

# **Clinical Reminders**

Manager's Manual

# PXRM\*2\*24

April 2013

Department of Veterans Affairs Office of Information and Technology (OIT) Product Development

# 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**

Manual	File name
Installation and Setup Guide	PXRM_2_24_IG.PDF
Release Notes	PXRM_2_24_RN.PDF
User Manual	PXRM_2_UM.PDF

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

Albany - 152.127.1.5 - anonymous.software Hines - 152.129.1.110 - anonymous.software Salt Lake City - 152.131.2.1 - anonymous.software

Clinical Reminders documentation can also be found in the VistA Documentation Library: <u>http://vista.med.va.gov/vdl/</u> or <u>http://www.va.gov/vdl</u>

# **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/
VHA Software Document Library	http://www.va.gov/vdl/
National Clinical Reminders Committee	http://vaww.portal.va.gov/sites/ncrcpublic/default.aspx

# **Revision History**

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April 2012- Mar 2013	Through- out	Added details about changes made for Patch 24 and phase 2 of the HRMHP project	Al Ebert	JoAnn Green	
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October 2007	Page <u>286</u>	Added description of new option, TIU Template Reminder Dialog Parameter	Tim Landy	JoAnn Green	

Revision Date	Page(s)	Description	Project Manager	Author
October 2007	Page <u>245</u>	Updates to description of Mental Health Dialog functionality	Tim Landy	JoAnn Green
October 2007	Page 317	Added description of new option, Edit Number of MH Questions	Tim Landy	JoAnn Green
September 2007	Page <u>131</u>	Added new function finding, NUMERIC	Tim Landy	JoAnn Green
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July 2006	Page <u>160</u>	Location List change	Tim Landy	JoAnn Green
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# 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, and assisting in compliance with VHA performance measures and with Health Promotion and Disease Prevention guidelines.

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

The High Risk Mental Health Patient – Reminder & Flag project is being 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 pre-defined 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 <u>National Clinical Reminders Committee (NCRC)</u>.

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. Distributed the updates to the VA-MHV INFLUENZA VACCINE reminder.
- **9.** 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)

То

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. Distributes 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.
- 9. 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
RM	VA-MHV BMI	Removed >, added text changes from
		NCP
RM	VA-MHV COLORECTAL CANCER	Added upper age limit
	SCREEN	
	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
RT	VA-MHV HIGH RISK FOR FLU	Updated to use new taxonomy
	VA-MHV HIGH RISK FOR	
RT	PNEUMONIA	Updated to use new taxonomy
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 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 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-MHV COLORECTAL CANCER SCREEN	VA-MHV BARIUM ENEMA added
VA-MHV HYPERTENSION	Uses reminder terms
VA-MHV DIABETES RETINAL EXAM	Frequency depends on no retinopathy only
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 VA-ALCOHOL ABUSE SCREEN (AUDIT-C) 6. 7. VA-ALCOHOL AUDIT-C POSITIVE F/U EVAL VA-ALCOHOL USE SCREEN (AUDIT-C) 8. VA-ANTIPSYCHOTIC MED SIDE EFF EVAL 9. 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-MHV BMI > 25.0 34. VA-MHV CERVICAL CANCER SCREEN 35. VA-MHV COLORECTAL CANCER SCREEN 36. VA-MHV DIABETES FOOT EXAM 37. VA-MHV DIABETES HBA1C 38. VA-MHV DIABETES RETINAL EXAM 39. VA-MHV HYPERTENSION 40. VA-MHV INFLUENZA VACCINE 41. VA-MHV LDL CONTROL 42. VA-MHV LIPID MEASUREMENT 43. VA-MHV MAMMOGRAM SCREENING 44. VA-MHV PNEUMOVAX 45. VA-MST SCREENING 46. VA- EPI LAB EXTRACT 47. VA- EPI RX EXTRACT 48. VA-OEF/OIF MONITOR REPORTING 49. VA-POLYTRAUMA MARKER 50. VA-POS DEPRESSION SCREEN FOLLOWUP

- 51. VA-PROJECT ARCH VISN CONTRACT CARE PILOT ELIGIBILITY
- 52. VA-PTSD REASSESSMENT (PCL)
- 53. VA-PTSD SCREENING
- 54. VA-QUERI REPORT IHD ELEVATED LDL
- 55. VA-QUERI REPORT LIPID STATUS
- 56. VA-TBI SCREENING
- 57. VA-TBI/POLYTRAUMA REHAB/REINTEGRATION PLAN OF CARE
- 58. VA-TERATOGENIC MEDICATIONS ORDER CHECK
- 59. VA-VANOD SKIN ASSESSMENT
- 60. VA-VANOD SKIN REASSESSMENT
- 61. VA-WH MAMMOGRAM REVIEW RESULTS
- 62. VA-WH MAMMOGRAM SCREENING
- 63. VA-WH PAP SMEAR REVIEW RESULTS
- 64. 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\*15 NATIONAL VA-TBI/POLYTRAUMA REHABILITATION DIALOG
- PXRM\*2\*12 MH REMINDERS AND DIALOGS
- 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

# **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. NOTE: Some options require the Reminder Manager's key (PXRM MGR), such as in the Reminder Location List options. Those options will specify if the key is required.

```
Reminders Managers Menu [PXRM MANAGERS MENU]
  CF
         Reminder Computed Finding Management ... [PXRM CF MANAGEMENT]
         CRL Computed Finding List
         CFT
                Reminder Computed Finding Inquiry
         CFE
                Add/ Edit Computed Finding
  RМ
         Reminder Definition Management ... [PXRM REMINDER MANAGEMENT]
         RL
                List Reminder Definitions
         RI
                Inquire about Reminder Definition
         RE
                Add/Edit Reminder Definition
         RC
                Copy Reminder Definition
         RA
                Activate/Inactivate Reminders
         RH
                Reminder Edit History
         TCS
               Integrity Check Selected
         ICA
                Integrity Check All
         Reminder Sponsor Management [PXRM SPONSOR MANAGEMENT]
  SM
         SL
                List Reminder Sponsors
         SI
                Reminder Sponsor Inquiry
         SE
                Add/Edit Reminder Sponsor
  ТХМ
         Reminder Taxonomy Management ... [PXRM TAXONOMY MANAGEMENT]
             List Taxonomy Definitions
         TL
         ΤТ
                Inquire about Taxonomy Item
         ΤE
                Add/Edit Taxonomy Item
         TC
                Copy Taxonomy Item
         TΧ
                Selected Taxonomy Expansion
                Verify all taxonomy expansions
         TXV
         ТХА
              Expand all Taxonomies
  TRM
         Reminder Term Management ... [PXRM TERM MANAGEMENT]
         TT.
                List Reminder Terms
                Inquire about Reminder Term
         ΤI
         ΤE
               Add/Edit Reminder Term
         TC
                Copy Reminder Term
         Reminder Location List Management ... [PXRM LOCATION LIST MANAGEMENT]
  LM
         T.T.
             List Location Lists
         LΙ
                Location List Inquiry
         LE.
                Add/Edit Location List
         LC
                Copy Location List
  RX
         Reminder Exchange [PXRM REMINDER EXCHANGE]
  RT
         Reminder Test [PXRM REMINDER TEST]
  OS
         Other Supporting Menus ... [PXRM OTHER SUPPORTING MENUS]
         ͲМ
                PCE Table Maintenance ...
                PCE Coordinator Menu ...
         PC
         HS
                Health Summary Coordinator's Menu ...
               Print Blank Encounter Forms ...
         ΕF
         QO
                Enter/edit quick orders
  INFO
         Reminder Information Only Menu ... [PXRM INFO ONLY]
         RT.
             List Reminder Definitions
         RΤ
             Inquire about Reminder Definition
```

TXT. List Taxonomy Definitions Inquire about Taxonomy Item TXI TRL List Reminder Terms TRI Inquire about Reminder Term SL List Reminder Sponsors Reminder Dialog Management ... [PXRM DIALOG MANAGEMENT] DM Dialog Parameters ... DP RS Reminder Resolution Statuses HR Health Factor Resolutions FΡ General Finding Type Parameters FΤ Finding Item Parameters Taxonomy Dialog Parameters ТD DT Reminder Dialogs DR Dialog Reports OR Reminder Dialog Elements Orphan Report ER Empty Reminder Dialog Report Check all active reminder dialogs for invalid items ALL CH Check Reminder Dialog for invalid items CPRS Reminder Configuration [PXRM CONFIGURATION MANAGEMENT] CP Add/Edit Reminder Categories CA CPRS Lookup Categories CL CS CPRS Cover Sheet Reminder List MH Mental Health Dialogs Active PN Progress Note Headers Reminder GUI Resolution Active RA DT. Default Outside Location Position Reminder Text at Cursor PΤ WΗ WH Print Now Active GEC GEC Status Check Active TIU TIU Template Reminder Dialog Parameter NP New Reminder Parameters RP Reminder Reports ... [PXRM REMINDER REPORTS] RD 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 GEC Referral Report REV Review Date Report FUR Finding Usage Report MST Reminders MST Synchronization Management ... [PXRM MST MANAGEMENT] SYN Reminders MST Synchronization REP Reminders MST Synchronization Report Reminder Patient List Menu ... [PXRM PATIENT LIST MENU] ΡL LRM List Rule Management PLM Patient List Management Reminder Parameters ... [PXRM REMINDER PARAMETERS] PAR ESD Edit Site Disclaimer EWS Edit Web Sites MH Edit Number of MH Questions ROI Reminder Orderable Item Menu OE Add/Edit Reminder Orderable Item Group Reminder Orderable Item Inquiry OI ОТ Reminder Orderable Item Group Test Reminder Extract Menu [PXRM EXTRACT MENU] ΧМ MA Reminder Extract Management ΕP Extract Definition Management ЕC Extract Counting Rule Management ΕG Extract Counting Group Management LR List Rule Management GEC Referral Report [GEC REFERRAL REPORT] GEC

# Reminder Managers Menu Descriptions

Option	Option Name	Syn	Description
Reminder Computed Finding Management	PXRM CF MANAGEMENT	CF	This option provides tools for viewing or editing reminder computed findings.
Reminder Definition Management	PXRM REMINDER MANAGEMENT	RM	This menu contains options for creating, copying, and editing reminder definitions, as well as the options for maintaining the parameters used by CPRS for reminder processing.
Reminder Sponsor Management	PXRM SPONSOR MANAGEMENT	SM	A Reminder Sponsor is the organization or group that sponsors a Reminder Definition, such as the Office of Quality and Performance. Options on this menu let you view, define, or edit Reminder Sponsors.
Reminder Taxonomy Management	PXRM TAXONOMY MANAGEMENT	ТХМ	The REMINDER TAXONOMY file is used to define a range of coded values from ICD Diagnosis codes, ICD Operation/Procedures codes, and CPT codes that can be viewed as being part of a clinical category (taxonomy). Each entry has a low value and a high value. The software will search for matches on all the codes between the low and high values inclusive. If there is a match then the taxonomy finding will be true for the patient. This menu contains options for copying, editing taxonomies, as well as listing and inquiring about specific taxonomies.
Reminder Term Management	PXRM TERM MANAGEMENT	TRM	This menu allows you to edit, map, and view reminder terms.
Reminder Location List Management	PXRM LOCATION LIST MANAGEMENT	LM	Location Lists are a new kind of reminder finding, that allow you to define a list of locations and give it a name. When reminders are evaluated, the finding will be true if the patient had a visit at one of the locations in the list in the specified date range.
Reminder Exchange	PXRM REMINDER EXCHANGE	RX	This option allows sites to exchange reminder definitions, dialogs, and other reminder components via MailMan messages and host files.
Reminder Test	PXRM REMINDER TEST	RT	This utility helps you test and troubleshoot your reminders when you create them or when you have problems.
Other Supporting Menus	PXRM OTHER SUPPORTING MENUS	OS	This option contains menus from related packages such as PCE and Health Summary.
Reminder Information Only Men	PXRM INFO ONLY	INFO	This menu provides information-only options for users who need information about reminders but do not need the ability to make changes.
Reminder Dialog Management	PXRM DIALOG MANAGEMENT	DM	This menu allows maintenance of the parameters used by CPRS for reminder dialog processing.

Option	Option Name	Syn	Description
Reminder Reports	PXRM REMINDER REPORTS	RP	This is a menu of Clinical Reminder reports that clinicians can use for summary and detailed level information about patients' due and satisfied reminders. This option also contains reports that clinical coordinators can use to assign menus to specific users.
Reminders MST Synchronization Management	PXRM MST 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 Menu	PXRM PATIENT LIST MENU	PL	This menu contains options to manage list rules and patient lists.
Reminder Orderable Item Menu	PXM ORDER	OI	This menu contains options to allow sites to create Reminder Order Checks
Reminder Parameters	PXRM REMINDER 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 MENU	XM	This option allows management of extract definitions, extract runs, and extract transmissions.
GEC Referral Report	PXRM GEC REFERRAL 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 in Patch 24

• PXRM\*2\*24 includes a new computed finding (VA- PCMM MHTC) that detects whether a Mental Health Treatment Coordinator (MHTC) is defined for a patient.

REMINDER COMPUTED FINDING INQUIRY Apr 16, 20			, 2012 2:36:22 pm Page 1		
VA-PCMM MHTC			No. 82		
Print Name: Class: Sponsor: Review Date:	VA-PCMM Mental NATIONAL	Health Treatment	t Coordinator		
Description: This computed finding returns the patient's current Mental Health Treatment Coordinator (MHTC). The Scheduling API 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 <b>POSITION - team position</b> Entry Point: MHTC Routine: PXRMPCMM					

- The following national computed findings had the field CF PARAMETER REQUIRED incorrectly marked as YES. The parameter was corrected.
   VA-ADMISSIONS FOR A DATE RANGE
   VA-APPOINTMENTS FOR A PATIENT
   VA-ASU USER CLASS
   VA-PATIENTS WITH APPOINTMENTS
- VA-APPOINTMENTS FOR A PATIENT was not setting the CSUB "APPOINTMENT DAT/TIME"; this has been fixed.

• The description of CF.VA-PATIENT RECORD FLAG LIST was updated to include how to use the computed finding parameter to specify the flag type:

```
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.
```

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

This patch was 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.

The Enrollment patch has enhancements to the Veterans Health Information Systems and Technology Architecture (VistA) system 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.

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.

### **Changes in Patch 18**

Admission ward and discharge ward were added as CSUB data to the VA-WAS INPATIENT computed finding.

A new computed finding named VA-FILEMAN DATE was added. It uses the Computed Finding Parameter to take any date format used in Clinical Reminders and sets the date of the finding to that date.

The purpose is to use it in a function finding to make date comparisons. For example, did a finding occur within 60 days of today?

A new computed finding VA-RANDOM NUMBER was added. This is based on an idea from a site that used a locally developed computed finding to generate random numbers for partitioning patients in a research study. NOTE: This CF is intended strictly for research use, and not for clinical use.

Four new computed findings to support the needs of PACT (Patient Aligned Care Teams) were added.

- 1 VA-PCMM PATIENTS ASSIGNED TO A PRACTICTIONER
- 2 VA-PCMM PATIENTS ASSIGNED TO A TEAM
- **3 VA-PCMM PC TEAM AND INSTITUTION**
- 4 VA-PCMM PRACTICTIONERS ASSIGNED TO A PATIENT

The first two are list types and the second two are multiple types.

NOTE: INCLUDE was added as an optional parameter to 1, 2, and 4 of the above.

Instructions for using INCLUDE are in the following section of the help for VA-PCMM PATIENTS ASSIGNED TO A PRACTITIONER (similar help is in the other PCMM computed findings):

NAME: VA-PCMM PATIENTS ASSIGNED TO A PRACTITIONER ROUTINE: PXRMPCMM ENTRY POINT: PTPR PRINT NAME: VA-PCMM Patients Assigned to a Practitioner TYPE: LIST This list type computed finding returns a list of patients DESCRIPTION: assigned to a practitioner in the date range defined by Beginning Date/Time and Ending Date/Time. A patient will be on the list if they were assigned to the practitioner at anytime during the date range. The Computed Finding Parameter is used to specify the practitioner. It can be either the IEN or the exact name (.01 field) from file #200, the New Person 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: PRACTITIONER^INCLUDE For example, if the practitioner is PROVIDER, ONE and you want the value of INCLUDE to be 1 then the computed finding parameter would be: PROVIDER, ONE^1

Two new computed findings for working with patient record flags were created: VA-PATIENT RECORD FLAG INFORMATION and VA-PATIENT RECORD FLAG LIST. Note that these computed findings require patch DG\*5.3\*836.

A site reported that they have some patients whose height has been entered as 0 and it causes the BMI computed finding to take an error. (It is difficult to determine how those got entered because the Vitals package normally will not allow heights of 0 to be entered.)

A check was added to the BMI and BSA computed findings to ignore any height entries with a value of 0.

The patch init will make sure all national computed findings have print names starting with "VA-". In conjunction with this, the print name maximum length of 40 characters was increased to 64.

Several other national print name problems were corrected:

VA-PATIENT TYPE print name, PATIENT TYPE, was changed to VA-Patient Type. VA-TREATING FACILITY LIST print name, Treating Facility list, was changed to VA- Treating Facility List.

VA-WH MAMMOGRAM ABNORMAL IN WH PKG print name was blank; it was changed to VA-WH Mammogram Abnormal in WH PKG.

VA-WH PAP SMEAR ABNORMAL IN WH PKG print name was blank; it was changed to VA-WH Pap Smear Abnormal in WH PKG.

The computed finding VA-APPOINTMENTS FOR A PATIENT was not doing proper date reversal for a negative Occurrence Count; this was fixed. It was also enhanced to display additional lines of text for each of the field numbers that can be passed in.

# Change in Patch 16

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.

# Changes in Patch 12

A computed finding inquiry (CFI) option was added to the Computed Finding Management menu. This option displays detailed information about a computed finding.

Several computed findings were modified and a number of new computed findings are included:

- A new version of VA-BMI is included. The new version is a multi-occurrence computing finding, in contrast with the old version which was a single occurrence computed finding. It provides for more efficient date range searching and the ability to get more than one occurrence.
- VA-BSA is a new multi-occurrence computed finding for calculating body surface area.
- Note: Sites using the Bar Code Expansion handheld devices from Care Fusion will need to install Vitals patch GMRV\*5\*25 and the fix from Care Fusion to remove bad dates from the GMRV VITAL MEASUREMENT file before using these computed findings. Because these bad dates can cause problems with the VA-BMI and VA-BSA computed findings, GMRV\*5.0\*25 is a required build.
- The description for the VA-COMBAT VET ELIGIBILITY computed finding was incorrect and has been corrected.
- VA-DATE FOR AGE is a new computed finding that uses the COMPUTED FINDING PARAMETER to pass an age in years and returns the date the patient will be that age as the date of the computed finding.
- VA-EMPLOYEE is a new computed finding that returns true if the patient is an employee.
- The VA-PROGRESS NOTE computed finding was changed so it can use either the TIU DOCUMENT DEFINITION title or IEN in the computed finding parameter.
- The CF VA-IS INPATIENT is a new computed finding that will be true if the patient was/ 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 SPECIALTY
  - WARD LOCATION

• Due to limitations in the single occurrence computed finding structure, date range checking is limited to a single date. Since weight measurements are made more frequently than height measurements, the date of the weight measurement was used as the date of the single occurrence computed finding. Because of this, it was possible for the height measurement to be outside of the date range and still have the computed finding return a BMI value. Conversion of the BMI computed finding to the multiple occurrence form eliminated this problem; now both height and weight are checked to make sure they are in the date range. Consequently, there may be cases where the new multiple occurrence version cannot return a BMI, even though the single occurrence version did.

## **Reminder Computed Finding Management Menu**

Syn.	Name	Option Name	Description
CFE	Add/Edit Reminder Computed Finding	PXRM COMPUTED 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 FINDING INQUI RY	Allows a user to display the information about a computed finding in an easy-to-read format.
CFL	Reminder Computed Finding List	PXRM COMPUTED 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:
       М
                MULTIPLE
       т.
              LIST
       S
              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 or not 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)="""
O
```

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-AGENT ORANGE EXPOSURE VA-ALLERGY VA-APPOINTMENTS FOR A PATIENT VA-ASU USER CLASS 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
TIU note)
```

# 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.

Edit History:

Entry Point: AGE Routine: PXRMPDEM

### 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
1 2	CLINIC
2	APPOINTMENT STATUS
4	PATIENT
4 5	LENGTH OF APPOINTMENT
6	COMMENTS
8 7	OVERBOOK
8	ELIGIBILITY OF VISIT
° 9	CHECK-IN DATE/TIME
9 10	APPOINTMENT TYPE
11	CHECK-OUT DATE/TIME
12	OUTPATIENT ENCOUNTER IEN
13	PRIMARY STOP CODE
13 14	CREDIT STOP CODE
14 15	WORKLOAD NON-COUNT
16	DATE APPOINTMENT MADE
17	DESIRED DATE OF APPOINTMENT
18	PURPOSE OF VISIT and SHORT DESCRIPTION
19	EKG DATE/TIME
20	X-RAY DATE/TIME
20	LAB DATE/TIME
22	STATUS
23	X-RAY FILMS
2.4	AUTO-REBOOKED APPOINTMENT DATE/TIME
25	NO-SHOW/CANCEL DATE/TIME
2.6	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.

### VA-PATIENTS WITH APPOINTMENTS

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 Managers 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

# VA-TREATING FACILITY LIST

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.

ID	FIELD NAME	DATA	Format/Valid Values	Description	Examples of Returned Data
		TYPE			
1	APPOINTMENT	DATE/TIME	YYYMMDD.HHMM	The scheduled	3031215.113
	DATE/TIME			Appointment	3031201.0815
				Date/Time	
2	CLINIC IEN and	TEXT	ID^name	Clinic IEN and name	150;CARDIOLOGY
	NAME				32;BLOOD DONOR
3	APPOINTMENT	TEXT	R (Scheduled/Kept)	The status of the	R;SCHEDULED/KEPT
	STATUS		I (Inpatient)	appointment.	I;INPATIENT
			NS (No-Show)		NS;N0-SHOW
			NSR (No-Show,		NSR;NO-SHOW &
			Rescheduled)		RESCHEDULED
			<b>CP</b> (Cancelled by Patient)		CP;CANCELLED BY PATIENT
			CPR (Cancelled by		CPR;CANCELLED BY PATIENT
			Patient, Rescheduled)		& RESCHEDULED
			CC (Cancelled by Clinic)		CC;CANCELLED BY CLINIC
			CCR (Cancelled by		CCR;CANCELLED BY CLINIC &
			Clinic, Rescheduled)		RESCHEDULED
			NT (No Action Taken)		NT;NO ACTION TAKEN
4	PATIENT DFN	TEXT	DFN;name	Patient DFN and	34877; JONES, BOB
	and NAME			Patient Name	455;SCHILSON,BRIAN
5	LENGTH OF	TEXT	NNN	The scheduled length	20
	APPOINTMENT			of appointment, in	60
				minutes	
6	COMMENTS	TEXT	free text	Any comments	PATIENT NEEDS WHEELCHAIR
				associated with the	
				appointment	

### **Available Appointment Data Fields**

7	OVERBOOK	TEXT	Y or N	"Y" if appointment is	Y
/	UVERBOOK	IEAI	I OF IN	an overbook else "N"	I N
8	ELIGIBILITY OF	TEXT	IEN;name	Eligibility code and	2;AID & ATTENDANCE
0	VISIT IEN and	12/11		name associated with	7;ALLIED VETERAN
	NAME			the appointment	13;COLLATERAL OF VET.
9	CHECK-IN	DATE/TIME	YYYMMDD.HHMM	Date/time the patient	3031215.113
-	DATE/TIME			checked in for the	00012101110
				appointment	
10	APPOINTMENT	TEXT	IEN;name	Type of Appointment	1;COMPENSATION & PENSION
	TYPE IEN and			IEN and name	3:ORGAN DONORS
	NAME				7;COLLATERAL OF VET.
11	CHECK-OUT	DATE/TIME	YYYMMDD.HHMM	Date/time the patient	3031215.113
	DATE/TIME			checked out of the	
				appointment	
12	OUTPATIENT	TEXT	NNN	The outpatient	4578
	ENCOUNTER			encounter IEN	
	IEN			associated with this	
				appointment	
13	PRIMARY STOP	TEXT	IEN;code	Primary Stop code	301;350
	CODE IEN and			IEN and code	
	CODE			associated with the	
				clinic.	
ID	FIELD NAME	DATA TYPE	Format/Valid Values	Description	Examples of Returned Data
14	CREDIT STOP	TEXT	IEN;code	Credit Stop code IEN	549;500
17	CODE IEN and	11271		and code associated	549,500
	CODE			with the clinic.	
15	WORKLOAD	TEXT	Y or N	"Y" if clinic is non-	Y
	NON-COUNT			count else "N"	N
16	DATE	DATE	YYYMMDD	Date the appointment	3031215
	APPOINTMENT			was entered into the	
	MADE			Scheduling system	
17	DESIRED DATE	DATE	YYYMMDD	The date the clinician	3031215
	OF			or patient desired for	
	APPOINTMENT			the scheduling of this	
				appointment.	
18	PURPOSE OF	TEXT	Code (1, 2, 3, or 4) and	The Purpose of Visit	1;C&P
	VISIT		short description (C&P,		2;10-10
			10-10, SV, or UV)		3;SV
					4;UV
19	EKG	DATE/TIME	YYYMMDD.HHMM	The scheduled	3031215.083
	DATE/TIME			date/time of the EKG	
				tests in conjunction	
20	NDAN			with this appointment	2021215.002
20	X-RAY	DATE/TIME	YYYMMDD.HHMM	The scheduled	3031215.083
	DATE/TIME			date/time of the X-	
				RAY in conjunction with this appointment	
21	LAB	DATE/TIME	YYYMMDD.HHMM	The scheduled	3031215.083
21	LAB DATE/TIME	DATE/IIME		date/time of the Lab	3031213.085
	DATE/IIWE			tests in conjunction	
				with this appointment	
22	STATUS	TEXT	Status Code, Status	Status Information	8;INPATIENT
22	SIATUS	ILAI	Description, Print Status,	for the Visit.	APPOINTMENT;INPATIENT/CH
			Checked In Date/Time,	101 uie v 101t.	ECKED
			Checked Out Date/Time,		OUT;;3030218.1548;145844
			and Admission Movement		001,,0000210.1040,140044
			IFN		
23	X-RAY FILMS	TEXT	Y or N	"Y" if x-ray films are	Y
23	X-RAY FILMS	TEXT	Y or N	" <b>Y</b> " if x-ray films are required at clinic else	Y 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 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.

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-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";

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 А General G Baseline Frequency В F Findings FF Function Findings L Logic С Custom date due D Reminder Dialog W Web Addresses Select section to edit: f Findings Reminder Definition Findings Choose from: CF BSA Finding # 2 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) VA-BMI 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.

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

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: OCCURRENCE COUNT: 5// 6  $\leftarrow$  You can change the occurrence count here. 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 # 2 Finding # CF VA-BMI 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

- M Mosteller
- D DuBois and Dubois
- H Haycock
- G Gehan and George
- B 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 (m<sup>2</sup>) = ( [Height(cm) x Weight(kg) ]/ 3600 )<sup>1/2</sup> e.g. BSA = SQRT( (cm\*kg)/3600 ) or in inches and pounds: BSA (m<sup>2</sup>) = ( [Height(in) x Weight(lbs) ]/ 3131 )<sup>1/2</sup>

## The DuBois and DuBois<sup>2</sup> formula

BSA (m<sup>2</sup>) =  $0.20247 \text{ x Height}(\text{m})^{0.725} \text{ x Weight}(\text{kg})^{0.425}$ 

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

BSA (m<sup>2</sup>) =  $0.007184 \text{ x Height}(\text{cm})^{0.725} \text{ x Weight}(\text{kg})^{0.425}$ 

### The Haycock formula

BSA (m<sup>2</sup>) =  $0.024265 \times \text{Height}(\text{cm})^{0.3964} \times \text{Weight}(\text{kg})^{0.5378}$ 

# The Gehan and George formula

BSA (m<sup>2</sup>) =  $0.0235 \text{ x Height(cm)}^{0.42246} \text{ x Weight(kg)}^{0.51456}$ 

### The Boyd formula

BSA (m<sup>2</sup>) =  $0.0003207 \text{ x Height(cm)}^{0.3} \text{ x Weight(grams)}^{(0.7285 - (0.0188 \times LOG(grams)))}$ 

# 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.
- 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("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.

Entry Point: DFA Routine: PXRMPDEM

#### 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 th

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.

Entry Point: DOB Routine: PXRMPDEM

#### 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.

Edit History:

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.

Edit History:

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.

