to search for clinical data (for evidence-based medicine, process improvements, or clinical research) were limited to VA FileMan. While powerful, FileMan is too esoteric and resource-intensive for many clinicians. Alternatively, several VISNs have data warehouses and allow clinicians to write SQL scripts to search them; but again, the learning curve is steep and the data can be historical and, therefore, not useful for time-sensitive searches.

Because FileMan and SQL are difficult to learn, clinicians are often reliant on technical intermediaries and are subject to their availability. In contrast, the clinical reminder patient list functionality is relatively accessible and comprehensible (with minimal training) to front-line clinicians, allowing any clinician to become an informaticist, avoiding the risk of clinical questions being diluted or lost in translation. With the number of VA clinicians nationwide finally able to access the rich VA database, the potential for advances in patient safety, patient therapy, and processes that realize time and budget savings is boundless. Reminder indexes make the queries fast and consume relatively few computer resources. The searchable database is up-to-date, making patient lists useful for daily patient safety surveillance reporting. Lists can be auto-tasked to run monthly, quarterly, and annually and rolled up into a message for possible transmission to regional patient registries or county health departments.

The patient list functionality was originally created to support reminder extract reports. Reminder extract reports rely on the patient list tools to build patient lists that meet specific finding criteria. The numbers of patients on the patient lists created and used for extract reports are often referred to as patient denominators. The lists of patients are used to evaluate specific reminders to calculate compliance totals and finding totals.

Patient lists can also be created and used independently of extract reporting.

This patient list-building tool uses the Clinical Reminders Index global; consequently, it can build patient lists very quickly. The Clinical Reminders Index provides indexes that support finding all patients with a particular finding (also known as "across-patient look-ups"). The Index global also supports rapidly accessing finding data for a specific patient.

**Example**: At one site, the Index global was used to build a list of all patients with a diabetic diagnosis in the last five years at a medium-sized site in about two minutes. There were approximately 10,000 patients on the list.

Once a patient list has been created by the reminder patient list tools, it can be stored and used for a number of purposes: reminder extract reports, input to reminder reports, input to health summaries, and creation of mailing lists and personalized form letters.

The reminder patient lists are stored in the Reminder Patient List file (#810.5). The Reminder Patient List Menu (PXRM PATIENT LIST MENU) provides access to the patient list management and list rule management functionality.

#### **List Rules**

List rules are the basic building blocks for constructing patient lists. A list rule may be defined using a reminder term, the patient cohort from a reminder definition, or an existing reminder patient list. Before a list rule can be created, the corresponding reminder term, reminder definition, or reminder patient list must already exist. Each list rule is defined independently. Once a list rule is defined, it can be combined with other list rules to build Rule Sets.

There are four types of list rules.

| Type of List Rule | <u>Abbreviation</u>                          |  |  |  |
|-------------------|--|--|--|--|
| Finding Rule      | FR   |  |  |  |
| Reminder Rule     | RR   |  |  |  |
| Patient List Rule | PL   |  |  |  |
| Rule Set          | RS   |  |  |  |
|                   | Finding Rule Reminder Rule Patient List Rule |  |  |  |

**TIP:** These four types of list rules are all stored in the same file, REMINDER LIST RULE (#810.4). A naming convention can be useful for ease of identifying list rule entries by type of list rule. One suggested convention is to use the abbreviations above as a prefix or suffix in the list rule name identifying the type of list rule. We will use this suggested naming convention for the examples of list rules in the List Rule Management Section.

**1. Finding rules** are used to build lists of patients based on reminder terms. Reminder patient list tools will find patients with the finding(s) defined in the reminder term.

Most of the types of findings that can be defined in the reminder term have a Global Index for across-patient look-ups. However, the Global Index is not used for computed findings linked to a reminder term, unless the computed finding has hard-coded logic to access the Global Index. The typical computed finding assumes the patient is already selected and does not support across-patient look-up. However, with V2.0, a computed finding can be specifically created for list-building purposes by defining the Type field in the computed finding definition as "List." The List type computed finding can be used as the first rule, or any subsequent rule in a rule set where the ADD PATIENT Operation is used. When a computed finding is used to SELECT or REMOVE patients from an existing patient list, a "single" or "multiple" type computed finding may be used.

- **2. Reminder rules** are used to build lists of patients based on a reminder definition and its patient cohort logic. Before a reminder definition is used to build a patient list, the cohort logic is checked to make sure it meets certain criteria. If it doesn't, a warning message will be issued. This is done to make sure that building the list is computationally feasible. The criteria for using a reminder definition are:
  - The cohort logic cannot start with a logical not
  - The cohort logic cannot contain a logical or not
  - If AGE is used in the cohort logic, then a baseline age range must be defined
  - If SEX is used in the cohort logic the reminder must be sex-specific
  - SEX cannot be the first element in the cohort logic unless it is followed by AGE
  - If a finding sets the frequency to 0Y, which effectively removes the patient from the cohort, it can't have an associated age range

- The USAGE field must be specified as "L" for Patient List
- **3.** Patient List rules are used to build a new reminder patient list based on the patients in an existing reminder patient list. An existing patient list can be used to create a new list, add patients to a list, remove patients from a list if they are defined in the specified list, and remove patients from a list if they are not defined in the specified list.

#### 4. List Rule Sets

A rule set combines list rules and logical operations into a series of steps which are processed to build a patient list. The steps are processed in a numerical order that is based on the value of the SEQUENCE field, which is a three-digit number, i.e., 1 to 999. The first step initializes the list and subsequent steps can add patients (ADD PATIENT) to the list or remove (REMOVE or SELECT) them from it. Since the first step initializes the list, its operation must be ADD PATIENT. Subsequent steps may also use the ADD PATIENT operation to merge patients.

Logical operators (i.e., AND, AND NOT, OR), similar to those used in a reminder definition, are represented by the Rule Set Operations:

ADD PATIENT – this works like a Boolean OR; any patient for which the finding is true will be added to the list. This should always be the operation for the first sequence in a rule set. Patient lists may be merged using the ADD PATIENT operation.

REMOVE – this works like a Boolean AND NOT; any patient for which the finding is true will be removed from the list.

SELECT – this works like a Boolean AND; any patient for whom the finding is true will remain on the list and those for which the finding is false will be removed from the list.

One additional operation is available that is not related to Boolean logic:

INSERT FINDING – this is a special operation that lets you store patient data in the patient list. If the finding rule is based on the term VA-IHD STATION code or VA-PCMM INSTITUTION the patient's PCMM institution will be stored with the list and when the patient list is displayed there will be a column that lists the PCMM Institution. The patient's PCMM institution is determined by finding the patient's PCMM team and then the Institution for the team. When the finding rule is based on any other terms, the "CSUB" data for the term will be stored with the list and can be used in the Patient Demographic Report.

#### **Rule Set Definition**

- Each rule set has a unique Name. National rule sets will have a name prefixed with "VA-" or "VA-\*", and cannot be edited.
- Each rule set has a Class. Rule sets defined by a local site must be defined with the LOCAL or VISN Class. Nationally distributed rules sets will be have a NATIONAL class.
- Sequence: This three-digit number defines the order in which the list rules in the rule set will be evaluated.
- The ADD PATIENT operation is always used in the first sequential step, typically 001, to build the initial list of patients which can then be modified by subsequent rules. The ADD PATIENT

- operation can also be used on subsequent steps to add patients with a particular finding to an existing list of patients.
- Each sequential step uses the patient list from the prior step as the starting list to be added to or deleted from.
- It is good practice to initialize the list with the list rule that produce the smallest number of patients. For example if you need a list of patients with a certain diagnosis seen at specific locations you should initialize the list with the smaller of the two. If a finding list rule is defined with a reminder term that is defined with a computed finding, some special considerations need to be taken. If the computed finding is being used to select from or remove a patient from an existing list, than the typical computed finding can be used. If the computed finding will be used with the ADD PATIENT operation, then the computed finding must be defined with a "List" type.
- Each sequence may include Beginning Date/Time and Ending Date/Time.
- Beginning and Ending date/times are optional fields that can be defined in the List Rule which further restrict the criteria for building the patient list. Alternatively, the reminder term can contain the beginning and ending dates.
- The Patient List field is used for patient list rules. It defines the name of a patient list to be used as the patient source. If this field is defined, it overrides the Extract Patient List Name field.
- Extract Patient List Name field provides a mechanism to automatically generate patient list names for patient lists that are built on a recurring basis by extract runs. The name specified should contain "yyyy" for year and "Qnn" for quarter or "Mnn" for month. The string "yyyy" is automatically replaced by the four digit year and the "nn" is replaced by the number of the quarter or the number of the month. For example, one of the national IHD QUERI rule sets contains the extract patient list VA-\*IHD QUERI yyyy Mnn PTS WITH QUALIFY AND ANCHOR VISIT; if an extract was run for November 2005 the resulting patient list would have the name VA-\*IHD QUERI 2005 M11 PTS WITH QUALIFY AND ANCHOR VISIT.

In current national rule sets, the Beginning Date and Ending Date/time information is not defined at the Sequence level. It is defined in the Finding Rule, instead of the reminder term. The finding rule (FR) name reflects the dates or the period of time represented by the beginning and ending dates. The national extract patient list name is sent to Austin with related total counts. The patient list names reflect enough information for Austin users to understand which patients the counts are related to. The number of patients on the patient list typically represent one of the patient denominators used for extract reports.

#### Simple Rule Set definition with one List Rule

This rule set only has one step and it is used to build a list of all patients who had a diabetic diagnosis in the last five years.

```
Name: RS-DIABETIC PATIENTS
Number: 20
Class: LOCAL

Description:

Rule Type: RULE SET

Component Rules
------
Sequence: 001
Seq Beginning Date: BDT-5Y
Seq Ending Date: BDT
Operation: ADD PATIENT
List Rule: FR-DIABETIC DIAGNOSIS
Description: This is a taxonomy for diabetic diagnosis.
Rule Type: FINDING RULE
Reminder Term: DIABETIC DIAGNOSIS
```

#### **Expanded Rule Set with two List Rules**

An example of a more complex rule set builds a list of all diabetic patients who have not had a diabetic eye exam.

```
Jun 08, 2006@12:29:21
Display/Edit Rule
                                                            Page:
                                                                     2 of
                                                                             3
        Name: RS-DIAB PTS W/O DIAB EYE EXAM
       Number: 27
        Class: LOCAL
   Description:
    Rule Type: RULE SET
   Component Rules
    _____
           Sequence: 001
          Operation: ADD PATIENT
          List Rule: FR-DIABETIC DIAGNOSIS
        Description: This is a taxonomy for diabetic diagnosis.
          Rule Type: FINDING RULE
        Reminder Term: DIABETIC DIAGNOSIS
           Sequence: 002
          Operation: REMOVE
          List Rule: FR-DIABETIC EYE EXAM
        Description:
          Rule Type: FINDING RULE
        Reminder Term: DIABETIC EYE EXAM
```

Step 001 initializes the list with all patients who have a diabetic diagnosis and step 002 removes any patients who have had a diabetic eye exam. The result is a list containing all diabetic patients who have **not** had a diabetic eye exam.

Note: The name of the Rule Set is summarized text representing the combination of the List Rules.

#### **National Rule Set Example**

Below is an example of one of the nationally released rule sets for the IHD QUERI extract. The rule set contains four finding rules.

```
Display/Edit Rule
                              Jun 01, 2006@10:21:39
                                                             Page:
                                                                      1 of
         Name: VA-*IHD QUERI PTS WITH QUALIFY VISIT
       Number: 7
        Class: NATIONAL
  Description: IHD patients with a qualifying visit.
    Rule Type: RULE SET
   Component Rules
           Sequence: 001
          Operation: ADD PATIENT
          List Rule: VA-*IHD QUERI DIAGNOSIS
        Description: Patients with IHD diagnosis in past 5 years.
          Rule Type: FINDING RULE
        Reminder Term: VA-IHD DIAGNOSIS
    LR Beginning Date: BDT-5Y
           Sequence: 002
          Operation: SELECT
          List Rule: VA-*IHD QUERI QUALIFYING VISIT
        Description: Patients with visit to EPRP locations in report period.
          Rule Type: FINDING RULE
        Reminder Term: VA-IHD OUERI OUALIFYING ENCOUNTER
    LR Beginning Date: BDT
       LR Ending Date: T
           Sequence: 003
          Operation: REMOVE
          List Rule: VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS
        Description: Patients with Inpatient AMI Diagnosis within 60 days.
          Rule Type: FINDING RULE
        Reminder Term: VA-IHD AMI DIAGNOSIS WITHIN 60 DAYS
           Sequence: 004
          Operation: INSERT FINDING
          List Rule: VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION
        Description: Associate primary facility.
          Rule Type: FINDING RULE
        Reminder Term: VA-IHD STATION CODE
```

This rule set gets all patients with an IHD Diagnosis documented within 5 years prior to the report start date. This list of patients is modified in sequence 002 to remove all patients that have not had a visit documented for an EPRP clinic location during the reporting month, where T in the Beginning Date

represents the report start date and T in the Ending Date represents the report ending date. This list is further modified in sequence 003 to remove patients that have an AMI diagnosis documented within the past 60 days. The patient list after sequence 003 is further modified by associating each patient's primary care station and storing the station with each patient in the patient list. National list rules cannot be modified.

### Steps to Create a Patient List

This is the sequence of steps to create a patient list:

- 1. Create list rules (FR, RR, or PLR)
- 2. Create rule sets
- 3. Create patient list

You must create list rules first. Once list rules are defined, they can be referenced in a rule set. Once the rule set is defined, the patient list tools can use the rule set to create a patient list.

NOTE: The Reminder Definition that is used in a Reminder Rule must have "L" (Reminder Patient List) in the Usage field or it will not be able to be used in the Reminder Rule

Prior to creating list rules and rule sets, it is a good idea to write down the criteria clearly enough so that anyone else will know exactly how the patient list should be built.

- What patient finding(s) should be used to build the list of patients?
- What finding should be used to create the first list of patients?
- Should this list be modified to remove patients with a particular finding?
- Should this list be modified to remove patients that do not have a particular finding?
- For each finding, what are the appropriate beginning and ending dates?
- What sequence will have the least impact on computer system resources?
- Who should be able to see the patient list?

The criteria for building a reminder patient list can be documented in the description field of the rule set. The criteria should take into consideration the most efficient sequence in which patient extracts should occur, to limit unnecessary impacts on system operations.

#### **Patient List Menu**

The Patient List Menu option on the PXRM MANAGERS MENU provides the following options for creating and managing list rules and patient lists.

| Syn. | Name                       | Option Name                  | Description   |
|------|----------------------------|------------------------------|---|
| LRM  | List Rule<br>Management    | PXRM LIST RULE<br>MANAGEMENT | This option allows creation of list rules, which build patient lists and test rule set criteria.  Nationally released list rules are used by nationally released extract definitions for national extract runs.  There are four types of list rules: Finding Rule, Reminder Rule, Patient List Rule, and Rule Set.                    |
| PLM  | Patient List<br>Management | PXRM EXTRACT<br>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. |

## **List Rule Management Option**

The List Rule Management option presents a list of existing reminder rule file entries. The possible actions available for each type of entry are presented in the bottom portion of the screen.

#### List Rule Management screen example:

| List Rule Management serven example. |                      |                |            |               |          |          |    |  |  |
|--------------------------------------|----------------------|----------------|------------|---------------|----------|----------|----|--|--|
| List R                               | ule Management       | Jun 01         | , 2006@08: | 44:21         | Page:    | 1 of 3   | 1_ |  |  |
|                                      |                      |                |            |               |          |          |    |  |  |
| Item                                 | Rule Set Name        |                |            |               |          | Class    |    |  |  |
| 1                                    | VA-*IHD QUERI 41     | 2 PTS WITH QUA | ALIFY AND  | ANCHOR VISIT  |          | NATIONAL |    |  |  |
| 2                                    | VA-*IHD QUERI 41     | 2 PTS WITH QUA | ALIFY AND  | ANCHOR VISIT  | ON LLA M | NATIONAL |    |  |  |
| 3                                    | VA-*IHD QUERI PT     | S WITH QUALIF  | Y AND ANCH | OR VISIT      |          | NATIONAL |    |  |  |
| 4                                    | VA-*IHD QUERI PT     | S WITH QUALIF  | Y AND ANCH | OR VISIT ON 3 | LLA MEDS | NATIONAL |    |  |  |
| 5                                    | VA-*IHD QUERI PT     | S WITH QUALIF  | Y VISIT    |               |          | NATIONAL |    |  |  |
| 6                                    | VA-*MH QUERI QUA     | LIFYING PC VI  | SIT        |               |          | NATIONAL |    |  |  |
| 7                                    | VA-*MH QUERY QUA     | LIFYING MH VI  | SIT        |               |          | NATIONAL |    |  |  |
|                                      | + Next Screen        | - Prev Scr     | een ?? M   | ore Action    |          |          |    |  |  |
| CV C                                 | hange View           |                | TEST T     | est Rule Set  |          |          |    |  |  |
| CR C                                 | reate Rule           |                | QU Q       | uit           |          |          |    |  |  |
| DR D                                 | DR Display/Edit Rule |                |            |               |          |          |    |  |  |
| Select                               | Item: Quit//         |                |            |               |          |          |    |  |  |

The default view is Rule Set; this screen is used to create, edit, and test rule sets. The Test Rule Set action applies only to rule sets. It can be used to test a rule set before it is used to build a patient list. When you use this action you enter list build beginning and ending dates, and then the rule set processes list rules in the sequential order defined in the rule set. For each sequence/step in the rule set, it shows you the list rule, and if the list rule uses a term or a definition, it shows all the findings and the final dates used for each finding.

#### Test Rule Set example

```
Rule Set Test
                      Oct 17, 2005@10:05:06
                                                              1 of
                                                                      2
                                                     Page:
Rule Set Test
List Build Beginning Date: 10/17/2000
List Build Ending Date: 10/17/2005
SEQUENCE 1 FR-DIABETIC DIAGNOSIS
TERM DIABETIC DIAGNOSIS
 FINDING 1-TX.VA-DIABETES
  Beginning Date/Time: 06/01/2003
  Ending Date/Time:
                        07/25/2004@23:59:59
 FINDING 2-HF.OUTSIDE DIABETIC DIAGNOSIS
  Beginning Date/Time: 02/28/1999
  Ending Date/Time:
                       08/29/2001@23:59:59
SEQUENCE 2 VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION
TERM VA-IHD STATION CODE
SEQUENCE 3 FR-BMI
TERM BMI
 FINDING 1-CF.VA-BMI
  Beginning Date/Time: 10/17/2000
  Ending Date/Time:
                       10/17/2005@23:59:59
SEQUENCE 004 FR-FINGERSTICK
TERM FINGERSTICK, GLUCOSE
 FINDING 1-OI.FINGERSTICK, GLUCOSE (WARD)
  Beginning Date/Time: 10/17/2000
  Ending Date/Time:
                        10/17/2005@23:59:59
          + Next Screen
                          - Prev Screen ?? More Action
Select Action: Next Screen//
```

Note that a local rule set can use national list rules, mixed with local list rules. Sequence 002 specifies a List Rule that identifies the facility that should receive the counts for the patient in a list.

The Change View (CV) action is used to select the screens for other types of list rules.

```
Select Item: Quit// CV Change View

Select one of the following:

F Finding Rule
P Patient List Rule
R Reminder Rule
S Rule Set

TYPE OF VIEW: F//F
```

If we select the finding rule view, then the display changes to show the newly selected view.

| <u>List</u> R | ule Management Jun 01, 2006@08:55:48         | Page: 1 of 1 |
|---------------|--|--------------|
| _Item         | Finding Rule Name                            | Class        |
| 1             | FR-BMI                                       | LOCAL        |
| 2             | FR-DIABETIC DIAGNOSIS                        | LOCAL        |
| 3             | VA-*IHD QUERI 412 DIAGNOSIS                  | NATIONAL     |
| 4             | VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS   | NATIONAL     |
| 5             | VA-*IHD QUERI ANCHOR VISIT                   | NATIONAL     |
| 6             | VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION | NATIONAL     |
| 7             | VA-*IHD QUERI DIAGNOSIS                      | NATIONAL     |
| 8             | VA-*IHD QUERI LIPID LOWERING MEDS            | NATIONAL     |
| 9             | VA-*IHD QUERI QUALIFYING VISIT               | NATIONAL     |
| 10            | VA-*MH QUERI QUALIFY MH VISIT                | NATIONAL     |
| 11            | VA-*MH QUERI QUALIFY PC VISIT                | NATIONAL     |
|               | + Next Screen - Prev Screen ?? More Action   |              |
| CV C          | hange View TEST Test Rule Set                |              |
| CR C          | reate Rule QU Quit                           |              |
| DR D          | isplay/Edit Rule                             |              |
| Select        | <pre>Item: Quit//</pre>                      |              |

When you are in the desired view, the CR (Create Rule) action is used to create a new list rule and the DR (Display/Edit Rule) action is used to display/edit an existing rule. Note that typing the item number is the same as selecting the DR action.

