VistA<sup>®</sup>

# **Clinical Reminders**

Manager's Manual

# PXRM\*2\*16

February 2011

Product Development Office of Information and Technology Department of Veterans Affairs

## Preface

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

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

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

#### **Recommended Users**

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

## **Related Manuals**

CPRS V28 Installation Guide (OR\_30\_280IG.PDF) CPRS V28 User Manual (OR\_30\_280UM.PDF) CPRS V28 Release Notes (OR\_30\_280RN.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

## Web Sites

Site	URL
National PD Reminders site	http://vista.med.va.gov/reminders
National CPRS site	http:// vista.med.va.gov/cprs
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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February 2011	<u>318</u>	Added two new appendices from the National Clinical Reminders Committee	Kenny Condie	JoAnn Green
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December 2010	<u>23</u>	Added computed finding example for VA-IS INPATIENT	AI Ebert	JoAnn Green
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September 2008	15	Added new computed findings descriptions	Tim Landy	JoAnn Green
July 2008	Page <u>246</u>	New report, Finding Usage Report	Tim Landy	JoAnn Green
July 2008	Page <u>23</u>	Updated computed findings, VA Progress Note	Tim Landy	JoAnn Green
January 2008	Page <u>23</u>	Updated computed findings: added new CF	Tim Landy	JoAnn Green
October 2007	Page <u>5</u>	Updated National Reminders list	Tim Landy	JoAnn Green
October 2007	Page <u>110</u>	Added description of new option, Copy Location List	Tim Landy	JoAnn Green
October 2007	Page <u>215</u>	Added description of new option, TIU Template Reminder Dialog Parameter	Tim Landy	JoAnn Green
October 2007	Page <u>182</u>	Updates to description of Mental Health Dialog functionality	Tim Landy	JoAnn Green

Revision Date	Page(s)	Description	Project Manager	Author
October 2007	Page 253	Added description of new option, Edit Number of MH Questions	Tim Landy	JoAnn Green
September 2007	Page <u>75</u>	Added new function finding, NUMERIC	Tim Landy	JoAnn Green
September 2007	Pages <u>1</u> - 3	Updated list of changes in patch 6	Tim Landy	JoAnn Green
June 2007	Through out	Changes per patch 6	Tim Landy	JoAnn Green
September 2006	Pages <u>254</u> - <u>288</u>	Changes to Patient Lists and Extract Management descriptions	Tim Landy	Debbie Trost, JoAnn Green
July 2006	Page 105	Location List change	Tim Landy	JoAnn Green
May-June 2006	Page <u>288</u>	Extract Management option changes	Tim Landy	JoAnn Green
April 2006	Through out	Changes per SQA review	Tim Landy	JoAnn Green
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March 2005	Through out manual	Changes for Version 2.0	Gloria Smith	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 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 16 (PXRM\*2\*16) Changes

The Clinical Reminders patch PXRM\*2\*16 and bundled patches (OR\*3.0\*280, PSJ\*5.0\*226) release new functionality that will allow 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.

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]. See the

#### 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 are 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 first 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 uses 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 that the reminder is resolved.

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

The Clinical Reminders patch PXRM\*2\*12 and bundled patches contain modifications to improve reminder exchange tools, reminder due reports, and National Drug Class standardization, as well as changes to support pharmacy encapsulation so the reminder package will no longer have direct access to Pharmacy data. Initial changes to support standardization of reminder findings are incorporated.

The PXRM\*2.0\*12 build is bundled with the following builds.

- GMTS\*2.7\*89 This patch supports new Reminder Exchange functionality and updates to Reminders components formatting.
- OR\*3.0\*295 This patch contains OR bug fixes related to reminder dialogs and changes to an API used by reminders.
- TIU\*1.0\*249 This patch supports new Reminder Exchange functionality and improves the TIU ListManager Health Summary Object display.

Some of the items in these patches include:

- The ability to use reminder exchange to send individual components (reminder dialogs, terms, taxonomies, etc.) without having to send a reminder,
- The ability to share TIU Health summary objects,
- The ability to show a % in a reminder report as a separate column and to separate stop codes in a combined report,
- New Computed Findings for body surface area, the date a patient will be a certain age, and for VA employees,
- Updates to the VA-TBI SCREEN, VA-IRAQ/AFGHAN SCREENING, VA-OEF/OIF
- MONITOR reminders to remove combat eligibility as a criteria and move towards using the OEF/OIF fields in the patient file,
- An OEF/OIF extract for the FY10 performance monitor,
- Updates and fixes to other reminders including some of the MHV reminders,
- A new reminder for evaluation of positive screens for embedded fragments) VA-EMBEDDED FRAGMENTS RISK EVALUATION).

# See the Clinical Reminders patch 12 Release Notes for specific details about enhancements and changes in patch 12 and related GMTS, OR, and TIU patches.

#### 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, MST, or Pain. Other national reminders are being developed under the guidance of the VA Clinical Practice Guideline Council.

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).

Reminder Definition/Dialog/Dialog Element	Description
VA-AAA SCREENING	Updates term VA-OUTSIDE SCREENING FOR
(REMINDER/DIALOG)	AAA to include two health factors instead of just one.
VA-POLYTRAUMA MARKER	Reminder print name: Combat Polytrauma Confirmation
VA-PTSD REASSESSMENT (PCL) REMINDER/DIALOG	Updates dialog to use the health factor UNABLE TO SCREEN-ACUTE MED CONDITION instead of UNABLE TO SCREEN - ACUTE ILLNESS.
VA-BL DEPRESSION SCREEN	Branching logic dialog element.
VA-HF ETOH SELF SCORE AUD 10	Update to dialog element VA-HF ETOH SELF SCORE AUD 10.
VA-HF ETOH SELF SCORE AUD 10 dialog element	Removes duplicate AUD10 entries from the result group which was duplicating text in the notes.
VA-EMBEDDED FRAGMENTS RISK EVALUATION	Updated Reminder/dialog. See Appendix B for instructions on changing default values.
VA-GP EF CONTACT INFORMATION DIALOG GROUP	Updates the contact information fields to be local to allow local editing.
VA-MH STOP CODES FOR PTSD EVALUATION	Updates to the Reminder Location List for VA-MH STOP CODES FOR PTSD EVALUATION.
VA-HF ACUTE ILLNESS EVAL	Updates to the dialog element VA-HF ACUTE ILLNESS EVAL.
DEPRESSION/PTSD REMINDER TERM UPDATES - PATCH 17	Updates to the reminder term VA-REFUSED PTSD SCREEN and VA-DEPRESSION SCREEN OEF/OIF.

PXRM*2*17 COMPUTED FINDINGS	Described in Computed Findings section below.

## Updates to National Reminders in Patch 12

The following Reminder components are 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

#### 2/17/11 NOTE: See Appendix B re changing default values for the Embedded Fragment reminder.

#### 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 Exported Reminders

1. VA-\*BREAST CANCER SCREEN

2. VA-\*CERVICAL CANCER SCREEN VA-\*CHOLESTEROL SCREEN (F) 4. VA-\*CHOLESTEROL SCREEN (M) 5. VA-\*COLORECTAL CANCER SCREEN (FOBT) 6. VA-\*COLORECTAL CANCER SCREEN (SIG.) 7. VA-\*FITNESS AND EXERCISE SCREEN 8. VA-\*IHD 412 ELEVATED LDL REPORTING 9. VA-\*IHD 412 LIPID PROFILE REPORTING VA-\*IHD ELEVATED LDL REPORTING 10. VA-\*IHD LIPID PROFILE REPORTING 11. 12. VA-\*INFLUENZA IMMUNIZATION 13. VA-\*PNEUMOCOCCAL VACCINE 14. VA-\*PROBLEM DRINKING SCREEN 15. VA-\*SEATBELT AND ACCIDENT SCREEN 16. VA-\*TETANUS DIPHTHERIA IMMUNIZATION VA-\*TOBACCO USE SCREEN 17. 18. VA-\*WEIGHT AND NUTRITION SCREEN 19. VA-AAA SCREENING 20. VA-ADVANCED DIRECTIVES EDUCATION VA-ALCOHOL ABUSE EDUCATION 21. VA-ALCOHOL ABUSE SCREEN (AUDIT-C) 22. 23. VA-ALCOHOL AUDIT-C POSITIVE F/U EVAL 24. VA-ALCOHOL USE SCREEN (AUDIT-C) 25. VA-ANTIPSYCHOTIC MED SIDE EFF EVAL 26. VA-BL ALCOHOL SCREEN 27. VA-BL ALCOHOL WITHIN SAFE LIMIT 28. VA-BL DEPRESSION SCREEN 29. VA-BL OEF/OIF FEVER 30. VA-BL OEF/OIF GI SX 31. VA-BL OEF/OIF OTHER SX VA-BL OEF/OIF SERVICE INFO ENTERED 32. 33. VA-BL OEF/OIF SKIN SX 34. VA-BL PTSD SCREEN 35. VA-BLOOD PRESSURE CHECK 36. VA-BREAST EXAM VA-BREAST SELF EXAM EDUCATION 37. 38. VA-CV ELIG W/HF FOR NO SERVICE VA-CV INELG W/HF FOR SERVICE 39. 40. VA-DEPRESSION SCREENING 41. VA-DIABETIC EYE EXAM 42. VA-DIABETIC FOOT CARE ED. VA-DIABETIC FOOT EXAM 43. VA-DIGITAL RECTAL (PROSTATE) EXAM 44. 45. VA-EMBEDDED FRAGMENTS RISK EVALUATION 46. VA-EMBEDDED FRAGMENTS SCREEN 47. VA-EXERCISE EDUCATION 48. VA-FECAL OCCULT BLOOD TEST 49. VA-FLEXISIGMOIDOSCOPY VA-GEC REFERRAL CARE COORDINATION 50. VA-GEC REFERRAL CARE RECOMMENDATION 51. 52. VA-GEC REFERRAL NURSING ASSESSMENT VA-GEC REFERRAL SOCIAL SERVICES 53. 54. VA-GEC REFERRAL TERM SET (CC)

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59.	VA-HTN ASSESSMENT BP >=140/90				
60.	VA-HTN ASSESSMENT BP >=160/100				
61.	VA-HTN LIFESTYLE EDUCATION				
62.	VA-IHD ELEVATED LDL				
63.	VA-IHD LIPID PROFILE				
64.	VA-INFLUENZA VACCINE				
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73.	VA-MHV DIABETES RETINAL EXAM				
74.	VA-MHV HYPERTENSION				
	VA-MHV INFLUENZA VACCINE				
	VA-MHV LDL CONTROL				
77.	VA-MHV LIPID MEASUREMENT				
78.	VA-MHV MAMMOGRAM SCREENING				
79.	VA-MHV PNEUMOVAX				
	VA-MST SCREENING				
	VA- EPI LAB EXTRACT				
82.	VA- EPI RX EXTRACT				
83.	VA-NUTRITION/OBESITY EDUCATION				
84.	VA-OEF/OIF MONITOR REPORTING				
85. 80	VA-PAP SMEAR				
86. 87.					
88.	VA-POLYTRAUMA MARKER VA-POS DEPRESSION SCREEN FOLLOWUP				
89.	VA-POD				
90.	VA-PSA				
91.	VA-PTSD REASSESSMENT (PCL)				
92.	VA-PTSD SCREENING				
93.	VA-QUERI REPORT IHD ELEVATED LDL				
94.	VA-QUERI REPORT LIPID STATUS				
95.	VA-SEATBELT EDUCATION				
96.	VA-TBI SCREENING				
97.	VA-TBI/POLYTRAUMA REHAB/REINTEGRATION PLAN OF CARE				
98.	VA-TEST				
99.	VA-TOBACCO EDUCATION				
100.	VA-VANOD SKIN ASSESSMENT				
101.	VA-VANOD SKIN REASSESSMENT VA-WEIGHT				
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104.	VA-WH PAP SMEAR REVIEW RESULTS				
105.	VA-WH PAP SMEAR SCREENING				

#### Patches Released since V1.5

PXRM*1.5*1 - Hepatitis C Extract
PXRM*1.5*2 - Clinical Reminders Fixes and Enhancements
PXRM*1.5*3 - Reminder Expanded Taxonomy Delete
PXRM*1.5*4 - Reminder Dialog changes for V15 CPRS
PXRM*1.5*5 - Exchange Utility
PXRM*1.5*6 - Reminder Reports Enhancements
PXRM*1.5*7 – MST Reminders and Dialogs
PXRM*1.5*8 - QUERI/IHD Reminders
PXRM*1.5*9 - MST Screening Reminders
PXRM*1.5*10 – FIX MST Date
PXRM*1.5*11 - Correct status of inpatient medications
PXRM*1.5*12 – Reminder Index Global
PXRM*1.5*13 – National Hypertension Reminders
PXRM*1.5*14 – Race and Ethnicity Reminders Computed findings
PXRM*1.5*15 – Mental Health QUERI Reminders
PXRM*1.5*16 – VA-IHD LIPID PROFILE reminder dialog correction
PXRM*1.5*17 – Clean-up for Reminder Computed Findings
PXRM*1.5*18 - CSV - CODE SET VERSIONING COMPLIANCE
PXRM*1.5*19 - FIX FOR DOM80 ERROR
PXRM*1.5*20 – CLINICAL REMINDERS INDEX SIZE ESTIMATE
PXRM*1.5*21 – IRAN&AFGHAN POST-DEPLOYMENT REMINDER
PXRM*1.5*22 - CORRECTION TO PXRM*1.5*12 TECHNICAL MANUAL
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*17 – POLYTRAUMA MARKER REMINDER AND DIALOG

## **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. (Yellow-highlighted options are new with PXRM\*2\*12.)

Reminders	s Managers Menu [PXRM MANAGERS MENU]					
CF	Reminder Computed Finding Management [PXRM CF MANAGEMENT]					
	CRL	Computed Finding List				
	CFI	Reminder Computed Finding Inquiry				
	CFE	Add/ Edit Computed Finding				
RM	RM Reminder Definition Management [PXRM REMINDER MANAGEMENT]					
	RL	List Reminder Definitions				
	RI	Inquire about Reminder Definition				
	RE	Add/Edit Reminder Definition				
	RC	Copy Reminder Definition				
	RA	Activate/Inactivate Reminders				
	RH	Reminder Edit History				
SM	-					
	SL	List Reminder Sponsors				
	SI	Reminder Sponsor Inquiry				
	SE	Add/Edit Reminder Sponsor				
TXM	Remino	der Taxonomy Management [PXRM TAXONOMY MANAGEMENT]				
	TL	List Taxonomy Definitions				
	TI	Inquire about Taxonomy Item				
	TE	Add/Edit Taxonomy Item				
	TC	Copy Taxonomy Item				
	TX	Selected Taxonomy Expansion				
	TXV	Verify all taxonomy expansions				
	TXA	Expand all Taxonomies				
TRM	Remino	der Term Management [PXRM TERM MANAGEMENT]				
	TL	List Reminder Terms				
	TI	Inquire about Reminder Term				
	TE	Add/Edit Reminder Term				
	TC	Copy Reminder Term				
LM						
	LL	List Location Lists				
	LI	Location List Inquiry				
	LE	Add/Edit Location List				
	LC	Copy Location List				
RX	Remino	der Exchange [PXRM REMINDER EXCHANGE]				
RT	Reminder Test [PXRM REMINDER TEST]					
OS	Other Supporting Menus [PXRM OTHER SUPPORTING MENUS]					
	TM	PCE Table Maintenance				
	PC	PCE Coordinator Menu				
	HS	Health Summary Coordinator's Menu				
	EF	Print Blank Encounter Forms				
	00	Enter/edit quick orders				
INFO	~	der Information Only Menu [PXRM INFO ONLY]				
_	RL	List Reminder Definitions				
	RI	Inquire about Reminder Definition				
	TXL	List Taxonomy Definitions				
	TXI	Inquire about Taxonomy Item				
	TRL	List Reminder Terms				
	TRI	Inquire about Reminder Term				

	St. List Domindon Chongong
DM	SL List Reminder Sponsors Reminder Dialog Management [PXRM DIALOG MANAGEMENT]
DM	DP Dialog Parameters
	RS Reminder Resolution Statuses
	HR Health Factor Resolutions
	FP General Finding Type Parameters
	FI Finding Item Parameters
	TD Taxonomy Dialog Parameters
	DI Reminder Dialogs
	DR Dialog Reports
	OR Reminder Dialog Elements Orphan Report
	ER Empty Reminder Dialog Report
	CH Check Reminder Dialog for invalid items
CP	CPRS Reminder Configuration [PXRM CONFIGURATION MANAGEMENT]
	CA Add/Edit Reminder Categories
	CL CPRS Lookup Categories
	CS CPRS Cover Sheet Reminder List
	MH Mental Health Dialogs Active
	PN Progress Note Headers
	RA Reminder GUI Resolution Active DL Default Outside Location
	PT Position Reminder Text at Cursor
	WH 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
PL	Reminder Patient List Menu [PXRM PATIENT LIST MENU]
	LRM List Rule Management
סגס	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
ROI	OE Add/Edit Reminder Orderable Item Group
	OI Reminder Orderable Item Inquiry
	OT Reminder Orderable Item Group Test
XM	Reminder Extract Menu [PXRM EXTRACT MENU]
	MA Reminder Extract Management
	EP Extract Definition Management
	EC Extract Counting Rule Management
	EG Extract Counting Group Management
	LR List Rule Management
GEC	GEC Referral Report [GEC REFERRAL REPORT]

## 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 Orderable Item Menu	ORDERABLE ITEM GROUP MENU	ROI	This menu contains the options Add/Edit Reminder Orderable Item Group, Reminder Orderable Item Inquiry, and Reminder Orderable Item Group Test, which let you create order checks.
Reminder Extract Menu	PXRM EXTRACT MENU	ХМ	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.

There is a set of national computed findings and 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.

#### 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.

Syn.	Name	Option Name	Description
CFE	Add/Edit Reminder	PXRM COMPUTED	This option provides for editing of computed finding
	Computed Finding	FINDING EDIT	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.

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

#### 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
       L
               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. Place the finding into your reminder (reminder manager).

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.

#### New Computed Finding with Patch 16

#### 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)
```

#### Change in Patch 17

A new national reminder computed finding, VA-ASU USER CLASS, was created for the Polytrauma Marker project. This computed finding can be used in reminder definitions, reminder terms, and reminder dialogs, and includes the ability to specify a user class showing that the user is active.

This computed finding can return multiple occurrences of a specified ASU user class for the user who is running the reminder evaluation or processing a reminder dialog.

#### Changes in Patch 12

A computed finding inquiry (CFI) option has been added to the Computed Finding Management menu. This option will display 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/is an inpatient on the evaluation date. The following "CSUB" values will be available:
  - ADMISSION DATE/TIME (FileMan format)
  - o 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.

#### **Descriptions of New and Modified Computed Findings with Patch 12:**

#### **CF VA-IS INPATIENT**

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

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-PROGRESS NOTE**

This computed finding was changed so it can use either the TIU DOCUMENT DEFINITION title or IEN in the computed finding parameter.

#### VA-BMI

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

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

An example of using the VA-BMI computed finding:

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

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

Select Reminder Definition Management Option: RE Add/Edit Reminder Definition Select Reminder Definition: bmi and BSA TEST PKR BMI AND BSA TEST LOCAL Select one of the following: All reminder details Α G General В Baseline Frequency F Findings FF Function Findings Logic L 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-BMT NATIONAL ...OK? Yes// (Yes) Computed Finding Description: The VA-BMI computed finding calculates the patient's body mass index. The value returned, which can be used in the CONDITION field of the findings, is the body mass index. An example of using the VA-BMI computed finding: 1) Create a finding in a reminder that is the VA-BMI computed finding; 2) Add logic in the CONDITION field to check for a particular BMI value: "I V>25"; 3) This finding will be evaluated to true for patients with a BMI that is greater than 25. This is a multi-occurrence computed finding. Editing Finding Number: 1 FINDING ITEM: VA-BMI// REMINDER FREQUENCY: MINIMUM AGE: MAXIMUM AGE: RANK FREQUENCY: USE IN RESOLUTION LOGIC: USE IN PATIENT COHORT LOGIC: BEGINNING DATE/TIME: ENDING DATE/TIME: ← You can change the occurrence count here. OCCURRENCE COUNT: 5// 6 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 CF VA-BMI Finding # 1 Select FINDING:

#### 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-BSA

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-CURRENT INPATIENTS

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:

#### 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:

#### New computed findings with Patch 6

#### 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

Μ	Mosteller
D	DuBois and Dubois
Н	Haycock
G	Gehan and George
В	Boyd

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

Formulas for Body Surface Area Calculator

# The Mosteller formulaBSA (m²) = ( [Height(cm) x Weight(kg) ]/ 3600 )<sup>½</sup>e.g. BSA = SQRT( (cm\*kg)/3600 )or in inches and pounds:BSA (m²) = ( [Height(in) x Weight(lbs) ]/ 3131 )<sup>½</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 x Height(cm)<sup>0.725</sup> x Weight(kg)<sup>0.425</sup>

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

The Gehan and George formula BSA (m<sup>2</sup>) =  $0.0235 \times \text{Height(cm)}^{0.42246} \times \text{Weight(kg)}^{0.51456}$ 

The Boyd formula

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

#### 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.

- 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 )

#### VA-DATE FOR AGE

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.

#### VA-EMPLOYEE

This computed finding will be true if the patient was an employee during the date range specified by the beginning date and time and the ending date and time.

The following algorithm is used to determine if the patient is 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, then 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 and time, the computed finding is false.

3. If steps one and two are passed, then a check is made to see if the New Person file entry has a pointer to the PAID file. If the pointer exists, the computed finding is true; otherwise it is false.

#### 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-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".

#### VA-COMBAT VET ELIGIBILITY

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".

#### VA-LAST SERVICE SEPARATION DATE

This is a single occurrence computed finding that returns the most recent Service Separation Date for the veteran as a FileMan date. It can be used as the value in the Condition. For example: I V>3030101.

The computed finding will be true if a separation date is found; otherwise it will be false. If the computed finding is true, the date of the finding will be the most recent Service Separation Date.

#### 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".

#### VA-OIF SERVICE

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".

#### VA-POW

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".

#### VA-PURPLE HEART

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

There is no value for use in a Condition.

# VA-SERVICE BRANCH

This computed finding will return service branch information for a maximum of three service periods in the date range specified by Beginning Date/Time and Ending Date/Time.

Subscripts that can be used in a Condition are: "BRANCH" "DISCHARGE TYPE" "ENTRY DATE" "SEPARATION DATE" "SERVICE COMPONENT"

The default value is "DISCHARGE TYPE".

### VA-UNKNOWN OEF/OIF SERVICE

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

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.

## **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. 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 Available Appointment Data Fields table in the Computed Findings 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 parameter is FLDS:F1,F2,...^STATUS:S1,S2,...^LL:LOCATION LIST. CLASS: NATIONAL

## 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^3030328.13^3VAMC"

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 TYPE	Format/Valid Values	Description	Examples of Returned Data
1	APPOINTMENT DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled Appointment Date/Time	3031215.113 3031201.0815
2	CLINIC IEN and NAME	TEXT	ID^name	Clinic IEN and name	150;CARDIOLOGY 32;BLOOD DONOR
3	APPOINTMENT STATUS	TEXT	R (Scheduled/Kept) I (Inpatient) NS (No-Show) NSR (No-Show, Rescheduled) CP (Cancelled by Patient) CPR (Cancelled by Patient, Rescheduled) CC (Cancelled by Clinic) CCR (Cancelled by Clinic, Rescheduled) NT (No Action Taken)	The status of the appointment.	R;SCHEDULED/KEPT I;INPATIENT NS;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
4	PATIENT DFN and NAME	TEXT	DFN;name	Patient DFN and Patient Name	34877;JONES,BOB 455;SCHILSON,BRIAN
ID	FIELD NAME	DATA TYPE	Format/Valid Values	Description	Examples of Returned Data
5	LENGTH OF APPOINTMENT	TEXT	NNN	The scheduled length of appointment, in minutes	20 60
6	COMMENTS	TEXT	free text	Any comments associated with the appointment	PATIENT NEEDS WHEELCHAIR
7	OVERBOOK	TEXT	Y or N	"Y" if appointment is an overbook else "N"	Y N
8	ELIGIBILITY OF VISIT IEN and	TEXT	IEN;name	Eligibility code and name associated with	2;AID & ATTENDANCE 7;ALLIED VETERAN

## **Available Appointment Data Fields**

	NAME			the appointment	13;COLLATERAL OF VET.
9	CHECK-IN	DATE/TIME	YYYMMDD.HHMM	Date/time the patient	3031215.113
<i></i>	DATE/TIME			checked in for the	5051215.115
				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	
1.4	CDEDIT STOP	TEVT	IENeada	clinic.	540.500
14	CREDIT STOP CODE IEN and	TEXT	IEN;code	Credit Stop code IEN and code associated	549;500
	CODE IEN and CODE			with the clinic.	
15	WORKLOAD	TEXT	Y or N	"Y" if clinic is non-	Y
15	NON-COUNT	ILAI		count else "N"	N
16	DATE	DATE	YYYMMDD	Date the appointment	3031215
10	APPOINTMENT	DITL		was entered into the	5051215
	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	X-RAY	DATE/TIME		with this appointment The scheduled	3031215.083
20	X-RAY DATE/TIME	DATE/TIME	YYYMMDD.HHMM	date/time of the X-	5051215.065
	DATE/TIME			RAY in conjunction	
				with this appointment	
21	LAB	DATE/TIME	YYYMMDD.HHMM	The scheduled	3031215.083
	DATE/TIME			date/time of the Lab	
				tests in conjunction	
				with this appointment	
22	STATUS	TEXT	Status Code, Status	Status Information	8;INPATIENT
			Description, Print Status,	for the Visit.	APPOINTMENT; INPATIENT/CH
			Checked In Date/Time,		ECKED
			Checked Out Date/Time,		OUT;;3030218.1548;145844
			and Admission Movement IFN		
				" <b>V</b> 7" : £ £:1	Y
23	X-RAY FILMS	TEXT	YOTN	Y II X-ray mine are	Ť
23	X-RAY FILMS	TEXT	Y or N	"Y" if x-ray films are required at clinic else	r N

#### **Example: Editing Computed Finding Parameter to filter appointment data**

If you want to limit the patient cohort for a reminder to APPOINTMENT DATE/TIME, CLINIC IEN and NAME, and DATE APPOINTMENT MADE, patients who kept their appointments, and were seen in a Diabetic clinic, you could specify this in the COMPUTED FINDING PARAMETER, as shown here.