Edit History:

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 - 23^3 EAST (SEA)
_____
                                   --STATUS-- --DUE DATE-- --LAST DONE--
Ment Hlth Inpatient Locations
                                   DUE NOW DUE NOW
                                                            unknown
Cohort:
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<sup>7</sup> EAST (SEA)
```

### VA-MST STATUS

Print Name:VA-MST StatusClass:NATIONALSponsor:Office of Mental Health Services and Women Veterans Health Program

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

Edit History:

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".

Edit History:

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

Edit History: 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

Edit History: 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.

Edit History: 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

Edit History:

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 Edit History: Edit Date: MAR 10,2006 14:59 Edit By: CRPROGRAMMER, ONE

Entry Point: APPL Routine: PXRMRDI

# VA-PCMM MHTC

Print Name:VA-PCMM Mental Health Treatment CoordinatorClass:NATIONALSponsor:Review Date:Description:This computed finding returns the patient's current Mental Health Treatment Coordinator (MHTC). The<br/>Scheduling API that this computed finding uses does not take a date as a parameter so it only returns the<br/>MHTC as of the actual calendar date. Therefore, this computed finding cannot be used to determine if the<br/>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: PXRMPCMMENTRY POINT: PTPRPRINT NAME: VA-PCMM Patients Assigned to a PractitionerTYPE: LISTCF PARAMETER REQUIRED: YESDESCRIPTION:This list type computed finding returns a list of patients assigned to a list ofpractitioners in the date range defined by Beginning Date/Time and Ending Date/Time. The ComputedFinding 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 andnames 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

Edit History:

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.

Edit History:

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

Edit History:

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".

Edit History:

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.

Edit History:

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.

Edit History:

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 DEFINITION or the internal entry number (IEN) of the TIU DOCUMENT DEFINITION. 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 = INACTIVE14 = 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^5, 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).

Edit History:

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.

Edit History: 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.

Edit History:

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.

Edit History:

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.

Edit History:

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

- \* NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
- \* WHITE
- \* DECLINED TO ANSWER

\_\_\_\_\_

Edit History:

Entry Point: NEWRACE Routine: PXRMPDEM

# VA-RACE PRE 2003

<sup>\*</sup> ASIAN

<sup>\*</sup> BLACK OR AFRICAN AMERICAN

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.

Edit History:

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 History:

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".

Edit History:

Entry Point: SBRANCH Routine: PXRMMSER

### VA-SERVICE SEPARATION DATES

Print Name:VA-Service Separation Date(s)Class:NATIONALSponsor:Office of Quality & PerformanceReview Date:

Description:

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

NOTE: This computed finding is being renamed (from VA-LAST SEPARATION DATE) because now it will return all service separation dates instead of just the last one.

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 History:

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 History:

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".

Edit History:

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 History:

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.

Edit History:

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"

Edit History:

Entry Point: WASINP Routine: PXRMPDEM

#### VA-WH MAMMOGRAM ABNORMAL IN WH PKG

Print Name:VA-WH Mammogram Abnormal in WH pkgClass:NATIONALSponsor:Women Veterans Health ProgramReview Date:Variation of the second se

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.

Edit History:

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.

Edit History:

Edit Date: FEB 15,2005 12:39 Edit By: CRPROGRAMMER, ONE Edit Comments: Exchange Install

Entry Point: MAM Routine: PXRMCWH

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

Print Name:VA-WH Pap Smear Abnormal in WH pkgClass:NATIONALSponsor:Women Veterans Health ProgramReview Date:Variation of the second se

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.

Edit History:

Entry Point: PAPA Routine: PXRMCWH

VA-WH PAP SMEAR IN LAB PKGNo. 21Print Name:VA-Lab Pap Smear SNOMEDClass:NATIONALSponsor:VA-Lab Pap Smear SNOMED

Description:

Review Date:

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 History:

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.



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 Reminders	PXRM (IN)/ACTIVATE REMINDERS	This option is used to make reminders active or inactive.
RE	Add/Edit Reminder Definition	PXRM DEFINITION 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 Definition	PXRM DEFINITION COPY	This option allows you to copy an existing reminder definition into a new reminder definition in the Clinical Reminder Definition file (#811.9). Once a new name is defined for the new reminder definition, the new reminder definition can be edited to reflect the local reminder definition.
RI	Inquire about Reminder Definition	PXRM DEFINITION	This option allows you to display a clinical reminder definition in an easy to read format.
RL	List Reminder Definitions	PXRM DEFINITION LIST	This option provides a brief summary of selected Clinical Reminder definitions.
RH	Reminder Edit History	PXRM REMINDER 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 Selected	PXRM DEF INTEGRITY CHECK ONE	This option lets the user select a reminder definition for integrity checking.
ICA	Integrity Check All	PXRM DEF INTEGRITY CHECK 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.

🗧 Reminder Resolution: High Risk MH No-Show Follow-up				
This patient has an active High Risk for Suicide Patient Record Flag and was a NO SHOW to a MH appointment. If the patient has a completed encounter to a MH appointment on the same day, or within 72 hours of the missed MH appointment, then this clinical reminder is resolved.				
MH Appointments Missed Last 10 Days				
DATE/TIME CLINIC STATUS				
04/09/2012 12:00 pmMental Health NO-SHOW				
Action needed: Please document follow-up outcome using fields below.				
Click here to see supporting information. Refer to the Safety Plan for additional information.				
Patient contact made and plan put in place for ongoing care.				
Patient sought urgent or emergent mental health care.				
C Other Outcome				
Three unsuccessful attempts made to contact patient.				
Suicide attempted or completed. Please document Safety Plan and/or Suicide Behavior Report where appropriate.				
Clear Clinical <u>M</u> aint <u>V</u> isit Info < Back Next > Finish Cancel				
<no encounter="" entered="" information=""></no>				
I * Indicates a Required Field				

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.

now looks for both the category I and category	301 y 11 active 1	<b>I</b> (1 10	n mgn Kisi	t IOI DU	neiue.
	STATUS	-DUE	DATE	LAST	DONE
High Risk MH No-Show Follow-up	DUE NOW	DUE	NOW	unkno	own
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.					be due
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 assignment.					
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:

Г

Location for Current Activities	×		
Select the appointment or visit that should be associated with the note or orders .	ОК		
	Cancel		
Encounter Location			
Mental Health Sep 17,12 08:00	Date Range		
Clinic Appointments Hospital Admissions New Visit			
Clinic Appointments / Visits (T-24 thru T+1)			
Mental Health Sep 17,2012 10			
Mental Health Sep 17,2012 08	:00 No-Show		

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

STATUSDUE DATELAST 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 09/17/2012@10:00 value - Mental Health APPOINTMENT DATE/TIME: 09/17/2012@10:00 CLINIC: Mental Health	Most recent appointment that triggered the reminder	
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		
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 Reminder Term: VA-MH NOSHOW PT CONTACTED Health Factor: MH NOSHOW PT CONTACTED 09/17/2012@08:00	Resolved by no show findings for an earlier no-show appt.	
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)

То

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

- 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:

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

## 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
Х	Reminder Extracts
*	All of the above, except L, O, and P.

## Changes to Reminder Definition in Patch 12

#### • Reminder Component Inquiry

The formatting for the various reminder component inquiries was made as consistent as possible and a computed finding inquiry was added.

#### • Reminder Component Updates

Two ICD 9 codes are added to the VA-DIABETES taxonomy.

#### • Reminder Evaluation:

- Pharmacy reengineering requires that direct reads of the various pharmacy files be replaced by APIs.
- Radiology patch RA\*5.0\*56 was released. This patch adds report status to the data returned by the radiology API Clinical Reminders uses, so the Clinical Maintenance output was changed so it now displays the report status. RA\*5.0\*56 was added as a required build.
- Finding date was added as a CSUB data for all reminder finding types.
- RANK\_DATE was added as a new function that can be used in a Custom Date Due.

## 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 <u>278</u>.

#### **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
  ВТ
  RE Add/Edit Reminder Definition
       Copy Reminder Definition
  RC
  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 120mg/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-IND 412 DIAGNOSIS (FI(1)-RT(75))

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-DDL (FI(2)-RI(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:
```

```
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)
```

```
Class:
```

FI(1)&FF(2)

```
NATIONAL
```

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 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 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 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

alastropia	anaguntar forma . Entry of these health factors should ONLY
	encounter forms. Entry of these health factors should ONLY g reminder dialog use.
occur auring	g reminder dialog use.
Findings:	
Finding Item:	VA-IRAQ/AFGHAN SERVICE NO (FI(1)=RT(489))
Finding Item:	
Finding Item:	
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:	
Finding Item:	VA-REFUSED ID & OTHER SX SCREE $(FI(20)=RT(568020))$
Finding Item: Finding Item:	VA-*SERVICE PERIOD SEPARATION (FI(21)=RT(616)) VA-*SERVICE PERIOD SERVICE TYP (FI(22)=RT(644))
Finding Item:	VA-*SERVICE PERIOD SERVICE TIP (FI(22)-RI(644)) VA-*SERVICE PERIOD SERVICE TYP (FI(23)=RT(645))
Finding Item:	VA SERVICE PERIOD SERVICE TIP (FI(23)=RI(643)) VA-*SERVICE PERIOD SERVICE TYP (FI(24)=RI(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:	
Finding Item:	VA-*OEF COUNTRY AFGHANISTAN (P (FI(39)=RT(666))
Finding Item:	VA-*OEF COUNTRY GEORGIA (PER P (FI(40)=RT(667))
Finding Item: Finding Item:	VA-*OEF COUNTRY KYRGYZSTAN (PE (FI(41)=RT(668)) VA-*OEF COUNTRY PAKISTAN (PER (FI(42)=RT(669))
Finding Item:	VA-*OEF COUNTRY PHILIPPINES (P (FI(42)=RI(609))
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))
Finding Item:	VA-*AGE 20-29 (FI(55)=RT(637))
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 PAGE 24 \_\_\_\_\_ \_\_\_\_\_ 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-AATE 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
.
```

#### Etc.

#### 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
                                                            NATTONAL
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:
                  VA-MH HIGH RISK NO SHOW FOLLOW-UP
Reminder Dialog:
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<sup>^</sup>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
                                                      LOCAL
     Select one of the following:
                   All reminder details
         А
                   General
         G
         В
                   Baseline Frequency
         F
                   Findings
         FF
                   Function Findings
                   Logic
         T.
         С
                   Custom date due
         D
                  Reminder Dialog
         W
                   Web Addresses
Select section to edit: a All reminder details
NAME: JG DIABETIC EYE EXAM Replace
PRINT NAME: Diabetic Eye Exam//
CLASS: LOCAL//
SPONSOR:
REVIEW DATE: MAY 3,2000//
USAGE: C//
RELATED REMINDER GUIDELINE:
INACTIVE FLAG:
RESCISSION DATE:
REMINDER DESCRIPTION:
Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
done yearly.
 Edit? NO//
TECHNICAL DESCRIPTION:
This reminder is based on the Diabetic Eye Exam reminder from the New
York VAMC which was designed to meet the guidelines defined by the PACT
panel. Additional input came from the Saginaw VAMC.
 Edit? NO//
PRIORITY:
Baseline Frequency
DO IN ADVANCE TIME FRAME: 1M//
SEX SPECIFIC:
IGNORE ON N/A:
Baseline frequency age range set
Select REMINDER FREQUENCY: 0Y//
 REMINDER FREQUENCY: 0Y//
 MINIMUM AGE:
 MAXIMUM AGE:
```

AGE MATCH TEXT: No existing text Edit? NO// AGE NO MATCH TEXT: No existing text Edit? NO// Select REMINDER FREQUENCY: Reminder Definition Findings Choose from: DIABETIC EYE EXAM ΕX 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: А All reminder details

G	General			
В	Baseline Frequency			
F	Findings			
FF	Function Findings			
L	Logic			
С	Custom date due			
D	Reminder Dialog			
W	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
         А
          G
                   General
          В
                   Baseline Frequency
          F
                   Findings
          FF
                   Function Findings
          L
                   Logic
                   Custom date due
          С
                   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:
         А
                   All reminder details
         G
                   General
         В
                  Baseline Frequency
         F
                  Findings
         FF
                  Function Findings
         L
                   Logic
         С
                   Custom date due
         D
                   Reminder Dialog
         Tv1
                   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:

All reminder details Α G General Baseline Frequency В F Findings FF Function Findings L Logic С Custom date due D Reminder Dialog W Web Addresses Select section to edit:

## **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.

#### 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.

```
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	<ul> <li>This field allows the reminder creator to specify how the reminder can be used.</li> <li>This is a free text field that can contain any combination of the following characters:</li> <li>C - CPRS (the reminder can be used in the CPRS GUI)</li> <li>L - Reminder Patient List</li> <li>O - Reminder Order Checks</li> <li>P - Patient; patients can view "My Health" reminders; the wildcard (*) excludes P</li> <li>R - Reminder Reports (the reminder can be used in reminder reports)</li> <li>X - Reminder Extracts (the reminder is used for data extraction)</li> <li>* - All of the above, except L, O, and P</li> <li>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.</li> </ul>			
	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 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 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 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 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 <u>111</u> .
FUNCTION	Function Findings are new in version 2.0. They are called Function Findings
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 comma- separated list of regular finding numbers. See page <u>117</u> .
CUSTOMIZED PATIENT 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 PATIENT COHORT FOUND 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 RESOLUTION LOGIC GENERAL	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. This text will be displayed in the Clinical Maintenance component if the reminder
RESOLUTION FOUND TEXT	has been resolved.
GENERAL RESOLUTION NOT FOUND TEXT	This text will be displayed in the Clinical Maintenance component if the reminder has not been resolved.
CUSTOM DATE 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 either the MIN_DATE or MAX_DATE functions.
LINKED REMINDER 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 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	МН
Orderable Item	101.43	OI
Radiology Procedure	71	RP
Reminder Computed Finding	811.4	CF
Reminder Taxonomy	811.2	ТХ
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

**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 <u>113</u>, 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 today's date is used as the STOP DATE. STOP DATE is used as the date of an orderable item finding. 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:

bbiole of del blackbeb are found		
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 19, 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>139</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 153.

**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 <u>160</u>, that describes Reminder Location List options.

#### **Findings Fields**

There are a number of fields in the Findings multiple that control how each Finding is used in the reminder evaluation process. Each of these fields is described in detail below. 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)

#### **Findings Fields 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, 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).

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.

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

The default value for each finding type is given in the following table.

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

Finding Type	Results File	Result Fields that can be used in CONDITION	Data example	CONDITION field example
Drug (50)		NONE – but you can use EFFECTIVE PERIOD of 0D, 0M, OR 0Y in the reminder definition to restrict view to current medications only		
Education Topic (9999999.09)	V PATIENT ED (9000010.06)	LEVEL OF UNDER- STANDING	1 for Poor 2 for Fair 3 for Good 4 for Group-no Assessment 5 for Refused	V=1   V=2   V=3   V=4   V=5

Finding Type	Results File	Result Fields that can be used in CONDITION	Data example	CONDITION field example
Exam (99999999.15) Health Factor (9999999.64)	V EXAM (9000010.13) V HEALTH FACTOR (9000010.23)	RESULT LEVEL/SEVE RITY	A for Abnormal N for Normal M for Minimal MO for Moderate H for Heavy/Severe	V="A"   V="N"   V="M"   V="MO"   V="H"
Immunization (9999999.14)	V IMMUNIZATION (9000010.11)	SERIES	P for Partially Complete C for Complete B for Booster 1 for Series 1 2 for Series 2 3 for Series 3 4 for Series 4 5 for Series 5 6 for Series 6 7 for Series 7 8 for Series 8	I V="P" I V="C" I V="B" I V=1 I V=2 I V=3 I V=3 I V=4 I V=5 I V=6 I V=7 I V=8
Laboratory Test (60)	LAB RESULTS in "CH" node	Number returned from the Lab API as the lab result	180	I V>130
Location List	VISIT (9000010)	SERVICE 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"   V="H"   V="C"   V="C"   V="T"   V="N"   V="S"   V="S"   V="E"   V="E"   V="R"   V="D"   V="X"
Mental health Instrument (601)		RAW SCORE from API based on a 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" 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.

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 24 Changes to Function Findings

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

The set of allowed operators in function finding strings was expanded. It now includes: +, -, \*, \*\*, /, \, #, !, &, `, >, <, =, ], [. The additions were \*, \*\*, /, \, #.

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:

```
Select Reminder Definition:
                               FFTEST
                                          LOCAL
     Select one of the following:
                   All reminder details
          А
          G
                   General
                   Baseline Frequency
          В
                   Findings
          F
                   Function Findings
          FF
          L
                   Logic
          С
                   Custom date due
          D
                   Reminder Dialog
          M
                   Web Addresses
Select section to edit: FF Function Findings
Function Findings
Select FUNCTION FINDING: 1
 Are you adding '1' as a new FUNCTION FINDINGS (the 1ST for this REMINDER
DEFINITION)? No// Y
  (Yes)
FUNCTION FINDINGS FUNCTION STRING: MRD(1,3)>MRD(11,8,4)
FUNCTION FINDING NUMBER: 1// <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 FREQUENCY: <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: 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**

#### By Alan Montgomery and Philip VanCamp, Health Product Support

Function findings are stored in Vista file 802.4. 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. This file defines the functions that can be used in function findings.

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 functionally 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 functionally can be used are as follows:

&	And
!	Or
د	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 in fileman format PXRMLAD – Returns the patients last admission date 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 finding 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. Reminder Global variables within reminders are:

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 3. If both finding 1 and 2 are true, the function would use 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 use 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 used.
- 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 an ending date time 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 ENDING DATE/TIME entry on either finding, then the function will work as described above. If there is an ENDING DATE/TIME entry, let's see how the outcome is affected.

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

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

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

Given these dates with the ending date/time 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 Function Findings and global variables as below: MRD(1)>MIN\_DATE(2)&(COUNT(2)>3) MRD(2)>3100510!(PXRMAGE>45)

CLASS: NATIONAL

#### MAX\_DATE

MAX\_DATE functions the same as MRD. This function finding returns the most recent date of the finding(s) in the argument list of the MAX\_DATE string, and then makes a comparison based on the operator used to another MAX\_DATE string or a global variable.

All mathematical operators may be used with MAX\_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. MAX\_DATE(1)>MAX\_DATE(2) This would be true if the date of finding 1 is more recent than the date of finding 2.
- 2. MAX\_DATE(1,2)<MAX\_DATE(3) This would be true if the most recent 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 most recent date of those two for the comparison to finding 3.
- 3. MAX\_DATE(1,2)=MAX\_DATE(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 use 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 used.
- 4. MAX\_DATE(1)>PXRMLAD This would be true if the date of finding 1 is more recent than the patients last admission date.
- 5. (MAX\_DATE(1,2) >MAX\_DATE(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 an ending date time set on the finding(s) that are part of the MAX\_DATE string, it could affect the date returned. For example, your string is MAX\_DATE(1,2)>MAX\_DATE(3) and there is no ENDING DATE/TIME entry on either finding, then the function will work as described above. If there is an ENDING DATE/TIME entry, let's see how the outcome is affected. FI(1) has ending date/time entry of T-1Y and FI(2) has NO ending date/time

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

<u>FI(1)</u>	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 ending date/time entry on FI(1), the MAX\_DATE 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 MAX\_DATE functionality is the use of a finding in the MAX\_DATE string that has a negative occurrence count.

Example: MAX\_DATE(1)>MAX\_DATE(2) and Finding 1 has a -1 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 -1 as occurrence count, the function string MAX\_DATE(1)>MAX\_DATE(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).

MAX\_DATE can be also combined with other Function Findings and global variables as below: MAX\_DATE(1)>MIN\_DATE(2)&(COUNT(2)>3) MAX\_DATE(2)>3100510!(PXRMAGE>45)

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 most recent 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 most recent 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 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 use 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 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 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.

Please note that if you have a Beginning Date/Time (BDT) on a finding, this may impact your results. The BDT 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.

<u>FI(1)</u>	<b>FI</b> (2)
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 3/26/08 > 2/5/08. Thus the finding is TRUE.

If you had a BDT of T-1Y on FI(2) (given today is 7/29/10) the evaluation of MIN\_DATE(1) > MIN\_DATE(2) would now be 3/26/08 > 6/26/10. Thus the FF is FALSE. Even though there are older dates of FI(2).

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 false because the date of FI(1) would be 6/1/09, which is the OLDEST of the latest two occurrences retrieved by use of the -2 in the occurrence count of FI(1). The date of FI(2) would be 3/20/08 since we are also using the MIN\_DATE function.

MIN\_DATE can be also combined with other Function Findings 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 occurrences of a particular finding. The syntax of this function finding is COUNT(1)>3. In this example, a check is done to see if there are more than 3 occurrences of FI(1). The COUNT function finding 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(1) has occurrence count of 3 FF(1) has string of COUNT(1)>2 The FF(1) will be true if FI(1) has at least 3 occurrences

If FI(1) 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(1) has a Condition or Status associated, then the number of returned occurrences will be the number of instances that meet the condition or Status up to the value in the occurrence count field. 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 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. In summary, the *n* number of occurrences will be returned and then the condition applied. If the number of instances that meets the condition makes the FF string True, then the FF is TRUE.

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

Again, assuming occurrence count of 5 on FI(1) (Lab test) and condition of I V>9.0. 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 *n* number 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(1)=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 Function Findings 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

#### FI

This function finding provides a way to logically string regular findings and/or other function findings and/or reminder global variable combinations together. The function finding 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 function findings:

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(1)>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: panding. Start data: 04/02/2004. Stop data: missing

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. So, 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 and the 99<sup>th</sup> 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 function finding string is DUR(1)>370 and if occurrence count of FI(1) is set to 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 Function Findings 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 finding 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(1,2)>n where the "1" and "2" 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 function findings, having an ending date/time 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 Function Findings 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 finding 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 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 something other than 1. Also, fields such as BEGINNING DATE/TIME, ENDING DATE/TIME, CONDITION, USE STATUS/COND IN SEARCH can change the dates returned by your function finding.

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 Function Findings 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 a lab finding was less than occurrence 2 of the same lab 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

6.0

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 Findings 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 Function Findings 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 string would be MAX\_VALUE(1,"VALUE"). Note that you have to set the occurrence count on FI(1) to a value other 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(1,"VALUE)>10. The function 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 text 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 Function Findings 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 string would be MIN\_VALUE(1,"VALUE"). Note that you have to set the occurrence count on FI(1) to a value other 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 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>, 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, from the smallest value of all findings evaluated is returned and a comparison is made to the text value.

Example: FI(1) is lab test with occurrence count of 5 with the following values:

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 Function Findings 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

To be true, a finding has to have a status on the list; this is a big change for drug findings because in V.1.5, status was not used for drugs. Your reminders that use drug findings types may work differently in V.2.0 and you may need to make some changes in order for them to work as desired.

#### Patch 4 Status List Updates

Several changes were made to the status list prompt in the reminder definition and reminder term editor.

- Removed the "delete all" prompt.
- Changed the status list to display the default selection for a finding item if the finding item did not have a status defined.
- Removed the status prompt for Taxonomy containing Problem List entries.
- Set the default prompt for the selection item to Save and Quit.

- No longer displays the entire list of possible statuses if none are defined for the finding item.
- Added multiple selections of statuses when adding to or deleting from the finding item status list.

```
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
         Ο
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:
         А
                   ADD STATUS
         D
                   DELETE A STATUS
         S
                   SAVE AND QUIT
         0
                   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:
                  ADD STATUS
         А
         D
                   DELETE A STATUS
         S
                  SAVE AND QUIT
         Q
                   QUIT WITHOUT SAVING CHANGES
Enter response: S//
```

#### Changes to support the use of non-VA meds in Reminders

The field RXTYPE was changed to allow for non-VA meds. The allowed values are now "A" for all, "I" for inpatient, "N" for non-VA, and "O" for outpatient. "A" replaces the previous "B". During the

installation of V.2.0, all "B" values will be changed to "A". If RXTYPE is null, then it will be treated like an "A". If RXTYPE includes non-VA meds, they will be searched for automatically, with no changes to the definition or term. This works as follows: Non-VA meds are stored by Pharmacy Orderable item and not by dispense drug; however, a dispense drug entry can have a pointer to the Pharmacy Orderable Item.

If the pointer exists and RXTYPE allows it, then a search for the corresponding non-VA med will be made.

**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:
               TNACTIVE
      1
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**

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

This option provides the functions for Reminder Sponsor Management.

# List Reminder Sponsors

	: Reminder Sponsor Management Option: SL Li E: ANYWHERE Right Margin: 80//	ist Reminde	r Sponsors	5
DEMIND		AN 28,2003	10:39	PAGE 1
Name: Class:	A NEW SPONSOR : VISN			
Name: Class:	CRPROVIDER,TWO VISN			
Name: Class:	CRPROVIDER, THREE LOCAL			
Name: Class:	Guidelines committee : LOCAL			
Name: Class:	HOSPITAL COMMITTEE : LOCAL			
	INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ NATIONAL			
	CRPROVIDER, FOUR NATIONAL			
Name: Class:	Mental Health Group : LOCAL			
	Mental Health and Behavioral Science Strat NATIONAL	cegic Group		
Health	Mental Health and Behavioral Science Strat n Program : NATIONAL	cegic Group	and Womer	n Veterans
Name: Class:				
	Office of Quality & Performance : NATIONAL			
Name:	РЈН			

```
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 LOCA
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
  OUERI 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 NATIONAL
You cannot edit National Class Sponsors!
Select Reminder Sponsor: A NEW SPONSOR VISN
NAME: A NEW SPONSOR//
CLASS: VISN//
Select CONTACT:
Select ASSOCIATED SPONSORS:
Select Reminder Sponsor: ?
```

## **Reminder Taxonomy Management**

The REMINDER TAXONOMY file #811.2 is used to define a set of coded values using ICD Diagnosis codes, ICD Operation/Procedures codes, and CPT codes that can be viewed as being part of a clinical category (taxonomy). Reminder taxonomies provide a convenient way to group coded values and give them a name. ) example, the VA-DIABETES taxonomy contains a list of diabetes diagnoses. Options on the Taxonomy Management Menu let you view and edit taxonomy definitions.

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

As a result of Remedy ticket #418968, dialog loading was changed to look for prompts when loading a reminder taxonomy in a dialog. If prompts are defined, then they will display in CPRS instead of the default prompts defined in the reminder finding parameter file. Also, a SUPPRESS ALL PROMPTS prompt was added to the group and element editors. This prompt only shows when a taxonomy is used as a finding item. If the value is set to YES, then no prompts will show in CPRS when using a taxonomy in a dialog.

#### Changes in Patch 12 (PXRM\*2\*12)

- Automatic taxonomy expansion checking was added as part of taxonomy inquiry.
- New options added to the taxonomy management menu:
  - Verify all taxonomy Expansions (PXRM TAXONOMY EXPANSION VERIFY) Option for verifying the correctness of all taxonomy expansions
  - Expand all Taxonomies (PXRM TAXONOMY EXPANSION ALL) This option can be used to rebuild all taxonomy expansions (Note the user must hold the PXRM MANAGER KEY to use this option.)
- As a result of problems reported with taxonomy expansion, listing of UPDATE^DIE error messages in taxonomy expansion was changed to use MES^XPDUTL so errors will be included in the Install file if taxonomy expansion is done as part of a KIDS install. Also the name and IEN of the taxonomy will be listed.
- An error in taxonomy expansion was found and corrected. For CPT codes associated with a radiology procedure the expansion assumed there could only be one radiology procedure per CPT code, which is not the case; the same CPT code can be used with multiple radiology procedures. The expansion was changed to allow for multiple procedures per CPT code.

#### NOTE: Problem with using CPT codes to find radiology procedures

File #71, RAD/NUC MED PROCEDURES, has a field to associate a CPT code with a radiology procedure. It also has an index, so you can find all the procedures associated with a CPT code. Clinical Reminders has an integration agreement that allows it to read this index. When a taxonomy is expanded, for every CPT code, the radiology index is checked to see if the CPT code is associated with a radiology

procedure. If it is, then the CPT code is stored in a radiology procedure section of the taxonomy expansion.

When a taxonomy is evaluated during reminder or term evaluation, if there are codes in the radiology procedure section of the taxonomy expansion, the patient's radiology data is checked to see if they have any of the procedures associated with the CPT codes. Because Radiology never made any changes to accommodate code set versioning, there are a couple of cases where this can go wrong. For the first case, consider what happens when a CPT code is inactivated and replaced by a new code. If a site is capturing radiology procedures via CPT codes, they have to start using the new active code; but if the new code has not been mapped to the radiology procedure and the taxonomy expansion rebuilt, then there will never be a match with the new CPT code. Sites are responsible for keeping the radiology procedure CPT code mapping current in file #71, but there is no mechanism to notify them when a CPT code that is mapped to a radiology procedure has been inactivated. Consequently, it is very unlikely that the mapping will be kept up-to-date.

In the second case, because file #71 is structured to allow only one CPT code per procedure, if the mapping was kept up-to-date and an inactivated code was replaced by a new active code, radiology procedures that were done in the past when the old code was still active would never be found. Until this problem is resolved, using CPT codes to find radiology procedures can be unreliable. At this point the safest thing to do is to use the radiology procedure as a finding.

#### Changes in Patch 6 (PXRM\*2\*6)

• The following CPT codes: 58290-58294, 58951, 58552-58554 were added to the national taxonomy VA-WH HYSTERECTOMY W/CERVIX REMOVED.

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

## Reminder Taxonomy Management Menu

Syno- nym	Option	Option Name	Description
TL	List Taxonomy Definitions	PXRM TAXONOMY LIST	Use this option to get a summary of all the taxonomies on your system. It shows the name of the taxonomy and the low and high codes for each of the possible code types.
TI	Inquire about Taxonomy Item	PXRM TAXONOMY INQUIRY	This option provides a detailed report of a Taxonomy item's definition, with a list of all the ICD0, ICD9, and CPT codes included in the taxonomy.
TE	Add/Edit Taxonomy Item	PXRM TAXONOMY EDIT	This option is used to edit Reminder Taxonomy Item definitions.
тс	Copy Taxonomy Item	PXRM TAXONOMY COPY	This option allows the user to copy an existing taxonomy definition into a new taxonomy entry. The new taxonomy must have a unique name.
ТХ	Selected Taxonomy Expansion	PXRM TAXONOMY EXPANSION	This option can be used to selectively rebuild a taxonomy expansion.
TXV	Verify all taxonomy Expansions	PXRM TAXONOMY EXPANSION VERIFY	Option for verifying the correctness of all taxonomy expansions
TXA	Expand all Taxonomies	PXRM TAXONOMY EXPANSION ALL	This option can be used to rebuild all taxonomy expansions

# **Taxonomy Fields**

Dialog taxonomy fields are listed on page 268.

NAME	DESCRIPTION
NAME	This is the name of the taxonomy. It must be unique. Nationally distributed
	taxonomies start with "VA-".
BRIEF	This is a brief description of what the taxonomy represents. This may be used
DESCRIPTION	to further define the intended use of this taxonomy.
CLASS	This is the class of the entry. Entries whose class is National cannot be edited
	or created by sites.
	N NATIONAL
	V VISN
CDONCOD	L LOCAL
SPONSOR REVIEW DATE	This is the name of a group or organization that sponsors the taxonomy.
	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.
PATIENT DATA SOURCE	Specifies where to search for patient data. It is a string of comma-separated key words.
USE INACTIVE	Applies only to searches in Problem List. Normally inactive problems are not
PROBLEMS	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.
INACTIVE FLAG	Enter "1" to inactivate the taxonomy. This flag is set to ACTIVE in the
	distribution. As part of the installation, each site should review the taxonomy definitions and inactivate those that do not meet the site's needs. If desired, a
	site can copy a distributed taxonomy, using the taxonomy copy option, to a
	local version and edit it to meet the site's needs.
ICD0 RANGE OF	This multiple is used to define ranges of ICD0 coded values that constitute
CODES (multiple)	taxonomy entries. A range is defined by a low and high value that is inclusive.
· · · · /	The low and high values are actual codes from the source file, not internal
	entry numbers.
ICD9 RANGE OF	This multiple is used to define ranges of ICD9 coded values that constitute
CODES (multiple)	taxonomy entries. A range is defined by a low and high value that is inclusive.
	The low and high values are actual codes from the source file, not internal
	entry numbers.
CPT RANGE OF	This multiple is used to define ranges of CPT coded values that constitute
CODES (multiple)	taxonomy entries. A range is defined by a low and a high value that are
(multiple)	inclusive. The low and high values are actual codes from the source file, not internal entry numbers.
EDIT HISTORY	If changes were made, the date and the name of the user making the
	changes will be inserted automatically. You can optionally type in a
	description of the changes made during the editing session.
PATIENT DATA	Specifies where to search for patient data. It is a string of comma-separated
SOURCE	key words. The keywords and their meanings are:

KEYWORD	MEANING
ALL	Search All sources (default)
EN	Search All PCE encounter data (CPT & ICD9)
ENPP	Search PCE encounter data, principal procedure (CPT) only
ENPD	Search PCE encounter data, principal diagnosis (ICD9) only
IN	Search All PTF inpatient data (ICD9 & ICD0)
INDXLS	Search PTF inpatient DXLS diagnosis (ICD9) only
INM	Search in PTF inpatient diagnosis (ICD9) movement only
INPD	Search in PTF inpatient principal diagnosis (ICD9) only
INPR	Search in PTF inpatient procedure (ICD0) only
PL	Search Problem List (ICD9)
RA	Search Radiology (CPT) 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 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.

## List Taxonomy Definitions

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

REMINDE	R TAXONOMY ICD9 R	ANCE	TCD0 I	ANCE	CPT I	BANGE
NAME	LOW	HIGH	ICDO H LOW	HIGH	LOW	HIGH
 FTEST1						
110011	100.9	100.9	99.52	99.52		
PAIN TA	XONOMY					
	388.71	388.72			62350	62351
	719.40	719.49			90783	90784
	724.1					
	789.00	789.09 724.2				
	724.2	724.2				
	926.11	926.11				
	724.5	926.11 724.5				
PROBTES	т 1					
	311.	311.			90724	90724
PROBTES	т 2					
	495.2	495.2				
Pain -	Lower Back					
		388.72			62350	62351
		719.49				90784
	724.1	724.1				
	789.00	789.09				
	724.2	724.2				
		926.11				
	724.5					
RADTAX						
						76091
					71030	71030
SL ALCO	HOL ABUSE					
	291.0					
		303.93				
	305.00	305.03 571.3				
	571.0	571.3				
	760.71 790.3	760.71				
	790.3	790.3				
	980.0 357.5	980.0				
	425.5	425.5 535.31				
	V11.3	1711 3				

#### Inquire about Taxonomy Item

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

```
Select Reminder Taxonomy Management Option: TI Inquire about Taxonomy Item
Select Reminder Taxonomy: VA-PNEUMOCOCCAL VACCINE Pneumococcal vaccine codes
       ...OK? Yes// <Enter> (Yes)
DEVICE: <Enter> ANYWHERE Right Margin: 80// <Enter>
REMINDER TAXONOMY INQUIRY
                                       Jan 13, 2004 10:15:50 am Page 1
 _____
      NUMBER: 25
VA-PNEUMOCOCCAL VACCINE
_____
Brief Description:
  Pneumococcal vaccine codes
Class:
                        NATIONAL
Sponsor:
Review Date:
Edit History:
Patient Data Source:
Use Inactive Problems:
ICD9 Codes:
Range V06.6-V06.6 Adjacent Lower-V06.5 Adjacent Higher-V06.8
 Code ICD Diagnosis
                                  Activation Inactivation Selectable
 ____
       _____
                                  ----- ----- ------
 V06.6 PROPHY VACC STREP PNEU&FLU
                                 10/01/1978
                                                          Х
ICD0 Codes:
Range 99.55-99.55 Adjacent Lower-99.54 Adjacent Higher-99.56
 Code ICD Operation/Procedure Activation Inactivation
        -----
 ____
                                   _____
 99.55 VACCINATION NEC
                                  10/01/1978
Range 99.59-99.59 Adjacent Lower-99.58 Adjacent Higher-99.60
      ICD Operation/Procedure Activation Inactivation
 Code
 ____
       _____
                                  _____
                                           _____
 99.59 VACCINATION/INNOCULA NEC 10/01/1978
CPT Codes:
Range G0009-G0009 Adjacent Lower-G0008 Adjacent Higher-G0010
```

Code	CPT Short Name	Activation Inactivation Selectable
G0009	Admin pneumococcal vaccine	07/01/1995 X
Range 90	732-90732 Adjacent Lower-90731	Adjacent Higher-90733
Code	CPT Short Name	Activation Inactivation Selectable
90732	PNEUMOCOCCAL VACCINE	06/01/1994

#### Add/Edit Taxonomy Item

Use this option to edit a single taxonomy definition.

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

### Copy Taxonomy Item

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

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

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

#### Selected Taxonomy Expansion

When you create a taxonomy, you define the codes in the taxonomy by entering sets of low and high codes. When a taxonomy is used in Clinical Reminders, all the codes in the range defined by the low and high code are "automatically" included. This is done behind the scenes by building an expansion of the taxonomy in the Expanded Taxonomies file #811.3. The expansion is built/rebuilt whenever code ranges are edited. It is also done whenever a code set update is installed.

Reminder evaluation uses the expanded taxonomy so if the expansion gets out of synch with the taxonomy or for some reason does not get correctly rebuilt the results of taxonomy evaluation may be incorrect. Incorrect taxonomy expansion is a very rare event so you may never need to use this option. It was added in version 2.0 so that if a problem with taxonomy expansion is ever encountered there is an easy way for sites to rebuild a taxonomy expansion.

#### **Code Set Versioning Changes**

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

After Version 2.0 of Clinical Reminders is installed, you may start receiving mail messages about taxonomy/code updates and Reminder Dialog CPT Code changes. Those individuals assigned to the Reminders mail group at your site will receive the messages. These updates normally occur quarterly, so you shouldn't receive these continuously. When you receive the messages, review them to see what action should be taken, if any. You may need to change the taxonomy low or high-coded values. It may

be appropriate to retain inactive codes for some reminders and dialogs; for example, Pneumovaxes, which are only given once in a lifetime.