## **Patient List Management Option**

The Patient List Management option presents a list of available reminder patient lists. The patient lists displayed will include local and national patient lists that you have access to.

**Note on national patient lists**: The example below includes several national patient lists created by the monthly VA-IHD QUERI extract runs. Each month the VA-IHD QUERI extract was run, there were five different national patient lists created. Each patient list has a unique name with abbreviated text in the patient title to reflect the criteria used to create the list. Each of the five patient lists was used by extract reporting tools to evaluate reminders and create compliance and finding totals. See the section called National Reminder Extract Reporting for more information on Reminder Extract Report processing.

#### Patient List Management screen example

| Reminder  | User P                   | atient | List   | t   | Jun   | 01,   | 2006@  | 12:0  | 8:18  |       |        | Page:  | : :    | l of    | 7   |
|---|--------------------------|--------|--------|-----|-------|-------|--------|-------|-------|-------|--------|--------|--------|---------|-----|
| Availabl  | Available Patient Lists. |        |        |     |       |       |        |       |       |       |        |        |        |         |     |
| _Item R   | Reminder                 | Patie  | ent L  | ist | Name  |       |        |       |       | (     | Create | d      |        | Patier  | nts |
| 1 V   | A-*IHD                   | QUERI  | 2000   | M4  | 412   | PTS W | /ITH Ç | QUALI | FY A  | N 4   | 4/27/0 | 4011:5 | 55:43  |         | 0   |
| 2 V   | A-*IHD                   | QUERI  | 2000   | M4  | 412   | PTS W | /ITH Ç | QUALI | FY A  | N 4   | 4/27/0 | 4011:5 | 55:43  |         | 0   |
| 3 V   | /A-*IHD (                | QUERI  | 2000   | M4  | PTS I | HTIW  | QUALI  | IFY A | AND A | N 4   | 4/27/0 | 4011:5 | 55:43  |         | 0   |
| 4 V   | /A-*IHD (                | QUERI  | 2000   | M4  | PTS I | HTIW  | QUALI  | IFY A | AND A | N 4   | 4/27/0 | 4011:5 | 55:43  |         | 0   |
| 5 V   | /A-*IHD (                | QUERI  | 2000   | M4  | PTS I | HTIW  | QUALI  | IFY V | /ISIT | ' 4   | 4/27/0 | 4011:5 | 55:43  |         | 0   |
| 6 V   | A-*IHD                   | QUERI  | 2001   | M10 | 412   | PTS   | WITH   | QUAI  | JIFY  | Α ΄   | 7/20/0 | 4008:2 | 28:08  |         | 2   |
| 7 V   | A-*IHD                   | QUERI  | 2001   | M10 | 412   | PTS   | WITH   | QUAI  | JIFY  | Α ΄   | 7/20/0 | 4008:2 | 28:09  |         | 0   |
| 8 V   | A-*IHD                   | QUERI  | 2001   | M10 | PTS   | WITH  | I QUAI | LIFY  | AND   | Α ΄   | 7/20/0 | 4008:2 | 28:08  |         | 4   |
| 9 V   | A-*IHD                   | QUERI  | 2001   | M10 | PTS   | WITH  | I QUAI | LIFY  | AND   | Α ΄   | 7/20/0 | 4008:2 | 28:08  |         | 0   |
| 10 V  | A-*IHD                   | QUERI  | 2001   | M10 | PTS   | WITH  | I QUAI | LIFY  | VISI  | T '   | 7/20/0 | 4008:2 | 28:07  |         | 5   |
| 11 V  | A-*IHD                   | QUERI  | 2001   | M11 | 412   | PTS   | WITH   | QUAI  | JIFY  | A     | 7/20/0 | 4008:3 | 31:23  |         | 0   |
| 12 V  | A-*IHD                   | QUERI  | 2001   | M11 | 412   | PTS   | WITH   | QUAI  | JIFY  | Α ΄   | 7/20/0 | 4008:3 | 31:23  |         | 0   |
| 13 V  | A-*IHD                   | QUERI  | 2001   | M11 | PTS   | WITH  | I QUAI | LIFY  | AND   | Α ΄   | 7/20/0 | 4008:3 | 31:23  |         | 0   |
| 14 V  | A-*IHD                   | QUERI  | 2001   | M11 | PTS   | WITH  | I QUAL | LIFY  | AND   | A     | 7/20/0 | 4008:3 | 31:23  |         | 0   |
| 15 V  | A-*IHD                   | QUERI  | 2001   | M11 | PTS   | WITH  | I QUAL | LIFY  | VISI  | T     | 7/20/0 | 4008:3 | 31:23  |         | 0   |
| 16 V  | A-*IHD                   | QUERI  | 2001   | M12 | 412   | PTS   | WITH   | QUAI  | JIFY  | Α ΄   | 7/20/0 | 4008:3 | 35:47  |         | 0   |
| + Next Screen - Prev Screen ?? More Action              |                          |        |        |     |       |       |        |       |       |       |        |        |        |         |     |
| CO Cop  | y Patie                  | nt Lis | st     | DE  | De.   | lete  | Patie  | ent I | ist   | CV    | Cha    | nge Vi | iew    |         |     |
| COE Cop   | y to OE                  | /RR T∈ | eam    | DCD | Di:   | splay | 7 Crea | ation | n Doc | : LRI | M Lis  | t Rule | e Mana | agement | 5   |
| CR Create Patient List DSP Display Patient List QU Quit |                          |        |        |     |       |       |        |       |       |       |        |        |        |         |     |
| Select I  | tem: Ne                  | xt Scr | reen/, | /   |       |       |        |       |       |       |        |        |        |         |     |

#### The actions on this screen are:

- CO (Copy Patient List) copy an existing patient list to a new patient list
- COE (Copy to OE/RR Team) copy a patient list to an OE/RR Team list
- CR (Create Patient List) create a new patient list
- DE (Delete Patient List) delete selected patient list(s)
- DCD (Display Creation Doc) display the documentation on how a patient list was created
- DSP (Display Patient List) display the contents of a patient list
- CV(Change View) toggles the display order of the list between one sorted by list name and one sorted by list type
- LRM (List Rule Management) this action takes you to the List Rule Management screen

When creating a local patient list, you are given the option to secure the list or to make it public for all to use. The type of security on the list is available by scrolling the list to the right.

When viewing the list of patient lists, there are two symbols: "<< "and ">>>" on the action line. These are standard List Manager symbols that mean you can scroll the view to the left using the left arrow key

and to the right using the right arrow key. If the view is scrolled to the right, you can see the "Type" of list, public (PUB) or private (PVT), and your "Access" to the list full (F) or view (V).

If the list has a Type of PUB, then the list can be used by all users with access to the Patient List Management option. The level of Access may be restricted to View (Read Only), or Full access (Delete, and Update actions).

For any secure list, the creator of the patient list can add additional users to the list and assign one of two permissions to the user; view only or full access.

This is an example of a screen that has been scrolled to the right. Note that the sequence number and patient list name are still displayed on the left side of the column with the Type and Access columns.

| Reminder User Patient List Sep 27, 2005@09:36:05 Page: 1 of 8 |   |                             |        |              |       |  |  |  |  |
|---|---|-----------------------------|--------|--------------|-------|--|--|--|--|
| Availa  | Available Patient Lists.                                |                             |        |              |       |  |  |  |  |
| +Item   | Reminder Patient L                                      | ist Name                    | Type   | Access       |       |  |  |  |  |
| 5   | AGP IHD EXTRACT WI                                      | TH QUALIFY VISIT            | PVT    | F            |       |  |  |  |  |
| 6   | AGP IHD QUERI PTS                                       | WITH QUALIFY AND ANCHOR VIS | PVT    | F            |       |  |  |  |  |
| 7   | AGP OE/RR TEAM 1 PUB F                                  |                             |        |              |       |  |  |  |  |
| 8   | AGP OERR TEAM LIST                                      |                             | PUB    | F            |       |  |  |  |  |
| 9   | CRPATIENT   |                             | PUB    | F            |       |  |  |  |  |
| 10  | CRPATIENT2  |                             | PUB    | F            |       |  |  |  |  |
| 11  | DIAB PTS W/O DIAB                                       | EYE EXAM                    | PUB    | F            |       |  |  |  |  |
| 12  | PJH EXTRACT 2004 M                                      | 10 BP                       | PVT    | V            |       |  |  |  |  |
|   | + Next Screen   | - Prev Screen ?? More Act   | ion    |              |       |  |  |  |  |
| CO C  | opy Patient List  | DE Delete Patient List C    | V Cha  | nge View     |       |  |  |  |  |
| COE C   | opy to OE/RR Team                                       | DCD Display Creation Doc L  | RM Lis | t Rule Manag | ement |  |  |  |  |
| CR C  | CR Create Patient List DSP Display Patient List QU Quit |                             |        |              |       |  |  |  |  |
| Select  | Select Item: Next Screen//                              |                             |        |              |       |  |  |  |  |

#### **Patient List Creation Action**

When you select the CR (Create Patient List) action, there are a number of prompts that must be answered before the patient list can be created. The following is a detailed explanation of each of these prompts.

#### **Secure List?**

If the answer to this prompt is "YES," the list becomes a private list, which means that the only people who can view the list are the creator, anyone who the creator has given view access, and anyone who holds the PXRM MANAGER KEY.

#### **Purge Patient List after 5 years?**

The response to this prompt sets the value of the Patient List file field AUTOMATICALLY PURGE. Whenever an automatic extract is run, if a patient list is more than 5 years old, AUTOMATICALLY PURGE is checked, and if its value is "YES," the patient list is deleted.

#### **Select LIST RULE SET**

This is the rule set that is used to construct the list.

### **Enter Patient List BEGINNING DATE**

This prompt is used to enter the values for the list build beginning date. The value entered can be: standard Clinical Reminders symbolic dates like T-5Y,

an actual date like 09/30/2005; any of the standard FileMan date formats are acceptable.

#### **Enter Patient List ENDING DATE**

This prompt is used to enter the values for the list build beginning date. The value entered can be: standard Clinical Reminders symbolic dates like T-5Y, an actual date like 09/30/2005; any of the standard FileMan date formats are acceptable.

**Include deceased patients on the list? N**//The default is to not include deceased patients in patient lists. If the answer to this prompt is "YES," then deceased patients will be included.

**Include test patients on the list? N**//The default is to not included test patients in patient lists. If the answer to this prompt is "YES," then test patients will be included.

#### **Dates in Patient Lists**

When you build a patient list, you are prompted to enter a Beginning Date and an Ending Date; for the purposes of this discussion we will call these the Patient List Beginning Date (PL BDT) and the Patient List Ending Date (PL EDT). There can also be a beginning date and ending date specified for each sequence in a rule set, for a finding rule, and for each finding in a term or definition.

These dates specify the period of time in which to search for patient data so it is important to understand the relationships between the BDT and EDT values at each level. For discussion purposes, the Beginning Date at the sequence, finding rule, and reminder term level is referred to as BDT, and Ending Date is referred to as EDT. For each level, the BDT and EDT values represent the date range that will be used to search for the findings.

The following is the hierarchy of date ranges and options for values that can be defined in the BDT and EDT fields at each level.

#### 1) Patient List BDT and EDT (required)

- Patient List BDT and EDT values are entered by the person creating the patient list.
- The Patient List BDT is represented symbolically by "BDT" and may be used in any of the list rule dates.
- The Patient List EDT is represented symbolically by "T" and may be used in any of the list rule dates. If "T" is used in the term or definition date fields it will take the value of the patient list EDT.

#### 2) Sequence BDT and EDT for each rule in the rule set (optional)

- Dates defined at the sequence level override those defined at the patient list level.
- Actual dates are used directly.
- Symbolic values can be used for both the BDT and EDT. The symbol "BDT" is equal to the PL BDT so a date such as "BDT-6M" is PL BDT minus 6 months. The symbol "T" is equal to the PL EDT.
- When 0 is entered for BDT it means start at the beginning of patient data and 0 for EDT means ignore PL EDT and use the end of today for the end of the search range.

### 3) Finding Rule BDT and EDT (optional)

- Dates defined in the finding rule override those defined at the sequence.
- Actual dates are used directly.
- Symbolic values can be used for both BDT and EDT. The symbol "BDT" is equal to the PL BDT so a date such as "BDT-6M" PL BDT minus 6 months. The symbol "T" is equal to the PL EDT.
- When 0 is entered for BDT it means start at the beginning of patient data and 0 for EDT means ignore PL EDT and use the end of today for the end of the search range.

### 4) Reminder Term and Definition BDT and EDT (optional)

- Each finding can optionally be defined with BDT and EDT values and these will override those defined at the finding rule and/or sequence level.
- Actual dates are used directly.
- Symbolic dates can only use "T" which is equal to PL BDT.

### Summary of date range overrides when searching for a particular finding

- The patient list BDT and EDT define the default date range to use to search for a particular finding unless the BDT or EDT is defined for the Rule Set Sequence, Finding Rule, or Reminder Term or Definition Finding.
- For each sequence in the rule set, you can override the Patient List's BDT or EDT by adding a BDT and EDT for each sequence in the Rule Set.
- For each Finding rule defined in a rule set sequence, you can override the Rule Set Sequence
  BDT and EDT value and the Patient List's BDT or EDT value by adding a BDT and EDT for the
  Finding Rule.
- For each Finding defined in a Reminder Term, you can override the BDT and EDT values at the Finding Rule, Rule Set Sequence and Patient List levels by adding a BDT and EDT for each finding in the Reminder Term or Definition.
- The following table summarizes the possible interactions between the various dates based on a Patient List Beginning Date of Sep 01, 2005 and Ending Date of Sep 30, 2005. This example is creating a patient list for the month of September 2005.

#### The table columns are as follows:

- Date Range # represents the various examples of how to define the Beginning Date Time (abbreviated in the Date Fields column as BDT) and Ending Date Time (abbreviated in the Date Fields column as EDT) in the four columns (List Build Date Range, Rule Set Sequence, Finding Rule, and Reminder Term Findings
- The Date Fields column shows BDT or EDT to represent the beginning date/time or ending date/time for each level that beginning and ending dates can be defined (List Build, Rule Set Sequence, Finding Rule, and Reminder Term Finding.
- The List Build column represents the dates you are prompted for when building a patient list. If run from an extract, this column is the extract's reporting period.

- The Rule Set Sequence column represents date values defined at the sequence level in a rule set.
- The Finding Rule column represents date field values defined in the list Finding Rule.
- The Reminder Term Finding column represents date field values defined at the finding level for a reminder term.
- The Search Date Range for Finding column shows the dates that will be used for each scenario when the list is actually built.

Times can optionally be specified, but if they are not, the beginning date/time defaults to the start of the day and the ending date/time defaults to the end of the day.

Whenever T is used in the Rule Set Sequence, Finding Rule, or Reminder Term Finding columns, T will always be equal to the List Build Ending Date/time.

Whenever BDT is used in the Rule Set Sequence, Finding Rule, or Reminder Term Finding columns, BDT will always be equal to the List Build Beginning Date/time.

| Date       | _              |              |                   |              |                          | Search Date          |
|------------|----------------|--------------|-------------------|--------------|--------------------------|----------------------|
| Range<br># | Date<br>Fields | List Build   | Rule Set          | Finding Rule | Reminder<br>Term Finding | Range for<br>Finding |
| 1          | BDT            | Sep 01, 2005 | Sequence<br>Blank | Finding Rule | Term Finding             | Sep 01, 2005         |
| -          | EDT            | Sep 30, 2005 | Blank             |              |                          | Sep 30, 2005         |
|            | בטו            | Sep 30, 2003 | Dialik            |              |                          | 3ep 30, 2003         |
| 2          | BDT            | Sep 01, 2005 | T-2Y              |              |                          | Sep 30, 2003         |
|            |                | ,            | Blank, same       |              |                          | ,                    |
|            | EDT            | Sep 30, 2005 | as T or EDT       |              |                          | Sep 30, 2005         |
| 2          | DDT            | 0 04 0005    | DDT OV            |              |                          | 0 04. 0000           |
| 3          | BDT            | Sep 01, 2005 | BDT-2Y            |              |                          | Sep 01, 2003         |
|            | EDT            | Sep 30, 2005 | T-1Y              |              |                          | Sep 30, 2004         |
| 4          | BDT            | Sep 01, 2005 | BDT-6M            |              |                          | Mar 01, 2005         |
|            | EDT            | Sep 30, 2005 | BDT               |              |                          | Sep 01, 2005         |
|            |                | •            |                   |              |                          | ,                    |
|            |                |              |                   |              |                          | No beginning         |
| 5          | BDT            | Sep 01, 2005 | 0 (zero)          |              |                          | date                 |
|            | EDT            | Sep 30, 2005 | Mar 28, 2003      |              |                          | Mar 28, 2003         |
|            | DDT            | 0 . 04 0005  | A 00 . 0004       |              |                          | 100.0004             |
| 6          | BDT            | Sep 01, 2005 | Apr 09, 2001      |              |                          | Apr 09, 2001         |
|            | EDT            | Sep 30, 2005 | Mar 28, 2003      |              |                          | Mar 28, 2003         |
| 7          | BDT            | Sep 01, 2005 | Apr 09, 2001      |              |                          | Apr 09, 2001         |
|            |                |              | , , , , , ,       |              |                          | End of day on        |
|            |                |              |                   |              |                          | date the list is     |
|            | EDT            | Sep 30, 2005 | 0 (zero)          |              |                          | built.               |
| 8          | BDT            | Sep 01, 2005 |                   | T-2Y         |                          | Sep 30, 2003         |
| 0          | EDT            | Sep 30, 2005 |                   | T-1Y         |                          | Sep 30, 2003         |
|            | בטו            | 3ep 30, 2005 |                   | 1-11         |                          | 3ep 30, 2004         |
| 9          | BDT            | Sep 01, 2005 |                   | BDT-2Y       |                          | Sep 01, 2003         |
|            | EDT            | Sep 30, 2005 |                   | Blank or T   |                          | Sep 30, 2005         |
|            |                |              |                   |              |                          |                      |

| Date<br>Range<br># | Date<br>Fields | List Build                   | Rule Set<br>Sequence | Finding Rule  | Reminder<br>Term Finding | Search Date<br>Range for<br>Finding                                 |
|--------------------|----------------|------------------------------|----------------------|---------------|--------------------------|---|
| 10                 | BDT            | Sep 01, 2005                 | Sequence             | BDT-6M        | reminimumg               | Mar 01, 2005  |
| 10                 | EDT            | Sep 30, 2005                 |                      | BDT-0M        |                          | Sep 01, 2005  |
|                    | LDI            | Gep 30, 2003                 |                      | ושם           |                          | Зер 01, 2003  |
|                    |                |                              |                      |               |                          | No beginning  |
| 11                 | BDT            | Sep 01, 2005                 |                      | 0 (zero)      |                          | date  |
|                    | EDT            | Sep 30, 2005                 |                      | Mar 28, 2003  |                          | Mar 28, 2003  |
|                    |                |                              |                      |               |                          |   |
| 12                 | BDT            | Sep 01, 2005                 |                      | Apr 09, 2001  |                          | Apr 09, 2001  |
|                    | EDT            | Sep 30, 2005                 |                      | Mar 28, 2003  |                          | Mar 28, 2003  |
|                    |                |                              |                      |               |                          |   |
| 13                 | BDT            | Sep 01, 2005                 |                      | Apr 09, 2001  |                          | Apr 09, 2001  |
|                    | EDT            | Sep 30, 2005                 |                      | 0 (zero)      |                          | End of day on date the list is built.                               |
|                    |                |                              |                      |               |                          |   |
| 14                 | BDT            | Sep 01, 2005                 |                      |               | T-2Y                     | Sep 30, 2003  |
|                    | EDT            | Sep 30, 2005                 |                      |               | T-1Y                     | Sep 30, 2004  |
|                    |                |                              |                      |               |                          | NI. b   |
| 15                 | BDT            | Sep 01, 2005                 |                      |               | 0 (zero)                 | No beginning date   |
| 13                 | EDT            | Sep 30, 2005                 |                      |               | BDT                      | Sep 30, 2005  |
|                    | בטו            | Sep 30, 2003                 |                      |               | BUT                      | 3ep 30, 2003  |
| 16                 | BDT            | Sep 01, 2005                 |                      |               | Apr 09, 2001             | Apr 09, 2001  |
|                    | EDT            | Sep 30, 2005                 |                      |               | Mar 28, 2003             | Mar 28, 2003  |
|                    |                | ,                            |                      |               | ,                        | · ·   |
| 17                 | BDT            | Sep 01, 2005                 | T-2Y                 | T-1Y          |                          | Sep 30, 2004  |
|                    | EDT            | Sep 30, 2005                 | T-1Y                 | T-6M          |                          | Mar 28, 2005  |
|                    |                |                              |                      |               |                          |   |
| 18                 | BDT            | Sep 01, 2005                 | Jun 01, 2003         | BDT           |                          | Sep 1, 2005<br>(BDT > EDT;<br>no finding<br>match will be<br>found) |
|                    | EDT            | Sep 30, 2005                 | Jul 25, 2004         | T-6M          |                          | March 30, 2005  |
|                    |                |                              |                      |               |                          |   |
| 19                 | BDT            | Sep 01, 2005                 | T-1Y                 | BDT-6M        | T-1Y                     | Sep 30, 2004  |
|                    | EDT            | Sep 30, 2005                 | Т                    | BDT           | T-6M                     | Mar 31, 2005  |
|                    |                | 0 0/                         |                      |               | T 0)                     | 0 00  |
| 20                 | BDT            | Sep 01, 2005                 | Apr 09, 2001         |               | T-2Y                     | Sep 30, 2003  |
|                    | EDT            | Sep 30, 2005                 | Feb 28, 2002         |               | Blank or T               | Sep 30,2005   |
| 21                 | BDT            | Sep 01, 2005                 | T-2Y                 |               | T-1Y                     | Sep 30, 2004  |
| ۷1                 | EDT            | Sep 01, 2005<br>Sep 30, 2005 | 0 (zero)             |               | T-6M                     | Mar 31, 2005  |
|                    | בטו            | Jep 30, 2003                 | 0 (2010)             |               | 1-OIVI                   | IVIAI 31, 2003  |
| 22                 | BDT            | Sep 01, 2005                 |                      | Apr 09, 2001  | Jun 01, 2003             | Jun 01, 2003  |
| <i></i>            | EDT            | Sep 30, 2005                 |                      | Feb 28, 2002  | Jul 25, 2004             | Jul 25, 2004  |
|                    | וטו            | Jep 30, 2003                 |                      | 1 60 20, 2002 | Jul 23, 2004             | Jul 23, 2004  |

Date Range #1 shows that if no dates are defined at the sequence, finding rule, or reminder term finding level, the List Build dates are used to search for the finding defined in the reminder term.