```
Select Reminder Definition Management Option: Add/Edit Reminder Definition
Select Reminder Definition: diaB PTS (5Y) W/O DIAB EXAM (1Y)
                                                                   LOCAL
     Select one of the following:
         Α
                   All reminder details
         G
                   General
         В
                   Baseline Frequency
         F
                   Findings
         FF
                  Function Findings
         T.
                   Logic
         С
                   Custom date due
         D
                   Reminder Dialog
         W
                   Web Addresses
Select section to edit: f Findings
Reminder Definition Findings
Choose from:
EX DIABETIC EXAM
                                                                 Finding #: 2
                                                                 Finding #: 1
тх
   VA-DIABETES
Select FINDING: VA-APPOINTMENTS FOR A PATIENT
     Searching for a DRUG, (pointed-to by FINDING ITEM)
     Searching for a EDUCATION TOPIC, (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 MENTAL HEALTH INSTRUMENT, (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)
     Searching for a REMINDER TAXONOMY, (pointed-to by FINDING ITEM)
     Searching for a REMINDER TERM, (pointed-to by FINDING ITEM)
     Searching for a SKIN TEST, (pointed-to by FINDING ITEM)
     Searching for a VA DRUG CLASS, (pointed-to by FINDING ITEM)
     Searching for a VA GENERIC, (pointed-to by FINDING ITEM)
     Searching for a VITAL MEASUREMENT, (pointed-to by FINDING ITEM)
     Searching for a DRUG
     Searching for a EDUCATION TOPIC
     Searching for a EXAM
     Searching for a REMINDER LOCATION LIST
     Searching for a HEALTH FACTOR
     Searching for a IMMUNIZATION
     Searching for a LABORATORY TEST
     Searching for a MENTAL HEALTH INSTRUMENT
     Searching for a ORDERABLE ITEM
    Searching for a RADIOLOGY PROCEDURE
    Searching for a REMINDER COMPUTED FINDING
 VA-APPOINTMENTS FOR A PATIENT
                                NATIONAL
         ...OK? Yes//
                      (Yes)
```

Are you adding 'VA-APPOINTMENTS FOR A PATIENT' as a new FINDINGS (the 3RD for this REMINDER DEFINITION)? No// Y (Yes)

Computed Finding Description:

This multiple occurrence computed finding returns a list of appointments for a patient 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 Available Appointment Data Fields table 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 Editing Finding Number: 3 FINDING ITEM: VA-APPOINTMENTS FOR A PATIENT// 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: I \$P(V,U,16)>3060301 CONDITION CASE SENSITIVE: N NO USE STATUS/COND IN SEARCH: Y YES COMPUTED FINDING PARAMETER: FLDS:1,2,16^STATUS:R^LL:DIABETIC LOCATIONS FOUND TEXT: No existing text Edit? NO// NOT FOUND TEXT: No existing text Edit? NO//

Remi	nder Definition Findings	
Choc	se from:	
CF	VA-APPOINTMENTS FOR A PATIENT	Finding #: 3
ΕX	DIABETIC EXAM	Finding #: 2
TX	VA-DIABETES	Finding #: 1

# **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	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.

# 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)

## Example: Diabetic Eye Exam

- 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 adding a reminder to a health summary is found on page **Error! Bookmark not defined.** and the procedure(s) for making it available in the CPRS GUI is found on page <u>220</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**: All the reminder definitions between the first one and Diabetic Eye Exam are deleted from this example, for brevity's sake.

```
RL
         List Reminder Definitions
  RI
         Inquire about Reminder Definition
  RE
        Add/Edit Reminder Definition
        Copy Reminder Definition
  RC
  RA
        Activate/Inactivate Reminders
Select Reminder Definition Management Option: RL List Reminder Definitions
List all reminders? Y// NO
List all local reminders? Y// NO
List only reminders starting with (prefix)? VA-// <Enter>
List Active (A), Inactive (I), Both (B)? B//<Enter> oth
Sort list by Name (N), Print Name (P)? N//<Enter> ame (.01)
A reminder list will be created using the following criteria:
 List all reminders? NO
 List all local reminders? NO
 List only reminders starting with (prefix)? VA-
 List Active (A), Inactive (I), Both (B)? Both
 Sort list by Name (N), Print Name (P)? Name (.01)
Is this correct? Y// <Enter>ES
DEVICE: <Enter> ANYWHERE Right Margin: 80// <Enter>
                                           FEB 8,2005 09:40 PAGE 1
REMINDER DEFINITION LIST
      _____
_____
       VA-HEP C RISK ASSESSMENT
Name:
Print Name: Hepatitis C Risk Assessment
Class:
                           NATIONAL
Sponsor:
Review Date:
Usage:
                           CPRS
Priority:
Reminder Description:
   Assess all patients for hepatitis C risk factors once. Patients with a
   previous laboratory test for hepatitis C or a previous diagnosis of
   hepatitis C do not require further risk assessment.
REMINDER DEFINITION LIST
                                           FEB 8,2005 09:40 PAGE 2
                      ------
```

Findings: Finding Item: VA-PREVIOUSLY ASSESSED HEP C R (FI(1)=RT(3)) Finding Item: VA-RISK FACTOR FOR HEPATITIS C (FI(2)=RT(4)) Finding Item: VA-NO RISK FACTORS FOR HEP C (FI(3)=RT(2)) Finding Item: VA-DECLINED HEP C RISK ASSESSM (FI(4)=RT(1)) Finding Item: VA-HEP C VIRUS ANTIBODY POSITI (FI(5)=RT(5)) Finding Item: VA-HEP C VIRUS ANTIBODY NEGATI (FI(6)=RT(6)) Finding Item: VA-HEPATITIS C INFECTION (FI(7)=RT(7)) Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient: (SEX)&(AGE) Expanded Patient Cohort Logic: (SEX)&(AGE) Default RESOLUTION LOGIC defines findings that resolve the Reminder: FI(1)!FI(2)!FI(3)!FI(4)!FI(5)!FI(6)!FI(7) Expanded Resolution Logic: FI(VA-PREVIOUSLY ASSESSED HEP C RISK)! FI(VA-RISK FACTOR FOR HEPATITIS C)!FI(VA-NO RISK FACTORS FOR HEP C)! FI(VA-DECLINED HEP C RISK ASSESSMENT)! FI(VA-HEP C VIRUS ANTIBODY POSITIVE)! FI(VA-HEP C VIRUS ANTIBODY NEGATIVE)!FI(VA-HEPATITIS C INFECTION)

#### **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- IHD LIPID PROFILE DEVICE: **<Enter>** ANYWHERE Right Margin: 80// **<Enter>** 

REMINDER DEFINITION INQUIRY Feb 08, 2005 9:47:23 am Page 1 No. 70 VA-IHD LIPID PROFILE -----Print Name: IHD Lipid Profile Class: NATIONAL Office of Quality & Performance Sponsor: Review Date: Rescission Date: Usage: CPRS, DATA EXTRACT, REPORTS Related VA-\* Reminder: VA-IHD LIPID PROFILE Reminder Dialog: Priority: Reminder Description: 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 reminder identifies patients with known IHD (i.e., a documented ICD-9 code for IHD on or after 10/01/99) who have not had a serum lipid panel within the last year. If a more recent record of an UNCONFIRMED IHD DIAGNOSIS is found, the reminder will not be applicable to the patient. A completed LDL lab test (calculated LDL or direct LDL) or documented outside LDL satisfies the reminder for 12 months. A documented order lipid profile health factor satisfies the reminder for 1 month. A patient's refusal to have an LDL level drawn satisfies the reminder for 6 months. Deferring the lipid profile for other reasons satisfies the reminder for 6 months. Technical Description: This reminder is recommended for use by clinicians at Primary Care Clinics (Primary Care/Medicine, GIMC, Geriatric, Women's), Cardiology, Cholesterol Screening and any other specialty clinics where primary care is given.

Setup issues before using this reminder: 1. Use the Reminder Term options to map local representations of findings: IHD DIAGNOSIS No mapping necessary. Use the VA-ISCHEMIC HEART DISEASE reminder taxonomy distributed with this term. UNCONFIRMED IHD DIAGNOSIS Use the UNCONFIRMED IHD DIAGNOSIS health factor distributed with this term or add any local health factor representing an unconfirmed or incorrect IHD diagnosis. LDLEnter the Laboratory Test names from the Lab Package for calculated LDL and direct LDL with "I +V>0" in the CONDITION field. For the following OUTSIDE LDL Reminder Terms, use the health factors distributed with the reminder term or enter the local Health Factor used to represent these values. OUTSIDE LDL <100 OUTSIDE LDL 100-119 OUTSIDE LDL 120-129 OUTSIDE LDL >129 ORDER LIPID PROFILE HEALTH FACTOR Use the health factor distributed with this term or add any local health factor representing the order action. Do not add orderable items to this reminder term (see LIPID PROFILE ORDERABLE). This represents the date the order was placed, not the date the order will be done in the future. The order placement will cause the reminder to be resolved for 1 month. (Alternatively, copy this reminder and add LIPID PROFILE ORDERABLE to the resolution findings if you want the next due date to be calculated based on the future date the order is to be done.) LIPID PROFILE ORDERABLE Enter orderable items for lipid panels that include LDL tests (calculated LDL and direct LDL). The orderable items are informational findings for this reminder. The order will not resolve the reminder, but it will display in the clinical maintenance. Ideally, the clinician will look at the clinical maintenance display to avoid entering duplicate orders. This reminder term is not used in the resolution logic since the future order could be for a long distance in the future. (Copy this reminder and add LIPID PROFILE ORDERABLE to the resolution findings if you want the next due date to be calculated based on the future date the order is to be done.) OTHER DEFER LIPID PROFILE Enter any local health factors or other findings that should defer the reminder for 6 months. For example, "LIFE EXPECTANCY < 6M". REFUSED LIPID PROFILE Use the health factor distributed with this term or add

any local health factor representing refusal of lipid profile test.
LIPID LOWERING MEDS Enter the formulary drug names for investigation drugs. Mapping non-investigative formulary drugs to the VA-GENERIC drugs will ensure the lipid lowering medications are found. The medications are informational findings for this reminder.
<ol> <li>Use the Reminder Dialog edit option to define the national reminder dialog finding items which should be updated during CPRS GUI reminder processing.</li> </ol>
Add local Order Dialog entries to the Dialog elements used for ordering a calculated LDL and/or direct LDL.
Review dialog elements in the national reminder dialog and change any national health factors to local health factors, if necessary. It is not unusual for local findings to be used in your national dialogs. Any local findings used in the national dialogs should be mapped to the appropriate national reminder term.
3. Alternatively, use the Reminder Dialog options to copy the national dialog, dialog elements, and dialog groups to make local changes.
If your site has a Lipid Panel TIU Object, add this TIU Object to the local dialog element header text. The TIU Object should include Chol, Trigly, HDL, LDL-C, Direct LDL values and dates.
Add local dialog elements with local Order Dialogs for additional ordering options for the clinicians. Some sites have clinicians order a consult to a service that corrects unconfirmed diagnoses the clinician finds in a patient's record. If your site has this method in place, copy the reminder dialog to a local reminder dialog and then add the local dialog element for the consult order to the reminder dialog so this practice can continue.
Baseline Frequency:
Do In Advance Time Frame: Wait until actually DUE Sex Specific: Ignore on N/A: Frequency for Age Range: 1 year for all ages Match Text:
No Match Text:
Findings:
Begin: VA-IHD DIAGNOSIS (FI(1)=RT(27)) Finding Type: REMINDER TERM Use in Patient Cohort Logic: AND
Beginning Date/Time: OCT 01, 1999 Use Inactive Problems: N Not Found Text: Patient has no IHD Diagnosis on file.
Mapped Findings: Mapped Finding Item: TX.VA-ISCHEMIC HEART DISEASE Use Inactive Problems: NO
End: VA-IHD DIAGNOSIS

---- Begin: VA-LDL (FI(2)=RT(32)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR Condition: I +V>0 Not Found Text: Patient with IHD and no LDL lab results on file in the past year. RT Mapped Finding: No Reminder Finding Found ---- End: VA-LDL ---------- Begin: VA-OUTSIDE LDL <100 (FI(3)=RT(35)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR Beginning Date/Time: T-1Y Mapped Findings: Mapped Finding Item: HF.OUTSIDE LDL <100 Health Factor Category: OUTSIDE LDL ---- End: VA-OUTSIDE LDL <100 --------- Begin: VA-OUTSIDE LDL 100-119 (FI(4)=RT(34)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR Beginning Date/Time: T-1Y Mapped Findings: Mapped Finding Item: HF.OUTSIDE LDL 100-119 Health Factor Category: OUTSIDE LDL ---- End: VA-OUTSIDE LDL 100-119 --------- Begin: VA-OUTSIDE LDL 120-129 (FI(5)=RT(52)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR Beginning Date/Time: T-1Y Mapped Findings: Mapped Finding Item: HF.OUTSIDE LDL 120-129 Health Factor Category: OUTSIDE LDL ---- End: VA-OUTSIDE LDL 120-129 --------- Begin: VA-OUTSIDE LDL >129 (FI(6)=RT(36)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR Beginning Date/Time: T-1Y Mapped Findings: Mapped Finding Item: HF.OUTSIDE LDL >129 Health Factor Category: OUTSIDE LDL ---- End: VA-OUTSIDE LDL >129 --------- Begin: VA-ORDER LIPID PROFILE HEALTH FACTOR (FI(7)=RT(61)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR

Beginning Date/Time: T-1M Mapped Findings: Mapped Finding Item: HF.ORDER LIPID PROFILE Health Factor Category: LIPID MED INTERVENTIONS ---- End: VA-ORDER LIPID PROFILE HEALTH FACTOR --------- Begin: VA-REFUSED LIPID PROFILE (FI(8)=RT(40)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR Beginning Date/Time: T-6M Mapped Findings: Mapped Finding Item: HF.REFUSED LIPID PROFILE Health Factor Category: LIPID PROFILE INTERVENTIONS ---- End: VA-REFUSED LIPID PROFILE --------- Begin: VA-OTHER DEFER LIPID PROFILE (FI(9)=RT(41)) -----Finding Type: REMINDER TERM Use in Resolution Logic: OR Beginning Date/Time: T-6M Found Text: The lipid profile is deferred for 6 months. Mapped Findings: Mapped Finding Item: HF.OTHER DEFER LIPID PROFILE Health Factor Category: LIPID PROFILE INTERVENTIONS ---- End: VA-OTHER DEFER LIPID PROFILE --------- Begin: VA-UNCONFIRMED IHD DIAGNOSIS (FI(10)=RT(42)) ------Finding Type: REMINDER TERM Use in Patient Cohort Logic: AND NOT Mapped Findings: Mapped Finding Item: HF.UNCONFIRMED IHD DIAGNOSIS Health Factor Category: UNCONFIRMED DIAGNOSIS ---- End: VA-UNCONFIRMED IHD DIAGNOSIS --------- Begin: VA-LIPID LOWERING MEDS (FI(12)=RT(54)) -----Finding Type: REMINDER TERM Beginning Date/Time: T-90D Not Found Text: No active lipid lowering agents on file. Mapped Findings: Mapped Finding Item: DG.CERIVASTATIN Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.FLUVASTATIN Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.ATORVASTATIN Beginning Date/Time: NOW RX Type: A

Mapped Finding Item: DG.LOVASTATIN Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.PRAVASTATIN Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.SIMVASTATIN Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.COLESTIPOL Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.CHOLESTYRAMINE Beginning Date/Time: NOW RX Туре: А Mapped Finding Item: DG.COLESEVELAM Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.FENOFIBRATE Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.GEMFIBROZIL Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.CLOFIBRATE Beginning Date/Time: NOW RX Type: A Mapped Finding Item: DG.NIACIN Beginning Date/Time: NOW RX Type: A ---- End: VA-LIPID LOWERING MEDS ---------- Begin: VA-LIPID PROFILE ORDERABLE (FI(14)=RT(39)) ------Finding Type: REMINDER TERM RT Mapped Finding: No Reminder Finding Found ---- End: VA-LIPID PROFILE ORDERABLE -----Function Findings: ---- Begin: FF(1)------Function String: MRD(1)>MRD(10) Expanded Function String: MRD(VA-IHD DIAGNOSIS)>MRD(VA-UNCONFIRMED IHD DIAGNOSIS) ---- End: FF(1) ------Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient: FI(1)&FF(1)Expanded Patient Cohort Logic:

FI(VA-IHD DIAGNOSIS)&FF(1)

Default RESOLUTION LOGIC defines findings that resolve the Reminder: FI(2)!FI(3)!FI(4)!FI(5)!FI(6)!FI(7)!FI(8)!FI(9) 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)!
FI(VA-ORDER LIPID PROFILE HEALTH FACTOR)!FI(VA-REFUSED LIPID PROFILE)!
FI(VA-OTHER DEFER LIPID PROFILE)

Web Sites:

Web Site URL: http://www.oqp.med.va.gov/cpg/DL/dl\_cpg/algo4frameset.htm

Web Site Title: VHA/DoD CPG for Dyslipidemia

The VHA/DoD CPG for Management of Dyslipidemia is a comprehensive guideline incorporating current information and practices for practitioners throughout the DoD and Veterans Health Administration system. See Section S, Table 3b for reference to LDL<120 in the Guideline.

# Add/Edit Reminder Definition

You can define a reminder through this option or through the Copy Reminder Definition. To edit existing reminders, a sub-menu is displayed that allows selection of specific fields in the reminder definition for edit.

```
Select Reminder Definition Management Option: Add/Edit Reminder Definition
Select Reminder Definition: JG DIABETIC EYE EXAM
                                                      LOCAL
    Select one of the following:
                   All reminder details
         А
         G
                   General
                   Baseline Frequency
         В
         F
                   Findings
         FF
                   Function Findings
         T.
                   Logic
         С
                  Custom date due
                  Reminder Dialog
         D
         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 VA-DIABETES ТΧ Select FINDING: ex.DIAB Searching for a EXAM, (pointed-to by FINDING ITEM) DIABETIC EYE EXAM ...OK? Yes// (Yes) FINDING ITEM: DIABETIC EYE EXAM// MINIMUM AGE: MAXIMUM AGE: REMINDER FREQUENCY: RANK FREQUENCY: USE IN RESOLUTION LOGIC: OR// USE IN PATIENT COHORT LOGIC: BEGINNING DATE/TIME: ENDING DATE/TIME: OCCURRENCE COUNT: CONDITION: Function Findings Select FUNCTION FINDING: ? You may enter a new FUNCTION FINDINGS, if you wish Enter the number of the function finding you are defining Select FUNCTION FINDING: Patient Cohort and Resolution Logic CUSTOMIZED PATIENT COHORT LOGIC (OPTIONAL): GENERAL PATIENT COHORT FOUND TEXT: No existing text Edit? NO// GENERAL PATIENT COHORT NOT FOUND TEXT: No existing text Edit? NO// CUSTOMIZED RESOLUTION LOGIC (OPTIONAL): GENERAL RESOLUTION FOUND TEXT: No existing text Edit? NO// GENERAL RESOLUTION NOT FOUND TEXT: No existing text Edit? NO// Reminder Dialog LINKED REMINDER DIALOG: JG DIABETIC EYE EXAM// Web Addresses for Reminder Information Select URL: Select one of the following: All reminder details А

	G	General
	В	Baseline Frequency
	F	Findings
	FF	Function Findings
	L	Logic
	С	Custom date due
	D	Reminder Dialog
	W	Web Addresses
Select se	ction to e	edit:
Input you	r edit com	ments.
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
          С
                    Custom date due
          D
                    Reminder Dialog
          W
                    Web Addresses
Select section to edit: Logic
Patient Cohort and Resolution Logic
CUSTOMIZED PATIENT COHORT LOGIC (OPTIONAL): (SEX)&(AGE)&FI(SLC DIABETES)
GENERAL PATIENT COHORT FOUND TEXT:
  1> <Enter>
GENERAL PATIENT COHORT NOT FOUND TEXT:
  1><Enter>
CUSTOMIZED RESOLUTION LOGIC (OPTIONAL): FI(DIABETIC EYE EXAM)
GENERAL RESOLUTION FOUND TEXT:
  1><Enter>
GENERAL RESOLUTION NOT FOUND TEXT:
  1><Enter>
```

# **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
Select the reminder item to copy:
                                    VA-WH PAP SMEAR SCREENING
                                                                   NATIONAL
PLEASE ENTER A UNIQUE NAME: JG-WH PAP SMEAR SCREENING
The original reminder VA-WH PAP SMEAR SCREENING has been copied into JG-WH PAP SMEAR
SCREENING.
Do you want to edit it now? YES
    Select one of the following:
         А
                   All reminder details
         G
                   General
                  Baseline Frequency
         В
         F
                  Findings
         FF
                  Function Findings
         L
                  Logic
         С
                   Custom date due
         D
                   Reminder Dialog
         τλΤ
                   Web Addresses
Select section to edit: General
PRINT NAME: VA-PAP Smear Screening Replace VA With LOCAL
 Replace
  LOCAL-PAP Smear Screening
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
USAGE: CR//
RELATED REMINDER GUIDELINE:
INACTIVE FLAG:
REMINDER DESCRIPTION:. . .
       * PCE CPT procedure code
        * Completed consult order for outside procedure
The following will resolve this reminder for one week:
        * PAP smear obtained at this encounter
        * Patient declined PAP smear
        * PAP smear deferred
        * Health Factor documenting an order related to PAP Smear
         screening was placed
 Edit? NO//
TECHNICAL DESCRIPTION:. . .
   ordering options for the clinicians. Some sites have clinicians order
   a consult to a service that provides PAP smears. If your site does
```

this, copy the reminder dialog to a local reminder dialog, then add the local dialog element for the consult order to the reminder dialog so this practice can continue.

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

Edit? NO//

PRIORITY:

Select one of the following:

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

Select section to edit:

# **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>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>* - The reminder can be used for any of the above</li> <li>P - Patient; patients can view "My Health" reminders; the wildcard (*) excludes P</li> <li>NOTE: To enter more than one code, type the codes with no spaces or punctuation between them.</li> </ul>
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	<ul> <li>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:</li> <li>Code Description</li> <li>A N/A due to not meeting age criteria.</li> <li>I N/A due to inactive reminder.</li> <li>R N/A due to the wrong race.</li> <li>S N/A due to the wrong sex.</li> <li>* N/A for any reason.</li> </ul>
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 falls in the age range.
	age does not fall in the age range.
FINDING FUNCTION FINDINGS	The Findings multiple is documented later in this chapter, page 62.Function Findings are new in version 2.0. They are called Function Findings because they do a computation on the results from regular findings. Function Findings can be used in both patient cohort logic and resolution logic.The general form of the function string is: FUNCTION(finding list) operator FUNCTION(finding list) where FUNCTION is one of the available functions and finding list is a comma- separated list of regular finding numbers. See page 69.
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	This field may be used to define a customized Boolean logic string that defines how and what reminder findings are used to determine if the reminder has been resolved. The customized logic is used when the USE IN RESOLUTION LOGIC fields associated with each finding do not provide the ability to create the required logic string. (e.g., grouping various findings within parenthesis). Tip: Before defining the Boolean string, review the default logic defined in the DEFAULT RESOLUTION LOGIC field using the reminder inquiry option.
GENERAL RESOLUTION FOUND TEXT	This text will be displayed in the Clinical Maintenance component if the reminder has been resolved.
GENERAL RESOLUTION NOT FOUND TEXT	This text will be displayed in the Clinical Maintenance component if the reminder has not been resolved.
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 to determine if the patient is in the cohort; however, the frequency associated with this age range 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
Mental Health Instrument	601	MH
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.

STATUS is now used in evaluating drug findings.

**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 #99999999.64. 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 64, 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:

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.