#### Example CSV Messages:

```
Subj: Reminder Dialog ICPT Code changes [#17926] 04/10/03@14:42 33 lines
From: POSTMASTER (Sender: CRPROVIDER, ONE) In 'IN' basket. Page 1 *New*
_____
New Code Set Post Installation Processing
Clinical Reminder Post Installation Processing for
Reminder Dialog file (801.41) Finding Items - ICPT Changes.
Please review the FINDING ITEM and ADDITIONAL FINDING Items changes
currently used by REMINDER DIALOGS that need changes before the
EFFECTIVE DATE. If the changes are not made, the FINDING ITEM will
not be used in CPRS GUI processing once the effective date has passed.
Consider adding another ADDITIONAL FINDING Items to the reminder dialog
entry, which will be active after the FINDING ITEM code status
effective date makes the current FINDING ITEM inactive. This will allow
the dialog to have old and new codes to be associated with a dialog
element, and only use the one effective for the encounter date.
Eventually, the inactive FINDING ITEM or ADDITIONAL FINDING Items
should be removed from the dialog element.
Make changes using the Reminder Dialog Management [PXRM DIALOG
MANAGEMENT] option.
Note: FI=FINDING ITEM field
                            AFI=ADDITIONAL FINDING ITEMS field
Note: [finding type] (status)
Report Data to Follow:
   ICPT FI: A9160 Podiatrist non-covered servi (Inactive 4/1/02 Past)
   Found in: CODE SET ELEMENT [dialog element] (Enabled)
    Used by: CODE SET TEST [reminder dialog] (Enabled)
   ICPT AFI: A0215 AMBULANCE SERVICE, MISCELLAN (Inactive 7/1/95 Past)
   Found in: CODE SET ELEMENT [dialog element] (Enabled)
    Used by: CODE SET TEST [reminder dialog] (Enabled)
Enter message action (in IN basket): Ignore//
Subj: Taxonomy updates due to new CPT global installation. [#17925]
04/10/03@14:42 174 lines
From: POSTMASTER (Sender: CRPROVIDER,ONE) In 'IN' basket. Page 1
There was a CPT code set update on 04/10/2003.
This could affect adjacent codes and/or taxonomy expansions.
Detailed information for affected taxonomies follows.
Taxonomy: VA-FLEXISIGMOIDOSCOPY = TX(15)
Selectable CPT code 45336 is inactive.
Selectable CPT code 45360 is inactive.
Selectable CPT code 45365 is inactive.
Selectable CPT code 45367 is inactive.
Selectable CPT code 45368 is inactive.
Selectable CPT code 45369 is inactive.
Selectable CPT code 45370 is inactive.
Selectable CPT code 45372 is inactive.
```

```
Taxonomy: VA-MASTECTOMY = TX(19)
Selectable CPT code T1950 is inactive.
Selectable CPT code T1951 is inactive.
Selectable CPT code T1952 is inactive.
Selectable CPT code T1953 is inactive.
Selectable CPT code T1954 is inactive.
Selectable CPT code T1955 is inactive.
Selectable CPT code T1956 is inactive.
Selectable CPT code T1957 is inactive.
Selectable CPT code T1958 is inactive.
Selectable CPT code T1959 is inactive.
Selectable CPT code T1960 is inactive.
Selectable CPT code T1961 is inactive.
Selectable CPT code T1962 is inactive.
Selectable CPT code T1963 is inactive.
Selectable CPT code T1964 is inactive.
Selectable CPT code T1965 is inactive.
Selectable CPT code T1966 is inactive.
Selectable CPT code T1967 is inactive.
Selectable CPT code T1968 is inactive.
Selectable CPT code T1969 is inactive.
Selectable CPT code T1970 is inactive.
Selectable CPT code T1971 is inactive.
Selectable CPT code T1972 is inactive.
Selectable CPT code T1973 is inactive.
Selectable CPT code T1975 is inactive.
Selectable CPT code T1976 is inactive.
Taxonomy: VA-OBESITY = TX(20)
Selectable CPT code 44131 is inactive.
Taxonomy: VA-HYPERTENSION SCREEN = TX(23)
Selectable CPT code 80060 is inactive.
Taxonomy: VA-CHOLESTEROL = TX(24)
Selectable CPT code 82470 is inactive.
Selectable CPT code 83700 is inactive.
Selectable CPT code 83705 is inactive.
Selectable CPT code 83720 is inactive.
Selectable CPT code G0054 is inactive.
Taxonomy: VA-TETANUS DIPHTHERIA = TX(29)
Selectable CPT code 90711 is inactive.
Taxonomy: VA-CERVICAL CANCER SCREEN = TX(30)
Selectable CPT code 00060 is inactive.
Selectable CPT code Q0061 is inactive.
Taxonomy: VA-INFLUENZA IMMUNIZATION = TX(33)
Selectable CPT code 90724 is inactive.
Selectable CPT code Q0034 is inactive.
Taxonomy: CSTEST = TX(41)
Adjacent codes have changed for the range defined by:
Low code C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead
Adjacent codes have changed for the range defined by:
```

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

```
New adjacent lower code C2804-Ventak Prizm 2 DR Defib
 Old adjacent higher code C2808-Contak TR 1241
 New adjacent higher code C3001-Kainox SL/RV defib lead
Adjacent codes have changed for the range defined by:
Low code C2805-Jewel AF 7250 Defib
High code C2807-Contak CD 1823
 Old adjacent lower code C2803-Ventak Prizm DR HE Defib
 New adjacent lower code C2804-Ventak Prizm 2 DR Defib
 Old adjacent higher code C2808-Contak TR 1241
 New adjacent higher code C3001-Kainox SL/RV defib lead
The following are new CPT codes in the expansion for this taxonomy:
C2804-Ventak Prizm 2 DR Defib
C2805-Jewel AF 7250 Defib
C2808-Contak TR 1241
Taxonomy: SLC-Ear Mites = TX(660001)
Selectable CPT code 69221 is inactive.
Taxonomy: PROBTEST 1 = TX(660006)
Selectable CPT code 90724 is inactive.
Subj: Reminder Dialog ICD9 AND CPT Code changes [#14085] 05/20/03@10:48
6 lines
From: POSTMASTER (Sender: CRPROVIDER,ONE) In 'IN' basket. Page 1 *New*
____
Report of Inactive ICD9 and CPT Codes referenced in the Reminder
Dialog file.
Note: FI=FINDING ITEM field AFI=ADDITIONAL FINDING ITEMS field
Note: [finding type] (status)
```

When you examine these CSV messages, you will notice that they point out inactive codes that are being used in reminder dialogs and taxonomies. A change was made in the way dialogs are processed for Code Set Versioning. This change made it so that 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 in the dialog, but remove 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. If a code is a selectable code for a taxonomy dialog, you may want to remove it from the taxonomy dialog if it is still being used.

**NOTE:** Even though an inactive code is still in the list of selectable codes, it is not present in the taxonomy dialog, because the GUI code uses the encounter date to display only active codes for the encounter date.

Another thing these messages point out is any adjacent codes that have changed. By adjacent codes, we mean the code that comes immediately before the low code and immediately after the high code. If either of these adjacent codes has changed, then you should review the taxonomy to see if the range of codes needs to be changed.

#### MailMan messages that notify you about inactive codes in taxonomies and dialogs

When Clinical Reminders V.1.5 was released in June of 2000, it introduced the reminder dialog functionality. The installation process generated lists of selectable diagnoses and selectable procedures for each taxonomy that was on the system at the time of the installation. These lists included all the codes in the taxonomy that were active on the date of the install. Any site taxonomies that were created after the installation of V.1.5 do not have a selectable list until the first time a taxonomy dialog for that taxonomy is edited/created. The first time the taxonomy dialog is edited/created, the selectable lists are built from all the currently active codes in the taxonomy. It is important to note that once these lists are generated, they are not automatically updated when the taxonomy is edited. The only way to change them is through the taxonomy dialog editing option.

The code set versioning changes that were made to reminder dialogs insure that a code that is inactive on the date of the encounter cannot be used. Therefore, inactive codes that are on selectable lists will not cause any problems.

Another code set versioning change that was made causes a check of all the codes used in reminder taxonomies and reminder dialogs whenever a Lexicon patch that updates a code set is installed. That is what creates the MailMan messages that notify you about inactive codes in taxonomies and dialogs. These messages are informational; as noted above, inactive codes will not cause problems, but at some point you may want to remove inactive codes.

## **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.

#### Change in Patch 24

A new term, The VA-MH HIGH RISK FOR SUICIDE PRF was added, to be used in the Reminder Definitions in the High Risk for Suicide Patient – Reminder & Flag project. The following description was added to the VA-HIGH RISK FOR SUICIDE PRF Reminder Term:

This reminder looks for the national category I HIGH RISK FOR SUICIDE patient record flag and the local category II patient record flag used at your site.

This term is distributed to look for the local name HIGH RISK FOR SUICIDE, which is the first mapped finding in the Mapped Findings. The Computed Finding Parameter of HIGH RISK FOR SUICIDE^L means use the local patient record flag called HIGH RISK FOR SUICIDE. If your site uses a different category II patient record flag name, then the computed finding parameter for the first mapped finding should be changed. For example, if your site uses SUICIDE RISK as the name of the category II patient record flag, then the Computed Finding Parameter should be changed to SUICIDE RISK^L.

Do not change the second mapped finding with the Computed Finding Parameter of HIGH RISK FOR SUICIDE^N.

#### **Correction made in Patch 18**

During the testing of PXRM\*2.0\*17, a test site noticed a problem with the output for drug classes in a term. The drug class the drug belonged to was not being displayed as it is when a drug class is used directly as a finding in a reminder definition. Code was added to display the drug class or VA Generic so that the output is similar to when drug classes or VA Generics are used directly as findings in a definition.

#### Change in Patch 12

• A hint was added on how to add a second occurrence of a finding. The hint will be displayed when a double question mark is typed when editing the findings in a definition or a term.

#### Changes in Patch 4

- When editing a term, if the term has a sponsor, a check is made to ensure that the class of the term and the class of the sponsor are the same; if not, then the user is prompted again for the class and sponsor until the classes match. There was a bug where even if the class of the term and the class of the sponsor were the same, it was saying they did not match. This bug was corrected.
- Term edit was changed so that the user cannot "^" out when the Class of the term and Class of the sponsor do not match.
- A change was made so that if a term contains only drugs or orderable items, the field USE START DATE can be edited. Note that USE START DATE is available in both definitions and terms for all drug findings and orderable items.
- A new national term, VA-PCMM INSTITUTION, was created to be used as a finding rule. It serves the same function as VA-IHD STATION CODE, but its name makes it easier to understand its function. Whenever a finding rule using either of these terms is included in a rule set with the Insert operation, the patient's PCMM Institution will be included with the patient list. The PCMM Institution is determined by first finding the Institution (file #4) entry for the patient's PCMM Team. If the Institution cannot be determined, the word NONE will be displayed.
- A site entered a Remedy ticket about a reminder not evaluating as expected. The finding in question was a term, so the debugger was used to see the details of how the term evaluated and it was found that everything was correct. Since the average Clinical Reminder Manager does not have programmer access, they cannot use the debugger to determine what is happening with a term. Therefore, an option was added to Reminder Test to show how all the findings for a term evaluated.
- The term finding modifier editing sequence was rearranged so it matches the sequence for definitions and term inquiry.
- InV.2.0, a change was made so that for terms used as findings in national reminders, the user could select a term and edit the findings on the term. This change introduced a bug that allowed the user to edit any of the findings in the reminder. The bug was corrected.
- The cross-reference on term findings for building the "enode" was never updated to the new form that was developed in V.2.0. (The enode is used for processing the term's findings.) This resulted in the enode not being built correctly for non-CH lab findings; other finding types were not affected. This was corrected. A section was added to the post-init to make sure all the definition and term lab enodes are set correctly.
- The computed finding parameter in reminder terms was not allowing the "^" character. This was fixed.

• There was a bug in term output when multiple occurrences of the same type of mapped finding were found. For example, if three occurrences were found, it would write three sets of output:

Line 1	
Line 1 Line 2	
Line 1 Line 2 Line 3	

This was corrected.

#### **Reminder Term Management Options**

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

#### 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//
                                           SEP 16,2003 14:17 PAGE 1
REMINDER TERM LIST
                                        _____
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.
                  AIMS (FI(2)=MH(234))
   Findings:
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
_____
THD DIAGNOSIS
                                                       No.27
_____
Class:
                   NATIONAL
Sponsor:
                   Office of Quality & Performance
                  JUL 23,2001
Date Created:
Review Date:
Description:
   This term represents patients diagnosed with Ischemic Heart Disease
   (IHD).
   This term is distributed pre-mapped to the VA-ISCHEMIC HEART DISEASE
   taxonomy. The Active Problem list, Inpatient Primary Diagnosis and
   Outpatient Encounter Diagnosis are used to search for IHD ICD9 diagnoses.
Edit History:
   Edit Date: JAN 18,2002 16:03
                                 Edit Bv: 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.

NOTE: USE COND IN FINDING SEARCH has been changed to USE STATUS/COND IN SEARCH. Give this field 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 1HBs Ab positiveNATIONAL2HBs Ag positiveNATIONAL 1 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 0 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.

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 are a new finding type introduced in version 2.0. They 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-\*LOCATION LIST EMERGENCY VA-\*LOCATION LIST NEXUS MENTAL HEALTH CLINICS VA-\*LOCATION LIST NEXUS PRIMARY CARE CLINICS VA-ALL LOCATIONS VA-IHD QUERI CLINIC STOPS VA-MH QUERI MH CLINIC STOPS VA-MH QUERI PC CLINIC STOPS VA-MHTC APPT STOP CODES LL

#### Changes in Patch 24

This patch contains 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.

#### Changes in Patch 18

Using a non-existent location list was causing a hard error during reminder evaluation. A change was made so that this will generate an evaluation status of ERROR instead of causing a hard error. Also, a MailMan message will be sent to the Clinical Reminders group. The message has the following format:

The Computed finding evaluation requested by XXXX,YYY on MMM DD, YYYY@HH:MM:SS requires appointment data which could not be obtained from the Scheduling database due to the following error(s): INVALID INPUT ARRAY ENTRY

#### Changes in Patch 12

- If a Location List had a value in the field CREDIT STOPS TO EXCLUDE (LIST), the Location List referenced by this field was not automatically being packed-up. The packing routine was changed so it will be automatically be included.
- There is a FileMan bug that under certain conditions causes problems by generating extraneous nodes when a Clinic Stop is deleted. The cross-references on CLINIC STOP and CREDIT STOP TO EXCLUDE were modified to pass the node and the set and kill code checks the node so the sets and kills are done correctly. Code was added to the post-init to clean up any bad nodes that may already exist.

#### Changes in Patch 6

• A new option, Copy Location List, was added. Timing data was added to the Location List Management Menu.

### 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 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 List	PXRM LOCATION LIST EDIT	This option allows creation and editing of Location Lists
LC	Copy Location List	PXRM LOCATION 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. If the original location list is prefixed with "VA-", the "VA-" will be stripped off the name automatically to create the name for the new location list entry. 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 AMIS 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 INTERVAL 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
TININGE OUD UGE DOKDER GRE	547
	553
DAY HOSPITAL-GROUP	554
PSYCHOGERIATRIC DAY PROGRAM	578
PSYCHOGERIATRIC DAY PROGRAM PTSD DAY HOSPITAL	570
PTSD DAY TREATMENT	581
Hospital Locations:	
Name: VA-*LOCATION LIST NEXUS PRIM Class: NATIONAL	MARY CARE CLINICS
CIASS. NATIONAL	
Clinic Stops:	
-	201
GENERAL INTERNAL MEDICINE	301
PRIMARY CARE/MEDICINE	323
PRIMARY CARE SHARED APPT	348
CARDIOLOGY	303
ENDO./METAB (EXCEPT DIABETES)	
DIABETES	306
HYPERTENSION	309
INFECTIOUS DISEASE	310
PULMONARY/CHEST	312
COMP WOMEN'S HLTH	322
GERIATRIC PRIMARY CARE	
MH MED PRI CARE IND 2ND TO 323	530
MH PRIMARY CARE - GROUP	563
Hospital Locations:	
Name: VA-ALL LOCATIONS	
Class: NATIONAL	
CLASS. NATIONAL	
Clinic Stops:	
Hospital Locations:	
News VALUE AUERT OFFICE ATTAC	
Name: VA-IHD QUERI CLINIC STOPS	
Class: NATIONAL	
Clinic Stops:	
GENERAL INTERNAL MEDICINE	301
CARDIOLOGY	303
ENDO./METAB (EXCEPT DIABETES)	305
DIABETES	306
HYPERTENSION	309
PULMONARY/CHEST	312
PRIMARY CARE/MEDICINE	323
GERIATRIC PRIMARY CARE	350
	502
MENTAL HEALTH CLINIC - IND	
COMP WOMEN'S HLTH	322
Hospital Locations:	
Name: VA-MH NO SHOW APPT CLINICS I	L .
Class: NATIONAL	
Clinic Stops:	
MENTAL HEALTH CLINIC - IND	502
MH RESIDENTIAL CARE IND	503
	505
DAY TREATMENT-INDIVIDUAL	
DAY HOSPITAL-INDIVIDUAL	506
PSYCHIATRY - INDIVIDUAL	509
PSYCHOLOGY-INDIVIDUAL	510
TOTCHOROGI INDIAIDOVH	5±0

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 572 573 574 MH INCENTIVE THERAPY F TO F 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
PULMONARY/CHEST	312
MH MED PRI CARE IND 2ND TO 323	531
Hospital Locations:	
Name: VA-MH STOP CODES FOR PTSD EV	VALUATION
Class: NATIONAL	
Clinic Stops:	
PTSD - GROUP	516
PTSD - INDIVIDUAL	562
PTSD CLINICAL TEAM PTS IND	540
PTSD DAY TREATMENT	581
PISD DAI IREAIMENI	501
PTSD POST-TRAUMATIC STRESS	541
SUBST USE DISORDER/PTSD TEAMS	519
MENTAL HEALTH CLINIC - IND	
MH RESIDENTIAL CARE IND	503
DAY TREATMENT-INDIVIDUAL	505
DAY HOSPITAL-INDIVIDUAL	506
PSYCHIATRY - INDIVIDUAL	
PSYCHOLOGY-INDIVIDUAL	510
MENTAL HEALTH CONSULTATION	512
ACTIVE DUTY SEXUAL TRAUMA	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
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
MENIAL HEALIH CLINIC-GROUP 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
SERV-MH GROUP	572
PSYCHOGERIATRIC - INDIVIDUAL	576
PSYCHOGERIATRIC - GROUP	577
TELEPHONE/PSYCHOGERIATRICS	579
PTSD DAY HOSPITAL	580
PRRC INDIVIDUAL	582
PRRC GROUP	583
PRRC TELEPHONE	584
Hospital Locations:	
Nama, VA_MURC ADDR CROD CODEC II	
Name: VA-MHTC APPT STOP CODES LL	
Class: NATIONAL	
Clinic Stops:	500
MENTAL HEALTH CLINIC - IND	502
MH RESIDENTIAL CARE IND	503

GRANT & PER DIEM GROUP	504
DAY TREATMENT-INDIVIDUAL	505
DAY HOSPITAL-INDIVIDUAL	506
HUD/VASH GROUP	507
HCHV/HCMI GROUP	508
	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
	523
OPIOID SUBSTITUTION	523 524
ACTIVE DUTY SEXUAL TRAUMA	
	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
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	
PSYCHOGERIATRIC - GROUP	577
PTSD DAY HOSPITAL	580
PRRC INDIVIDUAL	582
PRRC GROUP	583
RRTP AFTERCARE IND	588
INTERCARE IND	500
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: li 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 505 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO DAY HOSPITAL-INDIVIDUAL 506 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 508 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 524 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: 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 550 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 554 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 MHICM - GROUP 567 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: NO SERV-MH GROUP 572 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO MH INCENTIVE THERAPY F TO F 573 Credit Stops to Exclude (LIST): VA-MHTC EXCLUSIONS STOPS Exclude locations with no credit stop: NO 574

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 576 PSYCHOGERIATRIC - INDIVIDUAL 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 588 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: le Add/Edit Location List
Select Location List: jg-list
 Are you adding 'jg-list' as a new REMINDER LOCATION LIST (the 6TH)? No// y
  (Yes)
  REMINDER LOCATION LIST CLASS: 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
                                            706
 Are you adding 'ALCOHOL SCREENING' as
   a new CLINIC STOP LIST (the 1ST for this REMINDER LOCATION LIST)? No// oldsymbol{y}
   (Yes)
  Select CREDIT STOP TO EXCLUDE: <Enter>
Select CLINIC STOP: alcohol tr
       ALCOHOL TREATMENT
    1
                                 81
     2
        ALCOHOL TREATMENT-GROUP
                                       556
     3
        ALCOHOL TREATMENT-INDIVIDUAL
                                            508
CHOOSE 1-3: 1 ALCOHOL TREATMENT
                                    81
 Are you adding 'ALCOHOL TREATMENT' as
    a new CLINIC STOP LIST (the 2ND for this REMINDER LOCATION LIST)? No// {f 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//f y
(Yes)
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. Once the host file is on the site's system, the Exchange Utility can load the host file into the site's Exchange File (#811.8). After the host file is loaded into the Exchange File, the packed reminders can be installed.

NOTE: 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,

#### Corrections made in patch 24

- Remedy ticket **#592128**. In some cases the Reminder Exchange silent installer was incorrectly linking reminder definitions and dialogs. This was corrected.
- Remedy tickets #573543 and #593623. There was a problem in Reminder Exchange causing an undefined error when installing a dialog using Install Selected instead of Install All. This was fixed.
- Remedy ticket **#707134**. For components that are not installable, Reminder Exchange would create a non-installable placeholder in the Exchange file by only packing the .01. Because Exams typically only have a .01, they were being made non-installable when they should be installable. Additional checks to determine if a component is installable were added so Exams are now installable.
- Remedy ticket **#606273**. In Reminder Exchange, if a definition selected for packing was linked to a dialog and that definition used CF.VA-REMINDER DEFINITION, either directly or through a term, the dialog was not being packed. This was because the variable RIEN was not newed in CHKCF^PXRMEXPS and that same variable name is used in SDEF^PXRMEXPS so the original RIEN was being replaced with the RIEN for the computed finding.
- In Reminder Exchange, if a dialog is being installed and the disable field was set to No then the dialog was installed with a Disable Status of Disable and Send Message. For National Dialogs the disable status should be set to No. This problem has been fixed.
- Because of a problem with a dialog not being installed properly during testing, the update action was removed.

## Changes in patch 18

- A problem where a TIU Template was being packed up incorrectly was corrected. All entries in PCE files were installing at a low IEN, which makes them national, so sites could not edit them. This was changed; now only national PCE entries will be installed at low IENs.
- Reminder Exchange did not have all the functionality needed for installing updates to national terms. The merge action preserved site-mapped findings, but did not allow updates of finding modifiers such as Beginning Date/Time and Ending Date/Time for nationally mapped findings. To improve this situation, a new action called update was added and a change to how merge works was made.

For terms, these actions work as follows:

Update – any finding that is in the Exchange entry and not already mapped is added, and findings that are in the Exchange entry and already mapped in the site entry are updated; i.e., all finding modifiers are set to the values in the Exchange entry. Findings that are mapped in the site entry but not in the Exchange entry are left as is. Merge – any finding that is already mapped in the site entry is left as is, and any finding that is in the Exchange entry but not already mapped in the site entry is added.

For dialogs these actions work as follows:

Update – additional findings that are in the site entry are left and any additional findings that are in the Exchange entry but not already in the site entry are added. All other dialog fields are set to what is in the Exchange entry.

Merge – additional findings that are in the site entry are left and any additional findings that are in the Exchange entry but not already in the site entry are added.

Note that during interactive installs, action choices for dialogs are only available when using the install selected action. If install all, is used everything is installed in overwrite mode.

## Changes in patch 12

Major enhancements were made to Reminder Exchange. The main change visible to users is the ability to select individual reminder file entries for packing. Now when the Create Exchange File Entry (CFE) action is selected, the user will be presented with the following selection list:

```
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 LIST RULE

8 REMINDER SPONSOR

10 REMINDER TAXONOMY

11 REMINDER TERM
```

Select a file: (1-11):

Multiple items of different types can be selected for packing into a single Exchange File entry. For reminder dialogs, selection of individual dialog items is now allowed; the user is no longer limited to packing up the entire dialog.

In previous versions of Reminder Exchange, only reminder definitions could be selected; the packing included everything the definition needed to function, such as sponsor, findings, and dialog. In this new version of Reminder Exchange, this functionality has been extended. When a reminder file entry is selected from the above list, everything it needs to function will be included in the packed entry. An extract definition could include reminder definitions and rule sets, which in turn have their own dependencies. Because of this, an Exchange file entry may contain components that were not expected.

To help the user know what is being included, as it is packing up an entry, Reminder Exchange will list every single component that is being included.

TIU/Health Summary Objects will be packed up if they are used in a reminder dialog that is being packed. The Health Summary Type will also be packed up if it does not contain local components and it does not contain the PROGRESS NOTES SELECTED component. A normal TIU Object will not be packed. If a TIU Object or Health Summary Type is not packed up, these items will appear in the list of components in the reminder exchange entries, but they will not be installable. Because of the packing order, these items will be installed on the system after the dialog is installed on the system.

For TIU Objects, Health Summary Objects, Health Summary Types, and/or entries from the Order Dialog file (#101.41) that are not packed up, descriptive text has been added to the reminder exchange entry summary field, describing what is in the items that were not packed up. This should help the receiving sites recreate these items as needed.

Automated dialog error checking has been added. All dialogs that are on the list to be packed will be checked. Two levels of severity will be reported: WARNING and FATAL ERROR. Each error will give a detailed description of the problems that are found. A FATAL ERROR prevents the dialog from being packed; therefore the packing will abort. A WARNING will allow the packing to proceed.

- FATAL errors mean the dialog will not work and are caused by things such as a pointer to an item that does not exist.
- WARNING means the dialog will function but possibly not as expected. For example, if the dialog contains a disabled item a warning will be generated. See example 2 and 3 for a display of the checker.

The following examples illustrate the points discussed above.

## Example 1

In this example, a single reminder dialog is selected for packing. This dialog contains branching logic with the VA-REMINDER DEFINITION computed finding and it includes a TIU/HS OBJECT with the Clinical Reminder Due Health Summary Component.

```
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
Select a file: (1-11): 4
Select REMINDER DIALOG NAME: EXCHANGE1 DIALOG
                                                                      LOCAL
                                                 reminder dialog
        ...OK? Yes// (Yes)
Enter another one or just press enter to go back to file selection.
Select REMINDER DIALOG NAME:
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
Select a file: (1-11):
Packing components ...
Adding routine PXRMCDEF
Adding VA GENERIC COLESEVELAM, IEN=3662
Adding VA GENERIC CERIVASTATIN, IEN=3505
Adding VA GENERIC FENOFIBRATE, IEN=3489
Adding VA GENERIC ATORVASTATIN, IEN=3382
Adding VA GENERIC FLUVASTATIN, IEN=3184
Adding VA GENERIC SIMVASTATIN, IEN=2708
Adding VA GENERIC PRAVASTATIN, IEN=2689
Adding VA GENERIC LOVASTATIN, IEN=2116
Adding VA GENERIC CHOLESTYRAMINE, IEN=1160
Adding VA GENERIC NIACIN, IEN=1080
Adding VA GENERIC GEMFIBROZIL, IEN=968
Adding VA GENERIC CLOFIBRATE, IEN=795
Adding VA GENERIC COLESTIPOL, IEN=406
Adding ORDER DIALOG ZZJM LIPID PROFILE, IEN=1348
Adding GMRV VITAL TYPE BLOOD PRESSURE, IEN=1
Adding MH TESTS AND SURVEYS AUDC, IEN=5
Adding TIU TEMPLATE FIELD A A PAIN HX CAUSE, IEN=765
Adding EDUCATION TOPICS VA-EXERCISE, IEN=363
Adding EDUCATION TOPICS VA-EXERCISE SCREENING, IEN=11
Adding EDUCATION TOPICS VA-DIABETES FOLLOW-UP, IEN=358
Adding EDUCATION TOPICS VA-DIABETES FOOT CARE, IEN=359
Adding EDUCATION TOPICS VA-DIABETES MEDICATIONS, IEN=357
Adding EDUCATION TOPICS VA-DIABETES EXERCISE, IEN=356
Adding EDUCATION TOPICS VA-DIABETES DIET, IEN=362
Adding EDUCATION TOPICS VA-DIABETES LIFESTYLE ADAPTATIONS, IEN=361
Adding EDUCATION TOPICS VA-DIABETES COMPLICATIONS, IEN=355
Adding EDUCATION TOPICS VA-DIABETES DISEASE PROCESS, IEN=354
Adding EDUCATION TOPICS VA-DIABETES, IEN=360
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE FOLLOW-UP, IEN=8
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE MEDICATIONS, IEN=7
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE EXERCISE, IEN=6
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE DIET, IEN=5
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE COMPLICATIONS, IEN=4
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE DISEASE PROCESS, IEN=3
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE LIFESTYLE ADAPTATIONS, IEN=2
Adding EDUCATION TOPICS VA-SUBSTANCE ABUSE, IEN=1
```

Adding EDUCATION TOPICS VA-NUTRITION/WEIGHT SCREENING, IEN=12 Adding EDUCATION TOPICS VA-ADVANCE DIRECTIVES SCREENING, IEN=9 Adding EDUCATION TOPICS VA-ADVANCE DIRECTIVES, IEN=338 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE SCREENING, IEN=10 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE FOLLOW-UP, IEN=352 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE MEDICATIONS, IEN=351 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE EXERCISE, IEN=350 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE DIET, IEN=349 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE COMPLICATIONS, IEN=348 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE DISEASE PROCESS, IEN=347 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE LIFESTYLE ADAPTATIONS, IEN=340 Adding EDUCATION TOPICS VA-ALCOHOL ABUSE, IEN=339 Adding EXAM FOBT(CLINIC), IEN=660001 Adding HEALTH FACTORS ALCOHOL USE, IEN=12 Adding HEALTH FACTORS BINGE DRINKING, IEN=19 Adding HEALTH FACTORS PT EDUCATION NEEDS/BARRIERS, IEN=612096 Adding HEALTH FACTORS BARRIERS LACK OF SUPPORT SYSTEM, IEN=612108 Adding HEALTH FACTORS REMINDER FACTORS, IEN=41 Adding HEALTH FACTORS ACTIVATE SIGMOIDOSCOPY, IEN=52 Adding HEALTH FACTORS INACTIVATE SIGMOIDOSCOPY, IEN=51 Adding HEALTH FACTORS ACTIVATE BREAST CANCER SCREEN, IEN=43 Adding HEALTH FACTORS INACTIVATE BREAST CANCER SCREEN, IEN=42 Adding HEALTH FACTORS BRADEN SCALE, IEN=612715 Adding HEALTH FACTORS BRADEN SCALE 9 OR LOWER, IEN=612903 Adding HEALTH FACTORS BRADEN SCALE 10-12, IEN=612902 Adding HEALTH FACTORS BRADEN SCALE 13-14, IEN=612901 Adding HEALTH FACTORS BRADEN SCALE 19 OR HIGHER, IEN=612716 Adding HEALTH FACTORS BRADEN SCALE 15-18, IEN=612714 Adding HEALTH FACTORS LIPID MED INTERVENTIONS, IEN=660077 Adding HEALTH FACTORS ORDER LIPID PROFILE, IEN=660070 Adding HEALTH FACTORS OUTSIDE LDL, IEN=660069 Adding HEALTH FACTORS OUTSIDE LDL 120-129, IEN=80 Adding HEALTH FACTORS UNCONFIRMED DIAGNOSIS, IEN=660084 Adding HEALTH FACTORS UNCONFIRMED IHD DIAGNOSIS, IEN=660085 Adding HEALTH FACTORS LIPID PROFILE INTERVENTIONS, IEN=660074 Adding HEALTH FACTORS OTHER DEFER LIPID PROFILE, IEN=83 Adding HEALTH FACTORS REFUSED LIPID PROFILE, IEN=85 Adding HEALTH FACTORS OUTSIDE LDL >129, IEN=82 Adding HEALTH FACTORS OUTSIDE LDL <100, IEN=81 Adding HEALTH FACTORS OUTSIDE LDL 100-119, IEN=79 Adding HEALTH FACTORS A A PAIN HX OUTSIDE, IEN=660013 Adding HEALTH FACTORS A A PAIN AM OUTSIDE ASSESSMENT, IEN=660017 Adding REMINDER SPONSOR NONE, IEN=19 Adding REMINDER SPONSOR Office of Quality & Performance, IEN=15 Adding REMINDER COMPUTED FINDINGS VA-REMINDER DEFINITION, IEN=35 Adding REMINDER TAXONOMY VA-COLORECTAL CANCER SCREEN, IEN=31 Adding REMINDER TAXONOMY VA-FOBT, IEN=27 Adding REMINDER TAXONOMY VA-FLEXISIGMOIDOSCOPY, IEN=15 Adding REMINDER TAXONOMY VA-MAMMOGRAM/SCREEN, IEN=16 Adding REMINDER TAXONOMY VA-ISCHEMIC HEART DISEASE, IEN=14 Adding REMINDER TERM EDUTEST, IEN=660006 Adding REMINDER TERM VA-ORDER LIPID PROFILE HEALTH FACTOR, IEN=61 Adding REMINDER TERM VA-LIPID LOWERING MEDS, IEN=54 Adding REMINDER TERM VA-OUTSIDE LDL 120-129, IEN=52 Adding REMINDER TERM VA-UNCONFIRMED IHD DIAGNOSIS, IEN=42 Adding REMINDER TERM VA-OTHER DEFER LIPID PROFILE, IEN=41 Adding REMINDER TERM VA-REFUSED LIPID PROFILE, IEN=40 Adding REMINDER TERM VA-LIPID PROFILE ORDERABLE, IEN=39 Adding REMINDER TERM VA-OUTSIDE LDL >129, IEN=36 Adding REMINDER TERM VA-OUTSIDE LDL <100, IEN=35 Adding REMINDER TERM VA-OUTSIDE LDL 100-119, IEN=34 Adding REMINDER TERM VA-LDL, IEN=32 Adding REMINDER TERM VA-IHD DIAGNOSIS, IEN=27