Date Range #2-7 are examples of the Rule Set Sequence BDT and EDT overriding the List Build BDT and EDT. The Rule Set Sequence BDT and EDT dates are used to determine the date range to use for the finding in the reminder term.

Date Range #2 shows symbolic dates defined at the sequence level using "T". T is the List Build ending date/time.

Date Range #3 shows symbolic dates defined at the sequence level using "BDT" (the List Build Beginning Date/time) and "T" (the List Build Ending Date Time).

Date Range #4 shows symbolic dates defined at the sequence level using "BDT" (the List Build Beginning date/time) in both the Rule Set Sequence BDT and EDT fields.

Date range #5 shows 0 (zero) entered as the sequence level beginning date with an actual date specified as the sequence level ending date. The 0 will cause the search for the finding to not limit how far back in history a reminder finding will be looked for, which is similar to the way a finding works in a reminder definition when the finding has a blank beginning date. The actual date entered as the ending date will be used directly, overriding the List Build end date.

Date range #6 shows that when actual dates are defined at the sequence level, they take precedence and are used directly.

Date range #7 shows an actual date specified as the sequence level beginning date, and "0" (zero) entered as the sequence level ending date. The actual date entered as the beginning date will be used directly, overriding the List Build beginning date. The "0" in the Sequence ending date will cause the search for the Reminder Term finding to use the end of the day on the day the patient list is created, overriding the List Build ending date. The actual date specified will be the beginning date, and TODAY@11:59pm will be used as the ending date.

Date Range #8-13 are examples of the Finding Rule BDT and EDT overriding the List Build BDT and EDT. The Finding Rule BDT and EDT dates are used to search for the findings defined in the finding rule's reminder term.

Date Range #8 shows symbolic dates defined at the finding rule level using "T" (the List Build ending date/time).

Date Range #9 shows symbolic dates defined at the finding rule level using "BDT" (List Build Beginning date/time) and "T"(List Build Ending date/time. If there is no EDT value defined in the Finding Rule EDT, then the List Build Ending date/time is used.

Date Range #10 shows symbolic dates defined at the finding rule level using "BDT" (the Patient List Beginning date/time).

Date range #11 shows "0" (zero) entered as the finding rule level beginning date and an actual date specified as the finding rule level ending date. The "0" will cause the search for the finding to not limit how far back in history the finding will be looked for, which is similar to the way a finding works in a reminder definition when the finding has a blank beginning date. The actual date entered as the ending date will be used directly, overriding the List Build ending date.

Date range #12 shows that when actual dates are defined in the BDT and EDT fields at the finding rule level, they override the List Build BDT and EDT.

Date range #13 shows an actual date specified as the finding rule level beginning date, and "0" (zero) entered as the finding rule level ending date. The actual date entered as the beginning date will be used directly, overriding the Patient List beginning date. The "0" (zero) in the finding rule ending date will use the end of the day on the day the patient list is created, overriding the List Build ending date. The date range used to search for the reminder term findings becomes the actual beginning date through the end of the day on the date the list is built(TODAY@11:59pm).

Date Range #14-17 are examples of the Reminder Term Finding BDT and EDT overriding the List Build BDT and EDT. The BDT and EDT dates are used to search for the findings defined in the finding rule's reminder term.

Date Range #14 shows symbolic dates defined at the finding rule level using "T" (the List Build ending date/time).

Date range #15 shows "0" (zero) entered as the finding rule level beginning date and uses the symbolic BDT (List Build Beginning date/time) as the ending date. actual date specified as the finding rule level ending date. The "0" will cause the search for the finding to not limit how far back in history the finding will be looked for, which is similar to the way a finding works in a reminder definition when the finding has a blank beginning date.

Date range #16 shows that when actual dates are defined in the BDT and EDT fields at the finding rule level, they override the List Build BDT and EDT.

Date range #17 and 18 are examples of what happens when Beginning and Ending date/time values are defined at the List Rule Sequence level and Finding Rule level. The Finding Rule level's beginning and ending date values will override the List Rule Sequence level's beginning and ending date values. BDT values are replaced with the List Build beginning date/time and T values are replaced with the Lit Build Ending date/time.

Date range #19 is an example of beginning and ending date values defined at every level, and where the Reminder Term Finding Beginning date/time and Ending date/time override all other levels.

Date range #20-22 is an example of the Reminder Term Findings beginning and ending date/times overriding miscellaneous other levels of beginning and ending date/time definitions.

## **Creating a Simple Patient List**

As an example, let's build a list of all our diabetic patients.

### 1. Create a Reminder rule using a reminder term

The first thing we must do is find or create a reminder term that identifies diabetes patients. If you are not familiar with how to do this, see the Reminder Term Management section of this manual. The examples below assume the following Reminder Term defines the criteria to identify diabetes patients.

# Diabetic Diagnosis term:

The Reminder Term called DIABETIC DIAGNOSIS is defined to use the Finding Item VA-DIABETES to identify whether a patient has a diabetic diagnosis.

### Use the Reminder Term to build a List Rule

#### 1a. Select the List Rule Management option.

```
List Rule Management
                                   Jun 03, 2005@10:41:29 Page: 1 of 1
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
      VA-*IHD QUERI PTS WITH QUALIFY VISIT
                                                                   NATIONAL
      VA-*MH QUERI QUALIFYING PC VISIT
                                                                    NATIONAL
      VA-*MH QUERY QUALIFYING MH VISIT
                                                                    NATIONAL
          + Next Screen - Prev Screen ?? More Actions
                                                                        >>> CV
                                  TEST Test Rule Set
Change View
CR Create Rule
                                       QU Quit
DR
   Display/Edit Rule
Select Item: Quit// CV Change View
```

# 1b. Select CV to change the view

```
Select one of the following:

F Finding Rule
P Patient List Rule
R Reminder Rule
S Rule Set

TYPE OF VIEW: F// Finding Rule
```

## 1c. Press Enter to accept the default of Finding Rule

### 1d. Select CR to create the rule.

| List R | ule Management Jun 03, 2005@10:41:33         | Page: 1 of 1        |
|--------|--|---------------------|
| Item   | Finding Rule Name                            | Class               |
|        | 410  |                     |
| Τ      | VA-*IHD QUERI 412 DIAGNOSIS                  | NATIONAL            |
| 2      | VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS   | NATIONAL            |
| 3      | VA-*IHD QUERI ANCHOR VISIT                   | NATIONAL            |
| 4      | VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION | NATIONAL            |
| 5      | VA-*IHD QUERI DIAGNOSIS                      | NATIONAL            |
| 6      | VA-*IHD QUERI LIPID LOWERING MEDS            | NATIONAL            |
| 7      | VA-*IHD QUERI QUALIFYING VISIT               | NATIONAL            |
| 8      | VA-*MH QUERI QUALIFY MH VISIT                | NATIONAL            |
| 9      | VA-*MH QUERI QUALIFY PC VISIT                | NATIONAL            |
|        | + Next Screen - Prev Screen ?? More Actions  | >>> <mark>CV</mark> |
| Change | View TEST (Test Rule Set)                    |                     |
| CR C   | reate Rule QU Quit                           |                     |
| DR D   | isplay/Edit Rule                             |                     |
| Select | Item: Quit// CR Create Rule                  |                     |

1e. Respond to the prompts as indicated below to define the local rule.

```
Select FINDING RULE to add: FR-DIABETIC DIAGNOSIS

Are you adding 'FR-DIABETIC DIAGNOSIS' as

a new REMINDER LIST RULE (the 19TH)? No// Y (Yes)

NAME: FR-DIABETIC DIAGNOSIS Replace
SHORT DESCRIPTION:
CLASS: L LOCAL
REMINDER TERM: DIABETIC DIAGNOSIS LOCAL

...OK? Yes// Y (Yes)

LIST RULE BEGINNING DATE/TIME:
LIST RULE ENDING DATE/TIME:
Input your edit comments.
Edit? NO//
```

## 1f. The new finding rule is now displayed in the list of Finding Rules.

```
List Rule Management Jun 03, 2005@10:42:11
                                                              1 of
                                                     Page:
      Finding Rule Name
                                                                      Class
   1 FR-DIABETIC DIAGNOSIS
                                                                     LOCAL
   2 VA-*IHD QUERI 412 DIAGNOSIS
                                                                     NATTONAL
   3 VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS
                                                                     NATIONAL
   4 VA-*IHD QUERI ANCHOR VISIT
                                                                     NATIONAL
   5 VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION
                                                                     NATIONAL
   6 VA-*IHD QUERI DIAGNOSIS
                                                                     NATIONAL
   7 VA-*IHD QUERI LIPID LOWERING MEDS
                                                                     NATIONAL
   8 VA-*IHD QUERI QUALIFYING VISIT
                                                                     NATIONAL
   9 VA-*MH QUERI QUALIFY MH VISIT
                                                                     NATIONAL
   10 VA-*MH QUERI QUALIFY PC VISIT
                                                                     NATIONAL
          + Next Screen - Prev Screen ?? More Actions
                                                                          >>><mark>CV</mark>
Change View
                                   TEST (Test Rule Set)
    Create Rule
                                        QU Quit
   Display/Edit Rule
Select Item: Quit//
```

## 2. Create the rule set.

Now that the finding rule has been created, we need to create the rule set.

- 2a. Select the List Rule Management option.
- 2b. Select CV to change the view to Rule Set.

| List R | ule Management Jun 03, 2005@11:08:58               | Page: 1 of 1           |  |  |  |  |
|--------|--|------------------------|--|--|--|--|
| Item   | Finding Rule Name                                  | Class                  |  |  |  |  |
|        |  |                        |  |  |  |  |
| 1      | FR-DIABETIC DIAGNOSIS                              | LOCAL                  |  |  |  |  |
| 2      | VA-*IHD QUERI 412 DIAGNOSIS                        | NATIONAL               |  |  |  |  |
| 3      | VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS         | NATIONAL               |  |  |  |  |
| 4      | VA-*IHD QUERI ANCHOR VISIT                         | NATIONAL               |  |  |  |  |
| 5      | VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION       | NATIONAL               |  |  |  |  |
| 6      | VA-*IHD QUERI DIAGNOSIS                            | NATIONAL               |  |  |  |  |
| 7      | VA-*IHD QUERI LIPID LOWERING MEDS                  | NATIONAL               |  |  |  |  |
| 8      | VA-*IHD QUERI QUALIFYING VISIT                     | NATIONAL               |  |  |  |  |
| 9      | VA-*MH QUERI QUALIFY MH VISIT                      | NATIONAL               |  |  |  |  |
|        | + Next Screen - Prev Screen ?? More Actions        | <b>&gt;&gt;&gt;</b> CV |  |  |  |  |
| Change | View TEST (Test Rule Set)                          |                        |  |  |  |  |
| CR C   | CR Create Rule QU Quit                             |                        |  |  |  |  |
| DR D   | isplay/Edit RuleSelect Item: Quit// CV Change View |                        |  |  |  |  |

#### 2c. Select S for Rule Set.

```
Select one of the following:

F Finding Rule
P Patient List Rule
R Reminder Rule
S Rule Set

TYPE OF VIEW: F// S Rule Set
```

#### 2d. Select CR for Create Rule.

```
List Rule Management
                              Jun 03, 2005@11:09:03
                                                                               1
                                                             Page:
                                                                      1 of
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
      VA-*IHD QUERI PTS WITH QUALIFY VISIT
                                                                     NATIONAL
                                                                     NATIONAL
      VA-*MH QUERI QUALIFYING PC VISIT
         + Next Screen - Prev Screen ?? More Actions
                                                                         >>><mark>CV</mark>
Change View
                                   DR
                                        Display/Edit Rule
    Create Rule
                                            Quit
Select Item: Quit// CR Create Rule
```

### 2e. Respond to the prompts as indicated, to define the Rule Set.

```
Select RULE SET to add: RS-DIABETIC PATIENTS
  Are you adding 'RS-DIABETIC PATIENTS' as
    a new REMINDER LIST RULE (the 20TH)? No// Y (Yes)
NAME: RS-DIABETIC PATIENTS Replace
SHORT DESCRIPTION:
CLASS: L LOCAL
Select SEQUENCE: 1
  Are you adding '1' as a new SEQUENCE (the 1ST for this REMINDER LIST RULE)? Y
   SEQUENCE LIST RULE: FR-DIABETIC DIAGNOSIS FINDING RULE
  LIST RULE: FR-DIABETIC DIAGNOSIS//
  OPERATION: ADD ADD PATIENT
  SEQUENCE BEGINNING DATE/TIME:
  SEQUENCE ENDING DATE/TIME:
Select SEQUENCE:
Input your edit comments.
Edit? NO//
```

### 2f. The new rule set is now displayed in the Rule Set list view of the Finding Rules.

| List R | ule Management Jun 03, 2005@11:09:52 Page:                   | 1 of 1                 |
|--------|--|------------------------|
| Item   | Rule Set Name  | Class                  |
| 1      | RS-DIABETIC PATIENTS   | LOCAL                  |
| 2      | VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT          | NATIONAL               |
| 3      | VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT ON LLA M | NATIONAL               |
| 4      | VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT              | NATIONAL               |
| 5      | VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT ON LLA MEDS  | NATIONAL               |
| 6      | VA-*IHD QUERI PTS WITH QUALIFY VISIT                         | NATIONAL               |
| 7      | VA-*MH QUERI QUALIFYING PC VISIT                             | NATIONAL               |
| 8      | VA-*MH QUERY QUALIFYING MH VISIT                             | NATIONAL               |
|        | + Next Screen - Prev Screen ?? More Actions                  | <b>&gt;&gt;&gt;</b> CV |
| Change | View DR Display/Edit Rule                                    |                        |
| CR C   | reate Rule QU QuitSelect Item: Quit//                        |                        |

#### 3. Build the Patient List

Once the rule set has been created, the patient list can be built via the patient list management option.

3a. Select the Patient List Management option from the Patient List Menu.

```
Reminder User Patient List
                             Aug 10, 2005@15:02:21
                                                           Page:
                                                                   1 of
Available Patient Lists.
Item Reminder Patient List Name
                                                    Created
                                                                    Patients
   1 VA-*IHD QUERI 2001 M01 412 PTS WITH QUALIFY A 8/5/05@11:12:16
   2 VA-*IHD QUERI 2001 M01 412 PTS WITH QUALIFY A 8/5/05@11:12:16
                                                                           0
   3 VA-*IHD QUERI 2001 M01 PTS WITH QUALIFY AND A 8/5/05@11:12:16
                                                                           0
   4 VA-*IHD QUERI 2001 M01 PTS WITH QUALIFY AND A 8/5/05@11:12:16
                                                                           Ω
   5 VA-*IHD QUERI 2001 M01 PTS WITH QUALIFY VISIT 8/5/05@11:12:16
                                                                           Ω
      VA-*IHD QUERI 2005 M1 412 PTS WITH QUALIFY AN 8/5/05@11:19:42
                                                                           0
      VA-*IHD QUERI 2005 M1 412 PTS WITH QUALIFY AN 8/5/05@11:19:43
                                                                           0
      VA-*IHD QUERI 2005 M1 PTS WITH QUALIFY AND AN 8/5/05@11:19:42
                                                                           0
      VA-*IHD QUERI 2005 M1 PTS WITH QUALIFY AND AN
                                                   8/5/05@11:19:42
                                                                           0
      VA-*IHD QUERI 2005 M1 PTS WITH QUALIFY VISIT
                                                    8/5/05@11:19:42
                                                                           0
          + Next Screen - Prev Screen ?? More Actions
Copy Patient List DE Delete Patient List CV Change View
COE Copy to OE/RR Team DCD Display Creation Doc LRM List Rule Management
CR Create Patient List DSP Display Patient List QU
                                                       Ouit
Select Item: Quit// CR Create Patient List
```

3b. Select the CR action to Create the Patient List.

```
Select PATIENT LIST name: DIABETIC PATIENTS 5Y
Are you adding 'DIABETIC PATIENTS 5Y' as
a new REMINDER PATIENT LIST? No// Y (Yes)

Secure list?: N// O

Purge Patient List after 5 years?: N// O

Select LIST RULE SET: RS-DIABETIC PATIENTS RULE SET

Enter Patient List BEGINNING DATE: T-5Y (AUG 10, 2000)
Enter Patient List ENDING DATE: T (AUG 10, 2005)

Include deceased patients on the list? N// O

Include test patients on the list? N// O

Queue the CREATE PATIENT LIST for DIABETIC PATIENTS 5Y:
Enter the date and time you want the job to start.
It must be on or after 08/10/2005@15:02:49 N
Task number 236638 queued.
```

**3c. Respond to the prompts** as shown to queue a task job that will create the patient list and add the patient list to the REMINDER PATIENT LIST file. Note that the Patient List Name reflects the date range of 5Y. The Name of the Patient List needs to be as specific as possible to understand what patients are in the list. Note: If the desire is to create a new patient list each month with diabetic patients seen during each month, then Beginning Date and Ending Date would reflect the month period, and the name would include the month and year.

| Remind | er User Patient | List    | Aug 10,   | 2005@15:02  | 2:53    | Page:            | 1 of 1              |
|--------|-----------------|---------|-----------|-------------|---------|------------------|---------------------|
| Availa | ble Patient Lis | sts.    |           |             |         |                  | <del></del>         |
| Item   | Reminder Patie  | nt List | Name      |             | (       | Created          | Patients            |
| 1      | DIABETIC PATIE  | NTS 5Y  |           |             | 8       | 8/10/05@15:02:52 | 2                   |
| 2      | VA-*IHD QUERI   | 2001 M0 | 1 412 PTS | WITH QUAL:  | IFY A   | 8/5/05@11:12:16  | 0                   |
| 3      | VA-*IHD QUERI   | 2001 M0 | 1 412 PTS | WITH QUAL   | IFY A   | 8/5/05@11:12:16  | 0                   |
| 4      | VA-*IHD QUERI   | 2001 M0 | 1 PTS WIT | H QUALIFY A | AND A   | 8/5/05@11:12:16  | 0                   |
| 5      | VA-*IHD QUERI   | 2001 M0 | 1 PTS WIT | H QUALIFY A | AND A   | 8/5/05@11:12:16  | 0                   |
| 6      | VA-*IHD QUERI   | 2001 M0 | 1 PTS WIT | H QUALIFY V | VISIT 8 | 8/5/05@11:12:16  | 0                   |
| 7      | VA-*IHD QUERI   | 2005 M1 | 412 PTS   | WITH QUALII | FY AN   | 8/5/05@11:19:42  | 0                   |
| 8      | VA-*IHD QUERI   | 2005 M1 | 412 PTS   | WITH QUALII | FY AN   | 8/5/05@11:19:43  | 0                   |
| 9      | VA-*IHD QUERI   | 2005 M1 | PTS WITH  | QUALIFY A   | ND AN   | 8/5/05@11:19:42  | 0                   |
| 10     | VA-*IHD QUERI   | 2005 M1 | PTS WITH  | QUALIFY A   | ND AN   | 8/5/05@11:19:42  | 0                   |
| 11     | VA-*IHD QUERI   | 2005 M1 | PTS WITH  | QUALIFY V   | ISIT 8  | 8/5/05@11:19:42  | 0                   |
|        | + Next Scre     | en -    | Prev Scre | en ?? Mo    | re Acti | ons              | >>> <mark>CO</mark> |
| Copy P | atient List     | DE De   | lete Pati | ent List (  | CV Cha  | ange View        |                     |
| COE C  | opy to OE/RR Te | eam DC  | D Displa  | y Creation  | Doc LRI | M List Rule Man  | agement             |
| CR C   | reate Patient I | ist DS  | P Displa  | y Patient 1 | List QU | QuitSelect It    | em: Quit//          |

**3d.** The new Patient List entry is added to the list of patient lists. When the tasked job has completed successfully, the new Patient List created by the job is displayed in the Reminder User Patient List with the date/time created and the number of patients included in the list.