**Mental Health Instrument** – Mental Health Instruments are found in the MENTAL HEALTH 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 15, 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>85</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 99.

**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.

**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 105, 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.

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
Exam (99999999.15) Health Factor	V EXAM (9000010.13) V HEALTH FACTOR	RESULT	A for Abnormal N for Normal M for Minimal	V="A"   V="N"   V="M"   V="MO"
(9999999.64) Immunization (99999999.14)	(9000010.23) V IMMUNIZATION (9000010.11)	RITY	MO for Moderate H for Heavy/Severe 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 5 6 for Series 7 8 for Series 8	I V="MO" I V="H" I V="P" I V="C" I V="B" I V=1 I V=2 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=8 I V>130

Finding Type	Results File	Result Fields that can be used in CONDITION	Data example	CONDITION field example
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	I V="A" I V="H" I V="I" I V="C" I V="T" I V="N" I V="S" I V="S" I V="E" I V="E" I V="D" I 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 are new in Clinical Reminders V. 2.0. They are called Function Findings (FF) because they 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.

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.

The old V. 1.5 MRD functionality will still function when Reminders v2.0 is released, but will eventually be inactivated. Sites will need to convert their **local** 1.5 MRD functions into new Function Findings before the old functionality is disabled. Installation of V.2.0 includes a utility that sends a MailMan message with a list of reminders that use old-style MRD findings.

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

## **Benefits of Using Function Findings**

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

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

FI(2)&FI(11)&((MRD(FI(2)))>(MRD(FI(9))))&'FI(13) Here is the custom logic when the old MRD logic is replaced with a Function Finding: (FF(1))

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

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

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

# **Creating a Function Finding**

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

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

```
Select Reminder Definition:
                              FFTEST
                                         LOCAL
    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
                   Web Addresses
         W
Select section to edit: FF Function Findings
Function Findings
Select FUNCTION FINDING: 1
 Are you adding '1' as a new FUNCTION FINDINGS (the 1ST for this REMINDER
DEFINITION)? No// Y
  (Yes)
```

```
FUNCTION FINDINGS FUNCTION STRING: MRD(1,3)>MRD(11,8,4)
FUNCTION FINDING NUMBER: 1// <Enter>
FUNCTION STRING: MRD(1,3)>MRD(11,8,4) Replace <Enter>
FOUND TEXT:
  No existing text
  Edit? NO// <Enter>
NOT FOUND TEXT:
  No existing text
  Edit? NO// <Enter>
USE IN RESOLUTION LOGIC: <Enter>
USE IN PATIENT COHORT LOGIC: <Enter>
REMINDER FREQUENCY: <Enter>
MINIMUM AGE: <Enter>
MAXIMUM AGE: <Enter>
RANK 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. This will be explained in detail later in this document on page  $\frac{72}{2}$ .

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

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

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

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

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

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

# **Function Finding Components**

The following Mumps operators can be used in a Function Finding FUNCTION STRING.

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

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

Function	Description
COUNT	Returns the number of true occurrences of a regular finding. Works in conjunction with the occurrence count finding modifier which specifies how many occurrences to search for. The value returned by COUNT can never be greater than the value of occurrence count.
DIFF_DATE	Returns the difference between the dates of two regular findings in days
DUR	For regular findings that have a start date and stop date, this returns the number of days between the start date and stop date. For regular findings that have a single date, this returns the number of days between the first occurrence and the last occurrence.
FI	Returns the true/false value of a logical string composed of regular finding true/false values and Boolean operators.
MAX_DATE	Returns the maximum (most recent) date from a list of regular finding dates.
MIN_DATE	Returns the minimum (oldest) date from a list of regular finding dates.
MRD	Returns the most recent date from a list of regular finding dates. This is the same as MAX_DATE, it was retained for backwards compatibility.
NUMERIC	Returns the first numeric portion of any of the "CSUB" values for a finding.
VALUE	Returns any of the "CSUB" values for a finding.

The general form for a function finding is:

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

where

FUN1 stands for function 1, FUN2 stands for function 2, etc.

arg1,arg2,...,argN stand for argument 1, argument 2, etc. These should be numbers that correspond to the regular findings that will be evaluated

oper1 stands for operator 1, etc., which are Mumps operators

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

## COUNT

Function: COUNT

Print name: Count

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

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

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

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

```
---- Begin: FF(1)-----

Function String: COUNT(2)>1

Expanded Function String:

COUNT(SOME FINDING)>1

Use in Patient Cohort Logic: AND

---- End: FF(1) -----
```

FF(1) will be true if the occurrence count is 2, 3, or 4. FF(1) will be false if the occurrence count is 0 or 1. The COUNT function can also work in conjunction with multiple findings to give the total number of true occurrences for all of the findings. For example, if finding 1 has an occurrence count of 3 and three true occurrences, finding 2 has an occurrence count of 2 and two true occurrences, and finding 3 has an occurrence count of 2 and one true occurrence, then COUNT(1,2,3)=6.

#### **DIFF\_DATE** Function: DIFF\_DATE Print name: Date Difference

This function finding returns the absolute value of the difference in days between the date of the first finding in the list and the date of the second finding.

# DUR

Function: DUR Print name: DUR

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

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

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

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

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

```
--- Begin: FF(4)------

Function String: FI(1)&FI(2)&FI(4)&'FI(7)

Expanded Function String:

(FI(DIABETES DIAGNOSIS)&FI(SOME CONDITION)

&FI(ANOTHER CONDITION)&'FI(STILL ANOTHER CONDITION)

Match Frequency/Age: 2 years for all ages

Found Text: Frequency changed to every 2 years for all

ages for this patient because s/he has been

diagnosed with diabetes and SOME CONDITION and

ANOTHER CONDITION are true and STILL ANOTHER

CONDITION is not true.

--- End: FF(4)
```

MAX\_DATE Function: MAX\_DATE Print Name: Maximum Date The MAX\_DATE function returns the most recent finding date for a given list of findings.

Example of a Function Finding that uses the MAX\_DATE function:

```
--- Begin: FF(2)------
Function String: MAX_DATE(1,3)>MAX_DATE(6)
Expanded Function String:
    MAX_DATE(SOME FINDING,SOME OTHER FINDING)
>MAX_DATE(STILL ANOTHER FINDING)
    Use in resolution logic: AND
--- End: FF(2)
```

This Function Finding would be true if the largest date from the first group (finding 1 and finding 3) is greater than the largest date from second group (finding 6).

#### February 2011

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

The following examples produce the same result: MAX\_DATE(1,2,3,7)>MAX\_DATE(8,9,11) MRD(1,2,3,7)>MRD(8,9,11) MAX\_DATE(1,2,3,7)>MRD(8,9,11) MRD(1,2,3,7)>MAX\_DATE(8,9,11)

# MIN\_DAT

Function: MIN\_DATE Print Name: Minimum Date The MIN\_DATE function returns the oldest finding date for a given list of findings.

Example of a Function Finding that uses the MIN\_DATE function:

```
--- Begin: FF(2)-----

Function String: MIN_DATE(1)>MAX_DATE(6)

Expanded Function String:

MIN_DATE(SOME FINDING)>MAX_DATE(SOME OTHER FINDING)

Use in patient logic: AND

--- End: FF(2) -----
```

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

# MRD

Function: MRD Print Name: Most Recent Date The MRD function returns the most recent finding date for a given list of findings.

Example of a Function Finding that uses the MRD function: MRD(1,7,13)>MRD(2,4,11)

This Function Finding would be true if the most recent date of the group of findings 1,7, and 13 is greater that the most recent date of the group of findings 2, 4, and 11. Note: The functions MRD and MAX\_DATE *are exactly the same*.

Any of the global reminder variables (PXRMAGE, PXRMDOB, PXRMLAD, and PXRMSEX) can be used in a Function Finding. In this example: PXRMLAD>MRD(1,2) the Function Finding is true if the patient's last admission date is greater than (more recent) than the most recent date of finding 1 and finding 2.

# NUMERIC

Function: NUMERIC Print Name: Numeric The NUMERIC function returns the first numeric portion of any of the "CSUB" values for a finding. For example, if the COMMENT field of a health factor contains a numerical value, this function can be used to test it. If you want to check to see if the first numeric portion in the COMMENT field of finding 1 occurrence 1 is greater than 2, then the function finding would be:

NUMERIC(1,1,"COMMENTS")>2

Note: OCCURRENCE COUNT for the finding must be equal to or greater than the occurrence(s) you want to use.

### VALUE

Function: VALUE Print Name: Value The VALUE function returns any of the "CSUB" values for a finding. The argument list is the finding number, the occurrence, and the "CSUB" subscript of interest. For example, if finding number 4 was for a lab test and you wanted to check see if occurrence 1 was less than occurrence 2, the function finding would be:

### VALUE(4,1,"VALUE")<VALUE(4,2,"VALUE")

### **Examples of Function Findings used in national reminders:**

Example: Function Findings in VA-HTN ASSESSMENT BP >=140/90This is what the MRD logic looks like under Clinical Reminders V.2.0. The Customized patient cohort logic has been changed to include an FF(1) and the MRD logic it has replaced is now the Function String within FF(1), Function Finding 1.

Expanded Patient Cohort Logic: FI(VA-HYPERTENSION CODES)&FI(BLOOD PRESSURE)&FF(1)&'FI(BLOOD PRESSURE)

Before: MRD logic in Reminders 1.5:

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

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

Expanded Patient Cohort Logic:

FI(VA-HYPERTENSION CODES)&FI(BLOOD PRESSURE)&

(MRD(FI(VA-HYPERTENSION CODES))>MRD(FI(VA-HTN INCORRECT DIAGNOSIS)))&'

FI(BLOOD PRESSURE)
```

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

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

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

Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient: FI(1)&(MRD(FI(1))>MRD(FI(10))) Expanded Patient Cohort Logic: FI(IHD DIAGNOSIS)&(MRD(FI(IHD DIAGNOSIS))> MRD(FI(UNCONFIRMED IHD DIAGNOSIS)))

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

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

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

```
Function String: MRD(3,4,7,8)>MRD(5,6,9,10)
     Expanded Function String:
     MRD(VA-OUTSIDE LDL <100,VA-OUTSIDE LDL 100-119,VA-LDL <100,
      VA-LDL 100-119)>MRD(VA-OUTSIDE LDL 120-129,VA-OUTSIDE LDL >129,
     VA-LDL 120-129,VA-LDL >129)
      Use in Resolution Logic: AND
 ---- End: FF(1) ------
                            _____
  ---- Begin: FF(2)------
            Function String: MRD(1)>MRD(11)
     Expanded Function String:
     MRD(VA-IHD 412 DIAGNOSIS)>MRD(VA-UNCONFIRMED IHD DIAGNOSIS)
 ---- End: FF(2) -----
Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
FI(1)\&FF(2)
Expanded Patient Cohort Logic:
FI(VA-IHD 412 DIAGNOSIS)&FF(2)
Customized RESOLUTION LOGIC defines findings that resolve the Reminder:
 (FI(3)!FI(4)!FI(5)!FI(6)!FI(7)!FI(8)!FI(9)!FI(10))&FF(1)
Expanded Resolution Logic:
 (FI(VA-OUTSIDE LDL <100)!FI(VA-OUTSIDE LDL 100-119)!
 FI(VA-OUTSIDE LDL 120-129)!FI(VA-OUTSIDE LDL >129)!FI(VA-LDL <100)!
```

FI(VA-LDL 100-119)!FI(VA-LDL 120-129)!FI(VA-LDL >129))&FF(1)

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

```
Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
    FI(1)&(MRD(FI(1))>MRD(FI(13)))
Expanded Patient Cohort Logic:
    FI(IHD 412 DIAGNOSIS)&(MRD(FI(IHD 412 DIAGNOSIS))>
    MRD(FI(UNCONFIRMED IHD DIAGNOSIS)))
Default RESOLUTION LOGIC defines findings that resolve the Reminder:
    FI(3)!FI(4)!'FI(5)!'FI(6)!'FI(7)!FI(8)
Expanded Resolution Logic:
    FI(OUTSIDE LDL <100)!FI(OUTSIDE LDL 100-119)!'
FI(OUTSIDE LDL 120-129)!'FI(OUTSIDE LDL >129)!'
FI(LDL >119)!FI(LDL <120)</pre>
```

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

This is one of the new Function Findings from the Women's Health Mammogram Screening reminder.

# **Custom Date Due**

Custom Date Due is new with Version 2.0. It lets you define a custom date due calculation that replaces the standard date due calculation.

The general form for a Custom Date Due string is:

FUNCTION(ARG1,ARG2,...,ARGN) where FUNCTION is MAX\_DATE or MIN\_DATE and the arguments have the form: M+FREQ, where M is a finding number and FREQ is a number followed by D for days, M for months, or Y for years.

### Example:

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

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

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

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

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

RANK\_DATE has been added to the available functions in Custom Date Due

The general form for a Custom Date Due string is: FUNCTION(ARG1,ARG2,...,ARGN)

FUNCTION can be one of the following:
 MAX\_DATE - return the maximum date from the argument list
 MIN\_DATE - return the minimum date from the argument list
 RANK\_DATE - going from left to right return the first non-zero date from the argument list

The arguments have the form: M+FREQ where M is a finding number and FREQ is a number followed by D for days, M for months, or Y for years. Each argument is converted to a date by adding the frequency to the date of the finding.

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

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

### Status List

Status List is new in Version 2.0. It 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	

See <u>Appendix C</u> for more details about Status and Status List.

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:
         А
                   ADD STATUS
         D
                   DELETE A STATUS
                  SAVE AND QUIT
         S
                  QUIT WITHOUT SAVING CHANGES
         0
Enter response: S// ?
Display when adding a status
Enter response: S// a ADD STATUS
1 - * (WildCard)
2 - CANCELLED
3 - COM
4 - COMPLETE
5 - EXAMINED
6 - TRANSCRIBED
7 - WAITING FOR EXAM
Select a Radiology Procedure Status or enter '^' to Quit: (1-7): 2,3,6
Statuses already defined for this finding item:
CANCELLED
COM
COMPLETE
TRANSCRIBED
    Select one of the following:
         A ADD STATUS
         D
                  DELETE A STATUS
         S
                  SAVE AND QUIT
                   QUIT WITHOUT SAVING CHANGES
         0
Enter response: S// ?
View when deleting a status
```

```
Enter response: S// d DELETE A STATUS
1 - CANCELLED
2 - COM
3 - COMPLETE
4 - TRANSCRIBED
Select which status to be deleted: (1-4): 2,4
Statuses already defined for this finding item:
CANCELLED
COMPLETE
    Select one of the following:
         A ADD STATUS
                   DELETE A STATUS
         D
         S
                   SAVE AND QUIT
                   QUIT WITHOUT SAVING CHANGES
         Q
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:
1 INACTIVE
INACTIVE FLAG: 1
```

Inactivating a reminder will not remove it from CPRS cover sheet lists or health summaries. However when the cover sheet loads or the health summary is run the reminder will not be evaluated and a message showing the date and time the reminder was inactivated will be displayed.

# **Reminder Sponsor Management**

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

This option provides the functions for Reminder Sponsor Management.

# **List Reminder Sponsors**

Select DEVICE:	ct Reminder Sponsor Management Option: SL List Reminder CE: ANYWHERE Right Margin: 80//	Sponsors	
	NDER SPONSOR LIST JAN 28,2003 1	0:39	PAGE 1
	: A NEW SPONSOR		
Class:	s: VISN		
	: CRPROVIDER, TWO		
Class:	s: VISN		
	: CRPROVIDER, THREE		
Class:	s: LOCAL		
	: Guidelines committee		
Class:	s: LOCAL		
	: HOSPITAL COMMITTEE		
Class:	s: LOCAL		
Name:	· ~		
Class:	s: NATIONAL		
	CRPROVIDER, FOUR		
Class:	s: NATIONAL		
	: Mental Health Group		
Class:	s: LOCAL		
	: Mental Health and Behavioral Science Strategic Group		
Class.	s: NATIONAL		
	: Mental Health and Behavioral Science Strategic Group a	and Womer	Veterans
	th Program s: NATIONAL		
Name:	• NTPL/		
	s: LOCAL		
Nomo	· Office of Quality & Devformance		
	: Office of Quality & Performance s: NATIONAL		
Name:	: РЈН		
manie.			

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
  QUERI IHD
             NATIONAL
  SLC OIFO DEVELOPMENT NATIONAL
  Women Veterans Health Program
                                  NATIONAL
Select Reminder Sponsor: Office of Quality & Performance
                                                      NATIONAL
DEVICE: ANYWHERE Right Margin: 80//
                                      Jan 28, 2003 10:41:47 am Page 1
REMINDER SPONSOR INQUIRY
                        _____
------
      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. For example, the VA-DIABETES taxonomy contains a list of diabetes diagnoses. Options on the Taxonomy Management Menu let you view and edit taxonomy definitions.

# 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 PXRM TAXONOMY Taxonomy Item 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.
TC	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 PXRM TAXONOMY Taxonomy EXPANSION 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 205.

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 L LOCAL
SPONSOR	This is the name of a group or organization that sponsors the taxonomy.
REVIEW DATE	The review date is used to determine when the entry should be reviewed to verify that it is current with the latest standards and guidelines.
PATIENT DATA SOURCE	Specifies where to search for patient data. It is a string of comma-separated key words.
USE INACTIVE PROBLEMS	Applies only to searches in Problem List. Normally inactive problems are not used. However when this field is set to YES, then both active and inactive problems are used. This field works just like the field with the same name that can be specified for a reminder definition finding or a reminder term finding. If this field is defined in the taxonomy, it will take precedence over the value of the corresponding field at the term or definition level.
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 CODES (multiple)	This multiple is used to define ranges of ICD0 coded values that constitute taxonomy entries. A range is defined by a low and high value that is inclusive. The low and high values are actual codes from the source file, not internal entry numbers.
ICD9 RANGE OF CODES (multiple)	This multiple is used to define ranges of ICD9 coded values that constitute taxonomy entries. A range is defined by a low and high value that is inclusive. The low and high values are actual codes from the source file, not internal entry numbers.
CPT RANGE OF CODES (multiple)	This multiple is used to define ranges of CPT coded values that constitute taxonomy entries. A range is defined by a low and a high value that are inclusive. The low and high values are actual codes from the source file, not internal entry numbers.
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 SOURCE	Specifies where to search for patient data. It is a string of comma-separated key words. The keywords and their meanings are:

KEYWORD	MEANING
ALL	Search 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	<enter> R TAXONOMY</enter>	LIST					
	ICD9 R	ANGE HIGH	ICD0 F	RANGE	CPT H	RANGE	
	LOW		LOW	HIGH	LOW	HIGH	
TEST1							
	100.9	100.9	99.52	99.52			
PAIN TA							
	388.71	388.72			62350	62351	
	719.40	719.49 724.1			90783	90784	
	724.1	724.1					
	789.00	789.09 724.2					
	724.2	724.2					
	926.11	926.11 724.5					
	724.5	724.5					
ROBTES	F 1						
	311.	311.			90724	90724	
ROBTES	52						
	495.2	495.2					
Pain - 1	Lower Back	:					
	388.71	388.72			62350	62351	
	719.40	719.49			90783	90784	
	724.1	724.1					
	789.00	724.1 789.09					
	724.2	724.2					
	926.11	724.2 926.11					
	724.5						
ADTAX							
					76091	76091	
					71030	71030	
L ALCO	IOL ABUSE						
	291.0	291.9					
	303.00	303.93					
	305.00	305.03					
	571.0	571.3					
	760.71	760.71					
	790.3	790.3					
	980.0	980.0					
	357.5	357.5					
	425.5	425.5					
	535.3	535.31					
	V11.3						

# Inquire about Taxonomy Item

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

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

```
Select Reminder Taxonomy 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
                               Activation Inactivation
 Code ICD Operation/Procedure
 ____
        _____
                                   _____ ____
 99.59 VACCINATION/INNOCULA NEC
                                  10/01/1978
```

```
CPT Codes:
```

Range G00	09-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 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 Line	_
Line	-
Line Line	-

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.
TI	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// REMINDER TERM LIST SEP 16,2003 14:17 PAGE 1 \_\_\_\_\_ ACUTE MEDICAL CONDITION Class: NATIONAL Date Created: Sponsor: Review Date: Description: Screening for depression may not be possible in patients with acute medical conditions. This term represents any data element that is used to indicate that the patient has an acute medical condition that prevents screening for depression. E.g. delirium, alcohol hallucinosis, florid psychosis, MI's and other medical emergencies. Findings: UNABLE TO SCREEN-ACUTE MED CONDITION (FI(1)=HF(107)) AIM EVALUATION NEGATIVE Class: NATIONAL Date Created: Sponsor: Review Date: Description: Represents any AIM evaluation that is negative or normal. Findings: AIMS (FI(2)=MH(234)) AIM EVALUATION POSITIVE NATIONAL Class: 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:
   Findings:
                  CN600 (FI(1)=DC(86))
                  CN609 (FI(2)=DC(395))
                  CN602 (FI(3)=DC(88))
                  CN601 (FI(4)=DC(87))
                  BUSPIRONE (FI(5)=DG(1165))
```

## 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
_____
                                                    No.27
IHD DIAGNOSIS
_____
        NATIONAL
Class:
               Office of Quality & Performance
JUL 23,2001
Sponsor:
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 By: CRPROVIDER,ONE
   Edit Comments: Exchange Install
Findings:
               Finding Item: VA-ISCHEMIC HEART DISEASE (FI(1)=TX(14))
               Finding Type: REMINDER TAXONOMY
       Use Inactive Problems: NO
```

## Add/Edit Reminder Term

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

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

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
        HBs Ab positive
                               NATIONAL
     1
     2
       HBs Aq positive
                              NATIONAL
CHOOSE 1-2: 1 HBs Ab positive
                                   NATIONAL
                                                              This is where you enter
Select Finding: HEPATITIS B SURFACE ANTIBODY
                                                              the local finding name.
FINDING ITEM: HEPATITIS B SURFACE ANTIBODY// <Enter>
BEGINNING DATE/TIME: <Enter>
ENDING DATE/TIME: <Enter>
OCCURRENCE COUNT: ??
        This is the maximum number of occurrences of the finding to return.
OCCURRENCE COUNT: 3
CONDITION: I (V["POS")!(V="+")
CONDITION CASE SENSITIVE: <Enter>
USE STATUS/COND IN SEARCH: ?
     Enter a "Yes" if you want the Status List and/or Condition used in the finding
     search.
     Choose from:
       1
             YES
       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

### 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
LĹ	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 do a Location List inquiry.
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 get a list of Location Lists.

Select Reminder Location List Management Option: 11 List Location Lists DEVICE: ;;999 ANYWHERE Right Margin: 80// REMINDER LOCATION LIST LIST SEP 16,2003 14:08 PAGE 1 AMIS REPORTING CLINIC STOP STOP CODE HOSPITAL LOCATION \_\_\_\_\_ Name: TEST LOCATION LIST Class: LOCAL Clinic Stops: Hospital Locations: CARDIOLOGY PULMONARY CLINIC OR 1 Name: VA-IHD QUERI CLINIC STOPS Class: NATIONAL Clinic Stops: GENERAL INTERNAL MEDICINE 301 CARDIOLOGY 303 ENDO./METAB (EXCEPT DIABETES) 305 DIABETES 306 HYPERTENSION 309 PULMONARY/CHEST 312 PRIMARY CARE/MEDICINE 323 GERIATRIC PRIMARY CARE 350 MENTAL HEALTH CLINIC - IND 502 WOMEN'S CLINIC 322 Hospital Locations: Name: VA-MH QUERI MH CLINIC STOPS Class: NATIONAL Clinic Stops: MENTAL HEALTH CLINIC - IND 502 Hospital Locations: Name: VA-MH QUERI PC CLINIC STOPS Class: NATIONAL Clinic Stops: GENERAL INTERNAL MEDICINE 301 CARDIOLOGY 303 WOMEN'S CLINIC 322 ENDO./METAB (EXCEPT DIABETES) 305 PRIMARY CARE/MEDICINE 323 306 DTABETES HYPERTENSION 309 PULMONARY/CHEST 312 MH PRIMARY CARE TEAM - IND 531 Hospital Locations: Name: jg-list

Class: LOCAL			
Clinic Stops:			
ALCOHOL SCREENING	706		
ALCOHOL TREATMENT	81		
Hospital Locations: 8W SUBSTANCE ABUSE Name: new location list Class: LOCAL			
Clinic Stops: CARDIOLOGY	29		
Hospital Locations:			

## **Location List Inquiry**

Select Reminder Location List Management Option: li Location List Inquiry Select LOCATION LIST: VA-ALL LOCATIONS NATIONAL DEVICE: HOME REMINDER LOCATION LIST INQUIRY Jul 03, 2006 10:25:59 am Page 1					
NUMBE	r: 20				
Name: VA-ALL	LOCATIONS				
Description:	When this special Location List is used the "AHL" index of the Visit file is searched to create a list of every hospital location for which one or more visits have been recorded.				
Class:	NATIONAL				
Sponsor:					
Review Date:					
Edit History:					
Clinic Stops:					
Hospital Loca	Hospital Locations:				

# Add/Edit Location List

```
Select HOSPITAL 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// oldsymbol{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// oldsymbol{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,