Adding REMINDER TERM BRANCHING LOGIC TERM, IEN=527 Adding REMINDER DEFINITION EDUTEST, IEN=660020 Adding REMINDER DEFINITION EDUTEST, IEN=223 Adding REMINDER DEFINITION DVF REMINDER, IEN=365 Adding REMINDER DEFINITION AUDC, IEN=318 Adding REMINDER DEFINITION VA-\*COLORECTAL CANCER SCREEN (SIG.), IEN=15 Adding REMINDER DEFINITION VA-\*BREAST CANCER SCREEN, IEN=4 Adding REMINDER DEFINITION VA-IHD LIPID PROFILE, IEN=70 Adding REMINDER DIALOG PXRM COMMENT, IEN=1 Adding REMINDER DIALOG PXRM REFUSED, IEN=86 Adding REMINDER DIALOG ED EXERCISE REFUSED, IEN=660006 Adding REMINDER DIALOG PXRM OUTSIDE LOCATION, IEN=41 Adding REMINDER DIALOG PXRM VISIT DATE, IEN=40 Adding REMINDER DIALOG ED EXERCISE DONE ELSEWHERE, IEN=660043 Adding REMINDER DIALOG PXRM LEVEL OF UNDERSTANDING, IEN=2 Adding REMINDER DIALOG ED EXERCISE DONE, IEN=660005 Adding REMINDER DIALOG ED EXERCISE SCREENING REFUSED, IEN=660004 Adding REMINDER DIALOG ED EXERCISE SCREENING DONE ELSEWHERE, IEN=660042 Adding REMINDER DIALOG HF BARRIER TO LEARNING, IEN=660169 Adding REMINDER DIALOG ED EXERCISE SCREENING DONE, IEN=660003 Adding REMINDER DIALOG ED SUBSTANCE ABUSE REFUSED, IEN=660002 Adding REMINDER DIALOG ED DIABETES FOOT CARE REFUSED, IEN=660118 Adding REMINDER DIALOG ED DIABETES FOOT CARE DONE ELSEWHERE, IEN=660117 Adding REMINDER DIALOG ED DIABETES FOOT CARE DONE, IEN=660084 Adding REMINDER DIALOG ED NUTRITION/WEIGHT SCREENING REFUSED, IEN=660053 Adding REMINDER DIALOG ED NUTRITION/WEIGHT SCREENING DONE ELSEWHERE, IEN=660286 Adding REMINDER DIALOG ED SUBSTANCE ABUSE DONE ELSEWHERE, IEN=660041 Adding REMINDER DIALOG ED NUTRITION/WEIGHT SCREENING DONE, IEN=660051 Adding REMINDER DIALOG ED SUBSTANCE ABUSE FOLLOW-UP REFUSED, IEN=660282 Adding REMINDER DIALOG ED SUBSTANCE ABUSE FOLLOW-UP DONE ELSEWHERE, IEN=660278 Adding REMINDER DIALOG ED SUBSTANCE ABUSE FOLLOW-UP DONE, IEN=660205 Adding REMINDER DIALOG ED DIABETES REFUSED, IEN=660008 Adding REMINDER DIALOG ED DIABETES DONE ELSEWHERE, IEN=660044 Adding REMINDER DIALOG ED DIABETES DONE, IEN=660007 Adding REMINDER DIALOG ED SUBSTANCE ABUSE DONE, IEN=660001 Adding REMINDER DIALOG EXCHANGE 4, IEN=660000158 Adding REMINDER DIALOG MH AUDC, IEN=1509 Adding REMINDER DIALOG AUTO AUDC, IEN=1510 Adding REMINDER DIALOG INACTIVE OBJECT, IEN=1710 Adding REMINDER DIALOG OBJECT TEST, IEN=1516 Adding REMINDER DIALOG ORDER ELEMENT, IEN=1049 Adding REMINDER DIALOG RGP4 ELEMENT 2, IEN=1536 Adding REMINDER DIALOG RGP4 ELEMENT 1, IEN=1535 Adding REMINDER DIALOG RESULT GROUP 4, IEN=1534 Adding REMINDER DIALOG RGP1 ELEMENT 2, IEN=1520 Adding REMINDER DIALOG RGP1 ELEMENT 1, IEN=1519 Adding REMINDER DIALOG RESULT GROUP 1, IEN=1529 Adding REMINDER DIALOG GP1 ELEMENT 2, IEN=1515 Adding REMINDER DIALOG RGP2 ELEMENT 2, IEN=1522 Adding REMINDER DIALOG RESULT ELEMENT 1, IEN=1537 Adding REMINDER DIALOG RGP3 ELEMENT 2, IEN=1526 Adding REMINDER DIALOG RGP3 ELEMENT 1, IEN=1525 Adding REMINDER DIALOG RESULT GROUP 3, IEN=1533 Adding REMINDER DIALOG RGP2 ELEMENT 1, IEN=1521 Adding REMINDER DIALOG RESULT GROUP 2, IEN=1530 Adding REMINDER DIALOG VA-IHD LIPID OTHER DEFER, IEN=390 Adding REMINDER DIALOG VA-IHD SPACER, IEN=397 Adding REMINDER DIALOG VA-IHD LIPID 120-129 DONE ELSE, IEN=392 Adding REMINDER DIALOG VA-IHD LIPID >129 DONE ELSE, IEN=281 Adding REMINDER DIALOG VA-IHD LIPID 100-119 DONE ELSE, IEN=280 Adding REMINDER DIALOG VA-IHD LIPID <100 DONE ELSE, IEN=279 Adding REMINDER DIALOG VA-IHD LIPID DONE ELSEWHERE GROUP, IEN=404 Adding REMINDER DIALOG VA-IHD UNCONFIRMED DIAGNOSIS, IEN=276

```
Adding REMINDER DIALOG VA-IHD LIPID REFUSED, IEN=270
Adding REMINDER DIALOG VA-IHD DIRECT LDL ORDERED, IEN=278
Adding REMINDER DIALOG VA-IHD FASTING LIPID ORDERED, IEN=277
Adding REMINDER DIALOG VA-IHD LIPID ORDER GROUP, IEN=272
Adding REMINDER DIALOG VA-IHD LIPID PROFILE HEADER, IEN=209
Adding REMINDER DIALOG VA-IHD LIPID PROFILE, IEN=269
Adding REMINDER DIALOG GP1 ELEMENT 1, IEN=1514
Adding REMINDER DIALOG GROUP 1, IEN=1527
Adding REMINDER DIALOG EXCHANGE DIALOG, IEN=1709
Adding HEALTH SUMMARY COMPONENT PCE HEALTH FACTORS ALL, IEN=204
Adding HEALTH SUMMARY COMPONENT CLINICAL REMINDERS DUE, IEN=202
Adding HEALTH SUMMARY COMPONENT TEST, IEN=5000147
Adding HEALTH SUMMARY COMPONENT PCE HEALTH FACTORS SELECTED, IEN=203
Adding HEALTH SUMMARY TYPE NP NEW HS TYPE, IEN=223
Adding HEALTH SUMMARY TYPE TEST PROGESS, IEN=208
Adding HEALTH SUMMARY TYPE VA-BRADEN SCALE 30D, IEN=104
Adding HEALTH SUMMARY OBJECTS NP TIUHS OBJECT TEST (TIU), IEN=6600090
Adding HEALTH SUMMARY OBJECTS LAB TEST (TIU), IEN=6600003
Adding HEALTH SUMMARY OBJECTS VA-BRADEN SCALE 30D (TIU), IEN=6600082
Adding TIU DOCUMENT DEFINITION PATIENT SEX, IEN=74
Adding TIU DOCUMENT DEFINITION PATIENT RACE, IEN=75
Adding TIU DOCUMENT DEFINITION NP TIUHS OBJECT TEST, IEN=1647
Adding TIU DOCUMENT DEFINITION TIU TEST, IEN=1337
Adding TIU DOCUMENT DEFINITION BRADEN SCALE 30D, IEN=1332
Packing is complete.
```

Notice that the above list contains an extensive set of items, even though only a single reminder dialog was selected for packing. Everything in the dialog was checked for dependencies and each dependency was automatically included. In turn, each of these was checked for dependencies and so on. This recursive dependency inclusion may generate a list of items that is far larger than originally expected but it insures that everything required by the items selected for packing is included in the packed entry.

## Example 2

In this example a reminder dialog is selected and the dialog checking generates a warning.

```
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
Select a file: (1-11): 4
Select REMINDER DIALOG NAME: EXCHANGE2 DIALOG reminder dialog
                                                                     LOCAL
        ...OK? Yes//
                       (Yes)
Enter another one or just press enter to go back to file selection.
Select REMINDER DIALOG NAME:
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
Select a file: (1-11):
**WARNING**
EXCHANGE2 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.
Packing is complete.
```

Because only a warning is generated, packing is allowed to proceed.

#### Example 3

In this example a reminder dialog is selected and the dialog checking generates a fatal error.

```
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
Select a file: (1-11): 4
Select REMINDER DIALOG NAME: EXCHANGE3 DIALOG reminder dialog
                                                                      LOCAL
        ...OK? Yes// (Yes)
Enter another one or just press enter to go back to file selection.
Select REMINDER DIALOG NAME:
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
Select a file: (1-11):
Checking reminder dialog(s) for errors....
**FATAL ERROR**
EXCHANGE3 DIALOG contains the following errors.
The dialog element BAD OBJECT contains a reference to a TIU Object
OBJECT NOT EXIST in the Dialog Text field. This TIU Object does not exist
on the system.
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.
Cannot create the packed file. Please correct the above fatal error(s).
```

In this example, two errors were found. The first error is considered a Fatal Error, because there is a TIU Object in the dialog that does not exist. The second error is the same error as in Example 2. The Fatal Error prevents the dialog from being packed up.

# Terminology

**Packing:** When you create an Exchange File entry, you select one or more reminder file 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 using a web browser. This will initially put it on your PC. Then it will have to be moved from the PC to the MUMPS server, at which point it can be loaded into the Exchange File (#811.8).

# **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
1. 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
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	-

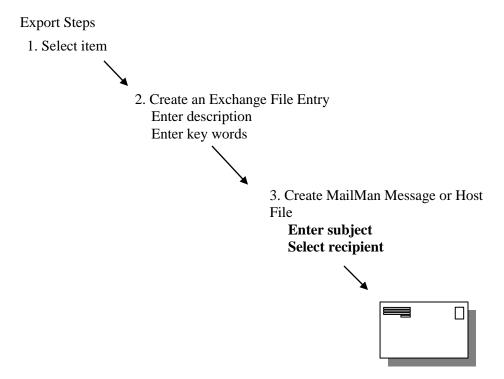
## **Reminder Exchange Main Screen**

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.

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

## 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.

Clin	ical Reminder Exchange Jan	02, 2009@1	1:21:47	Page:	1 of 1
Exch	ange File Entries.				
	Entry	Source	e	Date	Packed
1	BLOOD PRESSURE CHECK	CRPROVIDE	R,ONE@VAMC1	03/28/20	04@13:12:26
2	SLC PNEUMOCOCCAL VACCINE	CRPROVIDE	R,TWO@VAMC2	03/29/20	04@11:55:11
3	VA-*CHOLESTEROL SCREEN (M)	CRPROVIDE	R,SIX@VAMC6	03/27/20	04@14:59:42
4	VA-ADVANCED DIRECTIVES EDUC	CRPROVIDE	R,TEN@VAMC10	3/27/200	4@14:54:24
5	VA-HEP C RISK ASSESSMENT	CRPROVIDE	R,ONE@VAMC1	03/27/20	04@14:56:13
	+ Next Screen - Prev S	creen ??	More Actions		
CFE	Create Exchange File Entry	IH	Installation	History	
CHF	Create Host File	LHF	Load Host Fil	e	
CMM	Create MailMan Message	LMM	Load MailMan	Message	
DFE	Delete Exchange File Entry	LR	List Reminder	Definitio	ns
IFE	Install Exchange File Entry	RI	Reminder Defi	nition Inq	uiry
Sele	ct Action: Quit// <b>CFE</b> Exchan	ge File En	try Creation	-	_

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
Select a file: (1-11):

## 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]

Exchange File Entries.					
Entry	Sourc	Source		Date Packed	
1 BLOOD PRESSURE CHECK	CRPROVIDE	R,ONE@VAMC1	03/28/20	04013:12:26	
2 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER, TWO@VAMC2		03/29/20	04011:55:11	
3 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER, SIX@VAMC6		03/27/20	04@14:59:42	
4 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDE	R,TEN@VAMC10	3/27/200	4@14:54:24	
5 VA-HEP C RISK ASSESSMENT	CRPROVIDE	R,ONE@VAMC1	03/27/20	04@14:56:13	
+ Next Screen - Prev S	Screen ??	More Actions			
CFE Create Exchange File Entry	IH	Installation	History		
CHF Create Host File	LHF	Load Host Fil	e		
CMM Create MailMan Message	LMM	Load MailMan	Message		
DFE Delete Exchange File Entry	LR	List Reminder	Definitio	ons	
IFE Install Exchange File Entry	RI	Reminder Defi	nition Inc	uiry	
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 Actions	
CFE Create Exchange File Entry	IH Installation	History
CHF Create Host File	LHF Load Host File	e
CMM Create MailMan Message	LMM Load MailMan I	Message
DFE Delete Exchange File Entry	LR List Reminder	Definitions
IFE Install Exchange File Entry	RI Reminder Defi	nition Inquiry
Select Action: Quit// cmm MailMa	n Message Creation	

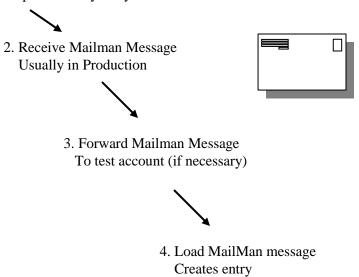
**NOTE**: The number of packed entries you can send via a MailMan message is limited by the MailMan parameters set locally for the number of lines in a message. Please check with your IRM for the number of lines allowed.

```
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:
Lastname, first
                            for a user at this site
Lastname, first@REMOTE-SITE for a user at another site
 (note: DUZ may be used, instead of Lastname, first for local or remote users)
G.<group-name>
                            for a mail group
D.<device-name>
                            for a device
*
                            for a limited broadcast or broadcast to all users
                            (must be Postmaster or XMSTAR key holder)
Prefix any user address with 'I:' to send Information only.
                             'C:' to send Carbon Copy.
                             'L:' to send Later.
                             1 - 1
                                  to delete it.
Enter:
G.?
                            for a list of mail groups
                            for a list of devices
D.?
Enter '??' for detailed help.
Forward mail to: [Enter a user or Mail Group.]
Select basket to send to: IN//
And Forward to:
```

Clini	ical Reminder Exchange May	03, 2004@1	1:27:25	Page: 1 of 1
Succe	essfully stored entries in mes	sage 43035	•	
		~		
	Entry	Sourc	-	Date Packed
1	BLOOD PRESSURE CHECK	CRPROVIDE	R,ONE@VAMC1	03/28/2004@13:12:26
2	SLC PNEUMOCOCCAL VACCINE	CRPROVIDE	R,TWO@VAMC2	03/29/2004@11:55:11
3	VA-*CHOLESTEROL SCREEN (M)	CRPROVIDE	R,SIX@VAMC6	03/27/2004@14:59:42
4	VA-ADVANCED DIRECTIVES EDUC	CRPROVIDE	R,TEN@VAMC1	03/27/2004@14:54:24
5	VA-HEP C RISK ASSESSMENT	CRPROVIDE	R,ONE@VAMC1	03/27/2004@14:56:13
	+ Next Screen - Prev S	creen ??	More Actions	
CFE	Create Exchange File Entry	IH	Installation	History
CHF	Create Host File	LHF	Load Host Fil	Le
CMM	Create MailMan Message	LMM	Load MailMan	Message
DFE	Delete Exchange File Entry	LR	List Reminder	r Definitions
IFE	Install Exchange File Entry	RI	Reminder Defi	inition Inquiry
Selec	ct Action: Quit//			

# **B. Steps to Import Reminders**

1. Request packed entry 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).

Clinical Reminder Exchange Jul 23, 2	2005@11:40:01	Page: 1 of 2
Entry	Source	Date Packed
+ Next Screen - Prev Screen	n ?? More Action	ns
CFE Create Exchange File Entry	IH Installatio	on History
CHF Create Host File	LHF Load Host 1	File
CMM Create MailMan Message	LMM Load MailMa	an Message
DFE Delete Exchange File Entry	LR List Remino	der Definitions
IFE Install Exchange File Entry	RI Reminder De	efinition Inquiry
Select Action: Next Screen// 1mm Load	d MailMan Message	
1 CREX: diabetic eye exam		
CRPROVIDER, ONE JUL 23, 2001@13	1:39:51	
2 CREX: pain screening		
CRPROVIDER, ONE JUL 23, 2001@1	1:37:59	
CHOOSE 1-2: 1 CREX: diabetic eye exam		
CRPROVIDER, ONE JUL 23, 2001@1	1:39:51	
Loading MailMan message number 44024		

# 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	e
protections are set.	

Clinical Reminder Exchange Apr	02 2004011.21.47	Page: 1 of 1	
Exchange File Entries.	02, 2004011.21.47	rage. ror r	
Exchange file Enclies.			
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 Actions		
CFE Create Exchange File Entry	IH Installation	History	
CHF Create Host File	LHF Load Host Fil	.e	
CMM Create MailMan Message			
DFE Delete Exchange File Entry			
IFE Install Exchange File Entry	RI Reminder Definition Inquiry		
Select Action: Quit// <b>lhf</b> Load H	lost File		
Enter a path: USER\$:[TEMP]// <b><ente< b=""></ente<></b>			
The following PRD files were found	l in USER\$:[TEMP]		
DIABETICEYE.PRD;1			
Enter a file name: <b>DIABETICEYE</b>			
Loading host file USER\$:[TEMP]DIAE	BETICEYE.PRD		
Select Action: Quit//			

	2			-	
+	Next Screen	- Prev	Screen	??	More Actions
Create	Exchange File	Entry		ΙH	Installation History
Create	Host File	_		LHF	Load Host File
Create	MailMan Messad	ge		LMM	Load MailMan Message
Delete	Exchange File	Entry		LR	List Reminder Definitions
	-	-		RI	Reminder Definition Inquiry
	file U + Create Create Create Delete	file USER\$:[SPOOL]DIA + Next Screen Create Exchange File Create Host File Create MailMan Messag Delete Exchange File	file USER\$:[SPOOL]DIABETICEY + Next Screen - Prev Create Exchange File Entry	file USER\$:[SPOOL]DIABETICEYE.PRD : + Next Screen - Prev Screen Create Exchange File Entry Create Host File Create MailMan Message Delete Exchange File Entry	Create Exchange File Entry IH Create Host File LHF Create MailMan Message LMM Delete Exchange File Entry LR

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

I Install or Overwrite the current entry

Q Quit the install

S Skip, do not install this entry

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

## 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.

Exchange File Components Aug 24, 2009@11:19:18	Page: 1 of 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 di the past 3 years. This reminder does not resolve. A displayed to the patient if the last 3 BPs were <= 13 was >140/90 or if any of the last 3 BPs was >=160/100	dditional text is 0/80, if the last BP
If you use a different taxonomy for HTN or for renal substitute you local taxonomies into the national rem	
Keywords:	
Components:	
GMRV VITAL TYPE BLOOD PRESSURE	Х
REMINDER SPONSOR	

1 VA National Center for Disease Prevention (NCI		
2 Office of Quality & Per		
3 National Clinical Pract		
REMINDER TAXONOMY		
4 VA-DIABETES	Х	
5 VA-HYPERTENSION	X	
REMINDER TERM		
6 VA-BP >130/80 (ANY OF 1	LAST 3)	
7 VA-BP >=160/100	Х	
8 VA-BP >=140/90	Х	
9 VA-MHV DIABETES OR KID	NEY DISEASE X	
10 VA-MHV HYPERTENSION DX	X	
REMINDER DEFINITION		
11 VA-MHV HYPERTENSION	Х	

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.

Dialog	g Compo	onents	i	Jan 26,	2005@12	2:38:5	51	Pac	je:	1 of	1
Packed	d remin	nder dialog: SI	MOKING	G CESSA	TION EDU	JCATIC	DN				
Item	Seq. I	Dialog Summary							Туре	Εx	ists
1	1	HF ACTIVATE P	NEUMO	COCCAL '	VACCINE	DONE	ELSEWHI	ERE	eleme	ent	Х
2	2	MH AIMS							eleme	ent	Х
3	3	VM BLOOD PRES	SURE I	DONE					eleme	ent	Х
4		SMOKING CESSA	TION H	EDUCATI	ON				dialc	g	Х
	+	Next Screen	- Pre	ev Scre	en ??	More	Action	5			
DD I	Dialog	Details	DT	Dialog	Text		IS	Install	. Selec	ted	
DF I	Dialog	Findings	DU	Dialog	Usage		QU	Quit			
DS I	Dialog	Summary	IA	Instal	l All						
Select	actio	on: 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.

Jan 26, 2005@12:52:05 Dialog Components Page: 1 of 1 Packed reminder dialog: DEMO REMINDER - SIMPLE Item Seq. Dialog Summary Туре Exists 1 DEMO REMINDER - SIMPLE dialog 2 5 IM HEP A DONE element 3 10 IM HEP A DONE ELSEWHERE element 4 15 IM HEP A CONTRA element + Next Screen - Prev Screen ?? More Actions DD Dialog Details DT Dialog Text IS Install Selected Dialog Findings QU DF DU Dialog Usage Quit DS Dialog Summary IA Install All Select Action: Quit// IA Install All All dialog components for DEMO REMINDER - SIMPLE are new. Install reminder dialog without making any changes: Y// ES Reminder Dialog DEMO REMINDER - SIMPLE is not linked to a reminder. Select Reminder to Link: LOCAL HEP A IMMUNIZATION

Dialog	Compo	onents	J	an 26 <b>,</b> 20	05@12:52:05	5	Page	e: 1	of	1
Packed	remir	nder dialog: DA	emo re	MINDER -	SIMPLE					
DEMO RI	EMINDE	ER - SIMPLE (re	eminde	r dialog)	installed	from	exchange	file.		
Item	Seq.	Dialog Summary	Y					Туре	Exis	LS
1		DEMO REMINDER	- SIM	IPLE				dialog		
2	5	IM HEP A DONE						element	t	
3	10	IM HEP A DONE	ELSEW	HERE				element	t	
4	15	IM HEP A CONTR	RA					element	t	
	+	Next Screen	- Pre	v Screen	?? More A	Action	s			
DD D:	ialog	Details	DT	Dialog Te	xt	IS	Install	Selecte	ed	
		Findings			age	QU	Quit			
DS D:	ialog	Summary	IA	Install A	11					
Select	Select Action: Quit//									

## 4. IH – Installation History

Use this option to review the installation of an Exchange File entry.

Clinical Reminder Exchange	Jul 23, 200403	1:27:15	Page:	1 of	2
Exchange File Entries.					
Entry	Sour	ce	Date	Packed	
1 A NEW REMINDER	CRPROVID	ER,ONE@VAMC1			
06/18/2004@11:50:40					
2 A**A SG PAIN SCREENING	CRPROVID	ER,SIX@VAMC6			
07/23/2004@10:55:23					
+ Next Screen - P	rev Screen ?	More Actions			
CFE Create Exchange File Ent	ry IH	Installation	History		
CHF Create Host File	LHF	Load Host Fi	le		
CMM Create MailMan Message	LMM	Load MailMan	Message		
DFE Delete Exchange File Ent	ry LR	List Reminde	r Definitio	ns	
IFE Install Exchange File En	try RI	Reminder Def	inition Inq	uiry	
Select Action: Next Screen// IH Installation History					
Select Entry(s): (1-4): 2					

Installation History	Jul 23, 200	4@11:27:27	Page:	1 of	1
Entry	Sour	ce	Date 1	Packed	
A**A SG PAIN SCREENING	CRPROV	IDER, ONE@VAMC1			
07/23/2001@10:55:23					
Installation Date	Installed By	•			
1 07/23/2004@10:58:48	CRPROVIDER,C	NE			
Enter ?? for more					
DH Delete Install History	I	D Installatio	on Details		
Select Action: Quit// ID I	nstallation D	etails			
A**A SG PAIN SCREENING	07	/23/2001@10:55	•23 07/23/20	01010.58.	48
Component		tion New Name	• 20 0 , 7 20 7 20		10
-					
EDUCATION TOPICS					
1 MANAGING PAIN		S			
HEALTH FACTORS					
2 REMINDER FACTORS		S			
3 Pain New Category		S			
4 PAIN PATIENT DECLINED T	O REPORT PAIN	S			
5 PATIENT UNABLE TO REPOR	T PAIN SCORE	S			
6 PAIN PATIENT REPORTS NE	W PAIN	S			
7 PATIENT REPORTS NEW PAI	N	S			
8 HF.SG PATIENT NEEDS PAI	N ASSESSMENT	S			
TIU TEMPLATE FIELD					
9 S's OLD/NEW		S			
		-			
Installation Detail			Page:		2
+ Entry		Date Packed	Date In	nstalled	
REMINDER DEFINITION					
10 A**A SG PAIN SCREENING		S			
		-			
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.

Sere	Select Reminder Managers Menu Option: RX Reminder Exchange							
Clin	Clinical Reminder Exchange Jun 21, 2004@12:09:19 Page: 1 of 3							
Exch	Exchange File Entries.							
	Entry	Source	Date Packed					
1	BLOOD PRESSURE CHECK	CRPROVIDER, ONE@VAMC1	03/28/2004@13:12:26					
1		, -						
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	IH Installation	History					
CHF	Create Host File	LHF Load Host Fil	e					
CMM	Create MailMan Message	LMM Load MailMan	Message					
DFE	Delete Exchange File Entry	LR List Reminder	Definitions					

IFE Install Exchange File Entry RI Reminder Definition Inquiry Select Action: Next Screen// <b>DFE</b> Delete Exchange File Entry Select Entry(s): (1-5): <b>1</b>						
Clinical Reminder Exchange Jun	21, 2004@12:09:47	Page: 1 of 3				
Deleted 1 Exchange File entry.						
Entry	Source	Date Packed				
1 SLC PNEUMOCOCCAL VACCINE	CRPROVIDER, TWO@VAMC2	03/29/2004@11:55:11				
2 VA-*CHOLESTEROL SCREEN (M)	CRPROVIDER,SIX@VAMC6	03/27/2004@14:59:42				
3 VA-ADVANCED DIRECTIVES EDUC	CRPROVIDER, TEN@VAMC10	3/27/2004@14:54:24				
4 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	IH Installation	History				
CHF Create Host File	LHF Load Host Fil	e				
CMM Create MailMan Message	LMM Load MailMan	Message				
DFE Delete Exchange File Entry	LR List Reminder	Definitions				
IFE Install Exchange File Entry RI Reminder Definition Inquiry						
Select Action: Next Screen//						

**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:
          С
                    Create a new entry by copying to a new name
          Ι
                    Install
          Q
                    Quit the install
          S
                    Skip, do not install this entry
Enter response: i Install
Name associated with AMIS stop code does not match the one in the
packed reminder:
 AMIS=560
 Site Name=ZZSUBSTANCE ABUSE - GROUP
 Name in packed reminder=SUBSTANCE ABUSE - GROUP
The update failed, UPDATE^DIE returned the following error message:
MSG("DIERR")=1^1
MSG("DIERR",1)=701
MSG("DIERR",1,"PARAM",0)=3
MSG("DIERR", 1, "PARAM", 3) = GYNECOLOGY
MSG("DIERR", 1, "PARAM", "FIELD") = .01
MSG("DIERR",1,"PARAM","FILE")=810.90011
MSG("DIERR",1,"TEXT",1)=The value 'GYNECOLOGY' for field CREDIT STOP TO
EXCLUDE
in CREDIT STOPS TO EXCLUDE SUB-FIELD in CLINIC STOP LIST SUB-FIELD in
file REMIN
DER LOCATION LIST is not valid.
MSG("DIERR", "E", 701, 1) =
REMINDER LOCATION LIST entry NEXUS STOP CODES FY05 did not get installed!
Examine the above error message for the reason.
```

# **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.

## Change in Patch 24

In Reminder Test the FIEVAL output for taxonomies was erroneously displaying FIEVAL(N,"CONDITION") when there was no Condition. This was corrected.

Remedy ticket #242214 reported that reminder test was taking an error when either a patient or a reminder was not selected. This was corrected.

Reminder Test now allows a Browser view, which improves some viewing of details. This was based on a change to Function Findings made in PXRM\*2\*18, to allow the MUMPS division operators in the function string, allowing 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.

## Example:

```
Select Reminder Managers Menu <TEST ACCOUNT> Option:
                                                      Reminder Test
Select Patient: CRPATIENT, ONE
                                     10-17-42
                                                  666112222
                                                                YES
                                                                        SC VET
ERAN
>>> Active Patient Record Flag(s):
     <HIGH RISK FOR SUICIDE>
                                             CATEGORY II
Do you wish to view active patient record flag details? Yes// N (No)
Enrollment Priority:
                                 Category: IN PROCESS
                                                          End Date:
Select Reminder: VA-MH HIGH RISK NO-SHOW FOLLOW-UP
                                                        NATIONAL
Enter date for reminder evaluation: Oct 05, 2012//
                                                      (OCT 05, 2012)
Display all term findings? N// O
Browse or Print? P// B
```

🐨 10.5.21.65.r2w - Reflection for UNIX and OpenVMS	
<u>Elle Edit Connection Setup Macro Window H</u> elp	
Reminder Test	
Reminder: VA-MH HIGH RISK NO-SHOW FOLLOW-UP Patient: CRPATIENT,ONE	
The elements of the FIEVAL array are: FIEVAL(1)=0	
FIEVAL(1,"BDT")=T-10D	
FIEVAL(1,"EDT")=T FIEVAL(1,"TERM")=VA-MH NOSHOW MISSED MH CLINIC APPTS	
FIEVAL(1, "TERM IEN")=809	
FIEVAL(2,"BDT")=FIEVAL(1,1,"DATE") FIEVAL(2,"EDT")=FIEVAL(1,1,"DATE")+1D	
FIEVAL(3,"BDT")=FIEVAL(1,1,"DATE")-8H FIEVAL(3,"EDT")=	
FIEVAL(4,"BDT")=FIEVAL(1,1,"DATE")-8H FIEVAL(4,"EDT")=	
FIEVAL(6,"BDT")=FIEVAL(1,1,"DATE")-8H FIEVAL(6,"EDT")=	
IEVAL(8)=0	_
Col> 1   <pf1>H=Help <pf1>E=Exit  Line&gt; 22 of 82 Screen&gt; 1 of 4</pf1></pf1>	
551, 1 VT500-7 10.5.21.65 via TELNET 01:39:11 Num Cap	⊻ ≤ ::
•••( **********************************	
☞ 10.5.21.65.r2w - Reflection for UNIX and OpenVMS	
Elle Edit <u>C</u> onnection Setup Macro <u>Wi</u> ndow <u>H</u> elp	
Ele Edit Connection Setup Macro Window Help	
Elle Edit Connection Setup Macro Window Help	
Elle Edit Connection Setup Macro Window Help	
Elle Edit Connection Setup Macro Window Help	
Elle Edit Connection Setup Macro Window Help	
Elle Edit Connection Setup Macro Window Help	
Elle Edit Connection Setup Macro Window Help C C V Marro Window Help Reminder Test RISK NO-SHOW FOLLOW-UP E IEVAL array are:	
Elle Edit Connection Setup Macro Window Help C C C C C C C C C C C C C C C C C C C	
Elle Edit Connection Setup Macro Window Help Elle Edit Connection Setup Macro Window Help Reminder Test RISK NO-SHOW FOLLOW-UP E IEVAL array are: H NOSHOW MISSED MH CLINIC APPTS 809	
Elle Edit Connection Setup Macro Window Help Ele Edit Connection Setup Macro Window Help Reminder Test RISK NO-SHOW FOLLOW-UP E IEVAL array are: H NOSHOW MISSED MH CLINIC APPTS 809 L(1,1,"DATE")	
Elle Edit Connection Setup Macro Window Help C C Marco Marco Window Help Reminder Test RISK NO-SHOW FOLLOW-UP E IEVAL array are: H NOSHOW MISSED MH CLINIC APPTS 809 L(1,1, "DATE") L(1,1, "DATE")+1D	
Elle Edit Connection Setup Macro Window Help C C Marco Marco Window Help Reminder Test RISK NO-SHOW FOLLOW-UP E IEVAL array are: H NOSHOW MISSED MH CLINIC APPTS 809 L(1,1, "DATE") L(1,1, "DATE")+1D	
Ele Edit Connection Setup Macro Window Help Reminder Test RISK NO-SHOW FOLLOW-UP E IEVAL array are: H NOSHOW MISSED MH CLINIC APPTS 809 L(1,1, "DATE") L(1,1, "DATE")-8H	
Ele Edit Connection Setup Macro Window Help Reminder Test RISK NO-SHOW FOLLOW-UP E IEVAL array are: H NOSHOW MISSED MH CLINIC APPTS 809 L(1,1, "DATE") L(1,1, "DATE")-8H	
File Edit Connection Setup Macro Window Help      I P M M P P P       Reminder Test       RISK NO-SHOW FOLLOW-UP        IEVAL array are:       H NOSHOW MISSED MH CLINIC APPTS     809     L(1,1, "DATE")     L(1,1, "DATE")-8H       L(1,1, "DATE")-8H	
File Edit Connection Setup Macro Window Help      I P M M P P P       Reminder Test       RISK NO-SHOW FOLLOW-UP        IEVAL array are:       H NOSHOW MISSED MH CLINIC APPTS     809     L(1,1, "DATE")     L(1,1, "DATE")-8H       L(1,1, "DATE")-8H	
Ele Edit Connection Setup Macro Window Help <ul> <li></li></ul>	

## Change in Patch 18

Display of Beginning Date/Time and Ending Date/Time for each finding was added. The format is: FIEVAL("BDT")=Input date/time FIEVAL("BDTE")=evaluated date/time FIEVAL("EDT")=Input date/time FIEVAL("EDTE")=evaluated date/time.

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.

Select Reminder Definit	ion Management Option: RI ion: EDUTEST	Inquire about Reminder Definition Dec 24, 2008 11:00:10 am Page 1
EDUTEST		No. 660020
Print Name:	Education Test	
Class:	LOCAL	
Sponsor:	NONE	
Review Date:		
Rescission Date:		
Usage:	CPRS	
Related VA-* Reminder:		
Reminder Dialog:	EXCHANGE 4	
Priority:		
Description:		
Technical Description:		
Baseline Frequency:		

Here is the inquiry for a reminder called EDUTEST.

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

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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
```