### **Create Patient List - Expanded example**

```
Reminder User Patient List Aug 11, 2005@14:22:31
Page:
       1 of
Available Patient Lists.
Item Reminder Patient List Name
                                                   Created
                                                                    24
   1 AGP 1
                                                   7/10/05@19:55:43
   2 AGP CREATED REMINDER REP
                                                   7/26/05@13:48:23
                                                                         25
   3 AGP EXTRACT TEST
                                                                          0
   4 AGP IHD EXTRACT WITH QUALIFY VISIT
                                                   7/1/05@11:03
   5 AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS 7/1/05@11:03:02
   6 AGP OE/RR TEAM 1
                                                   7/10/05@20:51:42
   7 AGP OERR TEAM LIST
                                                   7/10/05@20:47:17
   8 AGP REMINDER TEST
                                                   7/25/05@11:17:24
                                                                         2.5
   9 AGP REPORT TEST OF PURGE
                                                   7/19/05@16:06:35
                                                                          3
  10 AGP T4
                                                   7/10/05@20:05:02
                                                                         24
  11 AGP TEST REMINDER 1
                                                   7/25/05@11:48:36
                                                                         23
  12 AGP TEST REMINDERS 2
                                                   7/25/05@12:01:46
                                                                         47
      FINGERSTICK
                                                   6/28/05@11:15:35
                                                                         1.3
  14
      FINGERSTICK (DEF)
                                                   7/6/05@09:51:42
                                                                          15
  15 PJH EXTRACT 2004 M10 BP
                                                   11/2/04@15:58:14
                                                                          1
  16 PKR PUB
                                                   8/9/05@11:33
                                                                          22
      + Next Screen - Prev Screen ?? More Actions
                                                                      >>><mark>CO</mark>
                                                                              Сору
             DE Delete Patient List CV Change View
Patient List
COE Copy to OE/RR Team DCD Display Creation Doc LRM List Rule Management
CR Create Patient List DSP Display Patient List QU Quit
Select Item: Next Screen// CR Create Patient List
```

```
Select PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM
  Are you adding 'DIAB PTS W/O DIAB EYE EXAM' as
   a new REMINDER PATIENT LIST? No// Y (Yes)
Secure list?: N// O
Purge Patient List after 5 years?: N// O
Select LIST RULE SET: RS-DIAB
       RS-DIAB PTS W/O DIAB EYE EXAM
                                          RULE SET
    1
     2 RS-DIABETIC PATIENTS RULE SET
CHOOSE 1-2: 1 RS-DIAB PTS W/O DIAB EYE EXAM
Enter Patient List BEGINNING DATE: T-5Y (AUG 11, 2000)
Enter Patient List ENDING DATE: T (AUG 11, 2005)
Include deceased patients on the list? N// O
Include test patients on the list? N// O
Oueue the CREATE PATIENT LIST for DIAB PTS W/O DIAB EYE EXAM:
Enter the date and time you want the job to start.
It must be on or after 08/11/2005@14:23:04 N
Task number 237005 queued.
```

| Reminder User Patient List Aug 11, 2005@14:23:08    | Page: 1 of               | 8       |
|---|--------------------------|---------|
| Available Patient Lists. Item Reminder Patient List | Name                     | Created |
| Patients 1 AGP 1                                    | 7/10/05@19:55:4          | 3       |
| 24  |                          |         |
| 2 AGP CREATED REMINDER REP                          | 7/26/05@13:48:23         | 5       |
| 3 AGP EXTRACT TEST                                  |                          | 0       |
| 4 AGP IHD EXTRACT WITH QUALIFY VISIT                | 7/1/05@11:03             | 0       |
| 5 AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS     | 7/1/05@11:03:02          | 0       |
| 6 AGP OE/RR TEAM 1                                  | 7/10/05@20:51:42         | 6       |
| 7 AGP OERR TEAM LIST                                | 7/10/05@20:47:17 1       | 6       |
| 8 AGP REMINDER TEST                                 | 7/25/05@11:17:24         | 5       |
| 9 AGP REPORT TEST OF PURGE                          | 7/19/05@16:06:35         | 3       |
| 10 AGP T4   | 7/10/05@20:05:02         | 4       |
| 11 AGP TEST REMINDER 1                              | 7/25/05@11:48:36         | 3       |
| 12 AGP TEST REMINDERS 2                             | 7/25/05@12:01:46         | 7       |
| 13 DIAB PTS W/O DIAB EYE EXAM                       | 8/11/05@14:23:08 1       | 9       |
| 14 FINGERSTICK                                      | 6/28/05@11:15:35         | 3       |
| 15 FINGERSTICK (DEF)                                | 7/6/05@09:51:42          | 5       |
| + Next Screen - Prev Screen ?? More Act             | tions >>>                | О Сору  |
| Patient List DE Delete Patient List CV Change       | e View                   |         |
| COE Copy to OE/RR Team DCD Display Creation Doc 1   | LRM List Rule Management |         |
| CR Create Patient List DSP Display Patient List (   | QU Quit                  |         |

List number 13 is our newly created list and we see that it has 19 patients.

## **Working with Patient Lists**

You can work with a patient list by selecting the DSP (Display Patient List) action. Here is an example:

```
Sep 29, 2005@10:25:44
Reminder User Patient List
                                                             Page: 1 of
Available Patient Lists. Item Reminder Patient List Name
                                                                             Created
Patients
      AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS 7/1/05@11:03:02
                                                                            0
      AGP OE/RR TEAM 1
                                                     7/10/05@20:51:42
                                                                            6
      AGP OERR TEAM LIST
                                                     7/10/05@20:47:17
                                                                           16
                                                                           25
   9 AGP REMINDER TEST
                                                     7/25/05@11:17:24
   10 AGP REPORT TEST OF PURGE
                                                                           3
                                                     7/19/05@16:06:35
   11 AGP T4
                                                     7/10/05@20:05:02
                                                                           24
   12 AGP TEST REMINDER 1
                                                     7/25/05@11:48:36
                                                                           23
   13 AGP TEST REMINDERS 2
                                                     7/25/05@12:01:46
                                                                           47
   14 CRPATIENT
                                                     8/11/05@14:56:11
                                                                           14
   15 CRPATIENT2
                                                     8/11/05@15:16:44
                                                                           14
   16 DIAB PTS W/O DIAB EYE EXAM
                                                     8/11/05@14:23:08
                                                                           19
                                                     6/28/05@11:15:35
                                                                           13
   17
      FINGERSTICK
   18
      FINGERSTICK (DEF)
                                                     7/6/05@09:51:42
                                                                           15
   19
      PJH EXTRACT 2004 M10 BP
                                                     11/2/04@15:58:14
                                                                            1
   20
      PKR PUB
                                                     9/29/05@10:19:51
                                                                            2
      PKR PVT
                                                     6/17/05@12:13:15
                                                                           26
          + Next Screen
                        - Prev Screen ?? More Actions
                                                                                  Сору
                    Delete Patient List CV
Patient List
               DE
                                             Change View
                              Display Creation Doc LRM List Rule Management
COE Copy to OE/RR Team DCD
    Create Patient List DSP Display Patient List QU QuitSelect Item: Next
Screen// DSP
              Display Patient List
Select (s): (6-21): 20
```

Enter DSP, and select the item number next to the patient list you want to view.

| Reminder Patient List     | Sep 29, 2005@15:08:17       | Page: 1 of     | 1                   |
|---------------------------|-----------------------------|----------------|---------------------|
| List Name: PKR PUB (22 pa | tients)                     |                |                     |
| Created: 09/29/2005@10:1  | 9:51 Creator: CRPR          | OVIDER, THREE  |                     |
| Class: Local              | Type: PUBLIC                |                |                     |
| Source: List Rule - RS-D  | IABETIC PATIENTS Patie      | nt Name        | DFN                 |
| PCMM Institution          | 1 AWHPATIENT, THREE         | 40             | NONE                |
| 2 CRPATIENT, EIGHT        | 39                          | NONE           |                     |
| 3 CRPATIENT, FIVE         | 24                          | SALT LAKE CITY |                     |
| 4 CRPATIENT, FOUR         | 10                          | NONE           |                     |
| 5 CRPATIENT, ONE          | 91290                       | NONE           |                     |
| 6 CRPATIENT, SEVEN        | 54                          | NONE           |                     |
| 7 CRPATIENT, TEN          | 912345678906                | NONE           |                     |
|                           |                             |                |                     |
| + Next Screen             | - Prev Screen ?? More Act   | ions           | >>> <mark>CV</mark> |
| Change View DEM           | Demographic Report QU Q     | uit            |                     |
| HSA Health Summary All    | ED Edit Patient List        |                |                     |
| HSI Health Summary Ind    | USR (View Users) Select Ite | m: Quit//      |                     |

Notice that this patient list includes a column with PCMM Institution. This information will be included when the rule set includes a list rule with the INSERT FINDING operation and a finding rule based on the reminder term VA-PCMM INSTITUTION or VA-IHD STATION CODE. This list rule should be added as the last step in the sequence of list rules in a rule set to ensure all patients in the final list are associated with a facility.

# List Manager actions on the Reminder Patient List screen

- CV (Change View) this lets you toggle between a view of the patient list sorted by PCMM Institution and patient name or sorted only by patient name
- HSA (Health Summary All) this lets you run a selected health summary for all the patients on the list
- HSI (Health Summary Ind) this lets you run a selected health summary for selected patients from a patient list.
- DEM (Demographic Report) this lets you run a patient demographic report
- ED (Edit Patient List) if you are the creator of the list you can use this action to edit the name and type of list; if you hold the PXRM MANAGER key you can also edit the creator of the list.
- USR (View Users) this action is applicable only to private lists. If you are the creator of the list or hold the PXRM MANAGER key you can use this action to give other users either view only or full access to the patient list. You can also remove a user's access to the list.

## **Demographic Report**

The Demographic Report can be used for a number of purposes, one of which is to facilitate contacting patients to make sure they receive the proper care. You can get a list of the patients and their phone numbers and addresses. The Demographic Report can produce output in a delimited format so that the information can be imported into another application to create personalized letters. If the output is imported into a spreadsheet, further analysis and sorting can be done.

Example

```
Demographic Report
Reminder Patient List
                            Feb 22, 2006@18:14:03
                                                          Page:
                                                                  1 of
List Name: Diabetic Eye Exam (7 patients)
Created: 08/11/2005@15:16:44
                                      Creator: CRPROVIDER, ONE
Class: Local
                                      Type: PUB
Source: Reminder Due Report
      Patient Name
                                       DFN
     AWHPATIENT, THREE
                                       40
   2 CRPATIENT, EIGHT
                                       39
   3 CRPATIENT, FIVE
                                       24
   4 CRPATIENT, FOUR
                                       10
   5 CRPATIENT, ONE
                                    91290
   6 CRPATIENT, SEVEN
                                       54
   7 CRPATIENT, TEN
                             912345678906
   + Next Screen - Prev Screen ?? More Actions
CV Change View DEM Demographic Report
HSA Health Summary All ED Edit Patient List
HSI Health Summary Ind USR (View Users)
Select Item: Next Screen// DEM Demographic Report
Select the items to include on the report.
Select from the following address items:
1 - CURRENT ADDRESS
2 - PHONE NUMBER
Enter your selection(s): (1-2): 1
Select from the following future appointment items:
1 - APPOINTMENT DATE
2 - CLINIC
Enter your selection(s): (1-2): 1-2
Maximum number of appointments to display: (1-25): 1// 2
Select from the following demographic items:
2 - DATE OF BIRTH
3 - AGE
4 - SEX
5 - DATE OF DEATH
6 - REMARKS
7 - HISTORIC RACE
8 - RELIGION
9 - MARITAL STATUS
10 - ETHNICITY
11 - RACE
Enter your selection(s): (1-11): 1-4
```

```
Print full SSN: N// O
Include the patient's preferred facility? N// O \,
Select from the following eligibility items:
1 - PRIMARY ELGIBILITY CODE
2 - PERIOD OF SERVICE
3 - % SERVICE CONNECTED
4 - VETERAN
5 - TYPE
6 - ELIGIBILITY STATUS
7 - CURRENT MEANS TEST
Enter your selection(s): (1-7):
Select from the following inpatient items:
1 - WARD LOCATION
2 - ROOM-BED
3 - ADMISSION DATE/TIME
4 - ATTENDING PHYSICIAN
Enter your selection(s): (1-5): 4
Include due status information for the following reminder(s):
1 - Breast Exam
2 - Problem Drinking Screen
3 - Weight and Nutrition Screen
4 - Cholesterol Screen (Male)
5 - Hepatitis C Risk Assessment
 6 - Pheumovax
7 - Alcohol Abuse Education
8 - Exercise Education
9 - Advanced Directives Education
10 - Weight
11 - IHD Lipid Profile
12 - MST Screening
13 - Smoking Cessation Education
14 - Diabetic Eye Exam
Enter your selection(s): (1-14): 30
Delimited Report:? Y// ES
DEVICE: HOME// ;;999 HOME
```

```
Patient Demographic Report
        Patient List: CRPROVIDER, ONE
         Created on Aug 11, 2005@15:16:44
PATIENT^STREET ADDRESS #1^STREET ADDRESS #2^STREET ADDRESS #3^CITY^STATE^ZIP^APP
OINTMENT DATE1^CLINIC1^APPOINTMENT DATE2^CLINIC2^SSN^DOB^AGE^SEX^ATTENDING^REMIN
 DER30^STATUS30^DUE DATE30^LAST DONE30^\\
AWHPATIENT, THREE 123 SESAME ST 125 ST LAKE CITY UTAH 84101 11 THREE 123 SESAME ST 125 AKE CITY UTAH 184101 AKE CITY UTAH 184101 AKE CITY UTAH 184101 AKE CITY UTAH 184101 
1951^55^FEMALE^WHPROVIDER, THREE^Diabetic Eye Exam^DUE NOW^DUE NOW^unknown^\\
CRPATIENT, EIGHT^^^^^^7892^MAY 19,1952^53^FEMALE^^Diabetic Eye Exam^DUE NOW^DUE NO
W^unknown^\\
CRPATIENT,FIVE^^^^^^^3242^MAR 3,1914^91^MALE^^Diabetic Eye Exam^DUE NOW^DUE N
 OW^unknown^\\
CRPATIENT, FOUR^^^^^^3242^OCT 23,1927^78^^^Diabetic Eve Exam^DUE NOW^DUE NOW^
unknown^\\
CRPATIENT,ONE^^^^^^8828^APR 19,1967^38^MALE^^Diabetic Eye Exam^DUE NOW^DU
E NOW^unknown^\\
CRPATIENT, SEVEN^RON^^^RUBY RIDGE^IDAHO^85098^^^^1239^MAY 5,1952^53^MALE^^Diabetic
Eve Exam^DUE NOW^3010501^3000500^\\
CRPATIENT,TWO^^^^^^3284^APR 4,1914^91^MALE^^Diabetic Eye Exam^DUE NOW^DUE NOW^
 unknown^\\
Enter RETURN to continue or '^' to exit:
```

If the rule set used to create the patient list contains a finding rule and the operation is INSERT then the "CSUB" data for the term's finding will be available for use with the Demographic Report. This could be used to include lab test results in letters that are sent to patients.

### **Demographic Report / Mail Merge Patient Data**

This option can be used to generate letters to send to all patients on a list. Follow the steps below to create personalized letters from the Demographic Report.

### **Summary of steps:**

- 1. Run a demographic report against a patient list.
- 2. Run the report in a delimited output
- 3. Capture the output in Notepad
- 4. Clean up the report output
- 5. Import the Notepad document into MS Excel
- 6. Import the Excel document into MS Word

### **Patient Lists Created by Reminders Due Reports**

Creation of Patient Lists is not limited to the Patient List Management option.

The Reminders Due Report option on the Reminder Reporting menu also provides the ability to save patients evaluated by the Reminders Due Report into a new Patient List that is stored in the Reminder Patient List file.

When you run a Reminders Due Report, you are given the option to save the list of patients to a patient list. Since this requires reminder evaluations for every selected patient, this method of generating a patient list will not be as efficient as generating a patient list from a rule set. Therefore, whenever possible, it is preferable to generate a patient list from a rule set.

Before V.2.0, when you ran a Reminders Due Report, you entered a set of criteria, such as visits to specific locations, which was used to generate a list of patients for which the list of reminders was evaluated. Now an existing patient list can be used directly in a Reminders Due Report, eliminating the requirement to generate the initial list of patients. This lets you target a Reminders Due Report to a very specific cohort of patients. For example, you could create a list of diabetic patients and then run a Reminders Due Report for this list of patients.

# **Patient Lists Created by Reminder Extract Reports**

National patient lists created by the Reminder Extract Reporting functionality are named with a prefix of "VA-" or "VA-\*". These patient lists are created when a national Reminder Extract Parameter definition is used to schedule and run a job. Each national extract parameter is set up so that IRM staff can schedule the job once, and then monthly extract reports will automatically be scheduled for the next month when the current months job is completed. This automated feature is only possible if the IRM staff initiates a job for the first month to be reported.

Alternatively, a Clinical Application Coordinator (CAC) can start the job using options available in the Reminder Extract Management (PXRM EXTRACT MANAGEMENT) option.

### Advantages of Reminder Patient Lists vs Reminder Due Report Lists

The national reminder patient lists don't need any setup and are created automatically from the national rule sets defined in the extract parameter criteria. When a national patient list is created, it remains on the computer system for five years, and is deleted automatically after 5 years. The national patient list is available to run with health summaries, or for extract validation.

Local patient lists can be generated using the Reminder Due option, where the report criteria specifies date ranges and locations or providers. However, the only output available is the due report (albeit condensed, if required).

The patient list management option provides health summary reporting from existing patient lists.

The patient list management 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 Reminder Index Global rather than by parsing the visit file. The downside 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.

Once a reminder patient list is created, the patient list can be copied to an OE/RR Patient List. To sum up, the patient list management option provides a way to run health summaries on patient lists, copy them to team lists, and quickly build lists for patients with specific finding combinations.

# **Reminder Extract Tools**

Clinical Reminders V.2.0 includes extract tools that enable sites to create extract summary reports based on an extract definition. An extract definition defines extract criteria similar to performance measure criteria. The extract definition specifies what patient lists should be created, which reminders should be run against each patient list, and what kind of totals should be accumulated. An extract run uses the extract definition to create extract totals and stores these results in the Reminder Extract Summary file.