### 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 LOCATION LIST

9 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 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): 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 DEMINDED DIAL	
3	JOG RGP4 ELEMENT 2, IEN=1536
3	OG RGP4 ELEMENT 1, IEN=1535
	OG RESULT GROUP 4, IEN=1534
	JOG RGP1 ELEMENT 2, IEN=1520
3	OG RGP1 ELEMENT 1, IEN=1519
3	OG RESULT GROUP 1, IEN=1529
	OG GP1 ELEMENT 2, IEN=1515
	JOG RGP2 ELEMENT 2, IEN=1522
	JOG RESULT ELEMENT 1, IEN=1537
	JOG RGP3 ELEMENT 2, IEN=1526
Adding REMINDER DIAL	JOG RGP3 ELEMENT 1, IEN=1525
	JOG RESULT GROUP 3, IEN=1533
	JOG RGP2 ELEMENT 1, IEN=1521
Adding REMINDER DIAL	JOG RESULT GROUP 2, IEN=1530
Adding REMINDER DIAL	JOG VA-IHD LIPID OTHER DEFER, IEN=390
Adding REMINDER DIAL	JOG VA-IHD SPACER, IEN=397
	JOG VA-IHD LIPID 120-129 DONE ELSE, IEN=392
	JOG VA-IHD LIPID >129 DONE ELSE, IEN=281
Adding REMINDER DIAL	JOG VA-IHD LIPID 100-119 DONE ELSE, IEN=280
Adding REMINDER DIAL	JOG VA-IHD LIPID <100 DONE ELSE, IEN=279
Adding REMINDER DIAL	JOG VA-IHD LIPID DONE ELSEWHERE GROUP, IEN=404
Adding REMINDER DIAL	JOG VA-IHD UNCONFIRMED DIAGNOSIS, IEN=276
Adding REMINDER DIAL	JOG VA-IHD LIPID REFUSED, IEN=270
Adding REMINDER DIAL	OG VA-IHD DIRECT LDL ORDERED, IEN=278
Adding REMINDER DIAL	OG VA-IHD FASTING LIPID ORDERED, IEN=277
Adding REMINDER DIAL	OG VA-IHD LIPID ORDER GROUP, IEN=272
Adding REMINDER DIAL	OG VA-IHD LIPID PROFILE HEADER, IEN=209
Adding REMINDER DIAL	OG VA-IHD LIPID PROFILE, IEN=269
Adding REMINDER DIAL	JOG GP1 ELEMENT 1, IEN=1514
	OG GROUP 1, IEN=1527
Adding REMINDER DIAL	OG EXCHANGE DIALOG, IEN=1709
Adding HEALTH SUMMAR	RY COMPONENT PCE HEALTH FACTORS ALL, IEN=204
Adding HEALTH SUMMAR	RY COMPONENT CLINICAL REMINDERS DUE, IEN=202
Adding HEALTH SUMMAR	Y COMPONENT TEST, IEN=5000147
Adding HEALTH SUMMAR	Y COMPONENT PCE HEALTH FACTORS SELECTED, IEN=203
Adding HEALTH SUMMAR	Y TYPE NP NEW HS TYPE, IEN=223
Adding HEALTH SUMMAR	Y TYPE TEST PROGESS, IEN=208
Adding HEALTH SUMMAR	Y TYPE VA-BRADEN SCALE 30D, IEN=104
Adding HEALTH SUMMAR	Y OBJECTS NP TIUHS OBJECT TEST (TIU), IEN=6600090
	Y OBJECTS LAB TEST (TIU), IEN=6600003
	Y OBJECTS VA-BRADEN SCALE 30D (TIU), IEN=6600082
	DEFINITION PATIENT SEX, IEN=74
Adding TIU DOCUMENT	DEFINITION PATIENT RACE, IEN=75
	DEFINITION NP TIUHS OBJECT TEST, IEN=1647
	DEFINITION TIU TEST, IEN=1337
	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	
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		

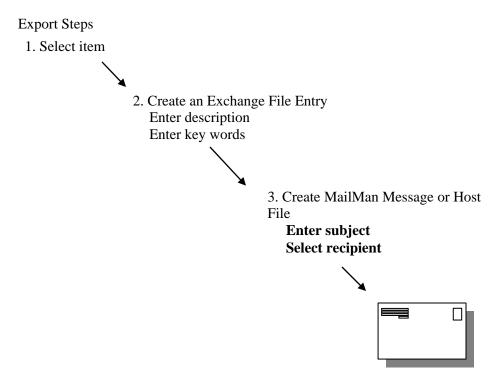
### **Reminder Exchange Main Screen**

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 Exchange File Entries.	Sep 16, 2004@15:20:	11 Page: 1 of
2	G	
Entry	Source	Date Packed
1 CDUE	CRUSER, ONE@SALT CITY	08/08/2003@10:59:52
2 CHA UNVESTED PATIENTS	CRPROVIDER, TWO@VAMC O	NE 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 S	IX 09/20/2004@10:59:22
+ Next Screen - Prev S	creen ?? More Action;	S
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 Reminde:	r Definitions
IFE Install Exchange File Entry	RI Reminder Def:	inition 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 entriesr 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
-	ange File Entries.	,			-	
	Entry	Sourc	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	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	ns	
IFE	Install Exchange File Entry	RI	Reminder Defi	nition Inq	uiry	
Sele	ct Action: Quit// <b>CFE</b> Exchan	nge 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]

Clinical Reminder Exchange Apr	c 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	C CRPROVIDER, TEN@VAMC10	3/27/2004@14:54:24
5 VA-HEP C RISK ASSESSMENT	CRPROVIDER, ONE@VAMC1	03/27/2004@14:56:13
+ Nort Saroon - Provi	Screen ?? More Actions	
CFE Create Exchange File Entry	IH Installation	History
HF Create Host File	LHF Load Host Fil	-
CMM Create MailMan Message	LMM Load MailMan	Message
OFE Delete Exchange File Entry	LR List Reminder	Definitions
IFE Install Exchange File Entry	RI Reminder Defi	nition Inquiry
Select Action: Quit// CHF		
Select Entry(s): (1-5): 2		
Enter a path: USER\$:[TEMP]// ?		
A host file is a file in your hos	at austom	
-	-	tongion
A complete host file consists of A path consists of a device and o	<b>-</b>	CEUSTON
pach consists of a device and o	arrectory mame.	

Enter a path: USER\$:[TEMP]// <Enter>

The default path is USER\$:[TEMP]

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

The default extension is prd (Packed Reminder Definiton).

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, 2	04@11:21:47 Page: 1 of 1
Exchange File Entries.	
Entry	ource Date Packed
1 BLOOD PRESSURE CHECK CRPR	VIDER,ONE@VAMC1 03/28/2004@13:12:26
2 SLC PNEUMOCOCCAL VACCINE CRPR	VIDER,TWO@VAMC2 03/29/2004@11:55:11
3 VA-*CHOLESTEROL SCREEN (M) CRPR	VIDER,SIX@VAMC6 03/27/2004@14:59:42
4 VA-ADVANCED DIRECTIVES EDUC CRPR	VIDER, TEN@VAMC10 3/27/2004@14:54:24
5 VA-HEP C RISK ASSESSMENT CRPR	VIDER,ONE@VAMC1 03/27/2004@14:56:13
+ Next Screen - Prev Screen	?? More Actions
CFE Create Exchange File Entry	IH Installation History
CHF Create Host File	LHF Load Host File
CMM Create MailMan Message	LMM Load MailMan Message
DFE Delete Exchange File Entry	LR List Reminder Definitions
IFE Install Exchange File Entry	RI Reminder Definition Inquiry
Select Action: Quit// cmm MailMan Mes	age Creation