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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) = 1FIEVAL(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) = 1FIEVAL(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) = 0FIEVAL(4, "FINDING") = 363; AUTTEDT( FIEVAL(5) = 1FIEVAL(5, 1) = 1FIEVAL(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) = 1FIEVAL(8, 1) = 1FIEVAL(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)=1FIEVAL(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) = 1FIEVAL("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
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```
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^Baseline
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
:15).
^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
```

use ^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.

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 11 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	
FIEVAL(1,1)=1	A 0 would mean it is false.
FIEVAL(1, 1, "COMMENTS") =	
<pre>FIEVAL(1,1,"CSUB","COMMENTS") =</pre>	
FIEVAL(1,1,"CSUB", "DATE")=2980700	This is the first occurrence of finding 1.
<pre>FIEVAL(1,1,"CSUB","LEVEL OF UNDERSTANDING") =</pre>	There are four occurrences.
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.
<pre>FIEVAL(1,1,"LEVEL OF UNDERSTANDING") =</pre>	Iormat.
FIEVAL(1,1,"VALUE") =	
FIEVAL(1,1,"VISIT")=3935	
FIEVAL(1,2)=1	This is the second occurrence of
<pre>FIEVAL(1,2,"COMMENTS") =</pre>	finding 1.
<pre>FIEVAL(1,2,"CSUB", "COMMENTS") =</pre>	<i></i>
FIEVAL(1,2,"CSUB","DATE")=3000000	
<pre>FIEVAL(1,2,"CSUB","LEVEL OF UNDERSTANDING") =</pre>	
<pre>FIEVAL(1,2,"CSUB", "VALUE") =</pre>	
FIEVAL(1,2,"CSUB","VISIT")=3997	This entry in the Visit File is
FIEVAL(1,2,"DAS")=212	3997.
FIEVAL(1,2,"DATE")=3000000	5771.
<pre>FIEVAL(1,2,"LEVEL OF UNDERSTANDING") =</pre>	
FIEVAL(1,2,"VALUE") =	
FIEVAL(1,2,"VISIT")=3997	
FIEVAL(1,3)=1	
FIEVAL(1,3,"COMMENTS") =	This section shows the final value
<pre>FIEVAL(1,3,"CSUB","COMMENTS") =</pre>	for the three occurrences.
FIEVAL(1,3,"CSUB","DATE")=3000202.15	for the three occurrences.
<pre>FIEVAL(1,3,"CSUB","LEVEL OF UNDERSTANDING")=3</pre>	
<pre>FIEVAL(1,3,"CSUB","VALUE")=3</pre>	
FIEVAL(1,3,"CSUB","VISIT")=3693	
FIEVAL(1,3,"DAS")=159	
FIEVAL(1,3,"DATE")=3000202.15	
<pre>FIEVAL(1,3,"LEVEL OF UNDERSTANDING")=3</pre>	
<pre>FIEVAL(1,3,"VALUE")=3</pre>	
FIEVAL(1,3,"VISIT")=3693	
FIEVAL(1,4)=1	
<pre>FIEVAL(1,4,"COMMENTS") =</pre>	
<pre>FIEVAL(1,4,"CSUB","COMMENTS") =</pre>	
FIEVAL(1,4,"CSUB","DATE")=3000217.085926	
<pre>FIEVAL(1,4,"CSUB","LEVEL OF UNDERSTANDING")=3</pre>	
<pre>FIEVAL(1,4,"CSUB","VALUE")=3</pre>	
FIEVAL(1,4,"CSUB","VISIT")=3720	
FIEVAL(1,4,"DAS")=151	
FIEVAL(1,4,"DATE")=3000217.085926	
<pre>FIEVAL(1,4,"LEVEL OF UNDERSTANDING")=3</pre>	

<pre>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,"CSUB","VISIT")=3935 FIEVAL(1,"DATE")=2980700 FIEVAL(1,"FILE NUMBER")=9000010.16 FIEVAL(1,"FINDING")=1;AUTTEDT( FIEVAL(1,"LEVEL OF UNDERSTANDING")=</pre>	200 is the DA string in the Patient Education file/education topic (see the Patch 12 technical manual for info on the DA strings.)
<pre>FIEVAL(1, 'LEVEL OF ONDERSTANDING ) = FIEVAL(1, "VALUE") = FIEVAL(1, "VISIT") = 3935</pre>	

**NOTE**: 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. See page <u>114</u> for more information.

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)=1FIEVAL(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)=1FIEVAL(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
FTEVAL(3) = 0
FIEVAL(3,"TERM")=VA-OUTSIDE LDL <100^^^3011113</pre>
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) = 0
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
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 as 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") =
	<pre>TFIEVAL(1,1,1,"PROVIDER NARRATIVE")=3906</pre>
	TFIEVAL(1,1,1,"VISIT")=5161991

# **Testing in Health Summary**

The following are steps for testing reminders in Health Summary:

- 1. Activate Clinical Reminders components in the Health Summary Component file. Create a Health Summary Type for testing new reminders being defined.
- 2. Add the Maintenance and Reminder components to the reminder Health Summary Type.
- 3. Select the reminder definition(s) to be tested in the selection items prompt from Clinical Maintenance and Clinical Reminder components.
- 4. If you can't select the clinical reminder components for the Health Summary, the components must be enabled for use, and the "Rebuild Ad Hoc Health Summary Type" option must be run.
- 5. Use the Print Health Summary Menu, "Patient Health Summary" option to begin testing the component for individual patients.
- 6. Find patients with data in VistA that should match the reminder definitions, as well as some that won't have data matches.
- 7. Assess the reminder results: Are the age range and frequency evaluation working? Are the target findings found, taxonomy findings found, and health factors found presenting the actual data found for patients that you know may have some results? When there is no data found, are the no-match comments being displayed (if defined)? Are pertinent negative alterations of the age and frequency criteria working as expected based on taxonomy or health factor findings?

Use the Print Health Summary Menu, "Hospital Location Health Summary" option to print the reminders for a clinic, based on a recently passed date range, or next week's date range. Did the Health Summary print run to completion without any errors?

## **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- nym	Option	Option Name	Description
ТМ	PCE Table Maintenance	PXTT TABLE 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 Menu	PX PCE COORDINATOR MENU	This menu for PCE ADPACS includes all of the user interface options as well as the options for file maintenance.
HS	Health Summary Coordinator's Menu	GMTS 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 Encounter Form	IBDF PRINT BLNK 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 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- nym	Option	Option Name	Description
RL	List Reminder Definitions	PXRM DEFINITION LIST	This option provides a brief summary of selected Clinical Reminder definitions.
RI	Inquire about Reminder Definition	PXRM DEFINITION	Allows a user to display a clinical reminder definition in an easy to read format.
TXL	List Taxonomy Definitions	PXRM TAXONOMY LIST	This option lists the current definitions of all the taxonomies defined in the REMINDER TAXONOMY file.
TXI	Inquire about Taxonomy Item	PXRM TAXONOMY INQUIRY	This option provides a detailed report of a Taxonomy item's definition.
TRI	List Reminder Terms	PXRM TERM LIST	This option is used to give a brief listing of reminder terms.
TR	Inquire about Reminder Term	PXRM TERM INQUIRY	This option allows a user to display the contents of a reminder term in an easy to read format.
SL	List Reminder Sponsors	PXRM SPONSOR LIST	This option is used to get a list of Reminder Sponsors.

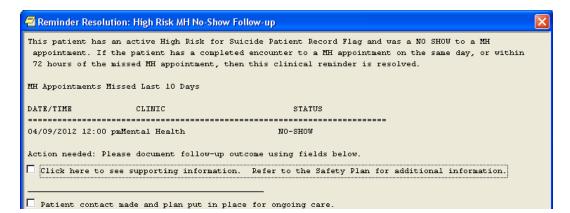
# **Reminder Dialog Management**

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 24

• The dialog info text for VA- HIGH RISK MH NO-SHOW FOLLOW-UP was changed 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.



- Also, the Reminder Dialog was modified to include the Suicide Behavior Report (SBR) for optional entry.
- Remedy ticket #737901 pointed out that the no lock statement in LOCK^PXRMDEDT is confusing, because the lock is on the entry, not the whole file:
  - E W !!,?5,"Another user is editing this file, try later" H 2 Q 0
  - It was changed to:
  - E W !!,?5,"Another user is editing this entry, try later." H 2 Q 0

#### **Changes to Reminder Dialogs in Patch 18**

- A new report, PXRM DIALOG CHECKER ALL, was added to the Dialog Reports Menu. It checks all active reminder dialogs for invalid items.
- As a result of Remedy ticket #418968, dialog loading was changed to look for prompts when loading a reminder taxonomy in a dialog. If prompts are defined, then they will display in CPRS

instead of the default prompts defined in the reminder finding parameter file. Also, a SUPPRESS ALL PROMPTS prompt was added to the group and element editors. This prompt only shows when a taxonomy is used as a finding item. If the value is set to YES, then no prompts will show in CPRS when using a taxonomy in a dialog.

## **Changes to Reminder Dialogs in Patch 12**

- A new option "Check Reminder Dialog for invalid items" has been added to the Dialog Report Menu. 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.
- Changes to reminder dialog functionality to support Data Standardization of the Immunization and Skin Test Files:
  - 1. When a file update is received, reminder dialogs will replace any pre-existing finding items with a new finding item, if there is a one-to-one match and if the file is in an HDI Status of 6 (VUID IMPLEMENTATION COMPLETED AT FACILITY) or 7 (TERM/CONCEPT MAPPING IN PROGRESS AT FACILITY).
  - 2. When immunization and/or skin test entries are mapped to a different entry using the HDIS Generic Mapping Tool, a protocol update will occur to replace the original item. Any reminder dialog entries that are using the original item will be replaced with the new mapped entry when the file status is changed from 7 to s. This information will be included in a MailMan message that is sent to the Clinical Reminders mail group.
  - 3. The Disable field has been changed from a free-text field to a set of codes .

0 for NO

1 for DISABLE AND SEND MESSAGE

2 for DISABLE AND DO NOT SEND MESSAGE

These codes will be used when loading a reminder dialog in CPRS. If an item is marked as DISABLE AND SEND MESSAGE. A MailMan message will be sent to the Clinical Reminder mailgroup.

- 4. When a standardized file has a status of 7 or 6, only an active entry from these files can be added as a finding item or additional finding item to a reminder dialog item.
- 5. When the Immunization or Skin Test files are set to a status of 6, any reminder dialog elements/groups that have a pointer to an inactive immunization or skin test that have not been remapped will be set to DISABLE AND SEND MESSAGE.
- 6. When trying to re-enable disabled dialog elements, groups, or results groups, a check will be performed on the item for any pointer value to an entry in a standardized file. If the entry is inactive and the file status is 6, then the dialog item cannot be reactivated.
- Note that the automatic mapping functionality for data standardization changes to the software are in patch PXRM\*2\*12, but they will be dormant until patch PXRM\*2\*14, which is part of a group of data standardization patches, is installed.
- When auto-generating a reminder dialog from a reminder, a scan will run through the new dialog and it will disable any sub-items that point to an inactive entry in a standardized file.

#### **Changes in Patch 6**

#### Reminder Dialog Changes (VistA)

#### • Data Dictionary Changes

The variable pointer for the Finding Item field was changed to point to the new MH file 601.71 instead of File #601.

PXRM\*2\*6 adds three new fields to the DD for 801.41. These fields will be used by Result Group/Elements and Dialog Elements.

^PXRMD(801.41,D0,50)= (#119) MH TEST [1P:601.71] ^ (#120) MH SCALE [2N] ^ ^PXRMD(801.41,D0,51,0)=^801.41121P^^ (#121) RESULT GROUP SEQUENCE ^PXRMD(801.41,D0,51,D1,0)= (#.01) RESULT GROUP SEQUENCE [1P:801.41] ^

- MH Test is defined when creating/editing a Result Group. As of patch 6, all Result Groups needs to be mapped to a MH Test.
- MH Scale is defined when creating/editing a Result Group. The list of possible scales is based off the MH Test defined in field #119. As of patch 6, all Result Groups need to be mapped to a MH Scale.
- Result Group Sequence is replacing the Result Group/Element field used when creating/editing a Dialog Element for a MH Test. With the new MH DLL in CPRS 27, it is now possible to evaluate multiple scores for each MH Test that contains multiple scales. In the past, we could only evaluate one score per test. With patch 6, only a Result Group can be assigned to a Dialog Element.

Field (#55) RESULT GROUP/ELEMENT [15P:801.41] will be deleted from the 801.41 DD.

Maximum Number of MH Questions has been added a new field to file 800.

^PXRM(800,D0,MH)= (#17) MAXIMUM NUMBER OF MH QUESTIONS [1N] ^

#### • Pre and Post Install

All the National Result Groups and Result Elements will be re-released with Patch 6. These have been updated to look at the correct MH Test and the MH Scale.

Seven new result groups will be released with PXRM\*2\*6. PXRM BRADEN RESULT GROUP PXRM MORSE FALL RESULT GROUP PXRM PCLC RESULT GROUP PXRM PCLM RESULT GROUP PXRM PHQ2 RESULT GROUP PXRM PHQ9 RESULT GROUP PXRM PTSD RESULT GROUP

The PXRM AIMS RESULT ELEMENT 1 Progress note text has been modified to only display the total score of the AIMS test.

The PXRM BDI RESULT GROUP has been marked disabled. Sites should use the PXRM BDI II RESULT GROUP instead of this result group.

NOTE: The MH instrument BDI is being discontinued. The Beck Depression Inventory is an instrument in the Mental Health Assistant that has long been used for evaluating and monitoring depression. For several years, MHA carried both the original version (BDI) and a newer, enhanced version (BDI2). With the release of patch YS\*5.01\*85, the BDI will be inactivated, as the BDI2 is now the preferred version of this instrument. During the pre-init, any dialog elements using BDI will be changed to use BDI2.

National Result Groups assigned to a dialog element will be moved to the new multiple "RESULT GROUP SEQUENCE" if the test assigned to the Result Group matches the MH Finding Item in the element. These items will be stored as the first position. Local Result Groups will not be moved because of the lack of MH Tests defined for the Result Groups. Any Result Group that is not moved should be displayed in a MailMan message stating the name of the Result Group and the Element.

#### • Result Element Editor

A new field was added to the Result Group Editor "Informational Text"; this field allows the sites to add text to a pop-up warning in CPRS. (CPRS 27 and the MH DLL are needed to support this functionality). When CPRS is evaluating the Result Element progress note text, if the Result Element is true, the Informational Text defined in the Result Element will be returned to CPRS 27.

#### • Result Group Editor

In the Result Group Editor, sites will be able to disable a Result Group. Sites will also be able to assign the MH Test and the MH Scale to the Result Group. Both an MH Test and a MH Scale are required before the Result Group can be used in CPRS. A disabled Result Group will not be used in CPRS.

Several enhancements were made to result group editing. Result groups are screened to make sure they match the MH test. If the MH test is changed, any existing result groups are checked and if they do not match the MH finding they are deleted.

#### • Dialog Element Editor

When defining an MH finding item in a dialog element, the user will be able to assign multiple result groups to a dialog element. This is done to support the enhanced functionality of the MH DLL in CPRS 27. The list of Result Groups should be limited to Result Groups that have the same MH test as the MH finding Item, an MH Scale defined, and the Result Group is not disabled. When an MH test is defined in a dialog element, a check will be done to see if the test requires a license. If the test requires a license, a message will be displayed to the user stating "The question text will not appear in the progress note."

#### New Dialog Options in patch 6

• A new option "Edit Number of MH Questions" has been added to the "Reminder Parameters" menu. This option allows the site to determine to set the maximum number of questions an MH test can have and be administered via a Reminder Dialog. The default value when PXRM\*2\*6 is installed is 35. The user will not be able to select a MH test with a number of questions that exceeds the value defined in this option.

#### **Reminder Dialog Changes (CPRS)**

YS\_MHA.DLL is a new tool included with YS\*5.01\*85 that provides an interface to Clinical Reminders functions in CPRS27. This DLL must be deployed to \Program Files\vista\ Common Files. This DLL will replace the current MH functionality in reminder dialogs. The DLL will allow Reminder Dialogs to process *all* MH tests with no more than 100 questions. The maximum number of questions can be set by sites using the option "Edit Number of MH Questions" described in the preceding section. The question and answer text for the progress note, along with the score and scale for each MH test, will be returned by the MH DLL.

CPRS 26 has additional checks to avoid forcing the user to answer all the questions in the MH test if the test is considered resolved without answering all of the questions. This requires installation of PXRM\*2\*6 and YS\*5.01\*85 to work.

A new parameter to toggle the MH DLL on or off was released with CPRS 27.

Select CPRS Configuration (IRM) Option: XX General Parameter Tools LV List Values for a Selected Parameter LE List Values for a Selected Entity LP List Values for a Selected Package LTList Values for a Selected Template ΕP Edit Parameter Values ΕT Edit Parameter Values with Template ΕK Edit Parameter Definition Keyword Select General Parameter Tools Option: EP Edit Parameter Values Select OPTION NAME: XPAR EDIT PARAMETER Edit Parameter Values Edit Parameter Values --- Edit Parameter Values ---Select PARAMETER DEFINITION NAME: OR USE MH DLL Use MH DLL? ----- Setting OR USE MH DLL for System: CPRS27.FO-SLC.MED.VA.GOV ------Use MH DLL?: YES//

# 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 auto-generate 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, 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 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. With PXRM\*2\*6, CPRS V27, and the MH DLL, result elements will be able to display a user defined message to the user in CPRS if the result elements evaluate as True.

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

# **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 Name	Description
RS	Reminder Resolution Statuses	PXRM RESOLUTION EDIT/INQ	This option lists the hierarchy of resolution status values used by CPRS.
HR	Health Factor Resolutions	PXRM HEALTH FACTOR 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/INQUIRE	This option lists the finding parameters used by Create Dialog from Reminder Definition.
FI	Finding Item 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.

Syn.	Name	Option Name	Description
TD	Taxonomy Dialog Parameters	PXRM DIALOG	The dialog for a taxonomy finding is created from the fields in this option each time the reminder dialog is passed to CPRS or viewed through the reminder dialog option.

#### **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	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 DECISION	LOCAL				
10	OTHER - DUE TO COHORT AGE	LOCAL				
11	PATIENT REFUSED	NATIONAL				
	+ Next Screen - Prev Screen	?? More Actions				
AD	Add PT List/Pri	nt All	QU	Quit		_
Selec	t Item: Quit//					

## AD - Add a new local resolution status

Selection List	May 05, 2000 12:11:25	Page:	1 of	1
Reminder Resolution Status		-		
Item Reminder Resolution S	tatus National/L	ocal		
1 CONTRAINDICATED	NATIONAL			
2 DONE AT ENCOUNTER	NATIONAL			
3 DONE ELSEWHERE (HISTO	RICAL) NATIONAL			
4 ORDERED	NATIONAL			
5 OTHER	NATIONAL			
6 PATIENT REFUSED	NATIONAL			
+ Next Screen -	Prev Screen ?? More	Actions		
AD Add F	T List/Print All	QU Quit		
Select Item: Quit// AD Ad	d			

```
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 RESO Answer must be 3-40 characters in		vish		
Select new RESOLUTION STATUS name: OTH Are you adding 'OTHER-DUE TO LIFE EX a new REMINDER RESOLUTION STATUS ( NAME: OTHER-DUE TO LIFE EXPECTANCY RE DESCRIPTION: 1>Other due to life expectancy 2> <enter> EDIT Option: <enter> ABBREVIATED NAME: OTHER - LIFE EXPECT REPORT COLUMN HEADING: OTHER - LIFE EX INACTIVE FLAG: <enter> This resolution status must be linked SELECT NATIONAL RESOLUTION STATUS: OTH</enter></enter></enter>	PECTANCY' as the 7TH)? No// Y (Yes) place <b><enter></enter></b> PECT to a national status			
OK? Yes// <b><enter></enter></b> (Yes)				
	, 2000 12:15:50	Page:	1 of	1
Reminder Resolution Status				
	National/Local			
1 CONTRAINDICATED	NATIONAL			
2 DONE AT ENCOUNTER	NATIONAL			
3 DONE ELSEWHERE (HISTORICAL) 4 ORDERED	NATIONAL NATIONAL			
5 OTHER				
5 OTHER 6 OTHER-DUE TO LIFE EXPECTANCY	NATIONAL LOCAL			
7 PATIENT REFUSED	NATIONAL			
	n ?? More Actions			
AD Add PT List/Pr Select Item: Quit// <enter></enter>	int All QU Quit	-		