The extract tools were developed to meet generic extract report and transmission needs. The tools provide options to:

- Manage extract criteria
- Manage extract runs (manual and automated)
- Manage transmissions to AAC
- View extract reporting results
- View the list of patients making up the patient denominator

The functionality supports corporate level management analysis by providing reports that:

- Summarize patient reminder compliance totals (not applicable, applicable, due, not due), similar to Reminder Due summary reports
- Summarize finding total counts that reflect the most recent findings resulting from reminder evaluation
- Summarize finding total counts that reflect site activities during the reporting month.

#### Reminder Extract Menu

The Reminder Extract Menu was new with Clinical Reminders V2.0. This menu uses list manager functionality to help Reminder managers or clinical application coordinators (CACs) track and manage the national, VISN, and local level extract transmissions.

| Syn | Option                            | Option Name                    | Description  |
|-----|-----------------------------------|--------------------------------|--|
| MA  | Reminder Extract<br>Management    | PXRM EXTRACT<br>MANAGEMENT     | This option uses list manager to view an extract definition, examine and schedule an extract run or transmission run, view extract summary results and view extract patient lists.   |
| D   | Extract Definition<br>Management  | PXRM EXTRACT<br>DEFINITION     | This option allows creation/editing of extract definitions for use in extract processing. Each extract definition identifies what list rules should be used to create patient lists, what reminders should be run against each patient list, and what counting rules should be used to count true findings found during reminder evaluation. |
| EC  | Extract Counting Rule Management  | PXRM EXTRACT<br>COUNTING RULES | This option allows creation/editing of extract counting rules used in the extract process. The counting rules define how to count the findings defined in an extract counting group (most recent for each finding, most recent finding in the group, utilization counts for the reporting period).   |
| EG  | Extract Counting Group Management | PXRM EXTRACT<br>GROUPS         | This option allows creation/editing of extract counting groups. Each group defines reminder terms.   |

|    |            |                | Counting groups are used when an extract definition is defined to accumulate COMPLIANCE and FINDING TOTALS (TYPE OF TOTALS). The counting groups are used in a counting rule during the extract process to count findings within a group. The reminder term, related counting group, and finding total counts are stored in the Extract Reminder Summary file. |
|----|------------|----------------|--|
| LR | List Rule  | PXRM LIST RULE | This option allows creation/editing of list rules when   |
|    | Management | MANAGEMENT     | are used to build patient lists.   |
|    |            |                |  |

LR List Rule Management is discussed in detail in the Reminder Patient List/List Rule section.

# **Clinical Reminder Extracts Guide**

By Alan Montgomery and Philip VanCamp, Clinical Product Support

We have written this guide in an attempt to be exactly what it says it is – a guide. The things we have learned about extracts have come from countless hours of trying and failing over and over again until we somewhat succeeded. Our intent from this document is to help you learn the mechanics of extracts and how all the pieces fit together to give you the desired results. Our plan is to make this very basic so that even the reminder novice can understand, so if it seems too simple, please humor us in our efforts to explain. Be forewarned that this is not a fast process and will require you to *think*, to be able to understand what is actually taking place. As you know, if you have worked with us, we will leave it to you to figure it out because just copying what we have done doesn't help you to learn how it works. You may not be interested in how it works, but that's too bad ©! As always, we will help answer any questions by pointing you in the right direction, but still leaving it to your imagination to figure it out. We can also pass along any enhancement ideas to development staff. As we progress and questions arise, we would like to start a Frequently Asked Questions (FAQ) to go along with this guide to help others who will follow (those poor souls) after we are long gone.

I suppose the best way to start is to create an outline as our guide, from alpha to omega. Here are some key points to making this guide more helpful. Any text that you type will be in **bold text.** 

#### What is an extract?

By definition, the word extract simply means to get, pull, or draw out, usually with special effort, skill, or force. Hopefully we will not need the "force" part or maybe we should "use the force" to help us ⑤. So, this means that we want to draw out results from VistA by use of our extract definition. Why should we use an extract? One reason is that we are able to get more precise data due to the flexibility that we have with dates inside the extract definition. This allows you to be able to report almost exact results to your management on performance measure data or whatever type of data is expected of you. Reminder reports definitely have their place for reporting data, but the accuracy you can obtain from extracts is more exact. Another reason is that these can be automatically tasked to run each month, quarter, or year leaving you only to worry about slicing and dicing the data. We will discuss how to do this later on.

### **Key Components**

This section of the guide will give us information on all the components that make up an extract definition and how they work together. We will give examples of each one as we complete the components.

## Finding Rules

Finding Rules – this type of list rule uses a reminder term to achieve the desired result. Let's look at an example from VistA. You have to use a little forethought when creating a finding rule. It is always best to already have the term that you will use created as you will not be able to create the finding rule without the term embedded. Just like all terms, you may have mapped findings with any number of combinations of beginning date/time(s), ending date/times, or conditions associated with the mapped findings. The menu option that is used to navigate to creating list rules is as follows:

- 1. From the Reminder Managers Menu, choose **PL**, then choose **LRM**.
- 2. This will take you to a window that is very similar to dialogs.
- 3. When you access these menus, the screen that is displayed is the window that displays all of your rule sets
- 4. To change to the window that contains your finding rules, at the "Select Item" prompt, type **CV** for change view (exactly like dialog windows) and press Enter.
- 5. To access your finding rules, take the default of "F" at the "Type of View" prompt. This will take you to the finding rules. Anytime you want to change from one type of list rule to another, i.e. finding rule to patient list rule, you will use the CV option. This same navigation is used to access the other types of list rules and I will not ask you to have to read this again for each section. Just remember for the next sections how to navigate to the type of list rule you are wanting.
- 6. After you are in the window you want to be in, choose **CR** to create a new finding rule.

```
Select FINDING RULE to add: FR DIABETIC PATIENTS

Are you adding 'FR DIABETIC PATIENTS' as a new REMINDER LIST RULE (the 344TH)? No//
Y (Yes)

Used by: Not used by any rule set
NAME: FR DIABETIC PATIENTS Replace
SHORT DESCRIPTION:
CLASS: L LOCAL
REMINDER TERM: TUS DIABETES DIAGNOSIS (Extract)

LOCAL ...OK? Yes//
(Yes)
```

The reminder term must already exist at time of entering into the field. Cannot be created on the fly.

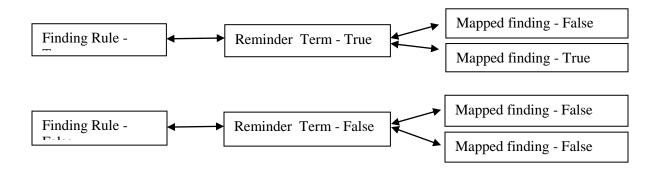
```
LIST RULE BEGINNING DATE/TIME:
LIST RULE ENDING DATE/TIME:
Input your edit comments. Edit? NO//
```

Most of the types of findings that can be defined in the reminder term have a Global Index (PXRMINDX) for across-patient look-ups. However, the Global Index (PXRMINDX) is not used for computed findings linked to a reminder term, unless the computed finding has hard-coded logic to access the Global Index. The typical computed finding assumes that the patient is already selected and does not support across-patient look-up. However, with V2.0, a computed finding can be specifically created for list-building purposes by defining the Type field in the computed finding definition as "List." The List type computed finding can be used as the first rule or any subsequent rule in a rule set where the ADD PATIENT Operation is used. When a computed finding is used to SELECT or REMOVE patients from an existing patient list, a "single" or "multiple" type computed finding may be used.

What does all this actually mean to the user?

- 1. Any type of finding can be used as a mapped item of a term inside of a Finding Rule as the first sequence, except for Computed Findings (CF)
  - a. One exception to the above is a CF of a LIST type. LIST type CF's can only have the ADD PATIENT operator function; therefore, it *can* be used as the first sequence of a rule set.
  - b. If you are using a CF in any other sequence than the first, you may use SINGLE, MULTIPLE, or LIST types of CF. Just remember, if you use the LIST type, the operator must be ADD PATIENT. If you use the SINGLE or MULTIPLE as any sequence but the first, you may use any operator. How do I find out what type of CF I have?

A finding rule will evaluate as TRUE if any mapped finding in the reminder term contained within the finding rule is true. If the Finding rule is true, then the logical operator associated with that finding rule will be invoked within the rule set which it is contained in, i.e. ADD PATIENT, SELECT, REMOVE.



#### **Reminder Rules**

*Reminder Rules* – This type of list rule uses an embedded existing reminder definition to achieve the desired results. Some important things to know about a reminder rule.

- 1. The embedded reminder definition must be an "L" usage type
- 2. In a reminder rule, *ONLY* the cohort logic is evaluated. If you have resolution logic, it will not be evaluated, but it also will not cause problems ©
- 3. The cohort string cannot start with a logical "NOT"
- 4. The cohort string cannot contain a logical "OR NOT"
- 5. If AGE is used in the cohort logic string, then a baseline age range must be defined
- 6. If SEX is used in the cohort logic string, the reminder must be sex-specific
- 7. SEX cannot be the first element of the cohort logic string unless it is followed by AGE
- 8. If a finding sets the frequency to 0Y, which effectively removes the patient from the cohort, it can't have an associated age range

Wow, a lot of limitations here!!! Reminder rules have their place, but they are not used as often as finding rules.

From the List Rule Management options, choose the Change View option (CV) and then select "R" for reminder rules, then select CR to create a rule

### VistA example of creating a reminder rule

```
Select REMINDER DEFINITION RULE to add: RR FLU HIGH RISK
Are you adding 'RR FLU HIGH RISK' as
a new REMINDER LIST RULE (the 345TH)? No// Y (Yes)

Used by: Not used by any rule set

NAME: RR FLU HIGH RISK//
SHORT DESCRIPTION:
CLASS: L LOCAL
REMINDER DEFINITION: AM HIGH RISK FLU LOCAL
LIST RULE ENDING DATE/TIME:
Input your edit comments.
Edit? NO//
```

Again, the reminder definition AM HIGH RISK FLU must meet all the criteria outlined above for reminder rules for it to function.

The LIST RULE ENDING DATE/TIME field is essentially the evaluation date, similar to using the reminder test option's evaluation date/time. If you leave this blank, TODAY will be assumed.

To sum all the above up, when using a reminder rule in a rule set as a sequence, the results obtained from the reminder rule will be the cohort logic only of the reminder definition being used. Again, all of the other constraints on reminder rules will apply.

### **Patient List Rules**

Patient List Rules- Patient list rules are exactly what their name implies they are -- rules that are based on an existing patient list. When using patient list rules in extracts, you can create a patient list rule that will be used by the extract that is based on a patient list that doesn't exist *yet*, but will exist when the patient list rule is used. If this doesn't make sense now, hopefully it will very soon! We will cover this idea of using a patient list rule based on a list that doesn't exist in just a bit.

A patient list can be created three ways:

- 1. Creating a patient list when running a reminders due report (there is a prompt to create a patient list
- 2. Creating the patient list from a rule set within a Patient List Management option
- 3. Creating a patient list when a rule set is invoked within an extract run

From the List Rule Management options, choose the Change View option (CV) and then select "P" for reminder rules, then select CR to create a rule

```
Select PATIENT LIST RULE to add: AJM EXTRACT
Are you adding 'AJM EXTRACT' as a new REMINDER LIST RULE (the 417TH)? No// Y
(Yes)

Used by: Not used by any rule set

NAME: AJM EXTRACT//
SHORT DESCRIPTION:
CLASS: L LOCAL
USE EXISTING PT LIST: AJM EXTRACT LIST
Input your edit comments.
Edit? NO//
```

As stated above, once a patient list exists, then it may be used as a sequence of a rule set as a patient list rule. Any of the <u>logical operators</u> (mentioned in the Rule Set section) may be used in conjunction with the patient list rule within the rule set.

Let's now discuss the anomaly of using a patient list that doesn't exist, but will exist at the time of evaluation. This will only happen when using rule sets within extracts. This is an advanced concept and may take a while to totally grasp....

When a rule set which is composed of finding rules, reminder rules, and patient list rules (not necessarily all of them, but at least one or a combination) is invoked within an extract definition set to run, by design, a patient list will be created. In the example below, you will see the field within the extract sequence that

asks the user for the name of the patient list that will be created. Other fields are listed, but disregard these at this point.

```
Select EXTRACT SEQUENCE: 8// 1 RS NEXUS COHORT (Extract)

EXTRACT SEQUENCE: 1//

LIST RULE SET: RS NEXUS COHORT (Extract)//

EXTRACT PT LIST NAME: NEXUS COHORT Mnn yyyy Replace

INCLUDE DECEASED PATIENTS: YES//

INCLUDE TEST PATIENTS: NO//

Select REMINDER SEQUENCE:
```

So, you have the concept that when the extract runs, each sequence within the extract will invoke a rule set and will create a patient list. Let's say, for example, that sequence one in our hypothetical extract is a rule set to create a Nexus Cohort and sequence two would be to create a diabetic cohort which is a smaller subset of the Nexus Cohort group....again, without understanding what a "Nexus Cohort" is, let's put this in general terms.

Once the rule set for Nexus Cohort runs and creates a patient list (let's say that that list has 1500 patients) we would like to use that patient list (1500 patients) as a starting point to create a separate refined list that only contains diabetics, and let's say that list has 750 patients.

At this point, our cohort would be patients that met the nexus definition AND who are diabetic (750 of 1500 patients). Since extracts process in sequence, our first sequence is to create the nexus cohort (and create a patient list, of 1500 patients, by using a rule set) and then the second sequence would use THAT patient list of 1500 as a starting point to further refine down to the diabetic cohort, 750 of 1500 patients.

The way that this is accomplished is that the second sequence of the extract uses a rule set that starts out using a patient list rule that is based on the patient list created in the first sequence of the extract. In essence, immediately following the creation of the patient list for Nexus Cohort, we use that patient list within a patient list rule to start out creating our diabetic cohort.

Maybe a picture will be worth a thousand words:

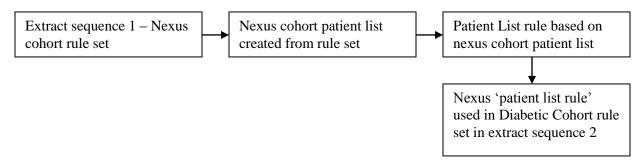
### **Extract Definition**

Sequence 1: Nexus Cohort rule set

A patient list of patients is created who meet the criteria of the rules in the rule set

Sequence 2: Diabetic cohort rule set

This rule set begins with a patient list rule that is based on the patient list created from sequence one.



#### **Extract Definition in VistA**

```
EXTRACT SEQUENCE: 1//
 cohort
 EXTRACT PT LIST NAME: NEXUS COHORT Mnn yyyy   This is the patient list that will be
created when the rule set is completed. Don't worry about the Mnn yyyy for now.
 INCLUDE DECEASED PATIENTS: YES//
 INCLUDE TEST PATIENTS: NO//
 Select REMINDER SEQUENCE:
Here is the breakdown of the RS NEXUS COHORT (Extract) rule set:
         Name: RS NEXUS COHORT (Extract)
       Number: 110
Class: LOCAL
  Description:
    Rule Type: RULE SET
   Component Rules
          Sequence: 1
          Operation: ADD PATIENT
          List Rule: <some list rule>
          Sequence: 2
          Operation: <some logical operator>
          List Rule: <some list rule
          Sequence: 3
          Operation: <some logical operator>
          List Rule: <some list rule>
```

Next, the second sequence of the extract runs after the first is completed. Here is the second sequence:

```
Select EXTRACT SEQUENCE: 2 RS FACILITY DM MEASURES

EXTRACT SEQUENCE: 2//

LIST RULE SET: RS FACILITY DM MEASURES// 	This is the rule set to build diabetes cohort

EXTRACT PT LIST NAME: FACILITY DM MEASURES Mnn yyyy 	This is the patient list that will be created when the rule set is completed. Again, don't worry about the Mnn yyyy for now.

INCLUDE DECEASED PATIENTS: NO//
INCLUDE TEST PATIENTS: NO//
Select REMINDER SEQUENCE:

Here is the expansion of the RS FACILITY DM MEASURES rule set:

Name: RS FACILITY DM MEASURES
Number: 281
Class: LOCAL
```

```
Description:

Rule Type: RULE SET

Component Rules
-----
```

Use Extract PT List Named: NEXUS COHORT Mnn yyyy ←Here is the key connection! If you can understand this, you are well on your way to understanding the complete process! In the set-up of the patient list rule, the field USE EXTRACT PT LIST NAMED entry must be the name of the patient list created from sequence 1 of the extract. Look above in that field of extract sequence 1 and see that entry is the same as what you see in the patient list rule EXTRACT PT LIST NAMED field.

Sequence: 2: Whatever happens based on the operator (ADD PATIENT, SELECT, REMOVE) of this sequence will start with the patients that met the NEXUS COHORT (patients who are "in" the nexus list)

Operation: <some logical operator> List Rule: <Some List Rule>

Sequence: 3

Operation: <some logical operator> List Rule: <Some List Rule>

Each patient list has a unique name and is stored in file 810.5 (REMINDER PATIENT LIST). These can be overwritten with a subsequent run of an extract or a reminder report.

#### **Rule Sets**

Rule sets are a sequence of steps that are made up of list rules that are connected together with a logical operator. The three types of list rules are:

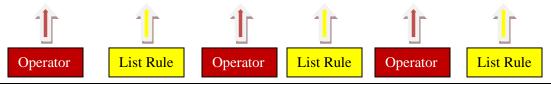
- 1. Finding Rule
- 2. Reminder Rule
- 3. Patient List Rule

To create/Edit any of the above, you must be in LIST RULE MANAGEMENT which is a sub menu of PATIENT LIST MANAGEMENT from the main reminders menu. Take a look here and notice all the options you have available at the bottom of the screen.

The types of logical operators that connect each sequence within the rule set are as follows:

- 1. Add Patient (like the Boolean "OR")
- 2. Select (like the Boolean "AND")
- 3. Remove (like the Boolean "AND NOT")

Let's think about it like a train that is connected together, except that trains usually are not in a logical sequence whereas we hope our rule set is. For this example, we will use generic names for our list rules. Example: <a href="mailto:kmolen.com/ADDPATIENT">ADDPATIENT</a>>FINDING RULE 1<a href="mailto:kmolen.com/SELECT">SELECT</a>>FINDING RULE 2<a href="mailto:kmolen.com/REMINDER RULE">REMINDER RULE 1</a>



Now let's use a real-life example to further illustrate a rule set and see what are result is from the rule set.

Finding Rule for Diabetic Patients –FR DIABETES

Finding Rule for A1C Lab test >9.0 – FR HGBA1C>9.0

Finding Rule for age >75 – FR AGE>75

<aadd patient>FR DIABETES< SELECT>FR HGBA1C>9.0< REMOVE>FR AGE>75



So, what are the results of this rule set? Diabetic patients who have a lab test of HGBA1C greater than 9.0 and who are 75 years of age or younger. Is that what you came up with? If not, stop a minute and think about the results. The first sequence (FR DIABETES) found our diabetic patients; then from those patients, we used sequence two (FR HGBA1C>9.0) to select (AND) the ones who had a HGBA1C greater than 9.0. Next we used sequence three (FR AGE>75) to remove (AND NOT) patients who were over the age of 75.

# Using Reminders to obtain data in the extract

So far, all we have from the Extract is nothing but a list of patients. We will continue to use the diabetes example. Our list now contains diabetic patients who have met the Nexus Cohort restrictions. Now what?? This list of patients is the APPLICABLE or our denominator. How do we get our numerator?

To obtain our numerator, we need to run reminder definition(s) against this patient list. To do this, we have to add in reminders to our extract definition. Reminders that already exist can be used for this, but most of the time, you will want to make a copy of an existing reminder and make edits or create a new one from scratch. The main reason to not use an existing reminder is that you will normally not need any cohort logic because your cohort has been built within the rule sets of the extract definition. This makes for faster evaluation of the reminders leading to quicker availability to data. Also, a lot of reminders have a DUE IN ADVANCE TIMEFRAME entry and this would affect your data.

Let's discuss some rules that will apply to the reminders that will be used in the extract.

- 1. The USAGE filed needs to have an \* or an X.
- 2. Cohort logic must contain something. If your rule set has entirely built your cohort, your reminder still must have something. I would suggest using a customized logic string of SEX
- 3. All other things about reminders would apply as normal when they are evaluated in the extract

How do I enter the reminder definitions into my extract definitions?