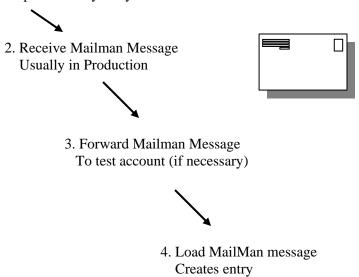
**NOTE**: The number of packed entries you can send via a MailMan message is limited by the MailMan parameters set locally for the number of lines in a message. Please check with your IRM for the number of lines allowed.

```
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.
'-' 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	e		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@VAMC1	03/27/20	04@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	
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	2
Entry	Source Date Packed	
		_
+ Next Screen - Prev Screen	n ?? More Actions	
CFE Create Exchange File Entry	IH Installation History	
CHF Create Host File	LHF Load Host File	
CMM Create MailMan Message	LMM Load MailMan Message	
DFE Delete Exchange File Entry	LR List Reminder Definitions	
IFE Install Exchange File Entry		
Select Action: Next Screen// 1mm Load	d MailMan Message	
1 CREX: diabetic eye exam		
CRPROVIDER,ONE JUL 23, 2001@11	1:39:51	
2 CREX: pain screening		
CRPROVIDER,ONE JUL 23, 2001@11	1:37:59	
CHOOSE 1-2: 1 CREX: diabetic eye exam		
CRPROVIDER, ONE JUL 23, 2001@11	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, depend	ing on how local file
protections are set.	

Clinical Reminder Exchange Apr Exchange File Entries.	02, 2004@11:21:47	Page:	1 of	1		
Entry 1 BLOOD PRESSURE CHECK 2 SLC PNEUMOCOCCAL VACCINE 3 VA-*CHOLESTEROL SCREEN (M) 4 VA-ADVANCED DIRECTIVES EDUC 5 VA-HEP C RISK ASSESSMENT	Source CRPROVIDER,ONE@VAMC1 CRPROVIDER,TWO@VAMC2 CRPROVIDER,SIX@VAMC6 CRPROVIDER,TEN@VAMC10 CRPROVIDER,ONE@VAMC1	03/28/20 03/29/20 03/27/20 3/27/200	Packed 004@13:12 004@11:55 004@14:59 04@14:54: 004@14:56	:11 :42 24		
+ Next Screen- Prev Screen?? More ActionsCFECreate Exchange File EntryIHInstallation HistoryCHFCreate Host FileLHFLoad Host FileCMMCreate MailMan MessageLMMLoad MailMan MessageDFEDelete Exchange File EntryLRList Reminder DefinitionsIFEInstall Exchange File EntryRIReminder Definition InquirySelect Action:Quit//IhfLoad Host File						
Enter a path: USER\$:[TEMP]// <b><ente< b=""> The following PRD files were found DIABETICEYE.PRD;1 Enter a file name: <b>DIABETICEYE</b> Loading host file USER\$:[TEMP]DIAB</ente<></b>	in USER\$:[TEMP]					

-	<b>ical Reminder Exchange</b> Jul 23, 2 file USER\$:[SPOOL]DIABETICEYE.PRD		3
	+ Next Screen - Prev Screen	??	More Actions
CFE	Create Exchange File Entry	IH	Installation History
CHF	Create Host File	LHF	Load Host File
CMM	Create MailMan Message	LMM	Load MailMan Message
DFE	Delete Exchange File Entry	LR	List Reminder Definitions
IFE	Install Exchange File Entry	RI	Reminder Definition Inquiry
Sele	ct Action: Next Screen//		

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 E	xists
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 diagn the past 3 years. This reminder does not resolve. Addi displayed to the patient if the last 3 BPs were <= 130/8 was >140/90 or if any of the last 3 BPs was >=160/100.	tional text is	
If you use a different taxonomy for HTN or for renal dis substitute you local taxonomies into the national remind	_	
Keywords:		
Components:		
GMRV VITAL TYPE		
BLOOD PRESSURE		Х
REMINDER SPONSOR		

1	VA National Center for Health Promotion and Disease Prevention (NCP)	
2	Office of Quality & Performance	х
3	National Clinical Practice Guideline Council	х
REMIN	NDER TAXONOMY	
4	VA-DIABETES	Х
5	VA-HYPERTENSION	Х
REMIN	NDER TERM	
6	VA-BP >130/80 (ANY OF LAST 3)	
7	VA-BP >=160/100	Х
8	VA-BP >=140/90	Х
9	VA-MHV DIABETES OR KIDNEY DISEASE	Х
10	VA-MHV HYPERTENSION DX	Х
REMIN	NDER 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	Compo	onents	ر	Jan 26,	2005@12	2:38:5	51	Pag	le:	1 of	1
Packed	remir	nder dialog: SN	MOKING	G CESSAI	ION EDU	JCATIC	DN				
Item	Item Seq. Dialog Summary								Туре	Ex	ists
1	1	HF ACTIVATE PN	NEUMOC	COCCAL V	ACCINE	DONE	ELSEWHI	ERE	eleme	nt	х
2	2	MH AIMS							eleme	nt	Х
3	3	VM BLOOD PRESS	SURE I	DONE					eleme	nt	Х
4	4 SMOKING CESSATION EDUCATION							dialo	g	Х	
	+	Next Screen	- Pre	ev Scree	n ??	More	Actions	5			
DD D	ialog	Details	DT	Dialog	Text		IS	Install	Selec	ted	
DF D	ialog	Findings	DU	Dialog	Usage		QU	Quit			
DS D	ialog	Summary	IA	Install	All						
Select	Actic	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 1 of Page: 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 IM HEP A DONE ELSEWHERE 10 element 4 15 IM HEP A CONTRA element + Next Screen - Prev Screen ?? More Actions DD Dialog Details DTDialog Text IS Install Selected Dialog Findings  $\mathsf{DF}$ DU Dialog Usage QU Quit Install All DS Dialog Summary IA Install All Select Action: Quit// IA 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 Components Jan 26, 2005@12:52:05 Page: 1 1 of Packed reminder dialog: DEMO REMINDER - SIMPLE DEMO REMINDER - SIMPLE (reminder dialog) installed from exchange file. Item Seq. Dialog Summary Type Exists 1 DEMO REMINDER - SIMPLE dialog 2 5 IM HEP A DONE element 2 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 DU DF Dialog Findings Dialog Usage QU Quit DS Dialog Summary IA Install All Select Action: Quit//

## 4. IH – Installation History

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

Clinical Reminder Exchange	Jul 23,	2004@1	1:27:15	Page:	1 of	2
Exchange File Entries.						
Entry		Sourc	e	Date	Packed	
1 A NEW REMINDER	CRP	ROVIDE	R,ONE@VAMC1			
06/18/2004@11:50:40						
2 A**A SG PAIN SCREENING	CRP	ROVIDE	R,SIX@VAMC6			
07/23/2004@10:55:23						
+ Next Screen - P	rev Scree	n ??	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 Reminder	r Definitio	ns	
IFE Install Exchange File En	try	RI	Reminder Def:	inition Ing	uiry	
Select Action: Next Screen//	IH Inst	allati	on History			
Select Entry(s): (1-4): 2						

Installation History	Jul 23, 200	4@11:	27:27	Page:	1 of	1
Entry A**A SG PAIN SCREENING	Sour CRPROV		ONE@VAMC1	Date P	acked	
07/23/2001@10:55:23						
Installation Date	Installed By					
1 07/23/2004@10:58:48						
Enter ?? for more a						
DH Delete Install History			nstallation D	etails		
Select Action: Quit// ID Ir	stallation I	Detail	S			
A**A SG PAIN SCREENING	07	/23/2	001@10:55:23	07/23/20	01@10:58	:48
Component	Ac	tion	New Name			
EDUQUETON HODICO						
EDUCATION TOPICS 1 MANAGING PAIN		S				
		D				
HEALTH FACTORS						
2 REMINDER FACTORS		S				
3 Pain New Category		S				
4 PAIN PATIENT DECLINED TO	-					
5 PATIENT UNABLE TO REPORT		S				
6 PAIN PATIENT REPORTS NEW		S				
7 PATIENT REPORTS NEW PAIN		S				
8 HF.SG PATIENT NEEDS PAIN	I ASSESSMENI	S				
TIU TEMPLATE FIELD						
9 S'S OLD/NEW		S				
Installation Detail	Jul 23, 200	)4@11:	27:39	Page:	2 of	2
+ Entry			Packed	Date In		
DEMINDED DEEINITATON						
REMINDER DEFINITION 10 A**A SG PAIN SCREENING		S				
TO Y Y DO LATIN DEVENTING		5				
Enter ?? for more a	ctions					
Select Action:Quit//						

## 7. Delete Exchange File Entry

## Use this option to delete selected entries from the Reminder Exchange file #811.8.

Select Reminder Managers Menu Option: RX Reminder Exchange								
	Clinical Reminder Exchange Jun 21, 2004@12:09:19 Page: 1 of 3							
Exchange File Entries.								
	Entry	Sou	rce	Date	Packed			
1	BLOOD PRESSURE CHECK	CRPROVI	DER,ONE@VAMC1	03/28/200	)4@13:12:26	i		
2	SLC PNEUMOCOCCAL VACCINE	CRPROVI	DER, TWO@VAMC2	03/29/200	)4@11:55:11			
3	VA-*CHOLESTEROL SCREEN (M)	CRPROVI	DER,SIX@VAMC6	03/27/200	)4@14:59:42	1		
4	VA-ADVANCED DIRECTIVES EDUC	CRPROVI	DER, TEN@VAMC1	0 3/27/2004	4@14:54:24			
5	VA-HEP C RISK ASSESSMENT	CRPROVI	DER, ONE@VAMC1	03/27/200	04@14:56:13	,		
	+ Next Screen - Prev S	creen	?? More Actio	ns				
CFE	Create Exchange File Entry	IH	Installati	on History				
CHF	Create Host File	LH	F Load Host	File				
CMM	Create MailMan Message	LM	M Load MailM	an Message				
DFE	Delete Exchange File Entry	LR	List Remin	der Definition	ıs			

IFE Install Exchange File Entry RI Reminder Definition Inquiry Select Action: Next Screen// DFE Delete Exchange File Entry Select Entry(s): (1-5): 1							
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 Screen ?? More Actions							
CFE Create Exchange File Entry	IH Installation	Installation History					
CHF Create Host File	LHF Load Host Fil	Load Host File					
CMM Create MailMan Message	LMM Load MailMan	Load MailMan Message					
DFE Delete Exchange File Entry	LR List Reminder	List Reminder Definitions					
IFE Install Exchange File Entry	RI Reminder Defi	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
          I
                    Install
          Q
                    Quit the install
                    Skip, do not install this entry
          S
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 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 LOCATION LIST
- 9 REMINDER SPONSOR
- 10 REMINDER TAXONOMY
- 11 REMINDER TERM
- Multiple items of different types can be selected for packing into a single Exchange File entry. 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. For example, 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.
- For reminder dialogs, selection of individual dialog items is now allowed; the user is no longer limited to packing up the entire dialog.
- 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 re-create 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 Examples in the appendix.
- For dialogs that are auto-generated from a reminder definition, a check was added that will disable a dialog element/group if the finding item is inactive as a result of Data Standardization.
- The formatting of the Exchange file entry installation display during a KIDS install was improved. It now shows the number, and if the text is too long to fit on one line, it will be broken into multiple lines instead of just wrapping.
- Because hospital locations are not standardized, they are not transportable. A list of hospital locations that will not be transported is included in the Exchange file entry description.

The output from this option provides a view of the internal workings of the clinical reminders software and allows you to see what happened as the reminder was evaluated. Errors and warnings that are not always seen on the 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 Definition Management Option: RI Inquire about Reminder Definition Select Reminder Definition: EDUTEST Dec 24, 2008 11:00:10 am Page 1 EDUTEST No. 660020 \_\_\_\_\_ \_\_\_\_\_ Print Name: Education Test Class: LOCAL NONE Sponsor: Review Date: Rescission Date: Usage: CPRS Related VA-\* Reminder: Reminder Dialog: EXCHANGE 4 Priority: Description: Technical Description: Baseline Frequency: Do In Advance Time Frame: Wait until actually DUE Sex Specific: Ignore on N/A: Frequency for Age Range: 1 month for ages 25 to 60 Match Text: This is the age match text for age range 25 to 60. Patient is in age range. Line 2. No Match Text: Patient is not in age range. Line 2 Frequency for Age Range: 1 year for ages 61 to 70 Match Text: This is match text for 61 to 70. The patient's age is |AGE|.

Here is the inquiry for a reminder called EDUTEST.

No Match Text: This is no match text for 61 to 70, the patient's age is |AGE|. Findings: ---- Begin: VA-SUBSTANCE ABUSE (FI(1)=ED(1)) -----Finding Type: EDUCATION TOPICS Occurrence Count: -4 ---- End: VA-SUBSTANCE ABUSE --------- Begin: VA-EXERCISE SCREENING (FI(2)=ED(11)) ------Finding Type: EDUCATION TOPICS Use in Resolution Logic: OR Occurrence Count: 2 Found Text: VA-EXERCISE SCREENING FOUND TEXT. Lets test out some objects. The patient was seen on VISIT DATE |. His last blood pressure was |BLOOD PRESSURE|. His last weight was |PATIENT WEIGHT|. Not Found Text: VA-EXERCISE SCREENING NOT FOUND TEXT. ---- End: VA-EXERCISE SCREENING --------- Begin: VA-EXERCISE (FI(3)=ED(363)) -----Finding Type: EDUCATION TOPICS Occurrence Count: 2 ---- End: VA-EXERCISE ------\_\_\_\_\_ ---- Begin: VA-EXERCISE (FI(4)=ED(363)) -----Finding Type: EDUCATION TOPICS Beginning Date/Time: T-5M ---- End: VA-EXERCISE ---------- Begin: VA-DIABETES (FI(5)=ED(360)) -----Finding Type: EDUCATION TOPICS ---- End: VA-DIABETES ---------- Begin: EDUTEST (FI(8)=RT(660006)) -----Finding Type: REMINDER TERM Occurrence Count: 3 Mapped Findings: Mapped Finding Item: ED.VA-SUBSTANCE ABUSE Mapped Finding Item: ED.VA-EXERCISE SCREENING Mapped Finding Item: ED.VA-EXERCISE Mapped Finding Item: ED.VA-ADVANCE DIRECTIVES ---- End: EDUTEST -----Function Findings: ---- Begin: FF(1)------Function String: MRD(1,2)>MRD(5) Expanded Function String:

MRD(VA-SUBSTANCE ABUSE,VA-EXERCISE SCREENING)>MRD(VA-DIABETES) Use in Resolution Logic: AND ---- End: FF(1) ---------- Begin: FF(2)------Function String: FI(1)&(FI(4)!FI(5)) Expanded Function String: FI(VA-SUBSTANCE ABUSE)&(FI(VA-EXERCISE)!FI(VA-DIABETES)) ---- End: FF(2) ---------- Begin: FF(3)------Function String: COUNT(2)>1 Expanded Function String: COUNT(VA-EXERCISE SCREENING)>1 Use in Resolution Logic: AND ---- End: FF(3) ---------- Begin: FF(4)------Function String: DIFF\_DATE(1,2)>625 Expanded Function String: DIFF\_DATE(VA-SUBSTANCE ABUSE,VA-EXERCISE SCREENING)>625 ---- End: FF(4) -----General Patient Cohort Found Text: This is the general cohort found text. General Patient Cohort Not Found Text: This is general cohort not found text. Line two of not found. Line 3 of not found. Patient's age is |AGE|. General Resolution Found Text: This is the general resolution found text. Second line of resolution found text. General Resolution Not Found Text: This is the general resolution not found text. Second line of not found. Third line of not found. Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient: (SEX)&(AGE) Expanded Patient Cohort Logic: (SEX)&(AGE) Default RESOLUTION LOGIC defines findings that resolve the Reminder: FI(2)&FF(1)&FF(3)Expanded Resolution Logic: FI(VA-EXERCISE SCREENING)&FF(1)&FF(3) Web Sites: Web Site URL: Influenza Directive Web Site Title: Description:

#### Test option output for this reminder

Select Reminder Managers Menu Option: RT Reminder Test Select Patient: CRPATIENT, TWO 10-10-72 666554444 YES ACTIVE DUTY Enrollment Priority: GROUP 1 Category: IN PROCESS End Date: Select Reminder: edutest LOCAL Enter date for reminder evaluation: Dec 24, 2008// (DEC 24, 2008) Display all term findings? N// y YES The elements of the FIEVAL array are: FIEVAL(1)=1 FIEVAL(1,1)=1FIEVAL(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")=200FIEVAL(1,1,"DATE")=2980700 FIEVAL(1,1,"LEVEL OF UNDERSTANDING") = FIEVAL(1,1,"VALUE") = FIEVAL(1,1,"VISIT")=3935 FIEVAL(1,2)=1FIEVAL(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)=1FIEVAL(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")=3FIEVAL(1,3, "VISIT")=3693 FIEVAL(1, 4) = 1FIEVAL(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") = 3FIEVAL(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

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FIEVAL(1,4, "VISIT")=3720
FIEVAL(1, "COMMENTS") =
FIEVAL(1,"CSUB","COMMENTS") =
FIEVAL(1, "CSUB", "DATE")=2980700
FIEVAL(1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(1, "CSUB", "VALUE") =
FIEVAL(1, "CSUB", "VISIT")=3935
FIEVAL(1, "DAS")=200
FIEVAL(1, "DATE")=2980700
FIEVAL(1,"FILE NUMBER")=9000010.16
FIEVAL(1, "FINDING")=1;AUTTEDT(
FIEVAL(1,"LEVEL OF UNDERSTANDING") =
FIEVAL(1, "VALUE") =
FIEVAL(1, "VISIT")=3935
FIEVAL(2)=1
FIEVAL(2,1)=1
FIEVAL(2,1,"COMMENTS") =
FIEVAL(2,1,"CSUB","COMMENTS") =
FIEVAL(2,1,"CSUB","DATE")=3000317.08
FIEVAL(2,1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(2,1,"CSUB","VALUE") =
FIEVAL(2,1,"CSUB","VISIT")=3787
FIEVAL(2, 1, "DAS") = 214
FIEVAL(2,1,"DATE")=3000317.08
FIEVAL(2,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(2,1,"VALUE") =
FIEVAL(2,1, "VISIT")=3787
FIEVAL(2,2)=1
FIEVAL(2,2,"COMMENTS") =
FIEVAL(2,2,"CSUB","COMMENTS") =
FIEVAL(2,2,"CSUB","DATE")=3000106.131524
FIEVAL(2,2,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(2,2,"CSUB","VALUE")=3
FIEVAL(2,2,"CSUB","VISIT")=3646
FIEVAL(2,2,"DAS")=119
FIEVAL(2,2,"DATE")=3000106.131524
FIEVAL(2,2,"LEVEL OF UNDERSTANDING")=3
FIEVAL(2,2,"VALUE")=3
FIEVAL(2,2,"VISIT")=3646
FIEVAL(2,"COMMENTS") =
FIEVAL(2,"CSUB","COMMENTS") =
FIEVAL(2, "CSUB", "DATE")=3000317.08
FIEVAL(2,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(2, "CSUB", "VALUE") =
FIEVAL(2,"CSUB","VISIT")=3787
FIEVAL(2, "DAS") = 214
FIEVAL(2, "DATE")=3000317.08
FIEVAL(2,"FILE NUMBER")=9000010.16
FIEVAL(2, "FINDING")=11;AUTTEDT(
FIEVAL(2,"LEVEL OF UNDERSTANDING")=
FIEVAL(2, "VALUE") =
FIEVAL(2, "VISIT")=3787
FIEVAL(3)=1
FIEVAL(3,1)=1
FIEVAL(3,1,"COMMENTS") =
FIEVAL(3,1,"CSUB","COMMENTS") =
FIEVAL(3,1,"CSUB","DATE")=3000317.08
FIEVAL(3,1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(3,1,"CSUB","VALUE") =
FIEVAL(3,1, "CSUB", "VISIT")=3787
FIEVAL(3,1,"DAS")=215
FIEVAL(3,1,"DATE")=3000317.08
FIEVAL(3,1,"LEVEL OF UNDERSTANDING") =
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FIEVAL(3,1,"VALUE") =
FIEVAL(3,1, "VISIT")=3787
FIEVAL(3,2)=1
FIEVAL(3,2,"COMMENTS") =
FIEVAL(3,2,"CSUB","COMMENTS") =
FIEVAL(3,2,"CSUB","DATE")=3000000
FIEVAL(3,2,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(3,2,"CSUB","VALUE") =
FIEVAL(3,2,"CSUB","VISIT")=3997
FIEVAL(3,2,"DAS")=210
FIEVAL(3,2,"DATE")=3000000
FIEVAL(3,2,"LEVEL OF UNDERSTANDING") =
FIEVAL(3,2,"VALUE") =
FIEVAL(3,2,"VISIT")=3997
FIEVAL(3, "COMMENTS") =
FIEVAL(3,"CSUB","COMMENTS") =
FIEVAL(3, "CSUB", "DATE")=3000317.08
FIEVAL(3,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(3,"CSUB","VALUE")=
FIEVAL(3,"CSUB","VISIT")=3787
FIEVAL(3, "DAS")=215
FIEVAL(3, "DATE")=3000317.08
FIEVAL(3,"FILE NUMBER")=9000010.16
FIEVAL(3,"FINDING")=363;AUTTEDT(
FIEVAL(3,"LEVEL OF UNDERSTANDING")=
FIEVAL(3, "VALUE") =
FIEVAL(3, "VISIT")=3787
FIEVAL(4)=0
FIEVAL(4, "FINDING")=363;AUTTEDT(
FIEVAL(5)=1
FIEVAL(5,1)=1
FIEVAL(5,1,"COMMENTS") =
FIEVAL(5,1,"CSUB","COMMENTS") =
FIEVAL(5,1,"CSUB","DATE")=3000317.08
FIEVAL(5,1,"CSUB","LEVEL OF UNDERSTANDING") =
FIEVAL(5,1,"CSUB","VALUE") =
FIEVAL(5,1,"CSUB","VISIT")=3787
FIEVAL(5,1,"DAS")=203
FIEVAL(5,1,"DATE")=3000317.08
FIEVAL(5,1,"LEVEL OF UNDERSTANDING") =
FIEVAL(5,1,"VALUE")=
FIEVAL(5,1, "VISIT")=3787
FIEVAL(5, "COMMENTS") =
FIEVAL(5, "CSUB", "COMMENTS") =
FIEVAL(5, "CSUB", "DATE")=3000317.08
FIEVAL(5,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(5, "CSUB", "VALUE") =
FIEVAL(5,"CSUB","VISIT")=3787
FIEVAL(5, "DAS")=203
FIEVAL(5, "DATE")=3000317.08
FIEVAL(5,"FILE NUMBER")=9000010.16
FIEVAL(5, "FINDING")=360;AUTTEDT(
FIEVAL(5,"LEVEL OF UNDERSTANDING")=
FIEVAL(5, "VALUE") =
FIEVAL(5, "VISIT")=3787
FIEVAL(8)=1
FIEVAL(8,1)=1
FIEVAL(8,1,"COMMENTS") =
FIEVAL(8,1,"CSUB","COMMENTS") =
FIEVAL(8,1,"CSUB","DATE")=3000317.08
FIEVAL(8,1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(8,1,"CSUB","VALUE") =
FIEVAL(8,1,"CSUB","VISIT")=3787
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FIEVAL(8,1,"DAS")=201 FIEVAL(8,1,"DATE")=3000317.08 FIEVAL(8,1,"FILE NUMBER")=9000010.16 FIEVAL(8,1,"FINDING")=1;AUTTEDT( FIEVAL(8,1,"LEVEL OF UNDERSTANDING") = FIEVAL(8,1,"VALUE") = FIEVAL(8,1, "VISIT")=3787 FIEVAL(8,2)=1 FIEVAL(8,2,"COMMENTS") = FIEVAL(8, 2, "CSUB", "COMMENTS") = FIEVAL(8,2,"CSUB","DATE")=3000317.08 FIEVAL(8,2,"CSUB","LEVEL OF UNDERSTANDING")= FIEVAL(8,2,"CSUB","VALUE") = FIEVAL(8,2,"CSUB","VISIT")=3787 FIEVAL(8,2,"DAS")=214 FIEVAL(8,2,"DATE")=3000317.08 FIEVAL(8,2,"FILE NUMBER")=9000010.16 FIEVAL(8,2,"FINDING")=11;AUTTEDT( FIEVAL(8,2,"LEVEL OF UNDERSTANDING") = FIEVAL(8,2,"VALUE") = FIEVAL(8,2, "VISIT")=3787 FIEVAL(8,3)=1 FIEVAL(8,3,"COMMENTS") = FIEVAL(8, 3, "CSUB", "COMMENTS") = FIEVAL(8,3,"CSUB","DATE")=3000317.08 FIEVAL(8,3,"CSUB","LEVEL OF UNDERSTANDING")= FIEVAL(8,3,"CSUB","VALUE") = FIEVAL(8,3, "CSUB", "VISIT")=3787 FIEVAL(8,3,"DAS")=215 FIEVAL(8,3,"DATE")=3000317.08 FIEVAL(8,3,"FILE NUMBER")=9000010.16 FIEVAL(8,3,"FINDING")=363;AUTTEDT( FIEVAL(8,3,"LEVEL OF UNDERSTANDING") = FIEVAL(8,3,"VALUE")= FIEVAL(8,3, "VISIT")=3787 FIEVAL(8, "COMMENTS") = FIEVAL(8, "CSUB", "COMMENTS") = FIEVAL(8, "CSUB", "DATE")=3000317.08 FIEVAL(8,"CSUB","LEVEL OF UNDERSTANDING") = FIEVAL(8, "CSUB", "VALUE") =FIEVAL(8,"CSUB","VISIT")=3787 FIEVAL(8, "DAS")=201 FIEVAL(8, "DATE")=3000317.08 FIEVAL(8,"FILE NUMBER")=9000010.16 FIEVAL(8, "FINDING")=1;AUTTEDT( FIEVAL(8,"LEVEL OF UNDERSTANDING")= FIEVAL(8, "TERM") = EDUTEST^^^3001206 FIEVAL(8,"TERM IEN")=660006 FIEVAL(8, "VALUE") = FIEVAL(8, "VISIT")=3787 FIEVAL("AGE")=1 FIEVAL("AGE",1)=1 FIEVAL("AGE", 2) = 0FIEVAL("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

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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") =
\texttt{TFIEVAL(8,1,1,"VALUE")} =
TFIEVAL(8,1,1,"VISIT")=3787
TFIEVAL(8,1,2)=1
TFIEVAL(8,1,2,"COMMENTS") =
TFIEVAL(8,1,2,"CSUB","COMMENTS") =
TFIEVAL(8,1,2,"CSUB","DATE")=3000217.085926
TFIEVAL(8,1,2,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,2,"CSUB","VALUE")=3
TFIEVAL(8,1,2,"CSUB","VISIT")=3720
TFIEVAL(8,1,2,"DAS")=151
TFIEVAL(8,1,2,"DATE")=3000217.085926
TFIEVAL(8,1,2,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,2,"VALUE")=3
TFIEVAL(8,1,2,"VISIT")=3720
TFIEVAL(8, 1, 3) = 1
TFIEVAL(8,1,3,"COMMENTS") =
TFIEVAL(8,1,3,"CSUB","COMMENTS") =
TFIEVAL(8,1,3,"CSUB","DATE")=3000202.15
TFIEVAL(8,1,3,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,3,"CSUB","VALUE")=3
TFIEVAL(8,1,3,"CSUB","VISIT")=3693
TFIEVAL(8,1,3,"DAS")=159
TFIEVAL(8,1,3,"DATE")=3000202.15
TFIEVAL(8,1,3,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,3,"VALUE")=3
TFIEVAL(8,1,3,"VISIT")=3693
TFIEVAL(8,1,"COMMENTS") =
TFIEVAL(8,1,"CSUB","COMMENTS") =
TFIEVAL(8,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,1,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,1,"CSUB","VALUE")=
TFIEVAL(8,1,"CSUB","VISIT")=3787
TFIEVAL(8,1,"DAS")=201
TFIEVAL(8,1,"DATE")=3000317.08
TFIEVAL(8,1,"FILE NUMBER")=9000010.16
TFIEVAL(8,1,"FINDING")=1;AUTTEDT(
TFIEVAL(8,1,"LEVEL OF UNDERSTANDING") =
TFIEVAL(8,1,"VALUE") =
TFIEVAL(8,1,"VISIT")=3787
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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
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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
03/17/200	00	

# **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	
FIEVAL(1,1,"LEVEL OF UNDERSTANDING")=	format.
FIEVAL(1,1, "VALUE")=	
FIEVAL(1,1, "VISIT")=3935	
FIEVAL(1,2)=1	This is the second occurrence of
FIEVAL(1,2,"COMMENTS")=	finding 1.
FIEVAL(1,2,"COMMENTS")= FIEVAL(1,2,"CSUB","COMMENTS")=	interne i.
FIEVAL(1,2, "CSUB", "DATE")=3000000	
FIEVAL(1,2,"CSUB","DATE")=S000000 FIEVAL(1,2,"CSUB","LEVEL OF UNDERSTANDING")=	
FIEVAL(1,2, CSUB, HEVEL OF UNDERSTANDING)= FIEVAL(1,2, "CSUB", "VALUE")=	
FIEVAL(1,2, "CSUB", "VISIT")=3997	This entry in the Visit File is
FIEVAL(1,2, "DAS")=212	3997.
FIEVAL(1,2, "DATE")=3000000	5997.
FIEVAL(1,2, "LEVEL OF UNDERSTANDING")=	
FIEVAL(1,2, "VALUE")=	
FIEVAL(1,2, VALUE) = 3997	
FIEVAL(1,2, VISI1) = 3997 FIEVAL(1,3)=1	
FIEVAL(1,3)-1 FIEVAL(1,3, "COMMENTS")=	This section shows the final value
FIEVAL(1,3, "CSUB", "COMMENTS")=	
FIEVAL(1,3, "CSUB", "DATE")=3000202.15	for the three occurrences.
FIEVAL(1,3, CSUB, DATE)=3000202.13 FIEVAL(1,3, CSUB, "LEVEL OF UNDERSTANDING")=3	
FIEVAL(1,3, CSUB, LEVEL OF UNDERSTANDING)=3 FIEVAL(1,3, "CSUB", "VALUE")=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,"DATE")=3000202.15 FIEVAL(1,3,"LEVEL OF UNDERSTANDING")=3	
FIEVAL(1,3, "LEVEL OF UNDERSTANDING")=3 FIEVAL(1,3, "VALUE")=3	
FIEVAL(1,3,"VISIT")=3693	
FIEVAL(1,4)=1 FIEVAL(1,4,"COMMENTS")=	
<pre>FIEVAL(1,4,"CSUB","COMMENTS")= FIEVAL(1,4,"CSUB","DATE")=3000217.085926</pre>	
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	
<pre>FIEVAL(1,4,"DATE")=3000217.085926 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,"DAS")=200 FIEVAL(1,"DATE")=2980700</pre>	200 is the DA string in the Patient Education file/education topic (see
<pre>FIEVAL(1,"CSUB","VISIT")=3935 FIEVAL(1,"DAS")=200</pre>	e e
<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>65</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
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")=
<pre>TFIEVAL(1,1,1,"CSUB","PROVIDER NARRATIVE")=3906</pre>
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 INQUIRY	Allows a user to display a clinical reminder definition in an easy to read format.
TXL	List Taxonomy Definitions	PXRM TAXONOMY LIST	This option lists the current definitions of all the taxonomies defined in the REMINDER TAXONOMY file.
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 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 replace it 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 autogenerating a reminder dialog from a reminder, a scan will run through the new dialog and it will disable any subitems 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 List Values for a Selected Entity LE List Values for a Selected Package T.P List Values for a Selected Template LT ΕP Edit Parameter Values EΤ 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 autogenerate a dialog, which would automatically incorporate all the defining elements, but would not add informational elements, orderable items, or templates. By manually creating your dialog, you can customize your dialog. Most sites prefer to create dialogs manually.

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

This file contains a combination of nationally distributed entries, local auto-generated entries, site, and VISN exchanged entries, and local manually created entries. Nationally distributed entries have their name prefixed with PXRM or "VA-". Entries in this file may be auto-generated via the Dialog Management Menu option. Manually created dialog entries should use local namespacing conventions.

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

# **Dialog Component Definitions**

# **Dialog Elements**

A dialog element is defined primarily to represent sentences to display in the CPRS window with a check box. When the user checks the sentence off, the FINDING ITEM in the dialog element and the ADDITIONAL FINDINGS will be added to the list of PCE updates, orders, vitals, mental health tests, andWomen'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:

Selection List	May 05, 2000 15:15:26	Page:	1 of	1
Reminder Resolution Status				
Item Reminder Resolution Status	National/Local			
1 CONTRAINDICATED	NATIONAL			
2 DONE AT ENCOUNTER	NATIONAL			
3 DONE ELSEWHERE (HISTORICA	L) 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 - Pre	v Screen ?? More Actions			
AD Add PT	List/Print All Q	U Quit		_
Select 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	Status National/Local			
1 CONTRAINDICATED	NATIONAL			
2 DONE AT ENCOUNTER	NATIONAL			
3 DONE ELSEWHERE (HISTO	DRICAL) NATIONAL			
4 ORDERED	NATIONAL			
5 OTHER	NATIONAL			
6 PATIENT REFUSED	NATIONAL			
+ Next Screen -	- Prev Screen ?? More Action	IS		
AD Add I	PT List/Print All QU	Quit		
Select Item: Quit// AD Ad	ld			

Select new RESOLUTION STATUS name: ? Answer with REMINDER RESOLUTION STATUS NAME Choose from: CONTRAINDICATED DONE AT ENCOUNTER DONE ELSEWHERE (HISTORICAL) ORDERED OTHER

You may enter a new REMINDER RESOLUTION STATUS, if you wish Answer must be 3-40 characters in length. Select new RESOLUTION STATUS name: OTHER-DUE TO LIFE EXPECTANCY Are you adding 'OTHER-DUE TO LIFE EXPECTANCY as a new REMINDER RESOLUTION STATUS (the 7TH)? No// Y (Yes) NAME: OTHER-DUE TO LIFE EXPECTANCY Replace <b><enter></enter></b> DESCRIPTION: 1>Other due to life expectancy 2> <b><enter></enter></b> EDIT Option: <b><enter></enter></b> ABBREVIATED NAME: OTHER - LIFE EXPECT REPORT COLUMN HEADING: OTHER - LIFE EXPECT INACTIVE FLAG: <b><enter></enter></b> This resolution status must be linked to a national status SELECT NATIONAL RESOLUTION STATUS: OTHER OK? Yes// <b><enter></enter></b> (Yes) Selection List May 05, 2000 12:15:50 Page: 1 of 1 Reminder Resolution Status I conTRAINDICATED NATIONAL 2 DONE AT ENCOUNTER NATIONAL 3 DONE ELSEWHERE (HISTORICAL) NATIONAL 4 ORDERED NATIONAL 5 OTHER NATIONAL 6 OTHER -DUE TO LIFE EXPECTANCY LOCAL	You may enter a new REMINDER RESOL				
Are you adding 'OTHER-DUE TO LIFE EXPECTANCY' as a new REMINDER RESOLUTION STATUS (the 7TH)? No// Y (Yes) NAME: OTHER-DUE TO LIFE EXPECTANCY Replace <enter> DESCRIPTION: 1&gt;Other due to life expectancy 2&gt;<enter> EDIT Option: <enter> ABBREVIATED NAME: OTHER - LIFE EXPECT REPORT COLUMN HEADING: OTHER - LIFE EXPECT INACTIVE FLAG: <enter> This resolution status must be linked to a national status SELECT NATIONAL RESOLUTION STATUS: OTHER OK? Yes// <enter> (Yes) Selection List May 05, 2000 12:15:50 Page: 1 of 1 Reminder Resolution Status National/Local 1 CONTRAINDICATED NATIONAL 2 DONE AT ENCOUNTER NATIONAL 3 DONE ELSEWHERE (HISTORICAL) NATIONAL 4 ORDERED NATIONAL 5 OTHER NATIONAL 6 OTHER-DUE TO LIFE EXPECTANCY LOCAL</enter></enter></enter></enter></enter>	-	· -	sh		
INACTIVE FLAG: <b><enter></enter></b> This resolution status must be linked to a national status SELECT NATIONAL RESOLUTION STATUS: <b>OTHER</b> OK? Yes// <b><enter></enter></b> (Yes) Selection List May 05, 2000 12:15:50 Page: 1 of 1 Reminder Resolution Status Item Reminder Resolution Status National/Local 1 CONTRAINDICATED NATIONAL 2 DONE AT ENCOUNTER NATIONAL 3 DONE ELSEWHERE (HISTORICAL) NATIONAL 4 ORDERED NATIONAL 5 OTHER NATIONAL 6 OTHER-DUE TO LIFE EXPECTANCY LOCAL	Are you adding 'OTHER-DUE TO LIFE EXP a new REMINDER RESOLUTION STATUS (t NAME: OTHER-DUE TO LIFE EXPECTANCY Rep DESCRIPTION: 1>Other due to life expectancy 2> <enter> EDIT Option: <enter></enter></enter>	ECTANCY' as he 7TH)? No// <b>Y</b> (Yes)	Y		
This resolution status must be linked to a national status SELECT NATIONAL RESOLUTION STATUS: OTHER OK? Yes// <enter> (Yes) Selection List May 05, 2000 12:15:50 Page: 1 of 1 Reminder Resolution Status Item Reminder Resolution Status National/Local 1 CONTRAINDICATED NATIONAL 2 DONE AT ENCOUNTER NATIONAL 3 DONE ELSEWHERE (HISTORICAL) NATIONAL 4 ORDERED NATIONAL 5 OTHER NATIONAL 6 OTHER-DUE TO LIFE EXPECTANCY LOCAL</enter>		ECT			
SELECT NATIONAL RESOLUTION STATUS: OTHER OK? Yes// <enter> (Yes) <u>Selection List May 05, 2000 12:15:50 Page: 1 of 1</u> Reminder Resolution Status <u>Item Reminder Resolution Status National/Local</u> 1 CONTRAINDICATED NATIONAL 2 DONE AT ENCOUNTER NATIONAL 3 DONE ELSEWHERE (HISTORICAL) NATIONAL 4 ORDERED NATIONAL 5 OTHER NATIONAL 6 OTHER-DUE TO LIFE EXPECTANCY LOCAL</enter>	INACTIVE FLAG: <b><enter></enter></b>				
Selection List       May 05, 2000 12:15:50       Page: 1 of 1         Reminder Resolution Status       Item Reminder Resolution Status         Item Reminder Resolution Status       National/Local         1       CONTRAINDICATED       NATIONAL         2       DONE AT ENCOUNTER       NATIONAL         3       DONE ELSEWHERE (HISTORICAL)       NATIONAL         4       ORDERED       NATIONAL         5       OTHER       NATIONAL         6       OTHER-DUE TO LIFE EXPECTANCY       LOCAL	This resolution status must be linked t	o a national status			
Reminder Resolution Status       National/Local         1       CONTRAINDICATED       NATIONAL         2       DONE AT ENCOUNTER       NATIONAL         3       DONE ELSEWHERE (HISTORICAL)       NATIONAL         4       ORDERED       NATIONAL         5       OTHER       NATIONAL         6       OTHER-DUE TO LIFE EXPECTANCY       LOCAL		R			
Item Reminder Resolution StatusNational/Local1CONTRAINDICATEDNATIONAL2DONE AT ENCOUNTERNATIONAL3DONE ELSEWHERE (HISTORICAL)NATIONAL4ORDEREDNATIONAL5OTHERNATIONAL6OTHER-DUE TO LIFE EXPECTANCYLOCAL	Selection List May 05	2000 12:15:50	Page:	1 of	1
1CONTRAINDICATEDNATIONAL2DONE AT ENCOUNTERNATIONAL3DONE ELSEWHERE (HISTORICAL)NATIONAL4ORDEREDNATIONAL5OTHERNATIONAL6OTHER-DUE TO LIFE EXPECTANCYLOCAL				-	
2DONE AT ENCOUNTERNATIONAL3DONE ELSEWHERE (HISTORICAL)NATIONAL4ORDEREDNATIONAL5OTHERNATIONAL6OTHER-DUE TO LIFE EXPECTANCYLOCAL	Reminder Resolution Status				
3DONE ELSEWHERE (HISTORICAL)NATIONAL4ORDEREDNATIONAL5OTHERNATIONAL6OTHER-DUE TO LIFE EXPECTANCYLOCAL	Reminder Resolution Status Item Reminder Resolution Status				
4ORDEREDNATIONAL5OTHERNATIONAL6OTHER-DUE TO LIFE EXPECTANCYLOCAL	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED	NATIONAL			
5 OTHER NATIONAL 6 OTHER-DUE TO LIFE EXPECTANCY LOCAL	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER	NATIONAL NATIONAL			
	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER 3 DONE ELSEWHERE (HISTORICAL)	NATIONAL NATIONAL NATIONAL			
	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER 3 DONE ELSEWHERE (HISTORICAL) 4 ORDERED	NATIONAL NATIONAL NATIONAL NATIONAL			
7 PATIENT REFUSED NATIONAL	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER 3 DONE ELSEWHERE (HISTORICAL) 4 ORDERED 5 OTHER	NATIONAL NATIONAL NATIONAL NATIONAL NATIONAL			
	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER 3 DONE ELSEWHERE (HISTORICAL) 4 ORDERED 5 OTHER	NATIONAL NATIONAL NATIONAL NATIONAL NATIONAL			
+ Next Screen - Prev Screen ?? More Actions	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER 3 DONE ELSEWHERE (HISTORICAL) 4 ORDERED 5 OTHER 6 OTHER-DUE TO LIFE EXPECTANCY	NATIONAL NATIONAL NATIONAL NATIONAL NATIONAL LOCAL			
AD Add PT List/Print All OU Quit	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER 3 DONE ELSEWHERE (HISTORICAL) 4 ORDERED 5 OTHER 6 OTHER-DUE TO LIFE EXPECTANCY 7 PATIENT REFUSED	NATIONAL NATIONAL NATIONAL NATIONAL LOCAL NATIONAL			
Select Item: Quit// <enter></enter>	Reminder Resolution Status Item Reminder Resolution Status 1 CONTRAINDICATED 2 DONE AT ENCOUNTER 3 DONE ELSEWHERE (HISTORICAL) 4 ORDERED 5 OTHER 6 OTHER-DUE TO LIFE EXPECTANCY 7 PATIENT REFUSED + Next Screen - Prev Screen	NATIONAL NATIONAL NATIONAL NATIONAL LOCAL NATIONAL *? More Actions			

# 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 Page: 1 of REMINDER RESOLUTION STATUS NAME: OTHER-DUE TO LIFE EXPECTANCY

Resolution Status: OTHER-DUE TO LIFE EXPECTANCY

Resolution Status Description Other due to life expectancy

Related National Status: OTHER Abbreviated name: OTHER - LIFE EXPECT Report Column Headings: OTHER - LIFE 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)

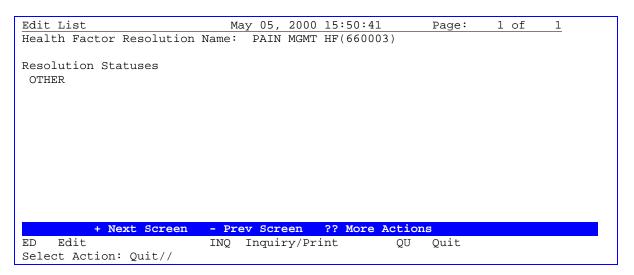
# **Health Factor Resolutions**

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	May	05,	2000	15:39:	50	Page:	1	of	1
Health Factor Resolutions									
Item Health Factors			Res	solutio	on Status				
1 ALCOHOL USE			01	THER					
2 BINGE DRINKING			07	THER					
3 CURRENT SMOKER			PA	ATIENT	REFUSED				
4 DRINKING ALONE			01	THER					
5 FAMILY HX OF ALCOHOL A	BUSE		05	THER					
6 NUTRITION			07	THER					
7 PAIN MGMT			07	THER					
8 TOBACCO			D	ONE AT	ENCOUNTER	R/DONE	ELSE	WHERE	
+ Next Screen -	Prev	Scre	een	?? Mor	e Actions	5			
AD Add PT	L	lst/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 I	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/Print All QU Quit					
Select 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 16:06:40	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 Scree	en ?? More Action	s			
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 Pag	e: 1 of	1			
Finding Type Parameter Name:	ED - EDUCATION TOPIC					
Resolution Status	Prefix//Suffix & Prompts/Values/Acti	ons Status				
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	Detiont dealized/	Disabled				
5 PAILENI REFUSED	Patient declined/ /at this encounter	DISADIEU				
	1] PXRM REFUSED (forced value)					
	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 & N	ame	Dialog Group/Eleme	ent	Status
1 HF-ED SUBSTANCE ABUSE	(OVERRIDE)	ED SUBSTANCE ABUSI	E REFUSED	Enabled
2 HF-ALCOHOL	OUP	Disabled		
+ Next Screen -	Prev Scree	n ?? More Actions		
	T List/Pr		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	Мау	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 TAXONOM	Y						
6 SLC DIABETES							
7 SLC-Ear Mites							
8 VA-ALCOHOL ABUSE							
9 VA-ALCOHOLISM SCR	EENING						
10 VA-BREAST TUMOR							
11 VA-CERVICAL CA/AB	NORMAL PAP						
12 VA-CERVICAL CANCE	R SCREEN						
13 VA-CHOLESTEROL							
14 VA-COLORECTAL CA							
15 VA-COLORECTAL CAN	CER SCREEN						
+ Next Screen	- Prev Scr	een	?? 1	More Actions			
PT List All	QU Quit						
Select Item: Next Scree	n//						

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 Dialo	g
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
+ Ne:	xt 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	og Edit List	Dec	c 15, 2004@14:04:	59		Page:	1 of	4
	NDER DIALOG NAME: VA-				1 *T.TMTTFD	-	1 01	<u> </u>
Iter			ION ASSESSMENT [I	ATTONAL		BDII		
$\frac{1}{1}$			ACT N FILL THOM					
T	5 Element: VA-TE	XI. DEPRE	ESSION EVAL INSTR	RUCTIONS				
2	7 Element: VA-TE	XT BLANK	K LINE WITH TEMPI	LATE FIE	LD			
3	10 Group: VA-GP I	EP MDD C	CRITERIA DISPLAY					
4	10.5 Element: VA	-TEXT MD	DD DSM-IV CRITERI	IA DISPL	AY			
5	12 Group: VA-GP H	HQ 9						
6	12.5 Element: VA	-TEXT PH	HQ 9					
7	15 Element: VAA-1	EXT BLAN	NK LINE					
8	20 Group: VA-GP I							
	+ Next Screen			Action				
ADD	Add Element/Group		ialog Summary			rint		
CO	Copy Dialog	DO Di	ialog Overview	QU	Quit			
DD	Detailed Display	DT Di	ialog Text					
DP	Progress Note Text	ED EC	dit/Delete Dialog	3				
Sele	ct Item: Next Screen/	/						
L								

# **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.

Dial	og Edi	t List		Dec 15, 2004@14:04:5	9		Page:	1 of	4
REMI	NDER D	IALOG NAME: VA-	DEPR	ESSION ASSESSMENT [NA	TIONAL	] *LIMITED	EDIT*		
Ite	m Seg	. Dialog Ove	erview	W					
1	5	Element: VA-TE	XT D	EPRESSION EVAL INSTRU	CTIONS	5			
2	7	Element: VA-TE	XT B	LANK LINE WITH TEMPLA	re fie	LD			
3	10	Group: VA-GP I	EP M	DD CRITERIA DISPLAY					
4	12	Group: VA-GP F	PHQ 9						
5	15	Element: VAA-T	EXT 1	BLANK LINE					
6	20	Group: VA-GP I	EP A	SSESSMENT RESULTS					
7	24	Element: VAA-T	EXT 1	BLANK LINE					
8	30	Element: VA-HF	'PT 1	FOLLOWED FOR DEPRESSI	NC				
		+ Next Screen	- P	rev Screen ?? More	Action	s			
ADD		lement/Group		Dialog Summary			rint		
1		Dialog		Dialog Overview	QU	Quit			
		led Display		Dialog Text					
1	-			Edit/Delete Dialog					
Se⊥e	ct Ite	m: 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 instrucent 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 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 2) that is being replaced by a rewrite of the MHA tool, 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:

1 of 2
Status

8	PXRM AUDIT RESULT (	GROUP	Result Group
9	PXRM BDI II RESULT	GROUP	Result Group
11	PXRM BRADEN RESULT	GROUP	Result Group
12	PXRM CAGE RESULT G	ROUP	Result Group
13	PXRM DOM80 RESULT (	GROUP	Result Group
14	PXRM DOMG RESULT G	ROUP	Result Group
15	PXRM MISS RESULT G	ROUP	Result Group
16	PXRM MORSE FALL RE:	SULT GROUP	Result Group
17	PXRM PCLC RESULT G	ROUP	Result Group
18	PXRM PCLM RESULT G	ROUP	Result Group
19	PXRM PHQ2 RESULT G	ROUP	Result Group
20	PXRM PHQ9 RESULT G	ROUP	Result Group
21	PXRM PTSD RESULT G	ROUP	Result Group
22	PXRM ZUNG RESULT G	ROUP	Result Group
+			
+	+ Next Screen	- Prev Screen	?? More Actions >>>
AD	Add	CV Change Vie	
CO	Copy Dialog	PT List/Print	All QU Quit
Selea	ct Item: Quit//		

# Mental Health Test Dialogs, cont'd

This is the Inquiry/Print for result group AIMS:

-		$J_{11}n$ 06	2007@09:09:50		Page: 1 of 2	
211120	g List G VIEW (RESULT GROUPS)	0 uli 00,	2007@09.09.30			
Item	Dialog Name		Dialog	, type	Status	
	AGP BPRS 210 RG		-	Group		
	AGP BPRS 212 RG			Group		
	AGP PTSD RESULT GROUP			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	P	Result	Group		
9	PXRM BDI RESULT GROUP		Result	Group	Disabled	
10	PXRM BRADEN RESULT GROU	P	Result	Group		
11	PXRM CAGE RESULT GROUP		Result	Group		
12	PXRM DOM80 RESULT GROUP		Result	Group		
13	PXRM DOMG RESULT GROUP		Result	Group		
	PXRM MISS RESULT GROUP			Group		
	PXRM PHQ2 RESULT GROUP			Group		
16	PXRM PHQ9 RESULT GROUP		Result	Group		
+	+ Next Screen - P	rev Scre	en ?? More Ac	tions	>>>	
AD Z	Add CV	Change	View	INO Inqu	uiry/Print	
	Copy Dialog PT				-	
	t Item: Next Screen// IN			~ ~		
	t Dialog Definition: PXR			result	group NATIONAL	
REMINI	DER DIALOG INQUIRY		Jur.	06, 2005	9:10:37 am Page 1	
	NUMBER: 208					
	Nam	e: PXRM	AIMS RESULT GF	OUP		
	Disabl	e:				
			lt group			
		e: resu				
	Тур	e: resu s: NATI				
	Typ Clas	e: resu s: NATI r:				
	Typ Clas Sponso	e: resu s: NATI r: e:	ONAL			
	Typ Clas Sponso Review Dat	e: resu s: NATI r: e: t: AIMS	ONAL			
	Typ Clas Sponso Review Dat MH Tes	e: resu s: NATI r: e: t: AIMS r: 1	ONAL			
Edit	Typ Clas Sponso Review Dat MH Tes MH Scale Numbe	e: resu s: NATI r: e: t: AIMS r: 1	ONAL			
	Typ Clas Sponso Review Dat MH Tes MH Scale Numbe Exclude from P	e: resu s: NATI r: e: t: AIMS r: 1	ONAL			
GROUI Re: Elemei E:	Typ Clas Sponso Review Dat MH Tes MH Scale Numbe Exclude from P t History:	e: resu s: NATI r: e: t: AIMS r: 1 N: RESULT	ONAL ELEMENT 1		nesia using the	
GROUI Res Elemen E	Typ Clas Sponso Review Dat MH Tes MH Scale Numbe Exclude from P t History: P COMPONENTS: Sequence: 1 sult Element: PXRM AIMS nt Condition: lement text: The patient was evaluate	e: resu s: NATI r: e: t: AIMS r: 1 N: RESULT d for sy	ONAL ELEMENT 1		esia using the	

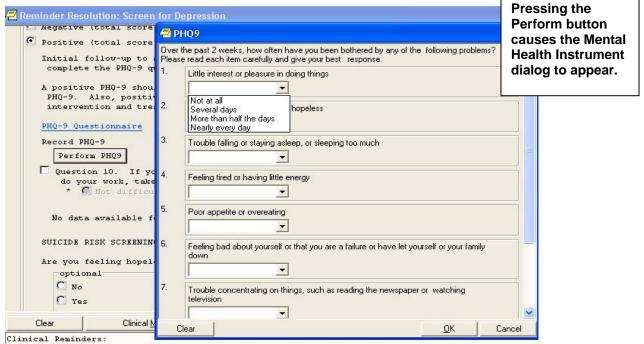
Action CV within Reminder Dialogs allows result groups and result elements to be modified. The position of the score in the progress note text is defined by a |SCORE| marker in the result element.

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

#### Mental Health Test Dialogs, cont'd

Example of giving a Mental Health Instrument:

#### With CPRS 26:



Alcohol Abuse Screen (AUDIT-C):

# With CPRS 27 and MH DLL:

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

# **Dialog Branching Logic**

New Branching/conditional logic has been added to dialog editing options, which 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	🔁 Reminder Resolution: Colorectal Cancer Screening 📃 🔰						×
Orders							
C Order	coccult blood pan	el.]					
🗖 Order	Colonoscopy or S	igmoidoscopy					
Outside Sc	reening Done Previ	ously					
Outsi	ide Occult Blood R	esult					
Prior	Normal Colonosco	ру					
D Prior	: Colonoscopy - Ab	normal					
D Prior	Sigmoidoscopy						
	stside colonscopy	or sigmoidosco	pv				
-	or Refusals						
	history of Colon C	ancer in a Fir	st Degree R	elative			
Educatio	n						
Clear	Clinical <u>M</u> aint		< Back	Next >	Finish	Cancel	
No encounter 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 co impairme: adequate would af	*** Visual Impairment *** An ICD code has been entered for this patient that suggests that they have severe visual impairment or blindness. Patients who are severely visually impaired may not be able to adequately perform occult blood testing. If this patient has severe visual impairment that would affect their ability to perform the occult blood test then please consider ordering a colonoscopy for screening for colorectal cancer.						
Order 0	Colonoscopy or Sigmoi	doscopy					
Order o	occult blood panel.						
Outside Scre	ening Done Previously						
Prior M Prior O Prior S	e Occult Blood Result Jormal Colonoscopy Colonoscopy - Abnorma Sigmoidoscopy side colonscopy or si	1					
Deferals o	or Refusals						
Family his	tory of Colon Cancer	in a First Degr	ee Relative				
Education							
l Clear	Clear Clinical <u>M</u> aint <u>V</u> isit Info < Back Next > Finish Cancel						
<no encounter="" infr<="" td=""><td colspan="7"><no encounter="" entered="" information=""></no></td></no>	<no encounter="" entered="" information=""></no>						
* Indicates a Requ	ired 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 Res	olution: Serology for Hepati	itis C Risk				×	
🗌 Order lab t	est for Hepatitis C						
Previously	tested for Hepatitis (	;					
🗖 Declines te	esting for Hepatitis C						
🗌 Life Expect	ancy < 6 months						
EVALUATE FOR	TESTING FOR OTHER CHRO	NIC VIRAL INFECTIO	NS				
HEPATITIS B T	ESTING						
Hepatit:	is B profile						
🗌 Outside Hep	Hepatitis B surface and B surface Ag pos (HB:	ntigen positive (c: sAg +)	arrier)				
Hep	Dutside Result - Hep B Datitis B core antibody Datitis B surface antil	y positive (HBc.	Ab +) or	ion)			
	Jutside Result - Hepat:						
	o B core Ab neg and no						
Hepatiti	is B Serology Not Indi	rated					
HIV TESTING							
HIV Sero	logr						
	IV serology negative						
	IV serology positive						
	to beloingy poblotic						
Clear	Clinical <u>M</u> aint	<u>V</u> isit Info	< Back	Next >	Finish	Cancel	
	<no encounter="" entered="" information=""></no>						
KING encounter infor	mation entered>						
* Indicates a Require	ad Field						
maicales a riequin	sarricia						

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: Sero	🖉 Reminder Resolution: Serology for Hepatitis C Risk 🛛 🛛 🔀					
🗖 Order lab test for He	patitis C					
Previously tested for	Hepatitis C					
Declines testing for	Hepatitis C					
Life Expectancy < 6 m	ionths					
EVALUATE FOR TESTING FO	R OTHER CHRON	IC VIRAL I	NFECTIONS			
Hepatitis B serology ha	s been perfor	med previo	usly.			
HIV testing has been do	ne previously					
Clear Clinical <u>M</u> aint	<u>V</u> isit Info	< Back	Next >	Finish	Cancel	
<no encounter="" entered<="" information="" td=""><td>&gt;</td><td></td><td></td><td></td><td></td></no>	>					
* 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., that 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 Unassigned	Filog Revolution	Postings A
Last 100 Signed Notes Edit Shared Templates Bit New Note in Program Create New Shared Template	Oct 21,2004@14:26		Change
Cot 21.04     Edit Template Fields     Edit Template Fields			
Cct 18,04 Http GEN			Î
/ Templates			
Reminders     Due			
- Ote - Of Problem Drinking Scre - Of Tobacco Cessation E			
JG TOBACCO USE S Alcohol Abuse Educa			
Pheumovax Weight and Nutition !			
KST Screening     Applicable			
Not Applicable     Den Categories			-
	I. MOLINE I		<u> </u>
Encounter     Diagnoses: DIETARY SURVE     Patient Educations: VA-NUTR	ITION/WEIGHT SCREENING		
Cover Sheet Problems Meds Orders Notes Consults Sur	gery D/C Summ Labs Reports		

🚝 Template Field Editor							_ 🗆 🗵
Action				Delete	C	ору	New
Template Fields		Name:	A A SG PAI	N NEW/OLD			
A A SG PAIN NEW/OLD. Combo		Name.					
1-5	Combo 🔺	Туре:	Combo Box	Field Le	en: 10 j	Text	Len: 🛛 🚊
A A PAIN HX CAUSE	Combo 🔤	Default					•
A A SG PAIN NEW/OLD.	Combo	Items:	NEW PAIN	{FLD:ADMIT	TED FF	( <b>M</b> )	
A GENERIC WORD PROCESSING BOX	WP	itoms.	LOCATION	(		,	
AAAAA PETER	Button		CAUSE				
AAUSUALPAIN	Button						
	Button						
ADMISSION TYPE	Combo	Line: 4					
	Combo Combo	Col: 1					
ALL-DATE	Date						F
ALL-DATE YEAR	Year	LM Text:					
ALL-EDIT BOX	Edit	🖂 Misce	llaneous			Indent-	
ALL-EDIT BOX1	Edit	🗌 🔲 Ina	ctive 📃 Sa	eparate Lines		Indent F	Field: 5 🗄 📗
ALL-EDUC DEGREES HELD	Radio		quired 🗖 Ex	clude From No	to.	Indent 1	Fext: 이 극
ALL-FULL OR DECREASED	Combo		danea 🗌 Ex	sciude Homino		machth	
ALL-NEG OR POS COMBO BOX	* Combo	Notes:					
ALL-R-L-BILAT	Combo						
ALL-STRONG DECREASED ABSENT	Combo						
ALL-TEXT FIELD	Text						
·· · -· ·· ·· · ··	* Edit						
ALL-WORD PROCESSING	WP 🔳	<u> </u>				_	
☑ Hide Inactive Fields * Indicates a Re	quired Field	Previe	w	OK	Can	cel	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 XPAR EDIT BY TEMPLATE Edit Parameter Values with Template action 1 XPAR EDIT KEYWORDEdit Parameter Definition KeywordXPAR EDIT PARAMETEREdit Parameter Valuesaction 2 edit 3 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] Service 3 SRV [choose from SERVICE/SECTION] Division 4 DIV [choose from INSTITUTION]

SYS [DVF.FO-SLC.MED.VA.GOV] 5 System 6 Package PKG [TEXT INTEGRATION UTILITIES] Enter selection: u User NEW PERSON Select NEW PERSON NAME: CRUSER CRUSER, ONE OC SYSTEMS ANALYST/PROGRAMMER ----- Setting TIU FIELD EDITOR CLASSES for User: CRUSER, ONE ------Select Sequence Number: 1 Are you adding 1 as a new Sequence Number? Yes// y YES Sequence Number: 1// 1 User Class: Clin Clinical And Laboratory Immuno CLINICAL AND LABORATORY IMMUNOLOGIST 1 Clinical Biochemical Geneticis CLINICAL BIOCHEMICAL GENETICIST 2 Clinical Biochemical Molecular CLINICAL BIOCHEMICAL MOLECULAR 3 GENETICIST Clinical Clerk CLINICAL CLERK 4 Clinical Coordinator CLINICAL COORDINATOR 5 Press <RETURN> to see more, '^' to exit this list, OR CHOOSE 1-5: 5 CLINICAL COORDINATOR Select Sequence Number: ? Sequence Number Value \_\_\_\_\_ \_\_\_\_ 1 CLINICAL COORDINATOR Select Sequence Number:

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

# **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	CH	This option runs a routine that checks
Dialog for invalid	CHECKER		a selected reminder dialog for
<mark>items</mark>			invalid sub-dialog items, invalid
			finding items, invalid TIU Objects,
			and/or invalid Template Fields.

## **Reminder Dialog Elements Orphan Report**

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