# 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
                                                                             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
                                                   QU
                                                        Quit
Select Action: Quit// ED
```

May 05, 2000 12:18:05 Edit List 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 QU Quit 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>

May 05, 2000 12:20:02 1 Edit List 1 of 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)

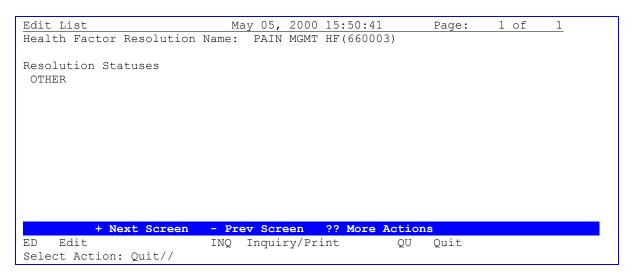
#### **Health Factor Resolutions**

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	Мау	05,	2000	15:39:50	Page:	1 of	1
Health Factor Resolutions							
			_				
Item Health Factors				solution Status	3		
1 ALCOHOL USE			0	THER			
2 BINGE DRINKING			05	THER			
3 CURRENT SMOKER			PZ	ATIENT REFUSED			
4 DRINKING ALONE			0	THER			
5 FAMILY HX OF ALCOHOL A	BUSE		0	THER			
6 NUTRITION			0	THER			
7 PAIN MGMT			0	THER			
8 TOBACCO			D	ONE AT ENCOUNTE	ER/DONE	ELSEWHERE	
+ Next Screen -	Prev	Scr	een	?? More Action	ns		
AD Add PT	L	.st/i	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

Selec	tion List May 05,	2000 10:14:51	Page:	1 of	2				
Healt	h Factor Resolutions								
Item	Health Factors	Resolution Status							
1	ACTIVATE TOBACCO USE SCREEN	OTHER							
2	ALCOHOL USE	OTHER							
3	BINGE DRINKING	OTHER							
4	CURRENT NON-SMOKER	OTHER							
5	CURRENT SMOKER	OTHER							
6	CURRENTLY PREGNANT	OTHER							
7	DRINKING ALONE	OTHER							
8	FAMILY HX OF ALCOHOL ABUSE	OTHER							
9	INACTIVATE BREAST CANCER SCREEN	OTHER							
10	INACTIVATE EXERCISE SCREEN	OTHER							
11	INACTIVATE FOBT CANCER SCREEN	OTHER							
12	INACTIVATE PNEUMOCOCCAL VACCINE	OTHER							
13	LIFETIME NON-SMOKER	OTHER							
14	LIFETIME NON-TOBACCO USER	OTHER							
15	NO RISK FACTORS FOR HEP C	DONE AT ENCOUNTER							
16	NUTRITION	OTHER							
	+ Next Screen - Prev Screen ?? More Actions								
AD	Add PT List/Pri	nt All QU Quit							
Selec	t Item: Next Screen// AD Add								

The option HR Health Factor Resolutions allows selection of reminders:

Select one of the following: Individual Health Factor Т А 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> 0 ADD resolution status for INACTIVATE TOBACCO USE SCREEN: N//  ${\tt YES}$ 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:

Selection List	May 05	, 2000	16:06:4	0	Page:	1 of	1
Finding Type Parameters							
Item Finding Type Parameter							
1 PROCEDURE							
2 EDUCATION TOPIC							
3 EXAM							
4 HEALTH FACTOR							
5 IMMUNIZATION							
6 ORDERABLE ITEM							
7 DIAGNOSIS							
8 SKIN TEST							
9 VITAL MEASUREMENT							
+ Next Screen - F	rev Scr	een	?? More	Actions			
PT List 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:

Finding Type Parameter List	May 05, 2000 16:11:10 Page:	1 of	1
Finding Type Parameter Name:	ED - EDUCATION TOPIC		
		<b>~</b> · · ·	
	Prefix//Suffix & Prompts/Values/Actions		
1 DONE AT ENCOUNTER	Patient had/	Enabled	
	/at this encounter		
	1] PXRM COMMENT		
	2] PXRM LOU (EDUCATION)		
2 DONE ELSEWHERE (HISTORICAL		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	21000100	
	1] PXRM REFUSED (forced value)		
L Nouth Comoon	2] PXRM COMMENT		
	Prev Screen ?? More Actions		
INQ Inquiry/Print QU			
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:

Selection List	May 05,	2000 10:35:36	Page:	1 of	1				
Finding Item Parameters									
Item Finding Item Type & Nam	ie	Dialog Group/Eleme	ent	Status					
1 HF-ED SUBSTANCE ABUSE (OVERRIDE) ED SUBSTANCE ABUSE REFUSED									
2 HF-ALCOHOL	2 HF-ALCOHOL ALCOHOL DIALOG GROUP								
+ Next Screen - Prev Screen ?? More Actions									
AD Add PT	List/Pr	int All	QU Quit						
Select Item: Quit//									

When you select a specific finding item parameter, details of the selected finding item parameter are displayed. You can then edit:

Edit List May 05, 2000 10:48:25 Page: 1 of 1							
Finding Item Parameter Name: ALCOHOL (ENABLED)							
Finding Type: HF(6) Finding Item: ALCOHOL							
Dialog Group: ALCOHOL DIALOG GROUP (ENABLED)							
1) Dialog Element: HF BINGE DRINKING OTHER (ENABLED)							
Dialog Text: Binge drinking							
Additional Prompts: PXRM COMMENT							
2) Dialog Element: HF DRINKING ALONE OTHER (ENABLED)							
Dialog Text: Drinking alone							
Additional Prompts: PXRM COMMENT							
+ Next Screen - Prev Screen ?? More Actions							
ED Edit INQ Inquiry/Print QU Quit							
Select Action: Quit//							

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.

## Taxonomy Dialog Edit (TD)

Dialogs for reminders with taxonomy findings are created from the REMINDER TAXONOMY file #811.2 as the dialog is passed to CPRS. This option maintains the fields used by this type of dialog. Changes made to a taxonomy dialog are immediately effective on reminder dialogs including the taxonomy finding item.

Changes may be made through this option to:

- Taxonomy header question
- Current/Historical procedure questions
- Current/Historical diagnosis questions
- Selectable codes (ICD9/CPT) and user modified descriptions

DX/PR parameters allowing for individual questions for each code (rather than presenting codes as a checklist box).

The first screen in this option displays all taxonomies:

Selection List	May	05,	2000	11:14:48	Page:	1 of	3
Taxonomy Dialog							
Item Reminder Taxonomy							
1 FTEST1							
2 PAIN TAXONOMY							
3 probtest 1							
4 probtest 2							
5 RADIOLOGY TAXONOMY							
6 SLC DIABETES							
7 SLC-Ear Mites							
8 VA-ALCOHOL ABUSE							
9 VA-ALCOHOLISM SCREENING							
10 VA-BREAST TUMOR							
11 VA-CERVICAL CA/ABNORMAL PA	P						
12 VA-CERVICAL CANCER SCREEN							
13 VA-CHOLESTEROL							
14 VA-COLORECTAL CA							
15 VA-COLORECTAL CANCER SCREE	N						
+ Next Screen - Prev	Scr	en	?? 1	More Actions			
PT List All QU Qu	it						
Select Item: Next Screen//							

If you select one of the items above, the dialog for the selected taxonomy is displayed:

Edit List	May 05, 2000 11:17:16 Page: 1 of 1
Taxonomy Name:	SLC DIABETES
Taxonomy Dialog	3
1	Taxonomy header prompt
1.1	Diagnosis this encounter
	Selectable codes: 100.9 LEPTOSPIROSIS, UNSPECIFIED
	391.8 MODIFIED TEXT
1.2	Historical Diagnosis
	Selectable codes: 100.9 LEPTOSPIROSIS, UNSPECIFIED
	391.8 MODIFIED TEXT
1.3	Current Procedure
	Selectable codes: 10060 DRAINAGE OF SKIN ABSCESS
	76091 MAMMOGRAM, BOTH BREASTS
+ Nez	t Screen - Prev Screen ?? More Actions
ED Edit	INQ Inquiry/Print QU Quit
Select Action:	Quit// Edit

Dialog Text Fields DIALOG HEADER TEXT: Patient is diabetic// CURRENT VISIT DX DIALOG HDR: Diabetes diagnosis at this encounter Replace HISTORICAL VISIT DX DIALOG HDR: Previously diagnosed diabetic Replace CURRENT VISIT PR DIALOG HDR: Current Procedure// HISTORICAL VISIT PR DIALOG HDR: Historical Procedure Replace Dialog Selectable codes Select SELECTABLE DIAGNOSIS: 391.8// SELECTABLE DIAGNOSIS: 391.8// DISPLAY TEXT: DISABLED: Select SELECTABLE DIAGNOSIS: Select SELECTABLE PROCEDURE: 76091// SELECTABLE PROCEDURE: 76091// DISPLAY TEXT: DISABLED: Select SELECTABLE PROCEDURE: Dialog Generation Parameters GENERATE DIALOG DX PARAMETER: GENERATE DIALOG PR PARAMETER:

All selectable codes for the taxonomy are preloaded at implementation. Codes not required may be disabled. The display text for the diagnosis/procedure may also be modified if the standard text for the code is not acceptable. If the taxonomy has only a few codes, then by setting the Generate Dialog DX/PR parameters, it is possible to create a dialog with individual sentences for each code. The sentences (dialog elements) are created from the REMINDER FINDING TYPE PARAMETER file (CPT/POV).

# **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

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 dialog. Allows the sequence numbers to be changed. Also

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

		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.

Dialo	q Edit List		Dec 15, 2004@14:04:59			Page:	1 of	4	
-	-		SSION ASSESSMENT [NAT		] *LIMITED	EDIT*			
Item	Seq. Dialog Sum	mary							
1	5 Element: VA-TE	XT DE	PRESSION EVAL INSTRUC	TIONS					
2	2 7 Element: VA-TEXT BLANK LINE WITH TEMPLATE FIELD								
3	3 10 Group: VA-GP DEP MDD CRITERIA DISPLAY								
4	10.5 Element: VA	-TEXT	MDD DSM-IV CRITERIA	DISPL	AY				
_									
5	12 Group: VA-GP P	HQ 9							
C	10 E Elements 373	meve							
6	12.5 Element: VA	-1.FX1	PHQ 9						
7	15 Element: VAA-T		TANK IINE						
/	15 Element. VAA-1	GVI C	LANK LINE						
8	20 Group: VA-GP D	EP AS	SESSMENT RESULTS						
+ Next Screen - Prev Screen ?? More Actions									
ADD	Add Element/Group	DS	Dialog Summary			rint			
	Copy Dialog	DO	Dialog Overview	QU	Quit				
DD	Detailed Display								
	Progress Note Text								
Selec	t 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	De	ec 15, 2	004@14:04:59			Page:	1 of	4
	R DIALOG NAME: VA-					*LIMITED	2	-	
Item	Seq. Dialog Ove	rview		-		-			
1	5 Element: VA-TE	XT DEPI	RESSION	EVAL INSTRUCT	FIONS				
2	7 Element: VA-TE	XT BLAI	NK LINE	WITH TEMPLATH	E FIE:	LD			
3	10 Group: VA-GP D	EP MDD	CRITERI	A DISPLAY					
	-								
4	12 Group: VA-GP P	HQ 9							
_									
5	15 Element: VAA-T	EXT BL	ANK LINE						
6	20 Group: VA-GP D	0 Group: VA-GP DEP ASSESSMENT RESULTS							
7	7 24 Element: VAA-TEXT BLANK LINE								
8	30 Element: VA-HF	PT FO	LLOWED F	OR DEPRESSION	V				
	+ Next Screen	- Pres	v Screen	22 More Ad	tion	8			
ADD Ad	d Element/Group			ummary			rint		
CO Co	py Dialog	DO I	Dialog O	verview					
DD De	tailed Display	DT I	Dialog T	ext					
DP Pr	ogress Note Text	ED I	Edit/Del	ete 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.

#### Changes made by PXRM\*2.0\*6 and YS\*5.01\*85:

The Clinical Reminders package currently interfaces with a version of the Mental Health Assistant (MHA) MHA3.

Clinical Reminders formerly used Mental Health Instruments from the MH Instrument file (#601) in reminder definitions, reminder terms, and reminder dialogs, but was required to change all use of the MH Instrument file (#601) to the new MH TESTS AND SURVEYS file (#601.71). Patch 6 converts current pointers from entries in file #601 to #601.71.

The CR package previously got patient results from the PSYCH INSTRUMENT PATIENT file, (#601.2), but MHA3 files all patients' results in the MH ADMINISTRATIONS file (#601.84). Pre-MHA3 results will not be converted from the PSYCH INSTRUMENT PATIENT file (#601.2) to the MH ADMINISTRATIONS file (#601.84). In MHA3, the MH ADMINISTRATIONS file (#601.84) will contain the patient results collected during the administration of a specified instrument from the MH TESTS AND SURVEYS file (#601.71).

#### **Clinical Reminder Dialog Result Group/Element Changes**

- MH Test is defined when creating/editing a Result Group. As of patch 6, all Result Groups need to be mapped to a MH Test.
- MH Scale is defined when creating/editing a Result Group. The list of possible scales is based on the MH Test defined in field #119. As of patch 6, all Result Groups need to be mapped to a MH Scale.
- Result Group Sequence is replacing the Result Group/Element field used when creating/editing a Dialog Element for a MH Test. With the new MH dll in CPRS 27, it is now possible to evaluate multiple scores for each MH Test that contains multiple scales. In the past, we could only evaluate one score per test. With patch 6, only a Result Group can be assigned to a Dialog Element.
- All the National Result Groups and Result Elements will be re-released with Patch 6. These have been updated to look at the correct MH Test and the MH Scale. There are also quite a few new national Result Groups.

The PXRM AIMS RESULT ELEMENT 1 Progress note text has been modified to only display the total score of the AIMS test.

The PXRM BDI RESULT GROUP has been marked disabled. Sites should use the PXRM BDI II RESULT GROUP instead of this result group.

Any dialog element that points to the BDI MH test will be re-pointed to the BDI2 MH Test.

National Result Groups assigned to a dialog element will be moved to the new multiple "RESULT GROUP SEQUENCE" if the test assigned to the Result Group matches the MH Finding Item in the element. These items will be stored as the first position. Local Result Groups will not be moved because of the lack of MH Tests defined for the Result Group. Any Result Group that is not moved should be displayed in a message stating the name of the Result Group and the Element.

Several enhancements were made to result group editing. Result groups are screened to make sure they match the MH test. If the MH test is changed, any existing result groups are checked and if they do not match the MH finding, they are deleted.

#### • Result Element Editor

A new field was added to the Result Element Editor "Informational Text"; this field allows the sites to add text to a pop-up warning in CPRS. (CPRS 27 and the MH dll are needed to support this functionality). When CPRS is evaluating the Result Element progress note text, if the Result Element is true, the Informational Text defined in the Result Element will be returned to CPRS 27.

#### • Result Group Editor

In the Result Group Editor, sites will be able to disable a Result Group. Sites will also be able to assign the MH Test and the MH Scale to the Result Group. Both a MH Test and a MH Scale are required before the Result Group can be used in CPRS. Disable Group will not be used in CPRS.

#### • Dialog Element Editor

When defining a MH finding item in a dialog element, the user will be able to assign multiple result groups to a dialog element. This is done to support the enhanced functionality of the MH dll in CPRS 27. The list of Result Groups should be limited to Result Groups that have the same MH test as the MH finding Item, and a MH Scale is defined, and the Result Group is not disabled. When a MH test is defined in a dialog element, a check will be done to see if the test required a license. If the test requires a license, a message will be displayed to the user stating "The question text will not appear in the progress note."

#### **New Option**

A new option, "Edit Number of MH Questions," has been added to the Reminder Parameters menu. This option allows the site to determine what is the most number of questions in a MH test to answer in a Reminder Dialog. The default value when patch 6 is installed is 35. The user will not be able to select a MH test with a number of questions that exceeds the value defined in this option.

The text of the dialog is derived from the mental health package and cannot be modified using the Reminder Dialogs option.

Score-based progress note text is generated from the Dialog Result Groups/Elements entered in the result field of the dialog element. The following result groups are included with the package:

Dialog List	Sep 25, 2007@12:	38:19	Page:	1 of	2
DIALOG VIEW (RESULT GROUPS)					
Them Dieles Mene			_		
Item Dialog Name		Dialog typ		Status	
6 PXRM AIMS RESULT GROUP		Result Gro	-		
7 PXRM AUDC RESULT GROUP		Result Gro	-		
8 PXRM AUDIT RESULT GROU		Result Gro	-		
9 PXRM BDI II RESULT GRO	JP	Result Gro	up		
11 PXRM BRADEN RESULT GRO	JP	Result Gro	up		
12 PXRM CAGE RESULT GROUP		Result Gro	up		
13 PXRM DOM80 RESULT GROU	2	Result Gro	up		
14 PXRM DOMG RESULT GROUP		Result Gro	up		
15 PXRM MISS RESULT GROUP		Result Gro	up		
16 PXRM MORSE FALL RESULT	GROUP	Result Gro	up		
17 PXRM PCLC RESULT GROUE		Result Gro	up		
18 PXRM PCLM RESULT GROUE		Result Gro	up		
19 PXRM PHQ2 RESULT GROUE		Result Gro	-		
20 PXRM PHO9 RESULT GROUP		Result Gro	-		
21 PXRM PTSD RESULT GROUP		Result Gro	-		
22 PXRM ZUNG RESULT GROUP		Result Gro	-		
+			-T-		
+ + Next Screen -	Prev Screen ?? M	lore Action	s	>>>	
AD Add CV	Change View	INQ	Inquiry/Prim	nt	
CO Copy Dialog PI	List/Print All	QU	Quit		
Select Item: Quit//		~ -	~		

## IMPORTANT NOTE:

With the release of Mental Health patch YS\*5.01\*103, several new instruments were included. Of these new instruments, the following utilize complex scoring algorithms.

BAM—Brief Addiction Monitor BASIS-24—Behavior and Symptom Identification Scale CDR—Clinical Dementia Rating FAST—Functional Assessment Staging Test ISMI—Internalized Stigma of Mental Illness Inventory POQ—Pain Outcomes Questionnaire WHYMPI—West Haven Yale Multiphasic Pain Inventory

Issues have been identified with the interface between these instruments and Clinical Reminders and Health Summary packages.

#### PROBLEMS WITH REMINDER DIALOGS

If you administer these 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. Any Conditions placed against the scores on these findings would also apply the condition to the wrong value for evaluation.

Currently a group of developers are reviewing this as it seems that a patch for MH, CPRS, Clinical Reminders and / or Health Summary may be necessary.

It is strongly suggested that sites NOT use the above instruments within a Reminder Dialog template for administration, NOT use them in a Reminder Definition, and NOT use them in any Health Summary data objects, until patches can be developed and released to correct this issue.

# Mental Health Test Dialogs, cont'd

This is the Inquiry/Print for result group AIMS:

Dialo	g List	.Tup 0.6	2007@09:09:50	F	Page: 1 of	2
	G VIEW (RESULT GROUPS)	0011 00,	2007809.09.30	1	age. I UI	2
DINEO						
Item	Dialog Name		Dialog	type	Stat	us
	AGP BPRS 210 RG		Result			
2	AGP BPRS 212 RG		Result	-		
3	AGP PTSD RESULT GROUP		Result	Group		
4	AGP PTSD RESULT GROUP 2		Result	Group		
5	PXRM AIMS RESULT GROUP		Result	Group		
6	PXRM AUDC RESULT GROUP		Result	Group		
7	PXRM AUDIT RESULT GROUP		Result	Group		
8	PXRM BDI II RESULT GROU	2	Result	Group		
9	PXRM BDI RESULT GROUP		Result	Group	Disa	bled
10	PXRM BRADEN RESULT GROU	2	Result	Group		
	PXRM CAGE RESULT GROUP		Result	Group		
	PXRM DOM80 RESULT GROUP		Result	Group		
	PXRM DOMG RESULT GROUP		Result	-		
	PXRM MISS RESULT GROUP		Result	-		
	PXRM PHQ2 RESULT GROUP		Result	-		
16	PXRM PHQ9 RESULT GROUP		Result	Group		
+	+ Next Screen - P:	cev Scre	en ?? More Ac	tions		>>>
AD .	Add CV	Change	View	INQ Inqui	ry/Print	
CO	Copy Dialog PT				-	
Selec	t Item: Next Screen// IN	2 Inqu	iry/Print			
Selec	t Dialog Definition: PXRI	4 AIMS R	ESULT GROUP	result	group NAT	IONAL
	OK? Yes// (Yes)					
DEVIC	E: HOME					
REMIN	DER DIALOG INQUIRY		Jun	06, 2007	9:10:37 am P	age 1
	NUMBER: 208	DUDY				
			AIMS RESULT GR	OUP		
	Disable		1.4			
			lt group			
	Clas: Sponso:		UNAL			
	Review Date					
	MH IES MH Scale Numbe:	t: AIMS r: 1				
	Exclude from P					
	EXCLUDE FROM PI	N .				
Edi	t History:					
цат	c miscory.					
GROTT	P COMPONENTS:					
GI(UU	L COMEONEINID.					
	Sequence: 1					
Ro	sult Element: PXRM AIMS	RESILT	ELEMENT 1			
-	nt Condition:	TTOCUTI				
	lement text:					
	The patient was evaluated	t for ev	motoms of tardi	vo dveking	eia lleina tha	
	AIMS.	I TOT SÅ	mptoms of cardi	ve uyskille	sia usiliy che	
-						
	Total score tor itema	-7.	CODE!			
	Total score for items	1-7:	SCORE			
nfor	Total score for items : mational text:	1-7:	SCORE			

Action CV within Reminder Dialogs allows result groups and result elements to be modified. The position of the score in the progress note text is defined by a |SCORE| marker in the result element.

Г

NOTE: |SCORE| works like TIU Objects, by retrieving and inserting the score in place of the marker.

Example of giving a Mental Health Instrument:

#### With CPRS 26:

🖅 Reminder Resolution: Screen	for Depression	Pressing the
Negative (total score	PHQ9	Perform button
🖸 Positive (total score	Over the past 2 weeks, how often have you been bothered by any of the following problems?	causes the Mental
Initial follow-up to : complete the PHQ-9 q	Please read each item carefully and give your best response.	Health Instrument dialog to appear.
A positive PHQ-9 shou PHQ-9. Also, positi intervention and trea <u>PHQ-9 Questionnaire</u>	Not at all	
Record PHQ-9 Perform PHQ9	<ol> <li>Trouble falling or staying asleep, or sleeping too much</li> </ol>	
Question 10. If yo do your work, take * 🤦 Not difficu	4. Feeling tired or having little energy	
No data available f	5. Poor appetite or overeating	
SUICIDE RISK SCREENIN	<ol> <li>Feeling bad about yourself or that you are a failure or have let yourself or your family down</li> </ol>	
Are you feeling hopel optional		
O No O Yes	7. Trouble concentrating on things, such as reading the newspaper or watching television	~
Clear Clinical M	Clear <u>O</u> K C	Cancel

Alcohol Abuse Screen (AUDIT-C):

# With CPRS 27 and MH DLL:

PHQ9: LU,LULU	
Over the past 2 weeks, how often have you been bothered by any of the following problems? Please read each item c best response.	aretuily and give your
1. Little interest or pleasure in doing things	
C 1. Not at all	
O 2. Several days	
O 3. More than half the days	
O 4. Nearly every day	
2. Feeling down, depressed, or hopeless	
C 1. Not at all	
C 2. Several days	
C 3. More than half the days	
O 4. Nearly every day	
3. Trouble falling or staying asleep, or sleeping too much	
C 1. Not at all	
🔘 2. Several days	
🔘 3. More than half the days	
O 4. Nearly every day	
4. Feeling tired or having little energy	
C 1. Not at all	
C 2. Several days	
🔘 3. More than half the days	
O 4. Nearly every day	
5. Poor appetite or overeating	
C 1. Not at all	-
Use speed tab	
Quit Hint: Use the number key of the item to speed data entry.	Done
	.::

# **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.

Four new fields have been added to the dialog editors to support this logic enhancement.

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
         11
  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	]				×
Orders							
🗖 Order	coccult blood pan	el.)					
🗖 Orden	Colonoscopy or S	igmoidoscopy					
Outside Sc	reening Done Previ	ously					
🗖 Outsi	ide Occult Blood R	esult					
🗖 Prior	Normal Colonosco	ру					
🗌 Prior	: Colonoscopy - Ab:	normal					
D Prior	: Sigmoidoscopy						
	stside colonscopy	or sigmoidosco	ру				
_	or Refusals						
	history of Colon C	ancer in a Fir	st Degree R	elative			
Educatio	n						
Clear	Clinical <u>M</u> aint	<u>V</u> isit Info	< Back	Next >	Finish	Cancel	
<no encounter<="" td=""><td>information entered&gt;</td><td></td><td></td><td></td><td></td><td></td><td>_</td></no>	information entered>						_
i * Indicates a Re	quired Field						_

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

🚝 Reminder Re	solution: Colorectal Cance	er Screening				×
Orders						
An ICD coo impairmen adequate: would af:	al Impairment *** de has been entered f nt or blindness. Pat ly perform occult blo fect their ability to opy for screening for	tients who are se od testing. If perform the occ	verely visual this patient ult blood tes	ly impaired m. has severe vi	ay not be able sual impairmen	e to nt that
C Order C	olonoscopy or Sigmoi	doscopy				
Order o	ccult blood panel.					
Outside Scree	ening Done Previously	,				
Outside	Occult Blood Result					
Prior N	ormal Colonoscopy					
Prior C	olonoscopy - Abnorma	1				
Prior S	igmoidoscopy					
No outs	ide colonscopy or si	gmoidoscopy				
Deferals o	r Refusals					
Family his	tory of Colon Cancer	in a First Degre	ee Relative			
Education	-	-				
Clear	Clinical <u>M</u> aint	<u>V</u> isit Info	< Back	Next >	Finish	Cancel
<no encounter="" info<="" td=""><td>rmation entered&gt;</td><td></td><td></td><td></td><td></td><th></th></no>	rmation entered>					
I * Indicates a Requi	red Field					

# Example 4

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

🚝 Reminder Reso	lution: Serology for Hepati	tis C Risk				×
Order lab to	est for Hepatitis C					
Previously t	cested for Hepatitis (	;				
Declines ter	sting for Hepatitis C					
Life Expects	ancy < 6 months					
EVALUATE FOR T	ESTING FOR OTHER CHRO	NIC VIRAL INFECTIO	NS			
HEPATITIS B TE	STING					
Hepatiti:	s B profile					
Outside Hep	Hepatitis B surface an B surface Ag pos (HB:	ntigen positive (c sAg +)	arrier)			
Hep	utside Result - Hep B atitis B core antibody atitis B surface antił	y positive (HBc.	Ab +) or	ion)		
	utside Result - Hepat: B core Ab neg and no					
	s B Serology Not India	-				
HIV TESTING						
HIV Sero						
	V serology negative					
Prior HI	7 serology positive					
Clear	Clinical <u>M</u> aint	⊻isit Info	< Back	Next >	Finish	Cancel
				·		·
<no encounter="" inform<="" td=""><th>nation entered&gt;</th><td></td><td></td><td></td><th></th><td></td></no>	nation entered>					
I * Indicates a Require	d Field					

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

🚝 Reminder Resolution: Serology for Hepatitis C Risk 🛛 🔀
🗖 Order lab test for Hepatitis C
Previously tested for Hepatitis C
Declines testing for Hepatitis C
Life Expectancy < 6 months
EVALUATE FOR TESTING FOR OTHER CHRONIC VIRAL INFECTIONS
Hepatitis B serology has been performed previously.
HIV testing has been done previously
Clear Clinical <u>M</u> aint <u>V</u> isit Info ≺ Back Next > Finish Cancel
<no encounter="" entered="" information=""></no>
i * Indicates a Required Field

## 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 set everything up correctly and the branching logic works if I do something to the dialog, but if I pulled it up and cancel the dialog out without checking anything, the branching logic does not work. The site is using CPRS 24.27.
- A There is a bug in any version of CPRS before 25. Launching a dialog from the Reminder Drawer and canceling out of the dialog will not allow it to branch. To fix this problem, your first element in the dialog must be set to suppress, or an item must be checked in the dialog. We are recommending that the dialog be set up with a dummy element set to suppress and the text in the dialog text field contains five blank spaces.
- **Q** I think I set everything up correctly, but the branching logic does not seem to be working correctly.
- A Verify that the term is evaluating correctly for your patient; you can do this by running the reminder test output from VistA.

# 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.

File Edit View Action Options Tools Help			
CRPATIENT.ONE Edit Templates 666-11-2222 Oct 17.15 Create New Template	Primary Care Team Unaccigned	Flag Bereda 👸	Postings A
Last 100 Signed Notes Edit Shared Templates Edit Shared Templates Create New Shared Template	Oct 21,2004@14:26		Change
Cot 21.04  Edit Tempiste Fields  Cot 21.04  Edit Tempiste Fields			
Cot 18,04 HEP GEN			Ê
Templates			
∇ Reminders			
Due     Problem Drinking Scre     Tobacco Cessation E			
- 🚰 JG TOBACCO USE S			
Alcohol Abuse Educa Pheumovax			
Weight and Nutilion 5			
Applicable     B     Not Applicable			-1
Other Calegories			Ľ
Diagnose: DIETARY SURVET     Patient Educations: VA-NUTRI			
Cover Sheet   Problems   Meds   Orders Notes   Consults   Sun	gery D/C Summ Labs Reports		

🚝 Template Field Editor							_ 🗆 🗵
Action				Delete	Co	ру	New
Template Fields							
A A SG PAIN NEW/OLD. Combo		Name:	A A SG PAI		_		
1.5	Combo 🔺	Туре:	Combo Box	💽 Field Le	en: 10 –	Text	Len: 🛛 📑
A A PAIN HX CAUSE	Combo 📕	Default:					•
A A SG PAIN NEW/OLD.	Combo	D	NEW PAIN	(FLD:ADMI)		010	<u> </u>
A GENERIC WORD PROCESSING BOX	WP	Items:	LOCATION	(FDD:ADHI)	LIED FR	UH)	
AAAAA PETER	Button		CAUSE				
AAUSUALPAIN	Button						
ABOVE/BELOW	Button						
ADMISSION TYPE	Combo	Line: 4					
ADMITTED FROM	Combo						
ADMITTED FROMX	Combo	Col: 1	•				F
ALL-DATE	Date	LM Text:					
ALL-DATE YEAR	Year		Ilaneous ———			Indent-	
ALL-EDIT BOX	Edit			eparate Lines		Indent F	ield 5 I
ALL-EDIT BOX1	Edit			sparate Lines			
ALL-EDUC DEGREES HELD	Radio	🗌 🗖 Re	quired 🛛 🗖 E>	clude From No	te	Indent T	ext: 0 🚊
ALL-FULL OR DECREASED	Combo						
ALL-NEG OR POS COMBO BOX	* Combo	Notes:					
ALL-R-L-BILAT	Combo Combo						
ALL-STRONG DECREASED ABSENT	Text						
ALL-TEXT FIELD	* Edit						
ALL-YORD PROCESSING	WP I						
Hide Inactive Fields * Indicates a Re		Previe	w	ОК	Cano	el	Apply

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
1 XPAR EDIT BY TEMPLATE Edit Parameter Values with Template action
2 XPAR EDIT KEYWORD Edit Parameter Definition Keyword edit
3 XPAR EDIT PARAMETER Edit Parameter Values action
CHOOSE 1-3: 3 XPAR EDIT PARAMETER Edit Parameter Values action
Edit Parameter Values
Edit Parameter Values
Select PARAMETER DEFINITION NAME: tiu field EDITOR CLASSES Template Field Ed itor User Classes
TIU FIELD EDITOR CLASSES may be set for the following:
1 User USR [choose from NEW PERSON]
3 Service SRV [choose from SERVICE/SECTION]

```
Division
                     DIV
                             [choose from INSTITUTION]
     4
         Divid
System
                       SYS [DVF.FO-SLC.MED.VA.GOV]
     5
         Package
                       PKG [TEXT INTEGRATION UTILITIES]
     6
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//
                        1
User Class: Clin
        Clinical And Laboratory Immuno CLINICAL AND LABORATORY IMMUNOLOGIST
Clinical Biochemical Geneticis CLINICAL BIOCHEMICAL GENETICIST
     1
     2
        Clinical Biochemical Molecular CLINICAL BIOCHEMICAL MOLECULAR
     3
GENETICIST
     4
        Clinical Clerk CLINICAL CLERK
     5 Clinical Coordinator CLINICAL COORDINATOR
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 5 CLINICAL COORDINATOR
Select Sequence Number: ?
                                           Value
     Sequence Number
                                           ____
     _____
     1
                                           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 ...
   1
   2
         Document Definitions (Manager) ...
         User Class Management ...
   3
   4
         TIU Template Mgmt Functions ...
   5
         TIU Alert Tools
Select TIU Maintenance Menu Option: 3 User Class Management
                     --- User Class Management Menu ---
         User Class Definition
  1
   2
         List Membership by User
   3
         List Membership by Class
   5
         Manage Business Rules
Select User Class Management Option: 2 List Membership by User
Select USER: CRPROVIDER, ONE CHIEF, MEDICAL SERVICE
Current User Classes
                             Jan 23, 2003@14:55:15
                                                                  Page: 1 of
                                                                                   1
                                CRPROVIDER, ONE
                                                                    2 Classes
    User Class
                                                        Effective Expires
1
    Clinical Coordinator
                                                        04/28/00
2
    Physician
                                                        11/16/98
                                                                   04/11/15
         + Next Screen - Prev Screen ?? More Actions
    Add
                              Remove
                                                        Quit
    Edit
                              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 C	Class		
2 Business Rule Manager		09/22/0	00
3 Medical Administration	Special	09/11/0	1
4 Social Worker Supervis	sor		
+ Next Screen - Add Edit Select Action: Quit// add	Prev Screen ?? More Actio Remove Change View Add	ns Quit	
2 Clinical Biochemic 3 Clinical Biochemic GENETICIST 4 Clinical Clerk CL 5 Clinical Coordinat Press <return> to see more, CHOOSE 1-5: 5 CLINICAL COO EFFECTIVE DATE: t (JAN 23,</return>	JINICAL CLERK for CLINICAL COORDINATOR '^' to exit this list, OR ORDINATOR 2003)	CHEMICAL GENET CHEMICAL MOLEC	TICIST
EXPIRATION DATE: t+1 (JAN	24, 2003)		
Select Another USER CLASS:			
Rebuilding membership list.			
Current User Classes	Jan 23, 2003014:55:15	Page:	1 of 1
	CRUSER, TWO		Classes
User Class		Effective	Expires
l 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	
5 Social Worker Supervis			
+ Next Screen -	Prev Screen ?? More Act	ions	
Add Edit	Remove Change View	Quit	

## **Dialog Reports**

Option Name		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.
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			-
New in Patch 18			

#### **Reminder Dialog Elements Orphan Report**

```
Select Reminder Managers Menu Option: DM Reminder Dialog Management
  DP
         Dialog Parameters ...
  DI
        Reminder Dialogs
        Dialog Reports ...
  DR
   IA
        Inactive Codes Mail Message
Select Reminder Dialog Management Option: DR Dialog Reports
  OR
         Reminder Dialog Elements Orphan Report
  ER
         Empty Reminder Dialog Report
         Check Reminder Dialog for invalid items
  CH
  ALL
         Check All Reminder Dialogs for invalid items
Select Dialog Reports Option: OR Reminder Dialog Elements Orphan Report
DEVICE: HOME// ;;999999999 ANYWHERE Right Margin: 80//
```

```
Reminder Dialog Elements Orphan Report
```

Page: 1 \_\_\_\_\_

```
Dialog Elements
_____
   A NEW DIALOG ELEMENT FOR IMMUNIZATION
   A NEW HEP A ELEMENT
   EC HISTORICAL (3)
   EC TAXON
   ED ADVANCED DIRECTIVE SCREENING DONE (10)
   ED ADVANCED DIRECTIVE SCREENING DONE (2)
   ED ADVANCED DIRECTIVE SCREENING DONE (3)
   ZZVA-WV PAP SMEAR CLINICAL REVIEW
   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
```

## **Empty Reminder Dialog Report**

```
Select Dialog Reports Option: ER Empty Reminder Dialog Report
DEVICE: HOME// ;;99999999999 ANYWHERE
                                   Right Margin: 80//
Empty Reminder Dialogs Report
                                                            Page: 1
_____
 A COPY OF AGETEST
 AGP EMPTY DIALOG TEST
 ANOTHER NEW REMINDER
 TEST EDIT (1)
 TEST EDIT COPY
Enter RETURN to continue or '^' to exit:
  OR
        Reminder Dialog Elements Orphan Report
  ER
        Empty Reminder Dialog Report
  СН
        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 a 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 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\*\*

## Inactive Codes Mail Message

This option is used to search the Dialog File #801.41 in search of ICD and CPT Codes that have become inactive and send the report in a mail message to the Clinical Reminders mail group.

```
Select Reminder Dialog Management Option: IA Inactive Codes Mail Message
Select one of the following:

1 ICPT Codes

2 ICD9 Codes

3 ALL Codes

Select Codes or All of the codes or "^" to exit: 3// ALL Codes

Check Mail for results....

Press RETURN to continue...
```

# **Dialog Taxonomy Fields**

NAME	DESCRIPTION
DIALOG HEADER TEXT	This text will be displayed as a checkbox in the reminder dialog for this taxonomy.
SELECTABLE DIAGNOSIS	These are the diagnosis codes that may be selected when processing a taxonomy dialog within CPRS. The list of codes is built from the code ranges within the taxonomy when the Clinical Reminders package is installed and includes only active codes.
SELECTABLE PROCEDURE	These are the procedure codes that may be selected when processing a taxonomy dialog within CPRS. The list of codes is built from the code ranges within the taxonomy when the Clinical Reminders package is installed and includes only active codes.
GENERATE DIALOG DX PARAMETER	This parameter works in conjunction with the autogeneration of dialogs. If it is set, then each active code in the selectable diagnosis list will be presented as a separate question in CPRS with text generated from the finding parameter file, #801.45. If it is not set, then there will be a checkbox for current diagnoses and a checkbox for historical entries. Fields #3107 and #3108 can be used to customize the checkbox headers. When one of the checkboxes is checked, then the selectable diagnoses list will be displayed as a drop-down list. This is the default option.
CURRENT VISIT DX DIALOG HDR	This is the diagnosis dialog sub-header text that will be selectable for CPRS users to document a diagnosis from the taxonomy as treated at the current visit. The header text will display with a checkbox which CPRS users can select to see the selectable diagnoses list. If this field is not present, the taxonomy name will be used.
HISTORICAL VIXIT DX DIALOG HDR	This is the diagnosis dialog sub-header text that will be selectable for CPRS users to document a diagnosis from the taxonomy as a historical diagnosis. The header text will display with a checkbox which CPRS users can select to see the selectable diagnoses list. Historical diagnoses selected will require the CPRS user to enter a visit date. If this field is not present, the taxonomy name followed by "(HISTORICAL)" will be used.
GENERATE DIALOG PR PARAMETER	This parameter works in conjunction with the autogeneration of dialogs. If it is set then each active code in the selectable procedure list will be presented as a separate question in CPRS with text generated from the finding parameter file, #801.45.
	If it is not set then there will be a checkbox for current procedures and a checkbox for historical entries. Fields #3110 and #3112 can be used to customize the checkbox headers. When one of the checkboxes is checked then the selectable diagnoses list will be displayed as a drop-down list. This is the default option.
CURRENT VISIT PR DIALOG HDR	This is the procedure dialog sub-header text that will be selectable for CPRS users to document a procedure from the taxonomy as done at the current visit. The header text will display with a checkbox which CPRS users can select to see the selectable procedure list. If this field is not present, the taxonomy name will be used.

NAME	DESCRIPTION
HISTORICAL VISIT	This is the procedure dialog sub-header text that will be selectable for CPRS users to document a procedure from the taxonomy as a historical procedure. The header text will display with a checkbox which CPRS users can select to see the selectable procedure list.
PR DIALOG HDR	Historical procedures selected will require the CPRS user to enter a visit date. If this field is not present, the taxonomy name followed by "(HISTORICAL)" will be used.

# Taxonomy Tip

When Clinical Reminders V.1.5 was released in June of 2000, it introduced the reminder dialog functionality. The installation process generated lists of selectable diagnoses and selectable procedures for each taxonomy that was on the system at the time of the installation. These lists included all the codes in the taxonomy that were active on the date of the install. Any site taxonomies that were created after the installation of V.1.5 do not have a selectable list until the first time a taxonomy dialog for that taxonomy is edited/created. The first time the taxonomy dialog is edited/created, the selectable lists are built from all the currently active codes in the taxonomy. It is important to note that once these lists are generated, they are not automatically updated when the taxonomy is edited. The only way to change them is through the taxonomy dialog editing option.

The code set versioning changes that were made to reminder dialogs ensure that a code that is inactive on the date of the encounter cannot be used. Therefore, inactive codes that are on selectable lists will not cause any problems.

Another code set versioning change that was made causes a check of all the codes used in reminder taxonomies and reminder dialogs whenever a Lexicon patch that updates a code set is installed. That is what creates the MailMan messages that notify you about inactive codes in taxonomies and dialogs. These messages are informational; as noted above, inactive codes will not cause problems, but at some point you may want to remove inactive codes.

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 Categories	PXRM CATEGORY EDIT/INQUIRE	A reminder category may contain a list of reminders and/or other sub-categories. Use this option to edit the list.
CL	CPRS Lookup Categories	PXRM CPRS LOOKUP CATEGORIES	Reminder Categories to be displayed in the Other Categories folder of the note tab are entered here.
CS	CPRS Cover Sheet Reminder List	PXRM CPRS COVER SHEET 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.
MH	Mental Health Dialogs Active	PXRM MENTAL 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 Headers	PXRM PN HEADER	The header inserted into the progress note when processing a reminder may be modified for user, location, or service. The default header is Clinical Reminders Activity.
RA	Reminder GUI Resolution Active	PXRM GUI REMINDERS ACTIVE	This option allows a user to modify the "Reminders Active" CPRS parameter. You can activate GUI reminder resolution processing at a user, service, division, or system level. When activated for one of these levels, a reminders drawer is available on the notes tab for selecting and processing reminders.
DL	Default Outside Location	PXRM DEFAULT LOCATION	Allows the default outside location for reminder dialogs to be specified at user, service, division, or system level.
PT	Position Reminder Text at Cursor	PXRM TEXT AT CURSOR	Allows the position reminder note text at cursor feature to be enabled at user, service, division, or system level.
WH	WH Print Now Active	PXRM WH PRINT NOW	This option allows sites to include the Print Now button on Women's Health dialogs for notification letters.
GEC	GEC Status Check Active	PXRM GEC 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 Reminder Dialog Parameter	PXRM TIU DIALOG TEMPLATE	This option lets users edit the TIU TEMPLATE REMINDER DIALOG parameter.
NP	New Reminder Parameters	PXRM NEW REMINDER 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.

## Fix in PXRM\*2\*18 to Reminder Category:

The input transform for the Display Order field in the Sub-Category multiple of the Reminder Category file had a bug. The first part of the input transform checks to make sure the user has typed in a number between 1 and 99, and the second part calls a routine to make sure the display order is unique. If the user inputs text instead of a number, the input fails the first part of the input transform and the routine is called with an undefined value for Display Order, which causes an error. The input transform was changed so that if the input fails the first part of the input transform, the routine is not called. Remedy ticket #404828.

To activate categories so that they appear in the reminders window in CPRS (under Other Categories), use the option CPRS Lookup Categories on page 272.

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

Selection List	Aug	18,	1999	15:04:41	Pa	ge:	1 of	1
Reminder Categories								
Item Reminder Category								
1 DIABETES CLINIC REMINDE	RS							
2 WEIGHT AND NUTRITION								
+ Next Screen - P:	rev S	Scre	en '	?? More Action	ns			
AD Add PT	Li	st/P:	rint 2	All	QU	Quit	5	
Select Item: Quit//								

#### 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
Sequence: 2 Reminder: TOBACCO USE SCREEN
                    Reminder: TOBACCO USE SCREEN
                3
                    Reminder: VA-*PROBLEM DRINKING SCREEN
     Sequence:
         + Next Screen - Prev Screen ?? More Actions
                              INQ
                                   Inquiry/Print
ED Edit
                                                                  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]
                      SRV [choose from HOSPITAL LOCATIO]
DIV [ISC SALT LAKE]
SYS [DEVCUR ISC -
     1
     2 Location
                    LOC [choose from HOSPITAL LOCATION]
       Service
                     SRV
     3
        Service
Division
     4
     5
        System
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
     5
                                         HEPATITIS C
     10
                                         WEIGHT AND NUTRITION
     15
                                         SLC REMINDER CATEGORY
     20
                                         Usability Test Reminders
Select Display Sequence: 25
Are you adding 25 as a new Display Sequence? Yes//<Enter>
                                                           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// <b><enter></enter></b> (Yes)
Select Display Sequence: <enter></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/SECTION]
    4 Division DIV [ISC SALT LAKE]
5 System SYS [DEVCUD ISC SIG
    5
                     SYS [DEVCUR.ISC-SLC.VA.GOV]
       System
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, ONE
                                            jq
----- Setting Clinical Reminders for Search for User: CRPROVIDER, ONE ------
Select Display Sequence: ?
    Display Sequence
                                        Value
     _____
                                         ____
    1
                                        VA-DIABETIC FOOT CARE ED.
    2
                                        VA-TOBACCO EDUCATION
    5
                                        VA-*PNEUMOCOCCAL VACCINE
    10
                                        VA-INFLUENZA VACCINE
    15
                                        VA-*BREAST CANCER SCREEN
    25
                                        TOBACCO USE SCREEN
     30
                                        VA-*CHOLESTEROL SCREEN (M)
    35
                                         VA-*COLORECTAL CANCER SCREEN (FOBT)
     40
                                         VA-*HYPERTENSION SCREEN
Select Display Sequence: 20
Display Sequence: 20// <Enter>
                                20
Clinical Reminder: MENTAL HEALTH TESTS
Select Display Sequence: <Enter>
```

## 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 functionalty, 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

Options		<u>?</u> ×
General Notifications	Order Checks Lists/Teams Notes	
Date Range defaults		_
•	Change the default date ranges for displaying patient information on your cover sheet.	
	Date Range Defaults	
Clinical Reminders –		- 1
1	Configure and arrange which clinical reminders are displayed on your cover sheet.	
	Clinical Reminders	
Other Parameters –		-
	Configure other parameter settings.	
	Other Parameters	
	OK Cancel App	dy

Then click on Clinical Reminders to get to the editing form.