When you go back and edit your extract definition, you choose the appropriate sequence number. For this example, it would be the sequence number dealing with the diabetes section. As you scroll through the fields, you will see a field named 'Select REMINDER SEQUENCE'. Here you would enter a sequence number, then enter in the .01 name of the reminder definition (not the print name). More than one reminder can be entered for each sequence of the extract definition. You would just need to give each reminder that you add a distinct sequence number. You will notice in the example below that the reminder definition has an (X) at the end. This is actually part of the reminder definition given by the person who created the reminder definition.

```
Select EXTRACT SEQUENCE: 2 RS FACILITY DM MEASURES

EXTRACT SEQUENCE: 2//

LIST RULE SET: RS FACILITY DM MEASURES//

EXTRACT PT LIST NAME: FACILITY DM MEASURES Mnn yyyy

Replace

INCLUDE DECEASED PATIENTS: NO//

INCLUDE TEST PATIENTS: NO//

Select REMINDER SEQUENCE: 145// 100 DM A1C W/I LAST YEAR (X)

REMINDER SEQUENCE: 100// ←Reminder Sequence number (arbitrary number)

REMINDER: DM A1C W/I LAST YEAR (X)// ←Reminder definition

COUNTING RULE

Select REMINDER SEQUENCE:
```

# Dates and how they affect your data

Remember that the patient lists are created from a rule set. The RULE SET TEST option within LIST RULE MANAGEMENT (specifically within RULE SETS area) is a great tool to let you know what your dates actually will be for your rule set, once it starts running. An example of the RULE SET TEST will be shown later.

There is a logical hierarchy within extracts. Within an extract, there exist many pieces and within these pieces, there are possibilities for date entries along the way. For example:

- -Extract runs MUST have a beginning date/time and ending date/time
  - -A Rule Set has the possibility for entry of a beginning date/time and ending date/time
    - -A finding rule within a rule set has the possibility for entry of a beginning date/time and ending date/time
      - -A reminder term in a finding rule has the possibility for entry of a beginning date/time and ending

date/time

-Within the reminder term, the mapped findings have the possibility for entry of a beginning date/time and ending date/time

So, if you had different dates in more than one place, which date would be used? The answer to this question is the date at the lowest level would trump a date at a higher level. Some things to think about when adding dates:

- 1. If you are using a reminder term in an extract, remember if you add dates at the term level or mapped item level within the term, they will also affect how that term is used any other place.
- 2. If a finding rule has dates, and it is used in more than one rule set, the dates may need to be different in each rule set within which they are used. This is a possible place for errors.
- 3. My inclination would be to put my dates at the highest level possible unless a piece at a lower level is specific to that one rule set.

Below is an example of using RULE SET TEST option. This example was testing the RS NEXUS COHORT rule set using the month of June. You can see that not all dates are 6/1-6/30. This means that there was a different date entered at a lower level within the rule set.

```
Enter Patient List BEGINNING DATE: 0601 (JUN 01, 2010)
Enter Patient List ENDING DATE: 0630 (JUN 30, 2010)
List Build Beginning Date: 06/01/2010
List Build Ending Date: 06/30/2010
SEQUENCE 1 FR NEXUS COHORT
Operation: ADD PATIENT
TERM TUS NEXUS CLINIC (Extract)
 FINDING 1-RL.NEXUS CLINIC COHORT FY08
  Beginning Date/Time: 06/01/2010
  Ending Date/Time:
                       06/30/2010@23:59:59
SEQUENCE 2 FR ANCHOR VISIT
Operation: SELECT
TERM TUS ALL LOCATIONS (Extract)
 FINDING 1-RL.VA-ALL LOCATIONS
  Beginning Date/Time: 06/01/2008
  Ending Date/Time: 05/02/2009@23:59:59
SEQUENCE 3 VA-FR-DATE OF DEATH
Operation: REMOVE
TERM VA-DATE OF DEATH
 FINDING 1-CF.VA-DATE OF DEATH
  Beginning Date/Time: 0
  Ending Date/Time: 05/31/2010@23:59:59
SEQUENCE 4 FR VA VETERAN
Operation: SELECT
TERM TUS VA VETERAN
 FINDING 1-CF.VA-VETERAN
  Beginning Date/Time: 06/01/2010
  Ending Date/Time: 06/30/2010@23:59:59
```

### **Extract Definitions**

This section of the guide will help you learn how to set up your extract definition. It is important to have all your pieces ready (rule sets, reminder definitions) to add into your extract definitions. Some good advice would be to create a "map" before you even start building any pieces of the extract, i.e. reminder terms, finding rules, reminder rules, patient list rules, etc.

Once you have your rule sets complete and have tested them to ensure that you will get the proper data returned by the dates you have entered along the way, it is time to add them to your extract definition. You may be creating your extract definition from scratch or you may be editing an already existing definition. Think about the sequential order that your extract needs to run – which rule set needs to run first. If you have a rule set that depends on something to be created (a patient list) to make it work, then the rule set that creates needs to be prior, sequentially.

#### To add a new extract or edit an existing one:

- 1. Use the **XM** menu option from the Reminder Managers menu,
- 2. Choose **ED** option.
- 3. Choose **CR** or **DE**, depending on what you need to do.

Below is a screen shot from VistA on creating a new extract definition. It includes all the field entries and responses you will need to know about at this time. Also, don't be concerned at this point about the **Mnn yyyy** that you see below. This will be explained later.

```
Select EXTRACT DEFINITION to add: EXTRACT FOR GUIDE
 Are you adding 'EXTRACT FOR GUIDE' as
   a new REMINDER EXTRACT DEFINITION (the 20TH)? No// Y (Yes)
NAME: EXTRACT FOR GUIDE//
CLASS: L LOCAL
TYPE OF TOTALS: ?
    Choose from:
              COMPLIANCE TOTALS ONLY
      CT
               COMPLIANCE AND FINDING TOTALS
TYPE OF TOTALS: CT COMPLIANCE TOTALS ONLY
DESCRIPTION:
 No existing text
 Edit? NO//
REPORT FREQUENCY: ?
    Enter the report frequency.
    Choose from:
      Ω
               QUARTERLY
      М
               MONTHLY
               YEARLY
REPORT FREQUENCY: M MONTHLY
Select EXTRACT SEQUENCE: 5 ←This is an arbitrary number
 Are you adding '5' as a new EXTRACT SEQUENCE (the 1ST for this REMINDER EXTRA
  EXTRACT SEQUENCE LIST RULE SET: RS NEX
       RS NEXUS COHORT (Extract)
                                     RULE SET
       RS NEXUS COHORT (LIST) RULE SET
       RS NEXUS IMMUNIZATION REPORT FY08 RULE SET
RS NEXUS WITH DM OR IHD AND VETERAN RULE SET
CHOOSE 1-4: 1 RS NEXUS COHORT (Extract) RULE SET
 LIST RULE SET: RS NEXUS COHORT (Extract) //
 EXTRACT PT LIST NAME: PATIENT LIST FOR NEXUS COHORT Mnn yyyy
 INCLUDE DECEASED PATIENTS: n NO
 INCLUDE TEST PATIENTS: n NO
 Select REMINDER SEQUENCE:
                             ←No reminder added at this point
Select EXTRACT SEQUENCE: 10
 Are you adding '10' as a new EXTRACT SEQUENCE (the 2ND for this REMINDER EXTR
  (Yes)
   EXTRACT SEQUENCE LIST RULE SET: RS FACILITY
        RS FACILITY CANCER MEASURES RULE SET
       RS FACILITY CANCER MEASURES (Q)
                                         RULE SET
       RS FACILITY CARDIOVASCULAR MEASURES
                                              RULE SET
       RS FACILITY CARDIOVASCULAR MEASURES (0)
                                                  RULE SET
       RS FACILITY DM MEASURES RULE SET
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 5 RS FACILITY DM MEASURES RULE SET
 LIST RULE SET: RS FACILITY DM MEASURES//
 EXTRACT PT LIST NAME: DIABETIC COHORT Mnn yyyy
 INCLUDE DECEASED PATIENTS: N NO
 INCLUDE TEST PATIENTS: N NO
 Select REMINDER SEQUENCE: 5
 Are you adding '5' as a new REMINDER SEQUENCE (the 1ST for this EXTRACT RULES
  (Yes)
   REMINDER SEQUENCE REMINDER: DM
    1
       DM A1C W/I LAST YEAR (X)
                                       LOCAL
        DM A1C<7.0 (X) LOCAL
        DM A1C>9.0 (X)
                             LOCAL
```

```
DM BP <130&<80 (X)
                                 LOCAL
    5 DM BP <140&<90 (X)
                                 LOCAL
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 DM A1C W/I LAST YEAR (X)
   REMINDER: DM A1C W/I LAST YEAR (X) //
   COUNTING RULE: -No entry at this point
 Select REMINDER SEQUENCE: 10 ←arbitrary number
 Are you adding '10' as a new REMINDER SEQUENCE (the 2ND for this EXTRACT RULE
   REMINDER SEQUENCE REMINDER: DM A1C
    1 DM A1C W/I LAST YEAR (X)
                                        LOCAL
    2 DM A1C<7.0 (X) LOCAL
    3 DM A1C>9.0 (X)
                            LOCAL
       DM A1C DONE ZTUS DM AND A1C DONE (RPT)
DM A1C>9.0 HGBA1C>9.0 LOCAL
                                                       LOCAL
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 2 DM A1C<7.0 (X)
                                 LOCAL
   REMINDER: DM A1C<7.0 (X)//
   COUNTING RULE: -No entry at this point
 Select REMINDER SEQUENCE:
```

To summarize the extract definition:

- 1. Extract definition is made up of rule set(s) which are processed in sequence and a patient list is created when each rule set completes. This list of patients makes up your applicable group or denominator for the specific rule set. Another way to say this is that if you have 5 rule sets, you will have 5 patient lists, therefore 5 applicable groups.
- 2. Reminder definitions can optionally be evaluated against the patient list created from each sequence of the extract definition. Once the reminder definitions are evaluated, the DUE patients make up your numerator.

## **Running the Extract**

There are two ways to create or start an extract:

- 1. Manual
- 2. Automatic

#### **Manual Method**

This makes the extract start processing the rule sets in the sequence that is contained within the extract definition..

- 1. Again, you will access the **XM** menu from the reminder managers menu,
- 2. then choose the **MA** menu option,
- 3. then choose the **VSE** action. When you choose the **VSE** action, you need to make sure your extract definition appears in the list to be able to choose it. Choose your extract definition, then choose the **ME** action for "manual extract".

4. At the Select EXTRACT PERIOD (Mnn/yyyy): // prompt, choose your reporting month and year in the syntax of Mnn/yyyy. So, if your reporting month was June of 2010, at the prompt, you would enter M06/2010.

At this point, you may be thinking about the Mnn yyyy in the extract definition. What happens when you choose your month and year for the manual extract to run? Anywhere you have defined Mnn yyyy in the name of the patient lists created from the rule set, M06 2010 will be substituted for the Mnn yyyy. After your extract completes, you can go to the patient list management section of reminders and you will NOT see a list with a literal Mnn yyyy in the name, but you will see M06 2010 instead. Magic!! ©.

Now you just have to let the extract complete. The time it takes will depend on how many rule sets, how many reminders you are evaluating, and the complexity of the reminders.

After the extract completes, if you are a member of your local reminders mail group, you will receive a VistA mail message that the extract is complete.

- 5. To view your results, access the **XM** menu, the **MA** menu and then choose the **VSE** action. You will see your completed extract on the screen. Choose the number that corresponds to your extract and you will be able to view your results.
- 6. At the Select Action prompt, take the default of **ES**. You should see data for the reminders that you defined in your extract in the format of TOTAL, APPL., N/A, DUE and NOT DUE.

Below is a screen shot from VistA to demonstrate what you should see.

| Extract Summary Name: FACILITY MH PM 201<br>Extract Period: 06/01/2010 - 06/30 |       | ted: 07/28 | 3/2010@2 | 2:49:15 |         |
|--|-------|------------|----------|---------|---------|
| Item Patient List/Station/Reminder   | Total | Appl.      | N/A      | Due     | Not Due |
| 679/DM A1C W/I LAST YEAR   | 807   | 807        | 0        | 74      | 733     |
| 679/DM A1C>9.0   | 807   | 807        | 0        | 732     | 75      |

You may be wondering why there is 0 in the N/A column. This is because we used the rule set for our cohort, not the reminder definition. This is one of the reasons extracts are more efficient because there is less evaluation time due to the fact that everybody on the patient list is in the cohort.

### **Automating the extract process**

This will involve your IRM department. They will have to create an option, set that option in TaskMan Management Options and queue it to run monthly. Then in FileMan, you/IRM will have to set a field to make sure the correct reporting period is being accessed. We will discuss this in detail below.

Step 1. Create the new option in VistA. You can give it a unique name to your system.

- Access the XUMAINT option from the programmer prompt or another way would be to access MENU MANAGEMENT option from the EVE menu.
- At the Select Menu Management Option, choose EDIT.

```
Select Menu Management Option: EDIT options
```

```
Select OPTION to edit: TUS MONTHLY PM
                                            MONTHLY PC PM \unique name for your site,
you will be asked to add this as a new option (since my option already existed, I was
not prompted to add as new)
NAME: TUS MONTHLY PM//
MENU TEXT: MONTHLY PC PM// ←Choose a name for the MENU TEXT
PACKAGE: CLINICAL REMINDERS / ← Choose CLINICAL REMINDERS as the PACKAGE
OUT OF ORDER MESSAGE:
LOCK:
REVERSE/NEGATIVE LOCK:
DESCRIPTION: ←enter some descriptive text for this option
This option is for use within Clinical Reminder extracts. This option is
tasked monthly by taskman utility
  Edit? NO//
TYPE: run routine//
HEADER:
ENTRY ACTION: D AUTO PXRMETX ("FACILITY MONTHLY PM", "Y")
                    ←The yellow highlighted text is the NAME of your extract
          Replace
definition you want to run
EXIT ACTION:
ROUTINE:
CREATOR: CRPROVIDER, ONE// ←This field will be automatically filled in by the creator
HELP FRAME:
PRIORITY:
Select TIMES PROHIBITED:
Select TIME PERIOD:
RESTRICT DEVICES?:
Select PERMITTED DEVICE:
```

Step 2: Go to TaskMan and set this option to run monthly.

- Access the menu option XUTM MGR from the programmer prompt or the TASKMAN MANAGEMENT option from the EVE menu.
- Then choose Schedule/Unschedule Options.
- Select TaskMan Management Option: schedule/Unschedule Options

```
Select OPTION to schedule or reschedule: tus monthly PM
                                                             MONTHLY PC PM ←choose
the option created from step 1
        ...OK? Yes//
                         Edit Option Schedule
   Option Name: TUS MONTHLY PM
   Menu Text: MONTHLY PC PM
                                                        TASK ID: 8824177
 QUEUED TO RUN AT WHAT TIME: JUL 3,2010@03:00
                                                 ←set the date to run after the first
of the next month. Make sure it doesn't conflict with any other tasks
DEVICE FOR QUEUED JOB OUTPUT:
QUEUED TO RUN ON VOLUME SET:
     RESCHEDULING FREQUENCY: 1M ←Set the option's frequency to monthly
            TASK PARAMETERS:
           SPECIAL QUEUEING:
```

Step 3: Give FileMan a starting month to start the automatic extract. This will be a one-time entry. Once you create your extract definition, it will be visible in the file.

- From the FileMan Menu, choose "Enter or Edit file entries"
- Choose file 810.2 (REMINDER EXTRACT DEFINITION)
- Then choose your extract definition.
- Then you will need to add an entry to the "NEXT REPORTING PERIOD/YEAR" field. The NEXT REPORTING PERIOD would be the month immediately preceding the month that is defined as your report queue date in TaskMan. For example, if your beginning report queue date in TaskMan is July 3, 2010, your NEXT REPORTING PERIOD would be June 2010 (M06/2010).

Once you have completed steps 1-3, your extract will be set up to automatically run each month, NO MAINTENANCE NECESSARY!! Nice!! © You will only have to go get the results from the Extract menus as described before.

Even though you have set the extract to run automatically, you can still make manual runs of your extract at any time. Do remember that these can be system-intensive, so take care to run this at off times. If your extract is small, then this will not be an issue.

## **Understanding your Output**

Now that you have data, what does it all mean? We mentioned earlier about the Applicable number being your denominator and the DUE number being your numerator. Once you have those numbers, it is as simple as doing the math, or having an excel spreadsheet do the math for you!

So, for an example, let's say for HGB A1C>9.0 for diabetics performance measure you have 1000 applicable patients from the extract and you have 100 patients that have A1C>9.0 lab value. Then you are 90% compliant on diabetic patients having A1C<9.0.

#### FAQ:

- 1. Q. How do I know what type of Computed Finding I have, i.e. Single, Multiple or List?
  - A. One way is to use the CFL option from the CF management menu option from the Reminder Managers menu. Enter the name of the specific CF and check the TYPE field entry. Another way is to look this up in FileMan from file #811.4 and check the TYPE field entry.
- 2. Q. Reminder rules require the use of a reminder definition which must be "L" type. How do I find out what usage type my reminder definition is?
  - A. From the Reminder Managers menu, choose RM, then RI, and look for the entry in the USAGE field.

# Access to National Extracts at Austin Information Technology Center (AITC)

1) Go to vaww.aac.va.gov, which will require you to enter your national access username e.g: User: VHAXXXXXVvhaisxxxxx

Password: enter your national password

2) Register for access to Austin system to get customer ID and initial logon password Go to <a href="http://vaww.aac.va.gov/servicedesk/">http://vaww.aac.va.gov/servicedesk/</a> on the VA intranet Select Publications and Forms on the service desk webpage Under the Forums category: Select VA FORM 9957

Questions? Access the following FAQ webpage: <a href="http://vaww.aac.va.gov/servicedesk/HDDocs/FAQ.pdf">http://vaww.aac.va.gov/servicedesk/HDDocs/FAQ.pdf</a>

### **Clinical Reminder Order Checks**

Sites can create their own CPRS Order Checks using Clinical Reminder Definitions or Terms.

Sites will be able to create local order checks using the Clinical Reminder functionality. These Order Checks will occur at the time the user clicks on the accept button when placing an order in CPRS. The set-up of a Clinical Reminder Order Check consists of two parts:

- Creating an Order Check Item Group that can contain Orderable Items or entries from the Drug #50, VA Drug Class #50.605, or VA Generic #50.6 files. (For the purpose of this document entries for Drug, VA Drug Class, or VA Generic will be referred to as Pharmacy Items).
- Creating the rules that will be applied to the orderable item when accepting an order in CPRS. It will be possible to have the same orderable item or pharmacy items in multiple groups. Each rule assigned to the different groups will be evaluated when placing the orderable item in CPRS.

The Order Check Items are stored in file #801. The Order Check Rules are stored in file 801.1. When an order is placed in CPRS, the reminder order check will find all order check item groups that contain the orderable item. It will also find all reminder order check item groups that contain a pharmacy item that the orderable item is part of.

**Note:** Sites should evaluate all requests to create a Clinical Reminder Order Check to determine the importance of adding it. Using many reminders in an order check could affect performance in the order check system.

File #801stores a pointer to an entry in the Orderable Item file (#101.43). The reminder Order Check file **will not** automatically be updated with changes to the Orderable Item file, such as inactivating an existing orderable item, or if an ancillary package adds an item to the Orderable Item file.

The entries in Reminder Order Check Items Group file (#801) need to be evaluated by the site anytime an update is done to the Orderable Item file, file #101.43. The site will need to determine if it needs to remove an orderable item from an existing group or if it needs to add an orderable item to existing group. The pharmacy items assigned to entries in the Reminder Order Item Group file will be automatically evaluated at the time of ordering.