```
Page: 1
Reminder Dialog Elements Orphan Report
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**

	ialog Reports Option: ER Empty Reminder Dialog Report HOME// ;;99999999999 ANYWHERE Right Margin: 80//	
Empty Re	minder Dialogs Report	Page: 1
AGP EM ANOTHE TEST E	OF AGETEST PTY DIALOG TEST R NEW REMINDER DIT (1) DIT COPY	
Enter RE	TURN to continue or ''' to exit:	
OR ER CH	Reminder Dialog Elements Orphan Report Empty Reminder Dialog Report Check Reminder Dialog for invalid items	
Select D	ialog 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.

## 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 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 a historical procedure. The header text will display with a checkbox which CPRS users can select to see the selectable procedure list. 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.

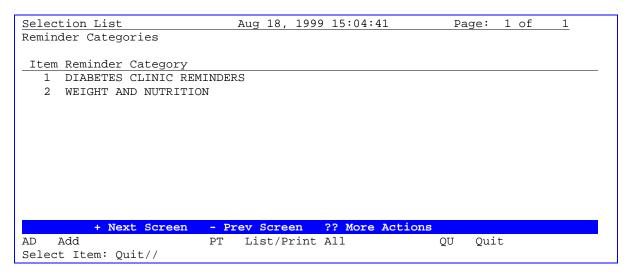
This menu contains options to maintain reminder categories and to set up reminder dialogs within CPRS.

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. To activate categories so that they appear in the reminders window in CPRS (under Other Categories), use the option CPRS Lookup Categories on page 209.

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



#### Actions

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

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

```
Apr 18, 2000 15:04:41
Edit List
                                                          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.
             Reminder: SLC CANCER SCREEN
Sequence: 1
Sequence: 2 Reminder: SLC DIABETIC EYE EXAM
Sequence: 3 Reminder: SLC LIFE STYLE EDUCATION
Sequence: 4 Reminder: SLC PNEUMOCOCCAL VACCINE
Sequence: 90 Reminder: SLC DIABETIC FOOT CARE ED
Sequence: 99 Reminder: MHTEST
Sub-category: SUBSTANCE ABUSE
                                                 Sequence: 3
    Sequence: 1 Reminder: TOBACCO EDUCATION
                   Reminder: TOBACCO USE SCREEN
    Sequence: 2
    Sequence: 3 Reminder: VA-*PROBLEM DRINKING SCREEN
         + Next Screen - Prev Screen ?? More Actions
ED
    Edit
                             INO
                                   Inquiry/Print
                                                                OU
                                                                    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:
     1
       User
                      USR
                              [choose from NEW PERSON]
       Location LOC
Service SRV
Division DIV
     2
                              [choose from HOSPITAL LOCATION]
                              [choose from SERVICE/SECTION]
     3
                              [ISC SALT LAKE]
     4
     5
                     SYS [DEVCUR.ISC-SLC.VA.GOV]
       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// <Enter> (Yes)
Select Display Sequence: <Enter>
```

# **CPRS Cover Sheet Reminder List**

Use this option to enter reminders that will be displayed on the CPRS cover sheet if the New Reminder Parameter option is set to No. If the New Reminders Parameter is set to Yes (ORQQPX NEW REMINDER PARAMS; see page 215), 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: USR [choose from NEW PERSON] 1 User 2 Location LOC [choose from HOSPITAL LOCATION] 3 Service SRV [choose from SERVICE/SECTION] 4 Division DTV [ISC SALT LAKE] 5 SYS [DEVCUR.ISC-SLC.VA.GOV] System Enter selection: 1 User NEW PERSON Select NEW PERSON NAME: CRPROVIDER, ONE jg ----- Setting Clinical Reminders for Search for User: CRPROVIDER, ONE ------Select Display Sequence: ? 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) VA-\*HYPERTENSION SCREEN 40 Select Display Sequence: 20 Display Sequence: 20// <Enter> 20 Clinical Reminder: MENTAL HEALTH TESTS Select Display Sequence: <Enter>

# **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: USR User [choose from NEW PERSON] 1 2 Service SRV [choose from SERVICE/SECTION] Division 3 DIV [choose from INSTITUTION] SYS [DEVCUR.ISC-SLC.VA.GOV] 4 System Enter selection: 1 User NEW PERSON Select NEW PERSON NAME: CRPROVIDER, SIX sc ----- Setting Mental Health Active for User: CRPROVIDER, SIX ------MENTAL HEALTH ACTIVE: YES// <Enter> CA Add/Edit Reminder Categories CL CPRS Lookup Categories CS CPRS Cover Sheet Reminder List MH Mental Health Dialogs Active PNProgress Note Headers Reminder GUI Resolution Active RA DL Default Outside Location  $\mathbf{PT}$ 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: 1 User USR [choose from NEW PERSON] Location [choose from HOSPITAL LOCATION] 2 LOC Service [choose from SERVICE/SECTION] 3 SRV Division DTV [REGION 5] 4 System SYS [DEVCUR.ISC-SLC.VA.GOV] 5 Package PKG [CLINICAL REMINDERS] 6 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) Primary Diagnosis Comment: Exercise Counseling (V65.41) **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.

```
Select CPRS Reminder Configuration Menus Option: RA Reminder GUI Resolution Active
Reminders Active may be set for the following:
    1
        User
                     USR
                            [choose from NEW PERSON]
        Service
    2
                     SRV
                            [choose from SERVICE/SECTION]
        Division
    3
                     DIV
                            [choose from INSTITUTION]
                     SYS
    4
       System
                            [DEVCUR.ISC-SLC.VA.GOV]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, ONE
                                          iα
----- Setting Reminders Active for User: CRPROVIDER, ONE -----
REMINDERS ACTIVE: YES// <Enter>
```

# **Default Outside Location**

Within portions of a reminder dialog where historical encounter information is entered, a new parameter, ORQQPX DEFAULT LOCATIONS, can be set up to define default outside locations for the PXRM OUTSIDE LOCATION prompt. Each free-text entry in this multi-valued parameter will appear at the top of the list of locations in the drop-down list in CPRS. If a number is entered as the free-text value, CPRS will attempt to locate an entry in the Institution file (#4) with the same internal entry number.