Clinical Reminders on Cover Sheet		? ×
Reminders not being displayed: Mammography National Hepatitis Lab Extrac Nutrition/Obesity Education Pap Smear Pap Smear Pheumovax Ppd Ppd Problem Drinking Screen Psa Seat Belt Education Seatbelt and Accident Screet Tetanus Diphtheria (td-Adult) Tobacco Cessation Educatio	Reminders being displayed: Diabetic Eye Exam Diabetic Foot Care Education Hepatitis C Risk Assessment Sort by O Display Order O Alphabet	×
	OK Can	cel

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 <u>273</u>).

## **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.

Primary Care Team Unassigne Remote Data	Ø	Postings A
--	---	---------------

Click on Action then click on Edit Cover Sheet Reminder List.

## **Edit Cover Sheet Reminder List**

Clinical Reminders and Remind	ler Catego	orie	s Displayed on	Cover S	heet			X	
Cover Sheet Reminders (Cumulative List)									
Reminder 9	eq Level						Icon Le	-	
+ 👸 AGETEST (Local) 1	0 Syster	m				٥G	Reminder (	Category	
	20 Servio	e	MEDICINE			Ø	Reminder		
	30 Servio	e	MEDICINE			+	Add to Cov	ver Sheet	
🗕 🥁 Seat Belt Education (VA-SE 4	40 Servio	e	MEDICINE			_	Remove Fi	rom Cover Sheet	
+ 📆 Weight and Nutrition Scree 1	0 User		WHPROVIDE	R,ONE		₿	Lock (can	not be removed)	
						Vie	w Cover Sh	eet Reminders	
Select Cover Sheet Parameter Level to Display / Edit									
🖸 System			🖸 Location:				•		
🖸 Division: Salt Lake City Hos		•	🖸 User Class:				•		
🖸 Service: Medicine		•	💽 User:	Whprovide	er,One - PH	iysici.4	AN 📕		
Editing C	Cover Shee	et R	eminders for Us	ser: WHP	ROVIDEF	R,ONE			
Available Reminders & Categories			User Level Remi	inders			Seq	<b>A</b>	
Weight and Nutrition Screen (V/ Weight and Nutrition Screen (JG			🕂 👸 Weight ar	nd Nutrition	Screen (V/	4-*₩	10		
ZZPJH TEST REMINDER (Loc		<b>₽</b>						<b>•</b>	
		<u> </u>						Seg # 10	
🗄 🛅 AGP TEST									
🗄 🖷 CAT								+ Add	
⊡ ⊡ Chicago PAP		-						- Remove	
🔁 🗂 Dialog Demos	>							🕀 Lock	
					OK		Cancel	Apply	

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.

🚝 Cover Sheet Reminders	
Reminder	Seq
Advanced Directives Education	10
Blood Pressure Check	10
Drug Class Test	10
Mammogram	10
Alcohol Abuse Education	20
DIQ Test	20
Mental Health Test	20
Antrys Agetest	30
	[ <u> </u>

## **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.

Clinical Reminders and Reminder Categories Displayed on Cover Sheet									
Cover Sheet Reminders (Cumulative List)									
Reminder	Seq	Level		^	<u> </u>		.egend		
+ 👸 AGETEST (Local)	10	System			<u> </u>	Reminder	Category		
+ 👸 Problem Drinking Screen (V	20	Service	MEDICINE		Ø	Reminder			
+ 🛅 SUBSTANCE ABUSE	30	Service	MEDICINE		+	Add to Co	iver Sheet		
- 👸 Seat Belt Education (VA-SE	40	Service	MEDICINE		_	Remove P	From Cover Sheet		
+ 🛅 HEPATITIS C	10	User Class	CLINICAL COORDINATOR		₽		not be removed)		
+ 👸 Pheumovax (VA-PNEUMOV	50	User	CRPROVIDER.TWO		•	соск (са	rnoc be removedj		
+ 👸 PAIN SCREENING (VA-PAI	60	User	CRPROVIDER, THREE	-	Vie	w Cover Sł	heet Reminders		
+ 👸 Weight and Nutrition Scree	120	User	CRPROVIDER, THREE						
+ 👸 MST Screening (VA-MST S	130	User	CRPROVIDER, THREE						
+ 📆 CHF Patients & ACE (JG-CH	200	User	CRPROVIDER, THREE	¥					
<			>						
Location shown in Cumulative List:			•						
	ing Co	ver Sheet	Reminders for User: CRPRC	٧D	ER,THR	REE			
Available Reminders & Categories			User Level Reminders			Seq 🔺			
Advanced Directives Educatio			+ 👸 Pheumovax (VA-PNEUMO	VAX	- Nati	50	<u> </u>		
Age Test (A NEW REMINDER	- Loc	al) 🔤 💊 🖌	+ 👸 PAIN SCREENING (VA-PA	AN S	CREE	. 60	. ➡		
Age Test (Agetest - Local)			+ 👸 Weight and Nutrition Scree	en (Ji	G-WEI	. 120 🗏	o		
Alcohol Abuse Education (VA			🕂 👸 MST Screening (VA-MST :	SCRI	EENIN	. 130	Seq # 1		
Anticoagulant use-CHF and A			🕂 👸 CHF Patients & ACE (JG-C	HF74	ACE (R	. 200 📃	+ Add		
Antrys Agetest (Antry's Agetes			🕂 📆 Mammogram (VA-MAMMO	GRA	M - N	210	Received		
BOB TEST (BOBTEST - Loca			🕂 📆 PAP Smear Review Result	ts (VA	λ-₩H	220 👡	- Remove		
< []					- · -				
		,	0	ĸ	1	Cancel	Apply		

#### **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:

```
Select CPRS Reminder Configuration Option: NP New Reminder Parameters
Use New Reminder Parameters may be set for the following:
    1 User USR [choose from NEW PERSON]
    2 Service SRV [choose from SERVICE/SECTION]
    3 Division DIV [choose from INSTITUTION]
    4 System SYS [MARTINEZ.MED.VA.GOV]
Enter selection: 4 System MARTINEZ.MED.VA.GOV
-- Setting Use New Reminder Parameters for System: XXXVAMC.MED.VA.GOV ----
USE NEW REMINDER PARAMS: YES//
HUN-0701-20018 RESTRICTED REMINDERS
Description:
```

**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?

```
(12) Jul 05, 2001@09:43:26 CRSUPPORT,ONE
Well, we took a look at the parameters and the following...
Select CPRS Reminder Configuration Option: np New Reminder Parameters
Use New Reminder Parameters may be set for the following:
1 User USR [choose from NEW PERSON]
2 Service SRV [choose from SERVICE/SECTION]
3 Division DIV [VAMC ALBANY PIA]
4 System SYS [CPR.ISC-ALBANY.VA.GOV]
5 Package PKG [ORDER ENTRY/RESULTS REPORTING]
Enter selection: 4 System CPR.ISC-ALBANY.VA.GOV
-- Setting Use New Reminder Parameters for System: CPR.ISC-ALBANY.VA.GOV ----
USE NEW REMINDER PARAMS: NO//
```

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: UserUSR[choose from NEW PERSON]ServiceSRV[choose from SERVICE/SECTION]DivisionDIV[choose from INSTITUTION]SystemSYS[DEVCUR.ISC-SLC.VA.GOV] 1 2 3 4 Enter selection: 1 User NEW PERSON Select NEW PERSON NAME: CRPROVIDER, SIX SC ----- Setting Mental Health Active for User: CRPROVIDER, SIX ------MENTAL HEALTH ACTIVE: YES// <Enter> 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.

Select CPRS Reminder Configuration Menus Option: PN Progress Note Headers Progress Note Header may be set for the following: USR [choose from NEW PERSON] LOC [choose from HOSPITAL LO 1 User Location User 2 [choose from HOSPITAL LOCATION] SRV Service 3 [choose from SERVICE/SECTION] Division DIV [REGION 5] 4 5 System SYS [DEVCUR.ISC-SLC.VA.GOV] [CLINICAL REMINDERS] 6 Package PKG Enter selection: 1 User NEW PERSON Select NEW PERSON NAME: CRPROVIDER, ONE jq ----- Setting Progress Note Header for User: CRPROVIDER, ONE ------PROGRESS NOTE HEADER: ? This response can be free text. PROGRESS NOTE HEADER: GREEN NOTES Reminder Resolution: Tobacco Use Screen X Patient had tobacco use screening at this encounter. Level of Understanding: (None selected) Comment: Patient received tobacco use screening at another facility. Patient declined tobacco use screening at this encounter. Exercise counseling codes ✓ This encounter Selectable Diagnoses: (None Selected) Exercise Counseling (V65.41) Primary Diagnosis Comment: **Progress Note Header text** Other Counseling, Not Elsewhere Classified appears at the top of all text Add to Problem List Person Feigning Illness (V65.2) generated from reminder Previous encounter dialogs for a given note. OK. Cance <u>C</u>lear Clinical Maint-Next > Finish Cancel GREEN NOTES Tobacco Use Screen: Patient had tobacco use screening at this encounter. Exercise counseling codes Patient Educations: Tobacco Use Screening

### **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:
     1UserUSR[choose from NEW PERSON]3ServiceSRV[choose from SERVICE/SECTION]4DivisionDIV[choose from INSTITUTION]5SystemSYS[DEVCUR.ISC-SLC.VA.GOV]6PackagePKG[ORDER ENTRY/RESULTS REPORTING]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, TWO
                                                 ТC
 ----- Setting Default Outside Locations for User: CRPROVIDER, ONE ------
Select Display Sequence: 1
Display Sequence: 1//
                            1
Outside Location (Text or Pointer): 663
Select Display Sequence: 2
Are you adding 2 as a new Display Sequence? Yes// <Enter> YES
Display Sequence: 2// <Enter>
Outside Location (Text or Pointer): Local Pharmacy
Select Display Sequence: 3
Are you adding 3 as a new Display Sequence? Yes// <Enter> YES
Display Sequence: 3// <Enter> 3
Outside Location (Text or Pointer): 640
Select Display Sequence: 4
```

```
Are you adding 4 as a new Display Sequence? Yes// <Enter> YES
Display Sequence: 4// <Enter>
                             4
Outside Location (Text or Pointer): Outside Physician's Office
Select Display Sequence: ???
    Display Sequence
                                        Value
     _____
                                         ____
    1
                                        663
    2
                                        Local Pharmacy
    3
                                        640
    4
                                        Outside Physician's Office
```

Default Location as it appears in CPRS:

Seattle, WA	•
Seattle, WA	
Local Pharmacy	
Palo Alto	
Outside Physician's Office	
	_
Albany, NY	•

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]
    4
                    DIV
       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
                                                   OC.
----- 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: 1 User USR [choose from NEW PERSON] 3 Service SRV [choose from SERVICE/SECTION] Division 4 DIV [choose from INSTITUTION] 5 System SYS [DVF.FO-SLC.MED.VA.GOV] Enter selection: 1 User NEW PERSON Select NEW PERSON NAME: CRPROVIDER, TWO t.c ---- 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.

Select CPRS Reminder Configuration Option: GEC GEC Status Check Active Gec Status Check may be set for the following: User 1 USR [choose from NEW PERSON] 2 Team TEA [choose from TEAM] Enter selection: 1 User NEW PERSON Select NEW PERSON NAME: CRPROVIDER, ONE OC. ----- Setting Gec Status Check for User: CRPROVIDER, ONE ------GEC Status Check: YES// <Enter>

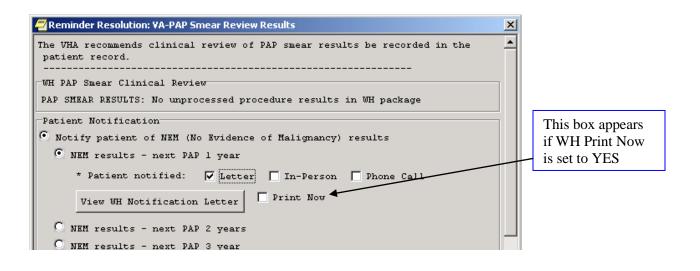
### WH Print Now Active

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
     2
        Division
                      DIV
                             [choose from INSTITUTION]
        Location
     3
                      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]
     6
        User
Enter selection: 6 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, ONE
                                           OC.
----- 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 in Patch 24

- A new Reminder Definition, "VA- MHTC NEEDS ASSIGNMENT," has been added.
  - This reminder looks for 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.
- Remedy ticket #391498 reported the following undefined error when a Reminders Due Report that was queued was then cancelled at the start time prompt: <UNDEFINED>QUE+8^PXRMXQUE \*ZTSK The undefined error was corrected.

#### Changes in Patch 12

- New options:
  - Finding Usage Report Option name: PXRM FINDING USAGE REPORT A generalized finding usage report was created. The user inputs a list of findings to search for, and definitions, terms, and dialogs are searched to report where the findings are used. For

findings that are from a standardized file, status and mapping information are included. This option was added as an item to the PXRM REMINDER REPORTS menu.

### • Print percentages with the report output

If the user replies "Y," the following percentages will be displayed: %Applicable = Number Applicable/Total patient \* 100 %Due = Number of Due/Number Applicable \* 100 %Done = 100-%Due

This field has also been added to the Reminder Report template functionality.

- A new prompt called "Clinic Stops output" was added to reminder reports. This prompt allows the user to select what type of output to display when running a reminder report against selected clinic stops. For a detailed report, the user will have the options to display output either by Clinic Stops only (current output) or by Individual Clinics belonging to the clinic stops. For a summary report with the report totals to either set to "Individual Locations" or by Individual locations plus Totals by Facility," the user will have the same options as the detailed report and a third option of reporting the output by Clinic Stops and Individual Clinic(s).
- A new field was added to template called Creator. This field 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.
- Reminder Report Bug Fixes
  - It was reported with PXRM\*2\*6 that when running a detailed PCMM Provider report, the output was no longer reporting by provider, but by associated clinic. This has been changed to report by Provider instead of reporting by associated clinic.
  - A problem was found when running a reminder summary report against multiple locations and multiple facilities. If the report was set to report the output by each facility and if there was a location with the same name as each facility and the patient was seen at the different location, the patient would not be included in the count for the location after the first location was counted.
  - For a number of years there have been reports that the output from Reminder Due Reports occasionally didn't show up. This problem was not reproducible and a number of things were done to try to find the cause. It appears that a possible cause might be that some sites have created aggressive cleanup routines to delete tasks that are not scheduled. This discovery led to a restructuring of reminder due reports. Previously, two tasks were created: the first assembled the data and the second produced the output. In order to not tie up the output device while the data was being assembled, the print job was not scheduled to run until the assembly job finished. In the new structure, the assembly and print job are combined, but the output device is not opened until it is ready to output the data.
  - When running a reminder report against multiple patient lists, the results of the report were printed out without the patient list name. Reminder reports were changed to display the patient list name with the patient list results.

### Changes in Patch 6

- Timing data was added to the output of Reminder Due Reports.
- The code to build location lists for reminder due reports was replaced with a call to the standard location list builder used for evaluating location list findings. This makes location list building consistent throughout the package and provides improved performance.
- A problem with historical reports including patients whose Visit date was past the end of the report ending date was corrected.
- After patch PXRM\*2\*4, the list of clinics without patients when running reports against all outpatient locations was more accurate and this caused it to be greatly expanded. To make the list more manageable, two things were done. First, when building the clinic list, if the clinic's inactive date is before the beginning date of the report, the clinic will not be added to list. Second, a new prompt display "Print locations with no patients" was added. If the answer is affirmative, the list of locations without patients will be displayed at the end of the report. This field will be stored in a reminder report template. Remedy # 168443 and #168399.
- The same help text for the Service Category field will be used when creating a new report or editing a report template. Remedy #171186.
- An undefined error that occurred when running a detailed PCMM provider report was corrected. Remedy #175319.
- When reports were run on a future date and the future date was the first day of the month, any patients that had visits on that date were missed. This was corrected. Remedy #169086 and #176643.
- An undefined error that occurred when saving a reminder due report output to a patient list was fixed.
- Due to changes made elsewhere, a call to a Scheduling API to get appointment data was no longer needed for a historical summary report so it was removed. This should speed up summary reports.

Syn.	Display Name	Option Name	Description
RD	Reminders Due	PXRM REMINDERS	For a selected patient and reminder, the report
	Report	DUE	lists any reminders that are currently due.
RDU	Reminders Due	PXRM REMINDERS	Reminders Due Reports may be run from any
	Report (User)	DUE (USER)	report template allocated to a specific user.
RDT	User Report	PXRM REPORT	This option allows you to modify the PXRM
	Templates	TEMPLATE (USER)	REPORT TEMPLATE (USER) parameter. This
			parameter defines which reminder report
			templates are available to a restricted user.
EPT	Extract EPI Totals	PXRM EXTRACT	This option is used to summarize total counts
		EPI TOTALS	for each type of finding item that was extracted
			for the target date range of the LREPI extract
			option run.

### **Reminder Reports menu**

Syn.	Display Name	Option Name	Description
EPF	Extract EPI List by Finding and SSN	PXRM EXTRACT EPI FINDING LIST	This option allows you to print extract results. Extracted data is listed by finding item and social security number.
EQT	Extract Queri Totals	PXRM EXTRACT QUERI TOTALS	This option prints reminder and finding totals for extract summaries created by automatic extracts.
REV	Review Date Report	PXRM REVIEW DATES	The Review Date Report may be run for the following files: Computed Findings, Reminder Definition, Reminder Dialogs, and Reminder Taxonomies. A cutoff date may be entered and all review dates prior or equal to that date in the file selected are reported.
FUR	Finding Usage Report	PXRM FINDING 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 Report	PXRM GEC REFERRAL 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

### Changes to finding date search

Version 2.0 of Clinical Reminders contains changes to the date range that can be used in searches. The changes include:

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

#### Benefits of date range finding searches

- The search for findings is done only in the specified date range.
- Retrospective reminder reports are now possible.

#### How date range searching works

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	
RD 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 GEC Referral Report REV Review Date Report	
FUR Finding Usage Report	
For 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:	
I Individual Patient	
R Reminder Patient List	
L Location	
O OE/RR Team	
P PCMM Provider	
T 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:	
I Individual Patient	
R Reminder Patient List	
L Location	
O OE/RR Team	

Ρ 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: D Detailed S Summary TYPE OF REPORT: S// ummary Select one of the following: Individual Teams only Т Individual Teams plus Totals by Facility R Т 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
                              OE/RR Team
         Patient Sample:
         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
                             8/25/2009 9:38:35 am
         Date run:
         Template Name:
                             CR-wh
         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
                   # Patients with Reminders
                   Applicable Due %Appl
                                                  %Due
                                                        %Done
                     _____
                                 ___
                                           ____
                                                  ____
                                                         ____
1
    MST Screening
                          37
                                  31
                                              87
                                                   84
                                                            16
2
    Breast Cancer Screen
                           9
                                  9
                                              21
                                                   100
                                                             0
    Breast Cancer Screen
3
                           9
                                   9
                                              21
                                                   100
                                                             0
4
    Mammogram
                           9
                                   9
                                              21
                                                   100
                                                             0
5
    ITC 2001 Mammogram Example
                                   9
                           9
                                              21
                                                   100
                                                             0
6
    CR MAM
                           0
                                              0
                                                    0
                                                             0
                                  0
7
    NONVA test DFN=37
                                             100
                                                   100
                                                             0
                          43
                                  43
8
    Pap Smear-Screening
                          13
                                  13
                                              31
                                                   100
                                                             0
9
    Pap Smear-Review of Results
                                   2
                                              14
                                                   34
                                                            66
                          6
10
    Pap Smear-F/U of Abnormal Results
                                              0
                                                   0
                                                             0
                          0
                                  0
    WH SCREEN
11
                          41
                                  41
                                              96
                                                   100
                                                             0
12
    PAP Smear Screening
                          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: jqtest HEP C ...OK? Yes// (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: Ι Individual Locations only R Individual Locations plus Totals by Facility т 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:LocationLocation: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:
                         jgtest
T
          Template Name:
          Summary report:
                               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
                                                                     3
1
    National Hepatitis Lab Extract
                                                          3
                                                                      3
2
3
    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
                                                               Due
                                                  _____
                                                                    ____
                                                         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
  EPT
         Extract EPI Totals
  EPF
         Extract EPI List by Finding and SSN
         Extract QUERI Totals
  EQT
  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
         Ι
                   Reminder Patient List
         R
         L
                   Location
         0
                   OE/RR Team
                  PCMM Provider
         Ρ
         т
                  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 NATIONAL 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 0 1 0 NONVA test DFN=37 14 14 2 3 Pap Smear-Screening 3 3 4 Pap Smear-Review of Results 2 0 5 0 Pap Smear-F/U of Abnormal Results 0 6 PAIN SCREENING 0 0 7 ITC Pneumovax 13 13 8 SLC Life style Education 6 6 9 new reminder 0 0 10 Hepatitis C Risk Assessment 14 12 11 Influenza Vaccine 12 12 12 Smoking Cessation Education 4 4 13 Pheumovax 13 10 ITC 2001 diabetes example 14 1 1 15 ITC 2001 Mammogram Example 3 3 16 SLC Diabetic Foot Care Education 14 14

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		
23	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		
Repo	Report run on 14 patients.				
Report timing data:					
Elapsed time for reminder evaluation: 6 secs					
End	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.

Select Reminder Reports Option: Extract EPI Totals START WITH NAME: FIRST// ?? The NAME is the combination of a unique abbreviation for the type of extract. The file contains different extract types: 1) EPI - Hep C Extract Extracts of this type are prefixed LREPI. The following is an example of EPI lookup information: 160 LREPI 00/05 061500 Jun 15,2000@14:52:36 161 LREPI 00/06 073100 Jul 15,2000@14:55:40 Aug 15,2000@15:42:24 162 LREPI 00/07 081500 The  $\ensuremath{\mathtt{YY}}\xspace/\ensuremath{\mathtt{MM}}$  represents 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.

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// Right Margin: 80// DEVICE: ;;999 TCP 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 ⊥ 207 1 HEPATITIS C ANTIBODY 207 190 190 TOT. BILIRUBIN RIBAVIRIN 35 35 192 192 AST 198 198 AT.T ALT VA-HEPATITIS C INFECTION 127 127 INTERFERON BETA-1B 18 4 4 INTERFERON BETA-1A INTERFERON BETA-1A18INTERFERON ALFACON-15RISK FACTOR FOR HEPATITIS C110NO RISK FACTORS FOR HEP C319DECLINED HEP C RISK ASSESSMENT8 18 5 110 319 8 LREPI 05/03 041505 Date Range: MAR 1,2005-MAR 31,2005 Extract Date: APR 15,2005 22:12 841 Total Patients Evaluated: Total Patients with Findings: 802 Finding Unique Patient Totals by Finding Item Count Count 2 2 INTERFERON ALFA-2B 1 1 HBSAG HEPATITIS C ANTIBODY 446 223 RIBAVIRIN 47 47 VA-HEPATITIS C INFECTION 119 119 INTERFERON BETA-1B 9 9 INTERFERON BETA-1A 16 16 8 INTERFERON ALFACON-1 8 HBSAB 33 33 HBSAB 33 RISK FACTOR FOR HEPATITIS C 132 NO RISK FACTORS FOR HEP C 372 DECLINED HEP C RISK ASSESSMENT 3 132 372 3 Press RETURN to continue...

#### **Extract QUERI Totals**

Reminders Due Report RD 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 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. 
 Internation
 Jun 15,2000@14:52:36

 LREPI 00/05 061500
 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 160 161 162 163 164 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:TotalApplicableN/ADueNot Due1000899101200699 Finding Totals: Sequence: 001 Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE Term: DEPRESSION DIAGNOSIS Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Total Applicable N/A Due Not Due 20 20 0 20 0 Sequence: 002 Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE Term: PSYCHOTHERAPY Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status:

Total Applicable N/A Not Due Due 003 Sequence: Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE ANTIDEPRESSANT MEDICATION Term: Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Total N/A Not Due Applicable Due Sequence: 004 Finding Group: VA-DEPRESSION SCREEN RESULT DEPRESSION SCREEN NEGATIVE Term: 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 006 Sequence: Finding Group: VA-REFUSED DEPRESSION SCREEN REFUSED DEPRESSION SCREENING Term: 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: 001 Sequence: 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) Term: 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 Term: 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 Due Not Due Reminder Totals: N/A Total Applicable 1000 3 997 1 2 Finding Totals: Sequence: 001 Finding Group: VA-ANTIPSYCHOTIC DRUGS Term: AIM EVALUATION NEGATIVE Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Applicable N/A Due Not Due Total 002 Sequence: Finding Group: VA-ANTIPSYCHOTIC DRUGS Term: AIM EVALUATION POSITIVE Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Applicable N/A Total Due Not Due Sequence: 003 Finding Group: VA-ANTIPSYCHOTIC DRUGS REFUSED ANTIPSYCHOTICS MOST RECENT FINDING PATIENT COUNT Term: 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
          2
                   Patient
          3
                   Provider by Patient
                  Referral Date
          4
          5
                   Location
          6
                  Referral Count Totals
          7
                   Category-Referred Service
          8
                  Summary (Score)
          9
                   '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//<Enter> (JUN 30, 2004)
    Select one of the following:
                   All Patients
         A
         М
                   Multiple Patients
Select Patients or ^ to exit: A//<Enter> 11 Patients
     Select one of the following:
         F Formatted
          D
                  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
Name
_____
CRPATIENT, ONE (666809999) 06/15/2004 0 0 2 4
                                                                          6
CRPATIENT, ONE(666809999)06/15/2004024CRPATIENT, ONE(666809999)06/15/20040795CRPATIENT, TWO(666809990)05/04/20040000CRPATIENT, SIX(666009999)05/11/20040000CRPATIENT, SIX(666009999)05/11/20040000CRPATIENT, SIX(666009999)05/11/20040000
                                                                         21
                                                                         0
                                                                          0
                                                                           0
                                                                          0
                                                               9
                                 Totals > > 0 7 11
                                                                         27
                                                                    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 new 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.

```
Select Reminder Reports Option: Finding Usage Report
Clinical Reminders Finding Usage Report
Select from the following reminder findings (* signifies standardized):
 1 - DRUG
  2 - EDUCATION TOPIC
 3 - EXAM
 4 - HEALTH FACTOR
  5 - IMMUNIZATION *
  6 - LABORATORY TEST
  7 - MH TESTS AND SURVEYS
  8 - ORDERABLE ITEM
  9 - RADIOLOGY PROCEDURE
 10 - REMINDER COMPUTED FINDING
 11 - REMINDER TAXONOMY
 12 - REMINDER TERM
 13 - SKIN TEST
 14 - VA DRUG CLASS *
 15 - VA GENERIC *
 16 - VITAL MEASUREMENT *
 17 - REMINDER LOCATION LIST
 18 - PROCEDURE
 19 - ICD9 DIAGNOSIS
  20 - ORDER DIALOG
  21 - WH NOTIFICATION PURPOSE
Enter your list for the report.: (1-21): 5
Search for all or selected IMMUNIZATIONS?
     Select one of the following:
          1
                    ALL
          2
                    SELECTED
Enter response: ALL// 2 SELECTED
Select IMMUNIZATION: in
       INFLUENZA
                        INFLUENZA
    1
    2
       INFLUENZA B
                         HIB
     3
        INFLUENZA VAC OTHER LOCATION
                                          FLU OUTSID
                                          FLU
     4
        INFLUENZA VACCINE PAST VISIT
     5
       INFLUENZA-OTHER REASON NOT GIVEN
                                            FLU-OTHER
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 INFLUENZA
                            INFLUENZA
Select IMMUNIZATION:
Deliver the report as a MailMan message? Y//
```

```
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 Synchronization	PXRM MST 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 Synchronization 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	This option allows the site disclaimer used in
		DISCLAIMER	Health Summary components to be modified.
EWS	Edit Web Sites	PXRM EDIT WEB	This option allows the reminder web sites used
		SITES	in CPRS GUI to be modified.
MH	Edit Number of MH	PXRM MH	This option allows the site to select the
	Questions	QUESTIONS	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://www.oqp.med.va.gov/cpg/cpg.htm
Select URL: ?
    Answer with WEB SITES URL
    Choose from:
    http://vista.med.va.gov/remind
    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.

Select Reminder Managers Menu Option: PAR Reminder Parameters
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.

#### Change in Patch 24

Remedy ticket **#610957**. A store error when trying to copy a large patient list to an OE/RR Team list was reported. The store error was occurring in a FileMan API that was being used to create the OE/RR Team list entry. The solution was to directly copy the patients instead of using the FileMan API.

#### Changes in Patch 18

- A bug that prevented location lists from working properly when used to build a patient list was corrected.
- Clin2 found a problem with a reminder rule incorrectly generating a patient list. There were patients on the list that should not have been. This was tracked to incorrect evaluation of a function finding for list building. The problem was corrected.
- Clin2 reported that if Race was one of the selected items in a delimited output Patient Demographic Report, no values were listed unless the number of occurrences was 2 or more. This was fixed so that values are listed for any number of occurrences.

## Change in Patch 12

• Reminder List Rules

There are four possible views in list rule management: finding rule, patient list rule, reminder rule, and rule set. When switching between the views, the screen position was being carried over. For example, if you were in the rule set view and line 10 was at the top of the display and you switched into the reminder rule view, it would start at line 10. If there were less than 10 reminder rules, then the display would be blank. The code was changed to save the current position for each view, so that when a particular view is selected, the display will start at the last screen position of that view.

#### Changes in Patch 6

- Previously, when a patient list was created, the first step was to initialize a stub in the Patient List file; the stub contained only the NAME and the CLASS. If there was an error populating the list and the stub was left, then only someone holding the PXRM MANAGER key could delete it. The stub initialization was changed so that it also inserts the CREATOR and sets the initial TYPE to be public. This makes it possible for the person who created the list to delete it if an error occurs that prevents normal completion of the list-building process.
- If a patient is on a patient list and for some reason the patient is later deleted from the Patient File, then running a Patient Demographic Report or a Health Summary would generate an error. Code was added to handle this problem.