The Reminder Order Check Menu...[ PXRM ORDER CHECK MENU] contains five options:

| Abbr | Option name                                  | File Name                         | Description  |
|------|--|-----------------------------------|--|
| GE   | Add/Edit Reminder Order<br>Check Items Group | PXRM ORDER CHK<br>ITEMS GROUP EDT | This option is used to create a new order check items group and rules or to edit an existing order check items group and the |

|      |                                       |                                    | corresponding rules.   |
|------|---------------------------------------|------------------------------------|--|
| GI   | Reminder Order Check<br>Items Inquiry | PXRM ORDER CHK<br>ITEMS GROUP INQ  | This option is used to display the details of a reminder orderable item group.   |
| RE   | Add/Edit Reminder Order<br>Check Rule | PXRM ORDER CHECK<br>ITEMS RULE EDT | This option is used to create/edit a reminder order check rule.  |
| RI   | Reminder Order Check<br>Rule Inquiry  | PXRM ORDER CHECK<br>RULE INQ       | This option is used to display the details of a reminder order check rule.   |
| TEST | Reminder Order Check<br>Test          | PXRM ORDER CHECK<br>TESTER         | This option allows the user to run a test against a patient and an orderable item. This allows them to evaluate the results of a reminder order check rule before turning it on in CPRS. |

When entering the editor or the inquiry options, you are presented with options to look up the order check item group or the rules by the name or the components that make up rules or the order check items group:

### For Order Check Items Group

- N: ORDER CHECK ITEM GROUP NAME
- C: VA DRUG CLASS
- D: DRUG
- G: VA GENERIC
- O: ORDERABLE ITEM
- R: ORDER CHECK RULE
- Q: QUIT

### For Order Check Rules

- N: ORDER CHECK RULE NAME
- R: REMINDER DEFINITION
- T: REMINDER TERM
- Q: QUIT

### Reminder Order Check Items Group Test [PXRM ORDERABLE ITEM TESTER]

This option provides a way for the user to test the order check functionality in VistA. The option requires the selection of a patient and either an orderable item or a drug from file 50. This duplicates the process of placing an order in CPRS or finishing a medication in backdoor pharmacy. The output shows the results for all the appropriate reminder rules. In addition, the output shows some internal results that are not displayed in CPRS. The internal results are the evaluation results of a reminder definition or a reminder term. The evaluation result will start

with "INTERNAL:". It also specifies if no rules are found for the different values in the testing flag and the severity fields. If a rule is found and it evaluates as false, the TESTER will display "RULE FAILED."

### **Description of the setup fields for Reminder Order Check Items Group:**

- Group Name: This is the name of the Orderable Group
- Description: Sites should use this field to describe the types of Orderable Items that should be defined in this Group.
- Pharmacy Item List: This field will allow sites to store a list of Drug, VA Drug Class, and/or VA Generic entries. When an order is placed in CPRS, the orderable item will be expanded to determine the drug, drug class, or the generic that it is associated with. If one of these items is found in one or more Order Check Items Groups, then the corresponding rules will be evaluated.
- Orderable Item: Users can assign specific orderable item at this prompt.
- Each Order Check Items Group can have multiple rules defined.

### Description of the setup fields for Reminder Order Check Rule:

- Rule Name: This is the internal name of the rule.
- Display Name: This is the external name; the value in this field appears in the order check form in CPRS, if the rule triggers an order check.
- Status Flag: This field determines if the rule is inactive, set for production use, or for testing use. If the rule is set to INACTIVE, then the rule will not be evaluated for the orderable item list. The value should be set to TESTING when a rule is first created so the creator of the rule can test it before turning it on for the entire facility. To turn it on for the entire facility, this field must be set to PRODUCTION.
- CPRS Order Check Flags
  - Clinical Reminder Live: This rule allows all users access to the Clinical Reminder Order Checks.
  - Clinical Reminder Test: This rule should only be assigned to a smaller group of users. This order check rule and the testing field are used to allow the users to test the rule before allowing every user at the site access to the rule

| Clinical Reminder Live   | Off |
|--------------------------|-----|
| ☑ Clinical Reminder Test | On  |

• Severity Flag: This field determines if the rule should require an override reason in the order check dialog. The three options are Low, Medium, and High. A severity of High will require the user enter an override reason for the order check when signing the order.

- Rules can either be defined to run against a reminder term or a reminder definition. A reminder term is beneficial when the request is to evaluate the presence of specific data. (See Example #1). A reminder definition is beneficial if you need the full functionality of a reminder definition to determine if the rule should show in the order check form (See Example #2). The user can only define one or the other. If users define a reminder term, they will be prompted to answer the fields that are for a reminder term. If users do not select a reminder term, they need to select a reminder definition and the associated fields.
- Reminder Term: This is a pointer value to the reminder term.
  - Term Evaluation Status: Reminder Term evaluation results are either True or False. This field lets the user determine if the rule should display in the order check form by selecting which reminder term status should be used.
  - o Order Check Text: This is the order check text that will display in CPRS.
- Reminder Definition: This field will show if a reminder term is not defined. This is a pointer to the reminder definition.
  - Definition Evaluation Status: This field determines which reminder evaluation results cause the rule to appear in the order check form. The three possible values are:
    - Due: A selection of DUE will cause the rule to appear in the order check form if the reminder has a status of DUE NOW or DUE SOON.
    - Applicable: A selection of APPLICABLE will cause the rule to appear in the order check form if the reminder has a status of DUE NOW, DUE SOON, or RESOLVED.
    - N/A: A selection of N/A will cause the rule to appear in the order check form if the reminder has a status of N/A or NEVER.
  - Output Text: This field controls which text should appear in the order check form.
     This field can have one of three possible values:
    - Order Check Text Only: This value will only display the text defined by the user in the order check text field.
    - Definition Text Only: This value will display the text of the reminder evaluation. This text is similar to the Clinical Maintenance Output except it will not include the Status Line and the Frequency line in the output.
    - Both Order Check and Definition Text: This value will display the Order Check Text followed by the definition evaluation text.
  - o Order Check Text: This is the order check text that will display in CPRS.

### Example #1

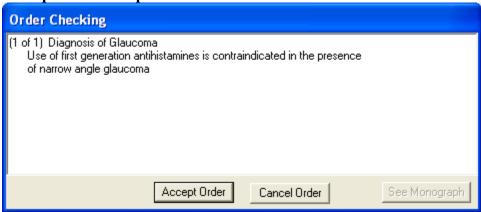
### Problem:

Order Check needed for the interaction between timolol ophthalmic (used to treat glaucoma) and OTC antihistamines (which should not be used in the more rare narrow angle glaucoma).

### **Setup:**

- 1. Create a reminder term that looks for the presence of a diagnosis of narrow angle glaucoma. (May need to look at multiple files depending on your site practice)
- 2. Create an Order Check Items Group that contains all orderable items for any OTC Antihistamines.
- 3. Create a Rule that contains the term created in step 1.
- 4. Set the rule to trigger the order check if the reminder term is evaluated as True.
- 5. Create the text that should appear in the order check window.

### **Example of the Output in CPRS.**



**Description of solution**: A reminder term was used in the setup because the presence of Glaucoma was all that is needed to determine if the rule should trigger an order check. In the screen shot above, the text "Diagnosis of Glaucoma" was defined in the Display Name field. The rest of the text was defined in the Order Check Text field.

### Example #2:

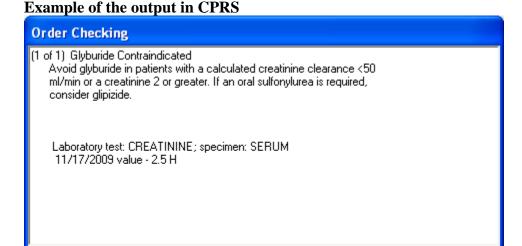
### Problem:

Order Check is needed when ordering Glyburide for patients age 65 or greater and serum Cr 2.0 or greater.

### **Setup:**

1. Create a reminder definition that is applicable to the patient if the patient age is 65 or greater and the patient has a CR serum 2.0 or greater.

- 2. Create an Order Check Items Group that contains all orderable items for the Glyburide.
- 3. Create a Rule that contains the definition created in step 1.
- 4. Set the rule to trigger the order check if the reminder definition is applicable to the patient.
- 5. Create the text that should appear in the order check window. Set the order text to display the finding output in the order check text.



Accept Order

### **Description of solution:**

We needed a reminder definition to match patients older than 64 who had a lab test with the results greater than 2. In this example we set the rule up to display both the order check text and the definition evaluation text. The text "Glyburide Contraindicated" is defined in Display Name field. The text "Avoid glyburide in patients with a calculated creatinine clearance < 50 ml/min or a creatinine 2 or greater. If an oral sulfonylurea is required, consider glipizide," is defined in the order check text field. The rest of the text is returned from the reminder definition evaluation.

Cancel Order

See Monograph

### Example #3

### Problem:

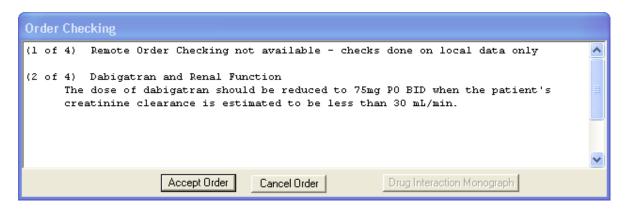
Order check desired to remind providers that the recommended dose of dabigatran (Pradaxa®) is reduced in the presence of declining renal function.

### **Setup:**

1. Create a reminder term that will identify patients with reduced renal clearance. The package insert for Pradaxa ® suggests a threshold of 30 mL/min creatinine clearance, but a serum creatinine level above 2.0 mg/dL approximates the same degree of renal function.

- 2. Create a reminder order check rule that calls the reminder term created in step 1 when its status is TRUE. The rule also contains the text that will appear in the order check window.
- 3. Create an order check item group for the dabigatran pharmacy item. You can do this at the VA GENERIC level (e.g., DG.DABIGATRAN) at the DRUG level (e.g., DABIGATRAN 75MG CAP) or at the ORDERABLE ITEM level (e.g., DABIGATRAN CAP, ORAL). Note that even if you use a specific strength at the drug level, all strengths will be order checked because CPRS actually uses the Orderable Item to perform the checks.
- 4. Connect the rule to the order check item group using the Add/Edit Reminder Order Check Items Group option.

### **Example of the Output in CPRS:**



### Description of the setup fields for reminder order check rule

For testing purposes, the status flag needs to be set to T.

| Status | Result  |
|--------|---|
| T      | Only Testing order checks display in CPRS and in the testing rules section of the reminder order check test option (VistA)        |
| Р      | Only Production order checks display in CPRS and the production rules section of the reminder order check test option (VistA)     |
| I      | No order checks display in CPRS or in the testing/<br>production rules section of the reminder order check test<br>option (VistA) |

# Reminder Order Check Items Inquiry Example: VA-TERATOGENIC MEDICATIONS ORDER CHECK (CAT X)

```
Select Reminder Managers Menu Option: ROC Reminder Order Check Menu
  GE
         Add/Edit Reminder Order Check Items Group
         Reminder Order Check Items Inquiry
  GΙ
         Add/Edit Reminder Order Check Rule
  RE
         Reminder Order Check Rule Inquiry
  RΙ
  TEST Reminder Order Check Test
Select Reminder Order Check Menu Option: GI Reminder Order Check Items
Inquiry
Select Reminder Order Check Items Group by one of the following:
    N: ORDER CHECK ITEMS GROUP NAME
    C: VA DRUG CLASS
    D: DRUG
    G: VA GENERIC
    O: ORDERABLE ITEM
    R: ORDER CHECK RULE
    Q: QUIT
Select Reminder Order Check Items Group by: (N/C/D/G/O/R/Q): N//
                                                                   ORDER
CHECK ITEM GROUP NAME
Reminder Order Check Item Group: VA
        VA-TERATOGENIC MEDICATIONS (CAT D OR C) GROUP
        VA-TERATOGENIC MEDICATIONS (CAT X) GROUP
CHOOSE 1-2: 2 VA-TERATOGENIC MEDICATIONS (CAT X) GROUP
DEVICE: ;;999 HOME
```

```
REMINDER ORDER CHECK RULE INQUIRY Jan 05, 2012 10:18:38 am Page 1

VA-TERATOGENIC MEDICATIONS ORDER CHECK (CAT X) No. 6

Display Name: Potentially Teratogenic Medication (FDA Category X)

Class: NATIONAL

Sponsor:

Review Date:

Description: Teratogenic Medications Order Check - Category X Meds

Due for: women of childbearing age (12-50) Exclusions: documented hysterectomy, documented placement of IUD more recent than documented
```

| removal of IUD   |  |  |
|--|--|--|
|  |  |  |
| Reminder Term:   |  |  |
| Term Evaluation Status:  |  |  |
| Reminder Definition  | VA-TERATOGENIC MEDICATIONS ORDER CHECK |  |
| Reminder Evaluation Sta  |  |  |
|  | APPLICABLE                             |  |
| Output Text:   | BOTH ORDER CHECK AND DEFINITION TEXT   |  |
| Order Check Text The ordered medication is in FDA pregnancy category X.  |  |  |
| 1) Pregnancy must be excluded prior to receiving the medication  |  |  |
| 2) The patient must be provided contraceptive counseling on potential risk vs. benefit of taking this medication if she were to become pregnant. |  |  |

# Reminder Order Check Items Inquiry Example: VA-TERATOGENIC MEDICATIONS (CAT D OR C) GROUP

| REMINDER ORDER CHECK ITE                 | EMS GROUP INQUIRY      | Feb 02, 2012  | 10:11:31 am Page 1 |
|--|------------------------|---------------|--------------------|
| VA-TERATOGENIC MEDICATIO                 |                        |               | No. 8              |
| Class:                                   | NATIONAL               |               |                    |
| Sponsor:                                 |                        |               |                    |
| Review Date:                             |                        |               |                    |
| Group Description:                       |                        |               |                    |
| Pharmacy Item List: DG.ACETAMINOPHEN/BUT | TALBITAL               |               |                    |
| Orderable Item List:                     |                        |               |                    |
| Reminder Rule List:<br>Rule Name: VA     | A-TERATOGENIC MEDICATI | ONS ORDER CHE | ECK (CAT D)        |

Display Name: Potentially Teratogenic Medication (FDA Category D or

C)

Class: National

Sponsor:
Review Date:
Active Flag: Yes
Testing Flag: Yes
Severity: Medium

Reminder Definition: VA-TERATOGENIC MEDICATIONS ORDER CHECK

Definition Status: Applicable

Output Text: Both Order Check and Definition Text

Order Check Text:

Concern has been raised about use of this medication

during pregnancy.

1) Pregnancy status should be determined. Discuss use of this medication on the context of risks to the mother and child of untreated disease. Potential benefits may warrant use of the drug in pregnant women despite risks.

2) The patient must be provided contraceptive counseling on potential risk vs. benefit of taking this medication if she were to become pregnant.

Rule Description:

Teratogenic Medications Order Check - Category D and

selected C Meds

Due for: women of childbearing age (12-50) Exclusions: documented hysterectomy, documented placement of IUD more recent than documented removal

of IUD

Select Reminder Order Check Items Group by one of the following:

N: ORDER CHECK ITEMS GROUP NAME

C: VA DRUG CLASS

D: DRUG

G: VA GENERIC

O: ORDERABLE ITEM

R: ORDER CHECK RULE

Q: QUIT

### **GEC Referral Report**

This option is used to generate GEC Reports. GEC (Geriatrics Extended Care) is used for referral of geriatric patients to receive further care. This report is also available on the reminder reports menu.

```
Select Reminder Managers Menu Option: GEC GEC Referral Report
All Reports will print on 80 Columns
     Select one of the following:
                    Category
          2
                    Patient
          3
                   Provider by Patient
          4
                   Referral Date
          5
                   Location
          6
                    Referral Count Totals
          7
                    Category-Referred Service
          8
                    Summary (Score)
          9
                    'Home Help' Eligibility
                Restore or Merge Referrals
          10
Select Option or ^ to Exit: 8// <Enter> Summary (Score)
Select a Beginning Historical Date.
BEGINNING date or ^{\circ} to exit: (1/1/1988 - 6/30/2004): T-60// (MAY 01, 2004)
Select Ending Date.
ENDING date or ^{\circ} to exit: (5/1/2004 - 6/30/2004): T// (JUN 30, 2004)
     Select one of the following:
                    All Patients
          M
                    Multiple Patients
Select Patients or ^ to exit: A// ll Patients
     Select one of the following:
                    Formatted
          D
                    Delimited
Select Report Format or ^ to exit: F// ormatted
DEVICE: HOME// ANYWHERE Right Margin: 80//
______
GEC Patient-Summary (Score)
Data on Complete Referrals Only
From: 05/01/2004 To: 06/30/2004
                                 Finished
                                                 Basic Skilled Patient TOTAL
                                 Date IADL ADL Care Behaviors ACROSS
Name
                      SSN
______
CRPATIENT, ONE (666009999) 06/15/2004 0 0 2 4
CRPATIENT, TWO (666009998) 06/15/2004 0 7 9 5
CRPATIENT, THREE (666009997) 05/04/2004 0 0 0
CRPATIENT, FOUR (666009996) 05/11/2004 0 0 0
CRPATIENT, FIVE (666009995) 05/11/2004 0 0 0
CRPATIENT, SIX (666009994) 05/11/2004 0 0 0
                                                                            21
CRPATIENT, THREE (666009996)
CRPATIENT, FOUR (666009995)
CRPATIENT, FIVE (666009994)
                                                                             0
                                                                             0
                                                                  0
                                                                             0
                                  Totals > > 0 7 11 9
                                                                           27
                                  Means > > 0.0 1.2 1.8
                                                                1.5
                                                                            4.5
                                                                            9.8
                     Standard Deviations > > 0.0 3.1 4.1
                                                               2.9
Enter RETURN to continue or '^' to exit:
```

# **Appendix A: Glossary**

The OIT Master Glossary is available at:

http://vaww.oed.wss.va.gov/process/Library/master\_glossary/masterglossary.htm

National Acronym Directory: <a href="http://vaww1.va.gov/Acronyms/">http://vaww1.va.gov/Acronyms/</a>

## **Acronyms**

| AITC       | Austin Information Technology Center (formerly AAC - Austin Automation Center)            |
|------------|---|
| AIMS       | Abnormal Involuntary Movement Sca   |
| API        | Application Programmer Interface  |
| CAC        | Clinical Application Coordinator  |
| CDCO       | Corporate Data Center Operations  |
| CNBD       | Cannot be Determined (frequency)  |
| CPRS       | Computerized Patient Record System  |
| CSV        | CSV is the file extension for a Comma-separated data value file                           |
| DBIA       | Database Integration Agreement  |
| EPRP       | External Peer Review Program  |
| GUI        | Graphical User Interface  |
| HSR&D      | Health Services Research and Development  |
| HL7        | Health Level 7  |
| HRMHP      | High Risk Mental Health Patient   |
| ICD-9, CM  | International Classification of Disease, 9 <sup>th</sup> Edition, Clinical Modifications  |
| ICD-10, CM | International Classification of Disease, 10 <sup>th</sup> Edition, Clinical Modifications |
| IHD        | Ischemic Heart Disease  |
| IVMH       | Improve Veterans Mental Health  |
| MDD        | Major Depressive Disorder   |
| MHTC       | Mental Health Treatment Coordinator   |
| NLM        | National Library of Medicine  |
| OEF/OIF    | Operation Enduring Freedom/Operation Iraqi Freedom  |
| OQP        | Office of Quality and Performance   |

| PD    | Product Development  |
|-------|--|
| QUERI | Quality Enhancement Research Initiative                        |
| SAS   | Statistical Analysis System                                    |
| SRS   | Software Requirements Specification                            |
| VHA   | Veterans Health Administration                                 |
| VISN  | Veterans Integrated Service Networks                           |
| VistA | Veterans Health Information System and Technology Architecture |