#### Example

```
Select CPRS Reminder Configuration Option: dl Default Outside Location
Default Outside Locations may be set for the following:
     1
       User
                USR [choose from NEW PERSON]
     3 Service
                     SRV [choose from SERVICE/SECTION]
     4 Division DIV [choose from INSTITUTION]
5 System SYS [DEVCUR.ISC-SLC.VA.GOV]
                     PKG [ORDER ENTRY/RESULTS REPORTING]
     6
       Package
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, TWO
                                          TC
----- Setting Default Outside Locations for User: CRPROVIDER, ONE ------
Select Display Sequence: 1
Display Sequence: 1//
                        1
Outside Location (Text or Pointer): 663
Select Display Sequence: 2
Are you adding 2 as a new Display Sequence? Yes// <Enter> YES
Display Sequence: 2// <Enter>
Outside Location (Text or Pointer): Local Pharmacy
Select Display Sequence: 3
Are you adding 3 as a new Display Sequence? Yes// <Enter> YES
Display Sequence: 3// <Enter> 3
Outside Location (Text or Pointer): 640
Select Display Sequence: 4
```

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

Default Location as it appears in 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]
                              [choose from SERVICE/SECTION]
     3
                      SRV
        Service
     4
        Division
                      DIV
                              [choose from INSTITUTION]
     5
        System
                      SYS
                              [DEVCUR.ISC-SLC.VA.GOV]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: <Enter>
                                  CRPROVIDER, ONE
                                                     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 Par ameter Reminder Dialogs allows as Templates may be set for the following: User USR [choose from NEW PERSON] 1 3 Service SRV [choose from SERVICE/SECTION] 4 Division 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 tc ---- Setting Reminder Dialogs allows as Templates for User: GREEN, JOANN ----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:

#### New Reminder Parameters

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

```
Select CPRS Reminder Configuration Option: NP New Reminder Parameters
Use New Reminder Parameters may be set for the following:
       User USR [choose from NEW PERSON]
Service SPV [choose from NEW PERSON]
     1
                     SRV [choose from SERVICE/SECTION]
     2
     3 Division
                     DIV [choose from INSTITUTION]
       System
Package
     4
                     SYS [DEVCUR.ISC-SLC.VA.GOV]
     5
                    PKG [ORDER ENTRY/RESULTS REPORTING]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: CRPROVIDER, ONE
                                          00
----- Setting Use New Reminder Parameters for User: CRPROVIDER, ONE -----
USE NEW REMINDER PARAMS: YES
```

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 –		-
<b></b>	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	y

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 210).

## **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 Reminder Catego	ries Displayed or	Cover Sheet		X
Cover Sheet Reminders (Cumulative List)				
Reminder Seq Level			lcon Le	-
🕂 👸 AGETEST (Local) 10 System	I		🗅 🗁 Reminder (	Category
🕂 👸 Problem Drinking Screen (V 20 Service	MEDICINE		👸 Reminder	
🕂 🛅 SUBSTANCE ABUSE 🛛 30 Service	e MEDICINE		+ Add to Cov	/er Sheet
- 📆 Seat Belt Education (VA-SE 40 Service	e MEDICINE		- Remove Fr	rom Cover Sheet
+ 📆 Weight and Nutrition Scree 10 User	WHPROVIDE	R,ONE	🕀 🛛 Lock (can	not be removed)
			View Cover Sh	eet Reminders
Select Cover Sheet Parameter Level to Display / Edit				
🖸 System	🖸 Location:		•	
🖸 Division: Salt Lake City Hos	🖸 🖸 User Class:		•	
C Service: Medicine	🖸 🖸 User:	Whprovider,One - PHነ	/SICIAN 🗾 🚽	
Editing Cover Sheel			,ONE	,
Available Reminders & Categories	User Level Rem	nders	Seq	<b></b>
Weight and Nutrition Screen (VA-WEI	🗕 🕂 👸 Weight ar	d Nutrition Screen (VA-	-*W 10	
ZZPJH TEST REMINDER (Local)	•			. ▲
- PNEUMOVAX (WRJ-PNEUMOVAX - L				Seg # 10
🕀 🛅 AGP TEST				
🔁 🖻 CAT	<b>6</b>			+ 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 20
DIQ Test Mental Health Test	20
Antrys Agetest	30
Antiys Agelesi	30
	OK )

#### **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 Remi	nder (	Categorie	s Displayed on Cover Sheet				×
	Co	ver Sheet	Reminders (Cumulative List)		,		
Reminder	Seq	Level		^	<u> </u>		Legend
+ 👸 AGETEST (Local)	10	System			<u> </u>	Reminde	er Category
+ 👸 Problem Drinking Screen (V	20	Service	MEDICINE		Ø	Reminde	er
+ 🛅 SUBSTANCE ABUSE	30	Service	MEDICINE		+	Add to C	Cover Sheet
- 📆 Seat Belt Education (VA-SE	40	Service	MEDICINE		_	Remove	From Cover Sheet
+ 🗅 HEPATITIS C	10	User Class	CLINICAL COORDINATOR		₽		an not be removed)
+ 📆 Pheumovax (VA-PNEUMOV	50	User	CRPROVIDER.TWO		Ð		annoc be removed)
+ 📆 PAIN SCREENING (VA-PAI	60	User	CRPROVIDER,THREE	-	Vie	w Cover 9	Sheet 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: CRPRO	VID	ER,THR	REE	
Available Reminders & Categories			User Level Reminders			Seq	▲ 🔺
Advanced Directives Educatio			🕂 👸 Pheumovax (VA-PNEUMO	VAX	- Nati	50	
Age Test (A NEW REMINDE)	H - Loc	alj 🔤 🔺	+ 👸 PAIN SCREENING (VA-PA	AN S	CREE	. 60	<b>±</b>
Age Test (Agetest - Local)		ر <u>۲</u>	+ 📆 Weight and Nutrition Scree	en (Ji	G-WEI	120	
Alcohol Abuse&Education (JM			🕂 📆 MST Screening (VA-MST S	SCRI	EENIN	. 130	Seq # 1
Anticoagulant use-CHF and A			🕂 📆 CHF Patients & ACE (JG-CI	HF74	ACE (R.,	. 200	+ Add
Antrys Agetest (Antry's Agetes			🕂 📆 Mammogram (VA-MAMMO	GRA	M - N	210	- Remove
BOB TEST (BOBTEST - Loca	al)	~	🕂 📆 PAP Smear Review Result	s (VA	4-WH		
			< <u>.</u>		010		
			0	<		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]
       Division
    3
                    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.

# **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: 1 User USR [choose from NEW PERSON] 2 TEA [choose from TEAM] Team Enter selection: 1 User NEW PERSON Select NEW PERSON NAME: OC CRPROVIDER, ONE ----- 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:
    1
        System
                      SYS
                             [DVF.FO-SLC.MED.VA.GOV]
       Division
    2
                     DIV
                             [choose from INSTITUTION]
       Location LOC
    3
                             [choose from HOSPITAL LOCATION]
       Service
                     SRV
                             [choose from SERVICE/SECTION]
    4
    5
        Team (OE/RR) OTL
                             [choose from OE/RR LIST]
    6
        User
                      USR
                             [choose from NEW PERSON]
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 Resolution: ¥A-PAP Smear Review Results	×	
The VHA recommends clinical review of PAP smear results be recorded in the patient record.	-	
WH PAP Smear Clinical Review	1 H	
PAP SMEAR RESULTS: No unprocessed procedure results in WH package		
Patient Notification Notify patient of NEM (No Evidence of Malignancy) results		This box appears if WH Print Now
<ul> <li>NEM results - next PAP 1 year</li> <li>* Patient notified: V Letter In-Person Phone Call</li> </ul>		is set to YES
View WH Notification Letter Print Now		
🖸 NEM results - next PAP 2 years		
🔘 NEM results - next PAP 3 year		

# **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 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.

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r. M This r. unts
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## **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
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

Þ PCMM Provider PCMM Team т PATIENT SAMPLE: L// o OE/RR Team Select TEAM: CRPROVIDER1 teamqa Select another TEAM: Enter EFFECTIVE DUE DATE: Aug 25, 2009// (AUG 25, 2009) Select one of the following: Detailed D S Summary TYPE OF REPORT: S// ummary Select one of the following: Τ Individual Teams only 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
         Patient Sample:
                              OE/RR Team
         OE/RR Team:
                               teamqa
         Reminder Category:
                               CRWH REPORTS
         Individual Reminder: WH SCREEN
                     VA-MAMMOGRAM
                     VA-WH PAP SMEAR SCREENING
         Effective Due Date: 8/25/2009
         Date run:
                              8/25/2009 9:38:35 am
         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
3
    Breast Cancer Screen
                            9
                                    9
                                               21
                                                    100
                                                              0
4
    Mammogram
                            9
                                    9
                                               21
                                                     100
                                                               0
5
    ITC 2001 Mammogram Example
                                    9
                                               21
                                                     100
                                                              0
                            9
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
                            6
                                                     34
                                                              66
10
    Pap Smear-F/U of Abnormal Results
                                               0
                                                     0
                                                              0
                                   0
                            0
11
    WH SCREEN
                                   41
                                                    100
                                                              0
                           41
                                               96
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: jgtest 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 Reminder: 1 LABTEST 2 VA-NATIONAL EPI LAB EXTRACT 3 VA-NATIONAL EPI RX EXTRACT Template Name: jgtest 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: Т Individual Locations only Individual Locations plus Totals by Facility R 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// 0DEVICE: HOME// HOME Building hospital locations list -Elapsed time for building hospital locations list: 0 secs Building patient list / Elapsed time for building patient list: 0 secs Removing invalid encounter(s) / Elapsed time for removing invalid encounter(s): 0 secs Evaluating Reminders |

```
Evaluating reminders /
Elapsed time for reminder evaluation: 0 secs
                                              Aug 25, 2009 12:36:04 pm Page 1
                Clinical Reminders Due Report - Summary Report
         Report Title: HEP C
         Patient Sample: Location
         Location:
Date Range:
                             All Outpatient Locations (Prior Encounters)
                              8/25/2006 to 8/25/2009
         Effective Due Date: 8/25/2009
                             8/25/2009 12:34:40 pm
         Date run:
                            jgtest
         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
                                                                  ___
                                                _____
                                                       3
1
    LABTEST
                                                                   3
2
    National Hepatitis Lab Extract
                                                        3
                                                                    3
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
  RD
         Reminders Due Report
  RDU
         Reminders Due Report (User)
       User Report Templates
  RDT
         Extract EPI Totals
  EPT
  EPF
         Extract EPI List by Finding and SSN
         Extract QUERI Totals
  EQT
  GEC
         GEC Referral Report
       Review Date Report
  REV
  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 2 14 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 ITC 2001 Mammogram Example 15 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	
Report run on 14 patients.				
Report timing data: Elapsed time for reminder evaluation: 6 secs				
End of the report. Press ENTER/RETURN to continue				

# **Extract EPI Totals**

Extract EPI Total reports are generated each month by a Lab package LREPI run that processes the following national reminders related to Hepatitis C:

VA-NATIONAL EPI DB UPDATE VA-NATIONAL EPI LAB EXTRACT VA-NATIONAL EPI RX EXTRACT.

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 LREPI 00/06 073100 LREPI 00/07 081500 161 Jul 15,2000@14:55:40 162 LREPI 00/07 081500 Aug 15,2000@15:42:24 The YY/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// DEVICE: ;;999 TCP Right Margin: 80// JAN 6,2006 16:30 PAGE 1 REMINDER EXTRACT TOTALS \_\_\_\_\_ \_\_\_\_\_ LREPI 05/02 031505 Date Range: FEB 1,2005-FEB 28,2005 Extract Date: MAR 15,2005 22:16 Total Patients Evaluated: 766 Total Patients with Findings: 718 Totals by Finding Item Finding Unique Patient Count Count INTERFERON ALFA-2B 1 1 HEPATITIS C ANTIBODY 207 207 190 TOT. BILIRUBIN 190 RIBAVIRIN 35 35 192 AST 192 198 198 AT.T VA-HEPATITIS C INFECTION 127 127 INTERFERON BETA-1B 4 4 18 INTERFERON BETA-1A 18 INTERFERON BETA-IA18INTERFERON ALFACON-15RISK FACTOR FOR HEPATITIS C110NO RISK FACTORS FOR HEP C319DECLINED HEP C RISK ASSESSMENT8 5 110 319 8 LREPI 05/03 041505 Date Range: MAR 1,2005-MAR 31,2005 Extract Date: APR 15,2005 22:12 Total Patients Evaluated: 841 Total Patients with Findings: 802 Finding Unique Patient Totals by Finding Item Count Count 2 INTERFERON ALFA-2B 2 1 1 HBSAG 223 HEPATITIS C ANTIBODY 446 RIBAVIRIN 47 47 119 VA-HEPATITIS C INFECTION 119 INTERFERON BETA-1B 9 9 INTERFERON BETA-1A 16 16 8 INTERFERON ALFACON-1 8 33 HBSAB 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 Reminders Due Report (User) RDU 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. 
 LREPI 00/05 061500
 Jun 15,2000@14:52:36

 LREPI 00/06 073100
 Jul 15,2000@14:55:40

 LREPI 00/07 081500
 Aug 15,2000@15:42:24

 LREPI 00/05 082200
 Aug 22,2000@02:44:54

 LREPI 00/08 082500
 Aug 25,2000@14:24:59
 160 LREPI 00/05 061500 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> JAN 10,2003 09:14 PAGE 1 REMINDER EXTRACT SUMMARY LIST \_\_\_\_\_ VA MH QUERI 2000 M2 Date Range: FEB 1,2000-FEB 28,2000 Extract Date: JAN 3,2003 Extract Sequence: 001 Reminder: VA-DEPRESSION SCREENING Station: CRSITE ONE Patient List: VA-MH QUERI 2000 M2 QUALIFYING VISIT Total Applicable N/A Due Not Due 1000 899 101 200 699 Reminder Totals: Finding Totals: Sequence: 001 Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE Term: DEPRESSION DIAGNOSIS Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Total Applicable N/A Due Not Due 20 0 20 20 0 Sequence: 002 Group Ct Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status:

Total Applicable N/A Not Due Due Sequence: 003 Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE Term: ANTIDEPRESSANT MEDICATION Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Total N/A Applicable Due Not Due Sequence: 004 Finding Group: VA-DEPRESSION SCREEN RESULT Term: DEPRESSION SCREEN NEGATIVE Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: APPLICABLE PATIENTS Finding Count by Reminder Status: Total Applicable N/A Due Not Due Sequence: 005 Finding Group: VA-DEPRESSION SCREEN RESULT Term: DEPRESSION SCREEN POSITIVE Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: APPLICABLE PATIENTS Finding Count by Reminder Status: Total N/A Applicable 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 VA-POS DEPRESSION SCREEN FOLLOW UP Reminder: Station: CRSITE HCS Patient List: VA-MH QUERI 2000 M2 QUALIFYING VISIT Reminder Totals: Total Applicable N/A Due Not Due 1000 300 690 700 10 Finding Totals: Sequence: 001 Finding Group: VA-POS DEPRESSION SCREEN FOLLOW UP Term: DEPRESSION SCREEN NEGATIVE Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Applicable N/A Total Due Not Due Sequence: 002 Finding Group: VA-POS DEPRESSION SCREEN FOLLOW UP

DEPRESSION ASSESS INCONCLUSIVE (?MDD) Term: MOST RECENT FINDING PATIENT COUNT Group Type: 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: Total Applicable N/A Due Not Due Sequence: 004 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: Total Applicable N/A Due Not Due Extract Sequence: 003 Reminder: VA-ANTIPSYCHOTIC MED SIDE EFF EVAL Station: CRSITE HCS Patient List: VA-MH QUERI 2000 M2 QUALIFYING VISIT Reminder Totals: Applicable Due Not Due Total N/A 1000 997 3 1 2 Finding Totals: Sequence: 001 Finding Group: VA-ANTIPSYCHOTIC DRUGS AIM EVALUATION NEGATIVE Term: Group Type: MOST RECENT FINDING PATIENT COUNT Group Status: TOTAL PATIENTS Finding Count by Reminder Status: Total Applicable N/A Due Not Due 002 Sequence: Finding Group: VA-ANTIPSYCHOTIC DRUGS AIM EVALUATION POSITIVE Term: 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 Term: Group Type: MOST RECENT FINDING PATIENT COUNT 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:
                  Category
         1
         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
        А
         М
                  Multiple Patients
Select Patients or ^ to exit: A//<Enter> 11 Patients
    Select one of the following:
        F Formatted
                  Delimited
         D
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

      (666809999)
      06/15/2004
      0
      7
      9

      (666809990)
      05/04/2004
      0
      0
      0

      (666009999)
      05/11/2004
      0
      0
      0

                                                           5
CRPATIENT, ONE
                                                                     21
CRPATIENT, TWO
                                                           0
                                                                     0
                                                           0
CRPATIENT, SIX
                                                                      0
                                                           0
CRPATIENT, SIX
                   (666009999) 05/11/2004 0 0 0
                                                                      0
                                                            0
CRPATIENT, SIX
                   (666009999) 05/11/2004 0 0
                                                    0
                                                                      0
                                                           9
                               Totals > > 0 7 11
                                                       1.5
2.9
                                                                    27
                               Means > > 0.0 1.2 1.8
                                                                    4.5
                  Standard Deviations > > 0.0 3.1 4.1
                                                                    9.8
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
     4
         INFLUENZA VACCINE PAST VISIT
                                            FLU
     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 Edit Site Disclaimer ESD Edit Web Sites EWS MH Edit Number of MH Questions Select Reminder Parameters Option: MH Edit Number of MH Questions MAXIMUM NUMBER OF MH QUESTIONS: 100// Edit Site Disclaimer ESD 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 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 VISIT

• Changed 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	<b>Abbreviation</b>
•	Finding Rule	FR
•	Reminder Rule	RR
٠	Patient List Rule	PL
•	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 (see <u>page Error! Reference source not found.Error! Bookmark not defined.</u>) for the term will be stored with the list and can be used in the Patient Demographic Report; see page <u>Error!</u> Bookmark not defined.

### **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 QUERI QUALIFYING ENCOUNTER
    LR Beginning Date: BDT
        LR Ending Date: T
           Sequence: 003
          Operation: REMOVE
          List Rule: VA-*IHD OUERI 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 Rule 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   Change View   TEST Test Rule Set	
CR Create Rule QU Quit	
DR Display/Edit Rule	
Select Item: Quit//	

The default view is Rule Set; this screen is used to create, edit, and test rule sets. The Test Rule Set action applies only to rule sets. It can be used to test a rule set before it is used to build a patient list. When you use this action you enter list build beginning and ending dates, and then the rule set processes list rules in the sequential order defined in the rule set. For each sequence/step in the rule set, it shows you the list rule, and if the list rule uses a term or a definition, it shows all the findings and the final dates used for each finding.

#### Test Rule Set example

Oct 17, 2005@10:05:06 Rule Set Test Page: 1 of 2 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:	1 of	1
Item	Finding Rule Name		Class	
1	FR-BMI		LOCAL	
2	FR-DIABETIC DIAGNOSIS		LOCAL	
3	VA-*IHD QUERI 412 DIAGNOSIS		NATIONAI	-
4	VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS		NATIONAI	-
5	VA-*IHD QUERI ANCHOR VISIT		NATIONAI	-
б	VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION		NATIONAI	-
7	VA-*IHD QUERI DIAGNOSIS		NATIONAI	
8	VA-*IHD QUERI LIPID LOWERING MEDS		NATIONAI	
9	VA-*IHD QUERI QUALIFYING VISIT		NATIONAI	
10	VA-*MH QUERI QUALIFY MH VISIT		NATIONAI	-
11	VA-*MH QUERI QUALIFY PC VISIT		NATIONAI	-
	+ 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

Remind	er User Patien	t List	Jun 01, 2006@12:08:18	Page:	1 of 7
Availa	ble Patient Li	sts.			
Item	Reminder Pati	ent List :	Name	Created	Patients
1	VA-*IHD QUERI	2000 M4	412 PTS WITH QUALIFY AN	4/27/04@11:55:43	0
2	VA-*IHD QUERI	2000 M4	412 PTS WITH QUALIFY AN	4/27/04@11:55:43	0
3	VA-*IHD QUERI	2000 M4	PTS WITH QUALIFY AND AN	4/27/04@11:55:43	0
4	VA-*IHD QUERI	2000 M4	PTS WITH QUALIFY AND AN	4/27/04@11:55:43	0
5	VA-*IHD QUERI	2000 M4	PTS WITH QUALIFY VISIT	4/27/04@11:55:43	0
6	VA-*IHD QUERI	2001 M10	412 PTS WITH QUALIFY A	7/20/04@08:28:08	2
7	VA-*IHD QUERI	2001 M10	412 PTS WITH QUALIFY A	7/20/04@08:28:09	0
8	VA-*IHD QUERI	2001 M10	PTS WITH QUALIFY AND A	7/20/04@08:28:08	4
9	VA-*IHD QUERI	2001 M10	PTS WITH QUALIFY AND A	7/20/04@08:28:08	0
10	VA-*IHD QUERI	2001 M10	PTS WITH QUALIFY VISIT	7/20/04@08:28:07	5
11	VA-*IHD QUERI	2001 M11	412 PTS WITH QUALIFY A	7/20/04@08:31:23	0
12	VA-*IHD QUERI	2001 M11	412 PTS WITH QUALIFY A	7/20/04@08:31:23	0
13	VA-*IHD QUERI	2001 M11	PTS WITH QUALIFY AND A	7/20/04@08:31:23	0
14	VA-*IHD QUERI	2001 M11	PTS WITH QUALIFY AND A	7/20/04@08:31:23	0
15	VA-*IHD QUERI	2001 M11	PTS WITH QUALIFY VISIT	7/20/04@08:31:23	0
16	VA-*IHD QUERI	2001 M12	412 PTS WITH QUALIFY A	7/20/04@08:35:47	0
	+ Next Scr	een - P	rev Screen ?? More Act	ion	
CO C	opy Patient Li	st DE	Delete Patient List C	V Change View	
COE C	opy to OE/RR T	eam DCD	Display Creation Doc L	RM List Rule Man	agement
CR C	reate Patient	List DSP	Display Patient List Q	U Quit	
Select	Item: Next Sc	reen//			

The actions on this screen are:

- CO (Copy Patient List) copy an existing patient list to a new patient list
- COE (Copy to OE/RR Team) copy a patient list to an OE/RR Team list
- CR (Create Patient List) create a new patient list
- DE (Delete Patient List) delete selected patient list(s)
- DCD (Display Creation Doc) display the documentation on how a patient list was created
- DSP (Display Patient List) display the contents of a patient list
- CV(Change View) toggles the display order of the list between one sorted by list name and one sorted by list type
- LRM (List Rule Management) this action takes you to the List Rule Management screen

When creating a local patient list, you are given the option to secure the list or to make it public for all to use. The type of security on the list is available by scrolling the list to the right.

When viewing the list of patient lists, there are two symbols: "<<<" and ">>>" on the action line. These are standard List Manager symbols that mean you can scroll the view to the left using the left arrow key

and to the right using the right arrow key. If the view is scrolled to the right, you can see the "Type" of list, public (PUB) or private (PVT), and your "Access" to the list full (F) or view (V).

If the list has a Type of PUB, then the list can be used by all users with access to the Patient List Management option. The level of Access may be restricted to View (Read Only), or Full access (Delete, and Update actions).

For any secure list, the creator of the patient list can add additional users to the list and assign one of two permissions to the user; view only or full access.

This is an example of a screen that has been scrolled to the right. Note that the sequence number and patient list name are still displayed on the left side of the column with the Type and Access columns.

Remind	Reminder User Patient List Sep 27, 2005@09:36:05 Page: 1 of 8					8
Availa	ble Patient Lists.					
+Item	Reminder Patient L	ist Name	Туре	Access		
5	AGP IHD EXTRACT WI	TH QUALIFY VISIT	PVT	F		
б	AGP IHD QUERI PTS	WITH QUALIFY AND ANCHOR V	IS PVT	F		
7	AGP OE/RR TEAM 1		PUB	F		
8	AGP OERR TEAM LIST	1	PUB	F		
9	CRPATIENT		PUB	F		
10	CRPATIENT2 PUB F					
11	DIAB PTS W/O DIAB	EYE EXAM	PUB	F		
12	PJH EXTRACT 2004 M	10 BP	PVT	V		
	+ Next Screen	- Prev Screen ?? More	Action			
CO C	opy Patient List	DE Delete Patient List	CV Cha	ange View		
COE C	opy to OE/RR Team	DCD Display Creation Do	c LRM Lis	st Rule M	anagemen	t
CR C	reate Patient List DSP Display Patient List QU Quit					
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
	EDT	Sep 30, 2005		T-1Y		Sep 30, 2004
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
10	DDT	Sep 01 2005		Amr 00, 2004		Apr 00, 2001
12	BDT EDT	Sep 01, 2005 Sep 30, 2005		Apr 09, 2001 Mar 28, 2003		Apr 09, 2001 Mar 28, 2003
		Sep 30, 2003		Wai 20, 2003		10121 20, 2003
13	BDT	Sep 01, 2005		Apr 09, 2001		Apr 09, 2001
10				7,01 00, 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
40	DDT	0				0
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
20	EDT	Sep 30, 2005	Feb 28, 2001		Blank or T	Sep 30,2005
			1 00 20, 2002			
21	BDT	Sep 01, 2005	T-2Y		T-1Y	Sep 30, 2004
	EDT	Sep 30, 2005	0 (zero)		T-6M	Mar 31, 2005
		200 00, 2000				
22	BDT	Sep 01, 2005		Apr 09, 2001	Jun 01, 2003	Jun 01, 2003
	EDT	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:**