- Dates shown in patient list creation documentation did not always match those displayed by the rule set test action. To correct this, a new routine was created, to be used for all patient list date calculation. Some of the basic date utility functions used throughout Clinical Reminders were optimized to get better performance.
- The setting of date ranges when building a patient list from a reminder definition was made consistent with the way it is done for terms.
- Code was added to catch problems with patient list build dates. The problems will be displayed in the list creation documentation.
- The list template PXRM PATIENT LIST PATIENTS had a bottom margin of 19 and consequently it could not display two of the actions. The bottom margin was changed to 18 so these actions would display.
- The display of Extract Definitions didn't show the fields INCLUDE DECEASED PATIENTS and INCLUDE TEST PATIENTS. If the value is NULL, then the display will show "NO."
- Changes were made so that if deceased and/or test patients are included on a patient list, they will be marked with a "D" or "T."
- When patient demographic report output was queued to p-message or a printer, the output never appeared. This was traced to incorrectly calling a Kernel queuing routine, which was corrected. Work on this also uncovered a problem in some VADPT routines that were not properly protecting variables, in particular % which is also used in the Kernel queuing routines. This may explain why some reminder report outputs have disappeared in the past. A Remedy ticket, #183747, was filed for VADPT.
- All sequences in patient lists and extracts were converted from three-character free-text to a number between 1 and 999. Existing entries will be converted by the post-init.
- The display of patient list creation documentation was improved. The header was expanded to two lines so the entire name of the patient list can be seen. The list template right margin was changed to 132 so the entire display can be seen. The number of patients was moved to a separate line.
- The extract summary display was changed to make it easier to read.
- The list template PXRM PATIENT LIST is obsolete so it was added to the build as "delete at site."
- The list template PXRM PATIENT LIST USER had incorrect caption information; it was corrected.
- Display of the operation was added to output for Rule Set Test.
- The following list rule changes were made: VA-\*IHD QUERI 412 DIAGNOSIS Changed LIST RULE ENDING DATE from null to T

VA-\*IHD QUERI LIPID LOWERING MEDS Changed LIST RULE ENDING DATE from null to T

VA-\*IHD QUERI PTS WITH QUALIFY VISITChanged LIST RULE ENDING DATE from T to BDT

## 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	Abbreviation
٠	Finding Rule	FR
٠	Reminder Rule	RR
٠	Patient List Rule	PL
٠	Rule Set	RS

**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 acrosspatient 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 such as 001. 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
                                                                              4
         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 Management	PXRM LIST RULE 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 Management	PXRM EXTRACT PATIENT LIST	This option manages reminder patient lists. Local patient lists may be created from list rules, copied to OE/RR teams, copied to other patient lists, or deleted. Local patient lists and national patient lists (from the extract process) are listed. Individual lists may be displayed or printed or used to run health summaries.

## 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 R	ule Management Jun 01, 2006@08:44:21 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
5	VA-*IHD QUERI PTS WITH QUALIFY VISIT	NATIONAL
6	VA-*MH QUERI QUALIFYING PC VISIT	NATIONAL
7	VA-*MH QUERY QUALIFYING MH 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	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
```

List R	ule Management Jun 01, 2006@08:55:48 Page	e: 1 of 1
		<u> </u>
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	Item: Quit//	

If we select the finding rule view, then the display changes to show the newly selected view.

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 Patient List Jun 01, 2006@12:08:18 Page: 1 of	7				
Available Patient Lists.					
Item Reminder Patient List Name Created Patients	3				
1 VA-*IHD QUERI 2000 M4 412 PTS WITH QUALIFY AN 4/27/04@11:55:43	)				
2 VA-*IHD QUERI 2000 M4 412 PTS WITH QUALIFY AN 4/27/04@11:55:43 (	)				
3 VA-*IHD QUERI 2000 M4 PTS WITH QUALIFY AND AN 4/27/04@11:55:43 (	)				
4 VA-*IHD QUERI 2000 M4 PTS WITH QUALIFY AND AN 4/27/04@11:55:43 (	)				
5 VA-*IHD QUERI 2000 M4 PTS WITH QUALIFY VISIT 4/27/04@11:55:43 (	)				
6 VA-*IHD QUERI 2001 M10 412 PTS WITH QUALIFY A 7/20/04@08:28:08 2	2				
7 VA-*IHD QUERI 2001 M10 412 PTS WITH QUALIFY A 7/20/04@08:28:09 (	)				
8 VA-*IHD QUERI 2001 M10 PTS WITH QUALIFY AND A 7/20/04@08:28:08	1				
9 VA-*IHD QUERI 2001 M10 PTS WITH QUALIFY AND A 7/20/04@08:28:08 (	)				
10 VA-*IHD QUERI 2001 M10 PTS WITH QUALIFY VISIT 7/20/04@08:28:07 5	5				
11 VA-*IHD QUERI 2001 M11 412 PTS WITH QUALIFY A 7/20/04@08:31:23 (	)				
12 VA-*IHD QUERI 2001 M11 412 PTS WITH QUALIFY A 7/20/04@08:31:23 (	)				
13 VA-*IHD QUERI 2001 M11 PTS WITH QUALIFY AND A 7/20/04@08:31:23 (	)				
14 VA-*IHD QUERI 2001 M11 PTS WITH QUALIFY AND A 7/20/04@08:31:23 (	)				
15 VA-*IHD QUERI 2001 M11 PTS WITH QUALIFY VISIT 7/20/04@08:31:23 (	)				
16 VA-*IHD QUERI 2001 M12 412 PTS WITH QUALIFY A 7/20/04@08:35:47 (	)				
+ Next Screen - Prev Screen ?? More Action					
CO 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 Quit					
Select Item: Next Screen//					

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.

Remind	Reminder User Patient List Sep 27, 2005@09:36:05 Page: 1 of 8					
Availa	Available Patient Lists.					
+Item	Reminder Patient L	ist Name	Туре	Access		
5	AGP IHD EXTRACT WI	TH QUALIFY VISIT	PVT	F		
6	AGP IHD QUERI PTS	WITH QUALIFY AND ANCHOR VI	S 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	110 BP	PVT	V		
	+ Next Screen	- Prev Screen ?? More A	ction			
CO C	Copy Patient List	DE Delete Patient List	CV Cha	ange View		
COE C	opy to OE/RR Team	DCD Display Creation Doc	LRM Lis	st Rule Ma	anagemen	t
CR C	reate Patient List	DSP Display Patient List	QU Qu	Lt		
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 Range #	Date Fields	List Build	Rule Set Sequence	Finding Rule	Reminder Term Finding	Search Date Range for Finding
1	BDT	Sep 01, 2005	Blank			Sep 01, 2005
	EDT	Sep 30, 2005	Blank			Sep 30, 2005
2	BDT	Sep 01, 2005	T-2Y			Sep 30, 2003
	EDT	Sep 30, 2005	Blank, same as T or EDT			Sep 30, 2005
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
5	BDT	Sep 01, 2005	0 (zero)			No beginning date
	EDT	Sep 30, 2005	Mar 28, 2003			Mar 28, 2003
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
	EDT	Sep 30, 2005	0 (zero)			End of day on date the list is built.
8	BDT	Sep 01, 2005		T-2Y		Sep 30, 2003
0	EDT	Sep 30, 2005		T-1Y		Sep 30, 2003
9	BDT	Sep 01, 2005		BDT-2Y		Sep 01, 2003
	EDT	Sep 30, 2005		Blank or T		Sep 30, 2005
10	BDT	Sep 01, 2005		BDT-6M		Mar 01, 2005

Date Range #	Date Fields	List Build	Rule Set Sequence	Finding Rule	Reminder Term Finding	Search Date Range for Finding
	EDT	Sep 30, 2005		BDT		Sep 01, 2005
						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 00, 2001		Apr 00, 2001
12	EDT	Sep 01, 2005 Sep 30, 2005		Apr 09, 2001 Mar 28, 2003		Apr 09, 2001 Mar 28, 2003
		Sep 30, 2003		Ivial 20, 2003		10121 20, 2003
13	BDT	Sep 01, 2005		Apr 09, 2001		Apr 09, 2001
10				7,0100,2001		End of day on
						date the list is
	EDT	Sep 30, 2005		0 (zero)		built.
14	BDT	Sep 01, 2005			T-2Y	Sep 30, 2003
	EDT	Sep 30, 2005			T-1Y	Sep 30, 2004
						No beginning
15	BDT	Sep 01, 2005			0 (zero)	date
	EDT	Sep 30, 2005			BDT	Sep 30, 2005
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
						Sep 1, 2005
						(BDT > EDT; no finding
						match will be
18	BDT	Sep 01, 2005	Jun 01, 2003	BDT		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
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
04	DDT	0 04 0005			T 414	0
21	BDT	Sep 01, 2005	T-2Y		T-1Y	Sep 30, 2004
	EDT	Sep 30, 2005	0 (zero)		T-6M	Mar 31, 2005
22	PDT	Sop 01 2005		Apr 00, 2004		lup 01 2002
22	BDT EDT	Sep 01, 2005		Apr 09, 2001	Jun 01, 2003	Jun 01, 2003
		Sep 30, 2005		Feb 28, 2002	Jul 25, 2004	Jul 25, 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 List Build beginning date/time and T values are replaced with the List Build beginning 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 R	ule 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	
5	VA-*IHD QUERI PTS	WITH QUALIFY VISIT	NATIONAL	
6	VA-*MH QUERI QUAL	IFYING PC VISIT	NATIONAL	
7	VA-*MH QUERY QUAL	IFYING MH VISIT	NATIONAL	
	+ Next Screen	- Prev Screen ?? More Actions	>>>CV	
Change	View	TEST Test Rule Set		
CR C	reate Rule	QU Quit		
DR D	isplay/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 VIE	W: 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
1	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	>>>CV
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 R	ule Management Jun 03, 2005@10:42:11 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				
10	VA-*MH QUERI QUALIFY PC VISIT	NATIONAL				
	+ Next Screen - Prev Screen ?? More Actions	>>>CV				
Change	View TEST (Test Rule Set)					
	reate Rule QU Quit					
DR D	DR Display/Edit Rule					
Select	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	e: 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	>>>CV			
Change	Change View TEST (Test Rule Set)				
CR C	CR Create Rule QU Quit				
DR D	DR Display/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.

<u>List R</u>	ule Management	Jun 03, 2005@11:09:03 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
5	VA-*IHD QUERI	PTS WITH QUALIFY VISIT	NATIONAL
6	VA-*MH QUERI Q	UALIFYING PC VISIT	NATIONAL
	+ Next Scre	en - Prev Screen ?? More Actions	>>>CV
Change	View	DR Display/Edit Rule	
CR C	reate Rule	QU Quit	
Select	Item: Quit// C	R 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
  (Yes)
   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	>>>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 Lis	t Aug	10, 200	5@15:02:2	21	Page:	1 of	1
Available Pat	ient Lists.							
Item Remind	er Patient I	ist Name			(	Created	Patien	ts
1 VA-*IH	) QUERI 2001	M01 412	PTS WIT	H QUALIF	YA 8	3/5/05@11 <b>:</b> 12 <b>:</b> 16		0
2 VA-*IH	) QUERI 2001	M01 412	PTS WIT	H QUALIFY	YA 8	3/5/05@11:12:16		0
3 VA-*IH	) QUERI 2001	M01 PTS	WITH QU	ALIFY ANI	DA 8	3/5/05@11:12:16		0
4 VA-*IH	) QUERI 2001	M01 PTS	WITH QU	ALIFY ANI	DA 8	B/5/05@11:12:16		0
5 VA-*IH	) QUERI 2001	M01 PTS	WITH QU	ALIFY VIS	SIT 8	B/5/05@11:12:16		0
6 VA-*IH	) QUERI 2005	M1 412 B	PTS WITH	QUALIFY	AN 8	8/5/05@11:19:42		0
7 VA-*IH	) QUERI 2005	M1 412 B	PTS WITH	QUALIFY	AN 8	3/5/05@11:19:43		0
8 VA-*IH	) QUERI 2005	M1 PTS V	VITH QUA	LIFY AND	AN 8	8/5/05011:19:42		0
9 VA-*IH	) QUERI 2005	M1 PTS V	VITH QUA	LIFY AND	AN 8	B/5/05@11:19:42		0
10 VA-*IH	) QUERI 2005	M1 PTS V	VITH QUA	LIFY VIS:	IT 8	8/5/05011:19:42		0
+ N	ext Screen	- Prev S	Screen	?? More	Actio	ons	>>>	СО
Copy Patient	List DE	Delete H	Patient 1	List CV	Cha	ange View		
COE Copy to	DE/RR Team	DCD Dis	splay Cr	eation Do	oc LRN	4 List Rule Ma	nagement	
CR Create P	atient List	DSP Dis	splay Pa	tient Lis	st QU	Quit	-	
Select Item:	Quit// CR	Create Pa	atient L	ist				

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 Lis	t Aug 10, 2005@15:02:53	Page: 1	of 1	
Available Patient Lists.					
Item	Reminder Patient L	ist Name	Created	Patients	
1	DIABETIC PATIENTS	5Y	8/10/05@15:02:52	2	
2	VA-*IHD QUERI 2001	M01 412 PTS WITH QUALIFY A	8/5/05@11:12:16	0	
3	VA-*IHD QUERI 2001	M01 412 PTS WITH QUALIFY 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	0	
5	VA-*IHD QUERI 2001	M01 PTS WITH QUALIFY AND A	8/5/05@11:12:16	0	
6	VA-*IHD QUERI 2001	M01 PTS WITH QUALIFY VISIT	8/5/05@11:12:16	0	
7	VA-*IHD QUERI 2005	M1 412 PTS WITH QUALIFY AN	8/5/05@11:19:42	0	
8	VA-*IHD QUERI 2005	M1 412 PTS WITH QUALIFY AN	8/5/05@11:19:43	0	
9	VA-*IHD QUERI 2005	M1 PTS WITH QUALIFY AND AN	8/5/05@11:19:42	0	
10	VA-*IHD QUERI 2005	M1 PTS WITH QUALIFY AND AN	8/5/05@11:19:42	0	
11	VA-*IHD QUERI 2005	M1 PTS WITH QUALIFY VISIT	8/5/05@11:19:42	0	
	+ Next Screen	- Prev Screen ?? More Act:	ions	>>>CO	
Сору Р	atient List DE	Delete Patient List CV Ch	hange View		
COE C	opy to OE/RR Team	DCD Display Creation Doc LA	RM List Rule Mana	gement	
CR C	reate Patient List	DSP Display Patient List Q	U QuitSelect Ite	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**

Г

Availa	ble Patient Lists.			
Item	Reminder Patient List Name	Created	Patients	
	AGP 1	7/10/05@19:55:43	24	
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	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	16	
7	AGP OERR TEAM LIST	7/10/05@20:47:17	16	
8	AGP REMINDER TEST	7/25/05@11:17:24	25	
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		
12	AGP TEST REMINDERS 2	7/25/05@12:01:46	47	
13	FINGERSTICK	6/28/05@11:15:35		
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 + Next Screen - Prev Screen ?? More Act	8/9/05@11 <b>:</b> 33		
elect	Copy to OE/RR Team DCD Display Creation Doc L Create Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List			
elect Select Are	reate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM you adding 'DIAB PTS W/O DIAB EYE EXAM' as			
Select Select Are	reate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List			
Select Select Are a	reate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM you adding 'DIAB PTS W/O DIAB EYE EXAM' as			
Select Select Are a Secure	reate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM you adding 'DIAB PTS W/O DIAB EYE EXAM' as new REMINDER PATIENT LIST? No// Y (Yes)			
Select Are a Secure Purge Select 1 2	reate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM you adding 'DIAB PTS W/O DIAB EYE EXAM' as new REMINDER PATIENT LIST? No// Y (Yes) list?: N// O	U Quit		
Select Are a Secure Purge Select 1 2 CHOOSE Enter	<pre>reate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM you adding 'DIAB PTS W/O DIAB EYE EXAM' as new REMINDER PATIENT LIST? No// Y (Yes) list?: N// O Patient List after 5 years?: N// O LIST RULE SET: RS-DIAB RS-DIAB PTS W/O DIAB EYE EXAM RULE SET RS-DIABETIC PATIENTS RULE SET</pre>	U Quit		
Select Are a Secure Purge Select 1 2 CHOOSE Enter Enter	<pre>reate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM you adding 'DIAB PTS W/O DIAB EYE EXAM' as new REMINDER PATIENT LIST? No// Y (Yes) list?: N// O Patient List after 5 years?: N// O LIST RULE SET: RS-DIAB RS-DIAB PTS W/O DIAB EYE EXAM RULE SET RS-DIABETIC PATIENTS RULE SET I-2: 1 RS-DIAB PTS W/O DIAB EYE EXAM RULE Patient List BEGINNING DATE: T-5Y (AUG 11, 200</pre>	U Quit		

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Reminder User Patient List Aug 11, 2005@14:23:08		of 8	
Available Patient Lists. Item Reminder Patient List	Name	Cre	eated
Patients 1 AGP 1	7/10/0501	19:55:43	
24			
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	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	16	
7 AGP OERR TEAM LIST	7/10/05@20:47:17	16	
8 AGP REMINDER TEST	7/25/05@11:17:24	25	
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		
13 DIAB PTS W/O DIAB EYE EXAM	8/11/05@14:23:08	19	
14 FINGERSTICK	6/28/05@11 <b>:</b> 15:35	13	
15 FINGERSTICK (DEF)	7/6/05@09:51:42	15	
+ Next Screen - Prev Screen ?? More Act	tions	>>>CO	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 Manag	gement	
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:

Reminde	er User Patient List Sep 29, 2005@10:25:44	Page: 1 of	8		
	ole Patient Lists. Item Reminder Patient List	5	Created		
Patien					
6	AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS	7/1/05@11:03:02	0		
7	AGP OE/RR TEAM 1	7/10/05@20:51:42	6		
8	AGP OERR TEAM LIST	7/10/05@20:47:17	16		
9	AGP REMINDER TEST	7/25/05@11:17:24	25		
10	AGP REPORT TEST OF PURGE	7/19/05@16:06:35	3		
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		
17	FINGERSTICK	6/28/05@11:15:35	13		
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		
21	PKR PVT	6/17/05@12:13:15	26		
	+ Next Screen - Prev Screen ?? More Ac	tions	>>>CO Copy		
Patien	t List DE Delete Patient List CV Chang	e View			
COE Co					
CR C:	reate 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	atients)		_
Created: 09/29/2005@10:1	9:51 Creator: CRPRC	VIDER, THREE	
Class: Local	Type: PUBLIC		
Source: List Rule - RS-I	DIABETIC PATIENTS Patien	it 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 Acti	ons	>>>CV
Change View DEM	Demographic Report QU Qu	lit	
HSA Health Summary All	ED Edit Patient List		
HSI Health Summary Ind	USR (View Users)Select Item	n: 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 2 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 1 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 OU Ouit 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: 1 - SSN 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^^^SALT LAKE CITY^UTAH^84101^^^^0003^JAN 1,
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	PXRM EXTRACT	This option uses list manager to view an extract
	Management	MANAGEMENT	definition, examine and schedule an extract run or
			transmission run, view extract summary results and
			view extract patient lists.
D	Extract Definition	PXRM EXTRACT	This option allows creation/editing of extract
	Management	DEFINITION	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	PXRM EXTRACT	This option allows creation/editing of extract
	Rule Management	COUNTING RULES	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	PXRM EXTRACT	This option allows creation/editing of extract
	Group Management	GROUPS	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 Management	PXRM LIST RULE MANAGEMENT	This option allows creation/editing of list rules we are used to build patient lists.

LR List Rule Management is discussed in detail in the <u>Reminder Patient List</u>/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, wewill 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 O! 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 youtype will be in **bold text**.

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# 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<sup>(D)</sup>. 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.

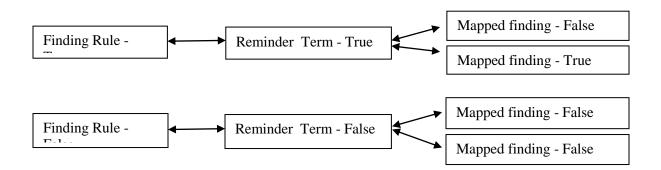
```
LIST RULE BEGINNING DATE/TIME:
LIST RULE ENDING DATE/TIME:
Input your edit comments. Edit? NO//
```

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.

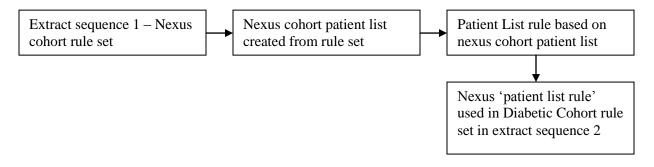
Maybe a picture will be worth a thousand words:

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//
 LIST RULE SET: RS NEXUS COHORT (Extract)//
                                               ←This is the rule set to build nexus
cohort.
 EXTRACT PT LIST NAME: NEXUS COHORT Mnn yyyy \leftarrowThis 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
```

```
Sequence: 1

Operation: ADD PATIENT

List Rule: PL NEXUS COHORT ←Here is the patient list rule that is based on

Nexus list created from sequence 1 of the extract

Description:

Rule Type: PATIENT LIST RULE
```

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="https://www.about.com">ADDPATIENT</a>>FINDING RULE 1</a><br/>
Example: <a href="https://www.about.com">ADDPATIENT</a>>FINDING RULE 1</a><br/>
Example: <a href="https://www.about.com">ADDPATIENT</a>>FINDING 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

<ADD 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 06/30/2010@23:59:59 Ending Date/Time: 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:
      СТ
             COMPLIANCE TOTALS ONLY
      CF
             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:
          QUARTERLY
      0
      М
              MONTHLY
      Y
              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
  (Yes)
  EXTRACT SEQUENCE LIST RULE SET: RS NEX
    1 RS NEXUS COHORT (Extract) RULE SET
    2 RS NEXUS COHORT (LIST)
                                  RULE SET
    3 RS NEXUS IMMUNIZATION REPORT FY08
                                             RULE SET
    4
      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
    1 RS FACILITY CANCER MEASURES RULE SET
       RS FACILITY CANCER MEASURES (Q) RULE SET
    2
       RS FACILITY CARDIOVASCULAR MEASURES RULE SET
    3
       RS FACILITY CARDIOVASCULAR MEASURES (Q)
                                               RULE SET
    5
       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
```

DM A1C W/I LAST YEAR (X) LOCAL 1 2 DM A1C<7.0 (X) LOCAL 3 DM A1C>9.0 (X) LOCAL DM BP <130&<80 (X) LOCAL Δ 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) LOCAL REMINDER: DM A1C W/I LAST YEAR (X)// Select REMINDER SEQUENCE: 10 ← arbitrary number Are you adding '10' as a new REMINDER SEQUENCE (the 2ND for this EXTRACT RULE (Yes) 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 DONEZTUS DM AND A1C DONE (RPT)DM A1C>9.0HGBA1C>9.0LOCAL 4 LOCAL 5 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:  $\leftarrow \text{No entry at this point}$ 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!! <sup>(2)</sup>

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 2010 M06					
Extract Period: 06/01/2010 - 06/30/2010 Created: 07/28/2010@22:49:15					
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 Taskmanager 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

MONTHLY PC PM ← unique name for your site, Select OPTION to edit: TUS MONTHLY PM 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//
                    (Yes)
     (R)
                       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
                                            \leftarrowset 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:
     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!! <sup>(C)</sup> 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:

- 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.
- 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: VHAXXXXX\vhaisxxxxx Password: enter your national password

2) Register for access to Austin system to get customer ID and initial logon password Go to <u>http://vaww.aac.va.gov/servicedesk/</u> 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: http://vaww.aac.va.gov/servicedesk/HDDocs/FAQ.pdf

# **Clinical Reminder Order Checks**

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

PXRM\*2.0\*22 releases two new National Reminder Order Checks for placing Teratogenic Medications in CPRS, and revises the order check set-up process in several ways, as described below. This patch 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.

To support the two-file structures, the existing menu options have been renamed and two new options are released with this patch.

ScreenMan tools are used within the options.

Fixes:

- This patch fixes a Mumps error when the "Select Order Checks:" prompt times out.
- This patch fixes a problem with Reminder Exchange taking an error when installing a dialog item that contains an ICD9 code as an additional finding item.
- This patch fixes a problem with the Reminder Definition Inquiry not showing usage of Reminder Order Check, if the usage field contains an "O".

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 Reminders 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:

- Add/Edit Reminder Order Check Item Group [PXRM ORDER CHK ITEMS GROUP EDT]
  - Provides sites the option to create a new order check items group and rules. This option is also used to edit existing order check items group and the corresponding rules.
- Reminder Order Check Item Inquiry [PXRM ORDER CHK ITEMS GROUP INQ]
  - Provides a way for the site to see the details of the Orderable Item group and the corresponding rules.
- Reminder Order Check Test [PXRM ORDER CHECK TESTER]
  - Provides a way to test the order check rules in VistA.

# New Options:

- Add/Edit Reminder Order Check Rule[PXRM ORDER CHECK RULE EDT]
  - Provides sites the option to create a new order check items rules. This option is also used to edit existing order check rules.
- Reminder Order Check Rule Inquiry [PXRM ORDER CHECK RULE INQ]
  - Provides a way for the site to see the details of the Order Check Rule.

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.
  - 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.
- Order Check Text: This is the order check text that will display in CPRS.

# Example #1

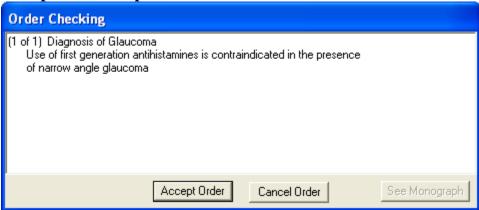
# Problem:

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.

# **Example of the output in CPRS**

Order Checking		
(1 of 1) Glyburide Contraindicated 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.		
Laboratory test: CREATININE; specimen: SERUM 11/17/2009 value - 2.5 H		
Accept Order Cancel Order See Monograph		

# **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.

# 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.

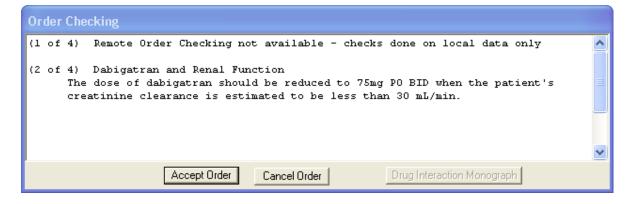
#### Setup:

- 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

Status	Result
Т	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)
Ι	No order checks display in CPRS or in the testing/ production rules section of the reminder order check test option (VistA)

For testing purposes, the status flag needs to be set to T.

# **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 GI Add/Edit Reminder Order Check Rule RE Reminder Order Check Rule Inquiry RI 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 1 2 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	tus: APPLICABLE
Output Text:	BOTH ORDER CHECK AND DEFINITION TEXT
Order Check Text The ordered medicatio	n is in FDA pregnancy category X.
1) Pregnancy must be	excluded prior to receiving the medication
, ·	e provided contraceptive counseling on potential risk 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	ITEMS GROUP 1	INQUIRY	Feb 02,	2012 1	0:11:31 am	Page 1
VA-TERATOGENIC MEDICA	ATIONS (CAT D	OR C) GROUP	)		No. 8	
Class:	NATIONAL					
Sponsor:						
Review Date:						
Group Description:						
Pharmacy Item List: DG.ACETAMINOPHEN,	BUTALBITAL					
•						
Orderable Item List:						
Reminder Rule List:						
Rule Name:	VA-TERATOGEN	NIC MEDICATI	ONS ORE	DER CHEC	K (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 0: ORDERABLE ITEM R: ORDER CHECK RULE QUIT Q:

# **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:
          1
                   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 ^ to exit: (1/1/1988 - 6/30/2004): T-60// (MAY 01, 2004)
Select Ending Date.
ENDING date or ^ to exit: (5/1/2004 - 6/30/2004): T// (JUN 30, 2004)
     Select one of the following:
          А
                   All Patients
                   Multiple Patients
         М
Select Patients or ^ to exit: A// 11 Patients
     Select one of the following:
          F
                   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)06/15/2004024CRPATIENT, TWO(666009998)06/15/20040795CRPATIENT, THREE(666009997)05/04/20040000CRPATIENT, FOUR(666009996)05/11/20040000CRPATIENT, FIVE(666009995)05/11/20040000CRPATIENT, SIX(666009994)05/11/20040000
                                                                          6
                                                                         21
CRPATIENT, THREE
CRPATIENT, FOUR (666009996)
CRPATIENT, FIVE (666009995)
                                                                          0
                                                                          0
                                                               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: <u>http://vaww1.va.gov/Acronyms/</u>

# 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	
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	
МНТС	Mental Health Treatment Coordinator	
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 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."
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	<ul> <li>Patient Cohort</li> <li>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.</li> <li>Patient Cohort Logic</li> <li>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), &amp; (AND), !' (OR NOT), and &amp;' (AND NOT).</li> </ul>
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 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.

Term	Definition
	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 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 the reminder.
Finding Item	A Finding Item is a piece of information that can be searched by the 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 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 Assistant	The Mental Health Assistant is a national VA software package that is used 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 presenting questionnaires for screening for common mental health issues such as the AUDIT-C for alcohol misuse.
Prompt	as the AUDIT-C for alcohol misuse.An aid on the screen in the form of a question or statement indicating the

Term	Definition		
	options available. Prompts are defined for PCE, MH Notification Purpose, or		
	as locally created comment check-boxes.		
PXRM	Clinical Reminder package namespace		
Reminder	A reminder component is any element, or part thereof, of a reminder,		
Component	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. <b>Finding type</b> 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	Location Lists are a new finding type introduced in version 2.0. They provide		
List	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 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		

Term	Definition
	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 run 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 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.
TIU	<ul> <li>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.</li> <li>TIU accepts document input from a variety of data capture methodologies.</li> <li>Those initially supported are transcription and direct entry. TIU allows upload of ASCII formatted documents into VISTA.</li> </ul>

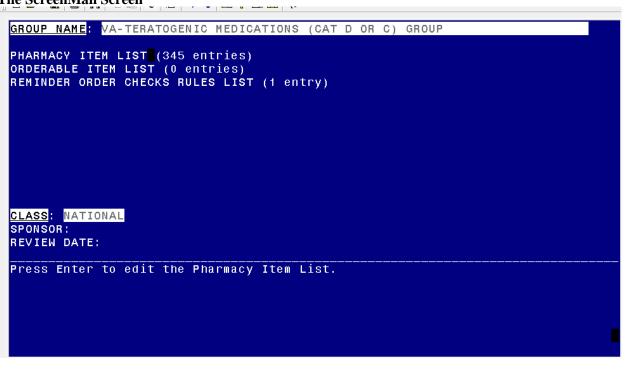
# Appendix B: Clinical Reminder Order Checks Example

**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.

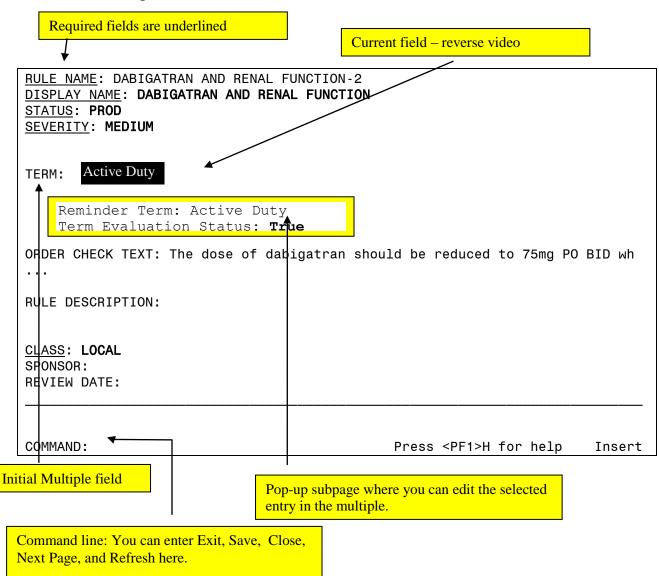
#### ScreenMan Overview

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



**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).

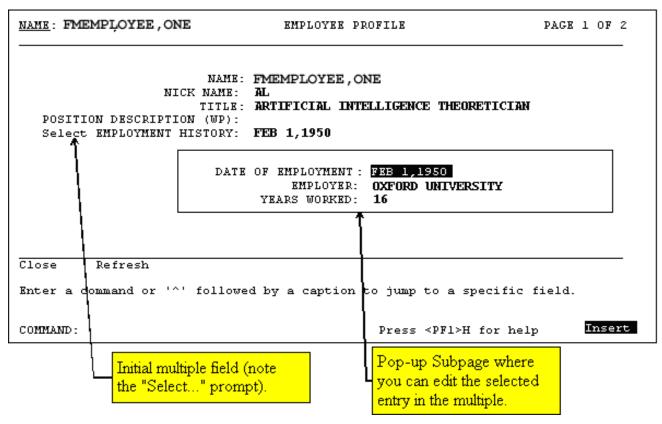
# Word-Processing Fields

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 vou 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.

- 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.

Options		?	
General Notifications Order Checks Order Checks Enable or disal You can turn on or off these notification	ble your or	der checks.	- 1
Order Check	On/Off	Comment	^
Allergy-Contrast Media Interaction	On		
Allergy-Drug Interaction	On		
Aminoglycoside Ordered	On		
Biochem Abnormality For Contrast	On		
Clinical Reminder Live	On		
Clinical Reminder Test	On		
Clozapine Appropriateness	On		
Critical Drug Interaction	On	Mandatory	
Ct & Mri Physical Limitations	On		
Dangerous Meds For Pt > 64	On		
Dispense Drug Not Selected	On		~
Dispense Drug Not Selected	On OK	Cancel Apply	2

- 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

Order Checks					
To cancel an order select the order by checking the checkbox and press the "Cancel Checked Order(s)" button. If the order check description is cut short, hover over the text to view the complete description.					
Cancel Order/Order Check Text					
Cancel? DABIGATRAN CAP,ORAL 150MG TAKE 1 CAPSULE BY MOUTH TWICE A DAY Quantity: 60 Refills: 0 *UNSIGNED*					
(1 of 4) Remote Order Checking not available - checks done on local data only (2 of 4) Dabigatran and Renal Function 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.					
Cancel Checked Order(s)         Accept Order(s)         Return to Orders					
Order Checking					
(1 of 4) Remote Order Checking not available - checks done on local data only 🔼					
(2 of 4) Dabigatran and Renal Function 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.					
Accept Order Cancel Order Drug Interaction Monograph					