## **Definitions**

| Term                       | Definition   |  |
|----------------------------|--|--|
| Applicable                 | A reminder is applicable when a patient's findings meet the patient cohort reminder evaluation.  |  |
| Boolean Logic<br>Operators | Boolean operators are connectors used to produce more relevant/precise search results: :! (OR), & (AND),!' (OR NOT), and &' (AND NOT)  |  |
| CNBD                       | Cannot Be Determined. If a frequency can't be determined for a patient, the Status and Due Date will both be CNBD and the frequency display that follows the status line will be "Frequency: Cannot be determined for this patient." When reminder evaluation is disabled the status will be CNBD.   |  |
| Clinical Reminder          | A clinical reminder is a software decision support tool that defines evaluation and resolution logic for a given clinical activity. The evaluation logic defines conditions in the database including the presence or absence of specified criteria such as diagnoses, procedures, health factors, medications, or demographic variables (e.g., age, gender). A reminder may or may not require provider resolution, depending on its purpose and design, through a user interface, also known as a reminder dialog. Also, in accordance with the underlying logic, reminders may be used to collect specified patient information that may or may not be related to the dialog. |  |
| Cohort                     | Patient Cohort A group of patients that meet the defined criteria (Patient Cohort Logic) for a reminder. In other words, if the reminder is applicable, the patient is in the cohort.  Patient Cohort Logic This is the logic that specifies how findings are used to select the applicable patient population; i.e., the patient cohort. It is based on Mumps Boolean operators and their negations. The operators are: !(OR), & (AND), !' (OR NOT), and &' (AND NOT).  |  |
| Component                  | A component represents the module that is presented in any given template.   |  |
| Computed Findings          | A custom MUMPS routine used to find some specific patient characteristic.  Computed findings are used when none of the standard findings will work.  Sites can create their own computed findings  |  |
| CSUB                       | CSUB values are used in the CONDITION field to do a comparison to numeric or string values. Using +V causes the CSUB data to be interpreted as   |  |

| Term              | Definition  |
|-------------------|---|
|                   | numeric. Strings that cannot be converted to a number are set to zero. For  |
|                   | example, a CONDITION such as I +V("CHECK-OUT DATE/TIME")>0  |
|                   | would be true if the appointment had a check-out date/time.   |
|                   | When a Reminder Test is run, some elements of the FIEVAL array will have  |
|                   | a "CSUB" subscript. Example for an orderable item finding:  |
|                   | FIEVAL (5, "CSUB", "DURATION") = 1774   |
|                   | FIEVAL(5, "CSUB", "ORDER")=3366^CA ULTRA^546;99RAP  |
|                   | FIEVAL(5, "CSUB", "RELEASE DATE") = 3010917.1625  |
|                   | FIEVAL(5, "CSUB", "START DATE") = 3010917 FIEVAL(5, "CSUB", "STATUS") = PENDING   |
|                   | FIEVAL(5, "CSUB", "STOP DATE") =  |
|                   | FIEVAL(5, "CSUB", "VALUE") = PENDING  |
|                   | Each of the subscripts following "CSUB" may be used in a Condition (hence   |
|                   | the abbreviation Condition SUBscript); for example:  I V("DURATION") > 90   |
| Dialog Element    | A dialog element is defined primarily to represent sentences to display in the  |
|                   | CPRS 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 PCE updates, orders, Mental Health Notification  |
|                   | Purposes, and mental health tests. The updates won't occur on the CPRS 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.  |
| Dialog Group      | A dialog group is similar to menu options. It groups dialog elements and  |
|                   | dialog groups within its component. The dialog group can be defined with a  |
|                   | finding item and a check-box. The components in the group can be hidden   |
| D.                | from the CPRS GUI window until the dialog group is checked off.   |
| Due               | A reminder is DUE for a patient if the patient is in the cohort, and has not yet  |
|                   | had the treatment, medication, education, etc., that is being searched for by   |
| Ein din - Itan    | the reminder.   |
| Finding Item      | A Finding Item is a piece of information that can be searched by the  |
| Function Findings | reminder.   |
| Function Findings | Function Findings (FF) do computations on the results from regular findings.  |
|                   | Function Findings can be used just like regular findings with one exception, there is no date associated with an FF, which means the Resolution Logic |
|                   | cannot be written so that it is made true solely by FFs. Besides providing new  |
|                   | and expanded functionality, FFs can make custom logic much simpler to   |
|                   | understand.   |
| Health Factors    | A health factor is a computerized component that captures patient information   |
| ricarui ractors   | that for which no standard code exists, such as Family History of Alcohol   |
|                   | Abuse, Lifetime Non-smoker, No Risk Factors for Hepatitis C, etc.   |
| Mental Health     | The Mental Health Assistant is a national VA software package that is used  |
| Assistant         | for administration and scoring of standardized self- report questionnaires and  |
|                   | tests. It is integrated with clinical reminders in that mental health assistant   |
|                   | instruments can be administered through a reminder dialog. Also the results   |
|                   | of a specific instrument overall score, scale score, or specific item response  |
|                   | can be used as a finding in reminder logic. This is the mechanism, for  |

| Term                      | Definition  |  |
|---------------------------|---|--|
|                           | presenting questionnaires for screening for common mental health issues such as the AUDIT-C for alcohol misuse.   |  |
| Prompt                    | An aid on the screen in the form of a question or statement indicating the options available. Prompts are defined for PCE, MH Notification Purpose, or as locally created comment check-boxes.  |  |
| PXRM                      | Clinical Reminder package namespace   |  |
| Reminder<br>Component     | A reminder component is any element, or part thereof, of a reminder, including the reminder's definitions, dialogs, findings, terms, cohort logic or resolution logic.  |  |
| Reminder Definition       | The reminder definition is the internal logic of the reminder. It describes the patients the reminder applies to, how often it is given, and what resolves or satisfies the reminder. It is comprised of the predefined set of finding items used to identify patient cohorts and reminder resolutions  |  |
| Reminder Dialog           | The reminder dialog is the display, which is seen by the user in the CPRS Graphical User Interface (GUI), when opening a reminder. Reminder dialogs are used in CPRS to allow clinicians to select actions that satisfy or resolve reminders for a patient. Information entered through reminder dialogs updates progress notes, places orders, and updates other data in the patient's medical record. A reminder dialog is created by the assembly of components in groups into an orderly display.   |  |
| Reminders Exchange        | The Clinical Reminders Exchange Utility provides a mechanism for sharing reminder definitions and dialogs among sites throughout the VA or among sites within a VISN. Exchanging reminders helps to simplify reminder and dialog creation. It also helps to promote standardization of reminders based on local, VISN-wide, and national guidelines.  |  |
| Reminder Extracts         | The Clinical Reminders application provides extract tools that enable sites to create extract summary reports based on an extract definition. An extract definition defines extract criteria similar to performance measure criteria. The extract definition specifies what patient lists should be created, which reminders should be run against each patient list, and what kind of totals should be accumulated. An extract run uses the extract definition to create extract totals and stores these results in the Reminder Extract Summary file. |  |
| Reminder Finding          | Reminder finding is a type of data element in the Veterans Health Information and Technology Architecture (VistA) that determines a reminder's status.  Finding type  This refers to the source of the finding, such as the files for Drugs, Education Topics, Exams, Health Factors, Immunizations, Laboratory Tests, Mental Health Instruments, Orderable Items, Radiology Procedures, Reminder Computed Findings, Reminder Taxonomies, Reminder Terms, Skin Tests, VA Drug Class, VA Generic, and Vital Measurements.                                |  |
| Reminder Location<br>List | Location Lists are a new finding type introduced in version 2.0. They provide a way to give a name to a list of locations.  A Location List is built from two types of entries: Hospital Location, file #44 and Clinic Stop, file #40.7. There is a multiple for Hospital Locations and a multiple for Clinic Stops in the Location List file, so when you build a list of locations, you can use Hospital Locations and/or Clinic Stops.   |  |
| 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   |  |

| Term           | Definition  |
|----------------|---|
|                | 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 Term  | A reminder term is a predefined finding item(s) that are used to map local findings to national findings, providing a method to standardize these findings for national use.  |
| Reminder Test  | 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 evaluate a reminder without going through CPRS or Health Summary. Reminder Test now allows a Browser view, which improves some viewing of details.  |
| Resolution     | A reminder is considered RESOLVED (or SATISFIED) if the conditions defined by the reminder resolution logic have been met. For example, if a reminder exists for influenza immunization, giving a flu vaccine satisfies or resolves that reminder. Likewise, ordering lab tests or drugs or giving patient education can resolve a reminder.  |
| Result Element | 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. The result element is only used with mental health test finding items. Default result elements are distributed for common mental health tests, prefixed with PXRM and the mental health test name. Sites may copy them and modify their local versions as needed. |
| Result Group   | 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.  |
| Term           | A TERM is a collection of findings grouped together to make one concept.  Text Integration Utilities (TIU) simplifies the access and use of clinical documents for both clinical and administrative VAMC personnel, by standardizing the way clinical documents are managed.  TIU accepts document input from a variety of data capture methodologies.  Those initially supported are transcription and direct entry. TIU allows upload of ASCII formatted documents into VISTA.  |

### **Appendix B: Clinical Reminder Order Checks Example**

**NOTE**: PXRM\*2\*22 changed the method for creating Order Checks, by using ScreenMan functionality. For those not familiar with ScreenMan, a brief overview follows.

#### ScreenMan Overview

The redesigned Reminder Order Check functionality uses ScreenMan. ScreenMan is VA FileMan's *screen-oriented* data entry tool. It is an alternative to the Scrolling Mode approach. With ScreenMan, data is entered in *forms*. Each form field occupies a fixed position on the screen (instead of scrolling off!). You can see many data fields at once, and use simple key combinations to edit data and move from field to field on a screen. You can also move from one screen to another like turning through the pages of a book. *For a detailed explanation of using ScreenMan, please refer to the VW FileMan Getting Started manual.* 

### The ScreenMan Screen

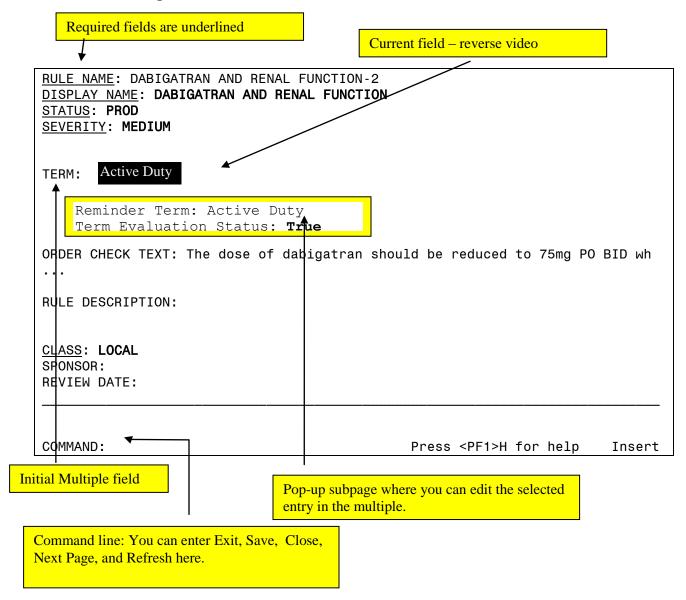
```
GROUP NAME: VA-TERATOGENIC MEDICATIONS (CAT D OR C) GROUP

PHARMACY ITEM LIST (345 entries)
ORDERABLE ITEM LIST (0 entries)
REMINDER ORDER CHECKS RULES LIST (1 entry)

CLASS: NATIONAL
SPONSOR:
REVIEW DATE:

Press Enter to edit the Pharmacy Item List.
```

### **ScreenMan Descriptions**



Fields are usually composed of a *data element* and a *caption*. ScreenMan displays data elements in high intensity (boldface) and other text in regular intensity. Text that identifies a data element is called a *caption* and is usually followed by a colon (:). A caption and its associated data element are together called a *field*. Captions of *required* fields are underlined; to save any changes you make on the form, required fields *must* contain data.

### **How to Navigate Between Fields and Pages**

There are a number of ways you can move the cursor from field to field on a form (i.e., navigate). This is to provide you with as much flexibility as possible so that you can work quickly and efficiently with forms.

You can use the keystrokes listed in the following table to move the cursor to various fields located on a ScreenMan form:

| То   | Press   |
|--|---|
| Move to the next field (to right or below).              | <tab></tab>   |
| Move to the previous field (to left or above).           | <pf4></pf4>   |
| Move to the field above.                                 | <arrowup></arrowup>                                       |
| Move to the field below.                                 | <arrowdown></arrowdown>                                   |
| Move to the next field in the pre-defined edit sequence. | <enter></enter>   |
| Edit a WORD-PROCESSING field.                            | At field, press <b><enter></enter></b>                    |
| Select a Subrecord in a Multiple.                        | At field, press <b><enter></enter></b>                    |
| Move to the next block on current page.                  | <pf1><pf4></pf4></pf1>                                    |
| Jump to a specific field.                                | ^ followed by Caption of field and <b><enter></enter></b> |
| Jump to the Command Line.                                | ^ <enter></enter>   |
| Move to next page  | <pf1><arrowdown> or</arrowdown></pf1>                     |
|  | <pagedown></pagedown>                                     |
| Move to previous page                                    | <pf1><arrowup> or</arrowup></pf1>                         |
|  | <pageup></pageup>   |
| Move to a page you specify                               | <pf1>P</pf1>  |

### **Saving and Exiting**

To SAVE or EXIT the form, you need to reach ScreenMan's command line. It's reachable from any ScreenMan screen. To reach the command line, do any one of the following:

- Enter a caret ("^") at any field prompt.
- Press **<Enter>**, **<Tab>**, or **<PF4>** to move from field to field until you reach the command line.
- Press **<ArrowDown>** or **<ArrowUp>** to move the cursor from field to field downwards or upwards, until you reach the command line.

Then you can enter SAVE or EXIT at the command line (see below).

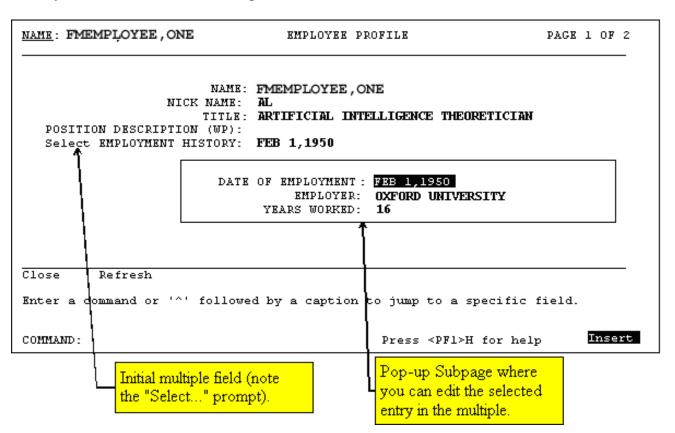
### **Word-Processing Fields**

To edit or display a WORD-PROCESSING field, press the Enter/Return key at the WORD-PROCESSING field. This clears the screen and passes control to your Preferred Editor to edit the field. If you do not have a Preferred Editor, the Screen Editor is used. When you exit the editor, you return to the ScreenMan screen.

### Multiples Linked to "Pop-Up" Subpages

A Multiple field can appear on a page and be linked to a regular or "pop-up" subpage. When you navigate to the Multiple field, select a Subrecord, and press the Enter/Return key, you are taken to the subpage, which contains the fields within the Multiple.

In the following illustration, the Multiple is the field with the caption "Select EMPLOYMENT HISTORY:". When you enter "FEB 1,1950" at this field, you are taken into a "pop-up" subpage, where you can edit the fields for that particular Subrecord:



### **Exiting a Subpage**

While in a subpage, your only Command Line options are CLOSE and REFRESH. You cannot EXIT, Quit, or SAVE until you return to the parent page. You can return to the parent page by pressing **PF1>C** or issuing the CLOSE command at the Command Line. From there, you can select another Subrecord to edit or navigate to another field.

### **Order Check Example**

**Purpose**: Design an Order Check for dabigatran (Pradaxa®) to remind providers about dose reduction when creatinine clearance is less than 30 mL/min

This example uses serum creatinine values greater than 2 mg/dL to focus more on the order check than on the lab result

1. Create a reminder term that will identify patients with reduced renal clearance. (Patients with Cr > 2 mg/dL)

```
Select Reminder Term Management Option: TE Add/Edit Reminder Term

Select Reminder Term: ZZ CREATININE > 2 (TERM)

Are you adding 'ZZ CREATININE > 2 (TERM)' as
    a new REMINDER TERM (the 1215TH)? No// Y (Yes)

REMINDER TERM CLASS: L LOCAL

NAME: ZZ CREATININE > 2 (TERM) Replace

CLASS: LOCAL//

Reminder Term has no findings!

Select Finding: LT. CREATININE

Are you adding 'CREATININE' as a new FINDINGS (the 1ST for this REMINDER TERM)? No// Y (Yes)

Editing Finding Number: 1

FINDING ITEM: CREATININE//

CONDITION: I V>2
```

- 2. Create a reminder order check rule that calls the reminder term created in step 1 when its status is TRUE. The rule also contains the text that will appear in the order check window.
  - Each RULE exists as a part of the OI Group
  - That allows you to set up multiple rules that apply to the same list of drugs

```
Select Reminder Managers Menu Option: ROC Reminder Order Check Menu
Select Reminder Order Check Menu Option: RE Add/Edit Reminder Order
Check Rule
Select Reminder Order Check Items Group by one of the following:

N: ORDER CHECK ITEMS GROUP NAME
C: VA DRUG CLASS
D: DRUG
G: VA GENERIC
O: ORDERABLE ITEM
R: ORDER CHECK RULE
Q: QUIT

Select Reminder Order Check Items Group by: (N/C/D/G/O/R/Q): N// R
ORDER CHECK RULE
```

Select REMINDER ORDER CHECK RULES RULE NAME: DABIGATRAN AND RENAL FUNCTION

Are you adding 'DABIGATRAN AND RENAL FUNCTION' as a new REMINDER ORDER CHECK RULES (the 4TH)? No// Y (Yes)

RULE NAME: DABIGATRAN AND RENAL FUNCTION DISPLAY NAME: DABIGATRAN AND RENAL FUNCTION

ACTIVE FLAG: YES
TESTING FLAG: YES
SEVERITY: MEDIUM
TERM: <Enter>

When you press Enter after Term:, a box pops up and prompts you for the Term name and Term Evaluation Status.

REMINDER TERM: ZZ CREATININE > 2 (TERM)
TERM EVALUATION STATUS: TRUE .

Either a Term or a Definition must be defined; if you don't enter a Term, the prompt appears for DEFINITION.

DEFINITION <Enter>

REMINDER DEFINITION: DEFINITION EVALUATION STATUS:

OUTPUT TEXT:

When you press Enter after Term:, a box pops up and prompts you for the Term name

ORDER CHECK TEXT:

Order Check Text and Rule Description are word-processing fields. When you press Enter, a word-processing screen opens up.

==[ WRAP ]==[ INSERT ]=====< ORDER CHECK TEXT >======[ <PF1>H=Help ]

The dose of dabigatran should be reduced to 75mg PO BID when the patient's creatinine clearance is estimated to be less than 30 mL/min.

RULE DESCRIPTION: <Enter>

RULE NAME: DABIGATRAN AND RENAL FUNCTION
DISPLAY NAME: DABIGATRAN AND RENAL FUNCTION

ACTIVE FLAG: YES
TESTING FLAG: YES
SEVERITY: MEDIUM

TERM: ZZ CREATININE > 2 (TERM)
TERM EVALUATION STATUS: TRUE

ORDER CHECK TEXT: The dose of dabigatran should be reduced to 75mg PO

BID wh ...

RULE DESCRIPTION:

CLASS: LOCAL
SPONSOR:
REVIEW DATE:

Exit Save Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: Press <PF1>H for help Insert

### 3. Create an Order Check Item Group

Similar ScreenMan actions and word-processing fields shown in the example above apply in this option.

```
field
--REMINDER ORDER CHECK RULE---
. DABIGATRAN AND RENAL FUNCTION
.

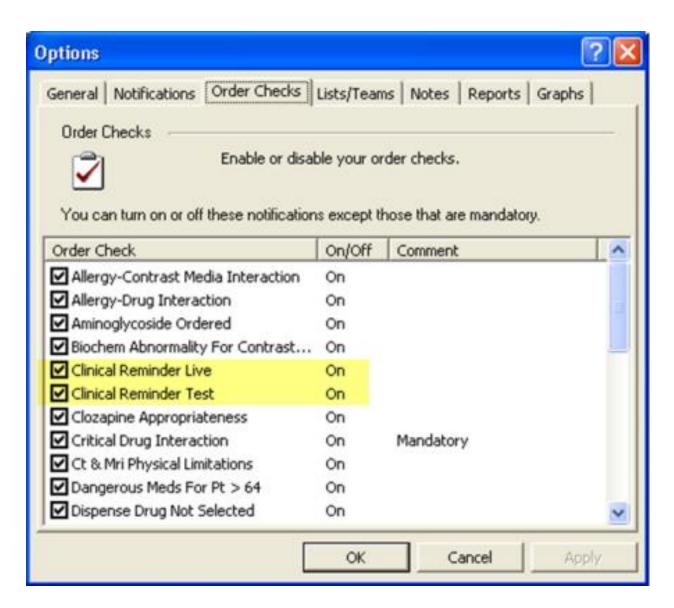
GROUP NAME: DABIGATRAN

PHARMACY ITEM LIST (0 entry)
ORDERABLE ITEM LIST (0 entries)
REMINDER ORDER CHECKS RULES LIST (1 entry)

CLASS: LOCAL

Select reminder order check items group by: (N/C/D/G/O/R/Q): N// QUIT
```

- 4. Connect the rule to the order check item group using the Add/Edit Reminder Order Check Items Group option.
- 5. In CPRS, turn off the Clinical Reminders Live Order Check.



- Set the rule's testing flag to True.
- Set the group's Active Flag to True.
- Run the Reminder Order Check Test option to validate that the active rule shows for each patient.
- In CPRS, place a corresponding order for the order group for each test patient.
- Validate that only the active rule shows in the order check form.

### Result