```
DIABETIC DIAGNOSIS
                                                   No.606
_____
                                                   _____
Class:
                   LOCAL
Sponsor:
Date Created:
Review Date:
Description:
Edit History:
   Edit Date: JUN 3,2005 09:54 Edit By:
   Edit Comments:
Findings:
              Finding Item: VA-DIABETES (FI(1)=TX(28))
              Finding Type: REMINDER TAXONOMY
```

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	N: F// Finding Rule

- 1c. Press Enter to accept the default of Finding Rule
- 1d. Select CR to create the rule.

List Rul	e Management Jun 03, 2005@10:41:33	Page:	1 of 1		
Item F	inding Rule Name		Class		
1 V	A-*IHD QUERI 412 DIAGNOSIS		NATIONAL		
2 V	A-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS		NATIONAL		
3 V	A-*IHD QUERI ANCHOR VISIT		NATIONAL		
4 V	A-*IHD QUERI ASSOCIATE PRIMARY CARE STATION		NATIONAL		
5 V	A-*IHD QUERI DIAGNOSIS		NATIONAL		
6 V	A-*IHD QUERI LIPID LOWERING MEDS		NATIONAL		
7 V	A-*IHD QUERI QUALIFYING VISIT		NATIONAL		
8 V	A-*MH QUERI QUALIFY MH VISIT		NATIONAL		
9 V	A-*MH QUERI QUALIFY PC VISIT		NATIONAL		
	+ Next Screen - Prev Screen ?? More Actions		>>> <mark>C</mark> V		
Change V	iew TEST (Test Rule Set)				
CR Cre	ate Rule QU Quit				
DR Dis	DR Display/Edit Rule				
Select I	tem: 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)				
CR C	reate Rule QU Quit				
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:	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	View TEST (Test Rule Set)		
CR C	reate Rule QU Quit		
DR D	isplay/Edit RuleSelect Item: Quit// CV Change View		

2c. Select S for Rule Set.

Select one of the following: F Finding Rule P Patient List Rule R Reminder Rule S Rule Set TYPE OF VIEW: F// S Rule Set

2d. Select CR for Create Rule.

List R	ule Management	Jun 03, 2005@11:09:03	Page:	1 of 1
Item	Rule Set Name			Class
1	VA-*IHD QUERI 41	2 PTS WITH QUALIFY AND ANCHOR VISIT		NATIONAL
2	VA-*IHD QUERI 41	2 PTS WITH QUALIFY AND ANCHOR VISIT	ON LLA M	NATIONAL
3	VA-*IHD QUERI PT	S WITH QUALIFY AND ANCHOR VISIT		NATIONAL
4	VA-*IHD QUERI PI	S WITH QUALIFY AND ANCHOR VISIT ON I	LA MEDS	NATIONAL
5	VA-*IHD QUERI PI	S WITH QUALIFY VISIT		NATIONAL
6	VA-*MH QUERI QUA	LIFYING PC VISIT		NATIONAL
	+ Next Screen	- Prev Screen ?? More Actions		>>>CV
Change	View	DR Display/Edit Rule		
CR C	reate Rule	QU Quit		
Select	Item: Quit// CR	Create Rule		

2e. Respond to the prompts as indicated, to define the Rule Set.

Select RULE SET to add: RS-DIABETIC PATIENTS
Are you adding 'RS-DIABETIC PATIENTS' as
a new REMINDER LIST RULE (the 20TH)? No// Y (Yes)
NAME: RS-DIABETIC PATIENTS Replace
SHORT DESCRIPTION:
CLASS: L LOCAL
Select SEQUENCE: 1
Are you adding '1' as a new SEQUENCE (the 1ST for this REMINDER LIST RULE)? Y
(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.

<u>List R</u>	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.

Remind	er User Patient List	Aug 10, 2005@15:02:21	Page:	1 of 1
Availa	ole Patient Lists.			
Item	Reminder Patient List N	ame	Created	Patients
1	VA-*IHD QUERI 2001 M01	412 PTS WITH QUALIFY A	8/5/05@11:12:16	0
2	VA-*IHD QUERI 2001 M01	412 PTS WITH QUALIFY A	8/5/05@11:12:16	0
3	VA-*IHD QUERI 2001 M01	PTS WITH QUALIFY AND A	8/5/05@11:12:16	0
4	VA-*IHD QUERI 2001 M01	PTS WITH QUALIFY AND A	8/5/05@11:12:16	0
5	VA-*IHD QUERI 2001 M01	PTS WITH QUALIFY VISIT	8/5/05@11:12:16	0
6	VA-*IHD QUERI 2005 M1 4	12 PTS WITH QUALIFY AN	8/5/05@11:19:42	0
7	VA-*IHD QUERI 2005 M1 4	12 PTS WITH QUALIFY AN	8/5/05@11:19:43	0
8	VA-*IHD QUERI 2005 M1 P	TS WITH QUALIFY AND AN	8/5/05@11:19:42	0
9	VA-*IHD QUERI 2005 M1 P	TS WITH QUALIFY AND AN	8/5/05@11:19:42	0
10	VA-*IHD QUERI 2005 M1 P	TS WITH QUALIFY VISIT	8/5/05@11:19:42	0
	+ Next Screen - Pr	ev Screen ?? More Acti	ions	>>> <mark>CO</mark>
Сору Р	atient List DE Dele	te Patient List CV Ch	nange View	
COE C	py to OE/RR Team DCD	Display Creation Doc LA	RM List Rule Mar	nagement
CR C	reate Patient List DSP	Display Patient List QU	J Quit	
Select	Item: Quit// CR Creat	e Patient List		

3b. Select the CR action to Create the Patient List.

```
Select PATIENT LIST name: DIABETIC PATIENTS 5Y
Are you adding 'DIABETIC PATIENTS 5Y' as
a new REMINDER PATIENT LIST? No// Y (Yes)
Secure list?: N// O
Purge Patient List after 5 years?: N// O
Select LIST RULE SET: RS-DIABETIC PATIENTS RULE SET
Enter Patient List BEGINNING DATE: T-5Y (AUG 10, 2000)
Enter Patient List ENDING DATE: T (AUG 10, 2005)
Include deceased patients on the list? N// O
Include test patients on the list? N// O
Queue the CREATE PATIENT LIST for DIABETIC PATIENTS 5Y:
Enter the date and time you want the job to start.
It must be on or after 08/10/2005@15:02:49 N
Task number 236638 queued.
```

**3c. Respond to the prompts** as shown to queue a task job that will create the patient list and add the patient list to the REMINDER PATIENT LIST file. Note that the Patient List Name reflects the date range of 5Y. The Name of the Patient List needs to be as specific as possible to understand what patients are in the list. Note: If the desire is to create a new patient list each month with diabetic patients seen during each month, then Beginning Date and Ending Date would reflect the month period, and the name would include the month and year.

Remind	er User Patient Lis	t Aug 10, 2005@15:02:53	Page:	l of 1
Availa	ble 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	>>> <mark>CO</mark>
Сору Р	atient List DE	Delete Patient List CV C	hange View	
COE C	opy to OE/RR Team	DCD Display Creation Doc L	RM List Rule Mana	agement
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

vaila				
	Reminder Patient List Name	Created		
	AGP 1	7/10/05@19:55:43		
	AGP CREATED REMINDER REP	7/26/05@13:48:23		
	AGP EXTRACT TEST		0	
	AGP IHD EXTRACT WITH QUALIFY VISIT	7/1/05@11:03	0	
	AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS			
	AGP OE/RR TEAM 1	7/10/05@20:51:42		
	AGP OERR TEAM LIST	7/10/05@20:47:17		
	AGP REMINDER TEST	7/25/05@11:17:24		
	AGP REPORT TEST OF PURGE	7/19/05@16:06:35		
	AGP T4	7/10/05@20:05:02		
	AGP TEST REMINDER 1	7/25/05@11:48:36		
	AGP TEST REMINDERS 2	7/25/05@12:01:46		
	FINGERSTICK	6/28/05@11:15:35		
	FINGERSTICK (DEF)	7/6/05@09:51:42		
	PJH EXTRACT 2004 M10 BP	11/2/04@15:58:14		
16	PKR PUB + Next Screen - Prev Screen ?? More Act	8/9/05@11:33	22 >>>CO	
R C elect	Copy to OE/RR Team DCD Display Creation Doc L Preate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List		agement	
R C elect elect	reate Patient List DSP Display Patient List Q		agement	
R C elect elect Are	Preate Patient List DSP Display Patient List Q Item: Next Screen// CR Create Patient List		agement	
R C elect elect Are a	Preate 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		agement	
elect elect Are a ecure	Preate 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)		agement	
elect elect Are a ecure eurge elect	Preate 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	90 Quit	agement	
R C elect Are a ecure urge elect 1 2 HOOSE	PATIENT LIST DSP Display Patient List Q 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	Quit	agement	
R C elect Are a ecure urge elect 1 2 HOOSE nter nter	PATIENT LIST NAME: DIAB PTS W/O DIAB EYE EXAM you adding '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 1-2: 1 RS-DIAB PTS W/O DIAB EYE EXAM RULE Patient List BEGINNING DATE: T-5Y (AUG 11, 200	Quit	agement	

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Reminder User Patient List Aug 11, 2005@14:23:08	Page: 1 d	of 8	
Available Patient Lists. Item Reminder Patient List	Name	Cre	eated
Patients 1 AGP 1	7/10/05@19	9:55:43	
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	47	
13 DIAB PTS W/O DIAB EYE EXAM	8/11/05@14:23:08	19	
14 FINGERSTICK	6/28/05@11:15:35	13	
15 FINGERSTICK (DEF)	7/6/05@09:51:42	15	
+ Next Screen - Prev Screen ?? More Act	tions	>>> <mark>CO</mark>	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 Manage	ement	
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	
Availal	ole Patient Lists.			
Item 1	Reminder Patient List Name	Created	Patients	
6	AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VI	IS 7/1/05@11:03:0	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@09:51:4	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 A	Actions	>>> <mark>CO</mark>	Сору
Patien	t List DE Delete Patient List CV Char	nge View		
	opy to OE/RR Team DCD Display Creation Doc			
CR C:	reate Patient List DSP Display Patient List	: QU QuitSelect	t Item: Next	
	// 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	L
List Name: PKR PUB (22 pa	tients)		-
Created: 09/29/2005@10:1	.9:51 Creator: CRPROV	/IDER, THREE	
Class: Local	Type: PUBLIC		
Source: List Rule - RS-I	DIABETIC PATIENTS Patient	z 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	
. <u></u>			
+ Next Screen	- Prev Screen ?? More Actic	ons	>>>CV
Change View DEM	Demographic Report QU Qui	it	
HSA Health Summary All	ED Edit Patient List		
HSI Health Summary Ind	USR (View Users)Select Item:	: 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 Feb 22, 2006@18:14:03 Reminder Patient List 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 39 2 CRPATIENT, EIGHT 3 CRPATIENT, FIVE 24 4 CRPATIENT, FOUR 10 5 CRPATIENT, ONE 91290 6 CRPATIENT, SEVEN 54 912345678906 7 CRPATIENT, TEN + + 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 - SSN2 - 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
Eye 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

See <u>Appendix F</u> for an example of using a demographic report to generate letters to send to all patients on a list.

#### 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 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.

Two national extract definitions, VA-IHD QUERI and VA-MH QUERI, were distributed with CR V.2.0. National extract runs can be manual or automated runs. National Reminder Extract Summary results are transmitted to the Austin Automation Center (AAC) via HL7 messages sent through the PXRM7-RECO HL Logical Link. AAC creates SAS files for authorized requestors to use for various types of analyses.

## 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 Management	PXRM EXTRACT MANAGEMENT	This option uses list manager to view an extract definition, examine and schedule an extract run or transmission run, view extract summary results and view extract patient lists.
D	Extract Definition Management	PXRM EXTRACT DEFINITION	This option allows creation/editing of extract definitions for use in extract processing. Each extract definition identifies what list rules should be used to create patient lists, what reminders should be run against each patient list, and what counting rules should be used to count true findings found during reminder evaluation.
EC	Extract Counting Rule Management	PXRM EXTRACT COUNTING RULES	This option allows creation/editing of extract counting rules used in the extract process. The counting rules define how to count the findings defined in an extract counting group (most recent for each finding, most recent finding in the group, utilization counts for the reporting period).
EG	Extract Counting Group Management	PXRM EXTRACT GROUPS	This option allows creation/editing of extract counting groups. Each group defines reminder terms. Counting groups are used when an extract definition is defined to accumulate COMPLIANCE and FINDING TOTALS (TYPE OF TOTALS). The counting groups are used in a counting rule during the extract process to count findings within a group. The reminder term, related counting group, and finding total counts are stored in the Extract Reminder Summary file.
LR	List Rule Management	PXRM LIST RULE MANAGEMENT	This option allows creation/editing of list rules we are used to build patient lists.

# **Clinical Reminder Extracts Guide**

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

I am attempting to write this guide to be exactly what it says it is – a guide. The things I have learned about extracts have come from countless hours of trying and failing over and over again until I somewhat succeeded. My 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. My plan is to make this very basic so that even the reminder novice can understand, so if it seems too simple, please humor me in my 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 me, I will leave it to you to figure it out because just copying what I 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 2! As always, I will help answer any questions by pointing you in the right direction, but still leaving it to your imagination to figure it out. I can also pass along any enhancement ideas to development staff. As we progress and questions arise, I would like to start a <u>Frequently Asked Questions (FAQ)</u> 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 I type will be in **bold text.** 

#### **Table of Contents**

- I. <u>What is an extract</u>
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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>(2)</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 RE	MINDER 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.

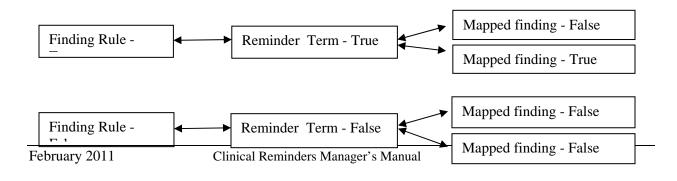
LIST RULE BEGINNING DATE/TIME: LIST RULE ENDING DATE/TIME: Input your edit comments. Edit? NO//

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.

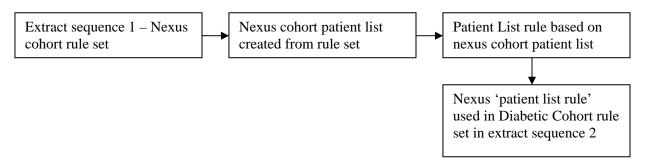
Maybe a picture will be worth a thousand words:

#### 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)//
                                               \leftarrowThis 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

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:

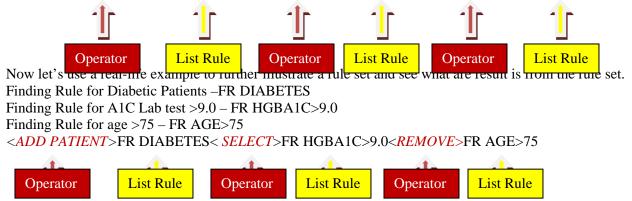
- 1. Finding Rule
- 2. Reminder Rule
- 3. Patient List Rule

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>



So, what are the results of this rule set? Diabetic patients who have a lab test of HGBA1C greater than 9.0 and who are 75 years of age or younger. Is that what you came up with? If not, stop a minute and think about the results. The first sequence (FR DIABETES) found our diabetic patients; then from those patients, we used sequence two (FR HGBA1C>9.0) to select (AND) the ones who had a HGBA1C greater than 9.0. Next we used sequence three (FR AGE>75) to remove (AND NOT) patients who were over the age of 75.

# Using Reminders to obtain data in the extract

So far, all we have from the Extract is nothing but a list of patients. We will continue to use the diabetes example. Our list now contains diabetic patients who have met the Nexus Cohort restrictions. Now what?? This list of patients is the APPLICABLE or our denominator. How do we get our numerator?

To obtain our numerator, we need to run reminder definition(s) against this patient list. To do this, we have to add in reminders to our extract definition. Reminders that already exist can be used for this, but most of the time, you will want to make a copy of an existing reminder and make edits or create a new one from scratch. The main reason to not use an existing reminder is that you will normally not need any cohort logic because your cohort has been built within the rule sets of the extract definition. This makes for faster evaluation of the reminders leading to quicker availability to data. Also, a lot of reminders have a DUE IN ADVANCE TIMEFRAME entry and this would affect your data.

Let's discuss some rules that will apply to the reminders that will be used in the extract.

- 1. The USAGE filed needs to have an \* or an X.
- 2. Cohort logic must contain something. If your rule set has entirely built your cohort, your reminder still must have something. I would suggest using a customized logic string of SEX
- 3. All other things about reminders would apply as normal when they are evaluated in the extract

How do I enter the reminder definitions into my extract definitions?

When you go back and edit your extract definition, you choose the appropriate sequence number. For this example, it would be the sequence number dealing with the diabetes section. As you scroll through the fields, you will see a field named 'Select REMINDER SEQUENCE'. Here you would enter a sequence

number, then enter in the .01 name of the reminder definition (not the print name). More than one reminder can be entered for each sequence of the extract definition. You would just need to give each reminder that you add a distinct sequence number. You will notice in the example below that the reminder definition has an (X) at the end. This is actually part of the reminder definition given by the person who created the reminder definition.

```
Select EXTRACT SEQUENCE: 2 RS FACILITY DM MEASURES
EXTRACT SEQUENCE: 2//
LIST RULE SET: RS FACILITY DM MEASURES//
EXTRACT PT LIST NAME: FACILITY DM MEASURES Mnn yyyy
Replace
INCLUDE DECEASED PATIENTS: NO//
INCLUDE TEST PATIENTS: NO//
Select REMINDER SEQUENCE: 145// 100 DM A1C W/I LAST YEAR (X)
REMINDER SEQUENCE: 100// ←Reminder Sequence number (arbitrary number)
REMINDER: DM A1C W/I LAST YEAR (X)// ←Reminder definition
COUNTING RULE
Select REMINDER SEQUENCE:
```

# Dates and how they affect your data

Remember that the patient lists are created from a rule set. The RULE SET TEST option within LIST RULE MANAGEMENT (specifically within RULE SETS area) is a great tool to let you know what your dates actually will be for your rule set, once it starts running. An example of the RULE SET TEST will be shown later.

There is a logical hierarchy within extracts. Within an extract, there exist many pieces and within these pieces, there are possibilities for date entries along the way. For example:

-Extract runs MUST have a beginning date/time and ending date/time

- -A Rule Set has the possibility for entry of a beginning date/time and ending date/time
  - -A finding rule within a rule set has the possibility for entry of a beginning date/time and ending date/time
    - -A reminder term in a finding rule has the possibility for entry of a beginning date/time and ending

date/time

-Within the reminder term, the mapped findings have the possibility for entry of a beginning date/time and ending date/time

So, if you had different dates in more than one place, which date would be used? The answer to this question is the date at the lowest level would trump a date at a higher level. Some things to think about when adding dates:

- 1. If you are using a reminder term in an extract, remember if you add dates at the term level or mapped item level within the term, they will also affect how that term is used any other place.
- 2. If a finding rule has dates, and it is used in more than one rule set, the dates may need to be different in each rule set within which they are used. This is a possible place for errors.
- 3. My inclination would be to put my dates at the highest level possible unless a piece at a lower level is specific to that one rule set.

Below is an example of using RULE SET TEST option. This example was testing the RS NEXUS COHORT rule set using the month of June. You can see that not all dates are 6/1-6/30. This means that there was a different date entered at a lower level within the rule set.

```
Enter Patient List BEGINNING DATE: 0601 (JUN 01, 2010)
Enter Patient List ENDING DATE: 0630 (JUN 30, 2010)
List Build Beginning Date: 06/01/2010
List Build Ending Date: 06/30/2010
SEQUENCE 1 FR NEXUS COHORT
Operation: ADD PATIENT
TERM TUS NEXUS CLINIC (Extract)
 FINDING 1-RL.NEXUS CLINIC COHORT FY08
  Beginning Date/Time: 06/01/2010
   Ending Date/Time: 06/30/2010@23:59:59
SEQUENCE 2 FR ANCHOR VISIT
 Operation: SELECT
TERM TUS ALL LOCATIONS (Extract)
 FINDING 1-RL.VA-ALL LOCATIONS
  Beginning Date/Time: 06/01/2008
  Ending Date/Time: 05/02/2009@23:59:59
SEQUENCE 3 VA-FR-DATE OF DEATH
 Operation: REMOVE
 TERM VA-DATE OF DEATH
 FINDING 1-CF.VA-DATE OF DEATH
  Beginning Date/Time: 0
                       05/31/2010@23:59:59
  Ending Date/Time:
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:
      CT 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:
      0
              QUARTERLY
      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
       RS NEXUS IMMUNIZATION REPORT FY08
    3
                                               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
    2 RS FACILITY CANCER MEASURES (Q)
                                        RULE SET
    3 RS FACILITY CARDIOVASCULAR MEASURES RULE SET
    4 RS FACILITY CARDIOVASCULAR MEASURES (Q)
                                                 RULE SET
       RS FACILITY DM MEASURES RULE SET
    5
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 5 RS FACILITY DM MEASURES
                                         RULE SET
 LIST RULE SET: RS FACILITY DM MEASURES//
 EXTRACT PT LIST NAME: DIABETIC COHORT Mnn yyyy
 INCLUDE DECEASED PATIENTS: N NO
 INCLUDE TEST PATIENTS: N NO
 Select REMINDER SEQUENCE: 5
 Are you adding '5' as a new REMINDER SEQUENCE (the 1ST for this EXTRACT RULES
```

(Yes) REMINDER SEQUENCE REMINDER: DM 1 DM A1C W/I LAST YEAR (X) LOCAL DM A1C<7.0 (X) LOCAL DM A1C>9.0 (X) LOCAL 2 3 DM BP <130&<80 (X) LOCAL 4 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)// COUNTING RULE: 
No entry at this point Select REMINDER SEQUENCE: 10 ← arbitrary number Are you adding '10' as a new REMINDER SEQUENCE (the 2ND for this EXTRACT RULE (Yes) REMINDER SEQUENCE REMINDER: DM A1C DM A1C W/I LAST YEAR (X) 1 LOCAL LOCAL 2 DM A1C<7.0 (X) 3 DM A1C>9.0 (X) LOCAL DM A1C DONE ZTUS DM AND A1C DONE (RPT) 4 LOCAL DM A1C>9.0 HGBA1C>9.0 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)// 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>(i)</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
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: \leftarrowenter 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:
      RESCHEDULING FREQUENCY: 1M
                                     ←Set the option's frequency to monthly
```

TASK PARAMETERS:

SPECIAL QUEUEING:

Step 3: Give FileMan a starting month to start the automatic extract. This will be a one-time entry. Once you create your extract definition, it will be visible in the file.

- From the FileMan Menu, choose "Enter or Edit file entries"
- Choose file 810.2 (REMINDER EXTRACT DEFINITION)
- Then choose your extract definition.
- Then you will need to add an entry to the "NEXT REPORTING PERIOD/YEAR" field. The NEXT REPORTING PERIOD would be the month immediately preceding the month that is defined as your report queue date in Taskman. For example, if your beginning report queue date in Taskman is July 3, 2010, your NEXT REPORTING PERIOD would be June 2010 (M06/2010).

Once you have completed steps 1-3, your extract will be set up to automatically run each month, NO MAINTENANCE NECESSARY!! Nice!! <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:

- 1. Q. How do I know what type of Computed Finding I have, i.e. Single, Multiple or List?
  - A. One way is to use the CFL option from the CF management menu option from the Reminder Managers menu. Enter the name of the specific CF and check the TYPE field entry. Another way is to look this up in FileMan from file 811.4 and check the TYPE field entry.
- 2. Q. Reminder rules require the use of a reminder definition which must be "L" type. How do I find out what usage type my reminder definition is?
  - A. From the Reminder Managers menu, choose RM, then RI, and look for the entry in the USAGE field.

# **Reminder Orderable Item Group Menu**

The Clinical Reminders patch PXRM\*2\*16 and bundled patches (OR\*3.0\*280, PSJ\*5.0\*226) release new functionality that will allow 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 will be able to create local order checks using the Clinical Reminder functionality. These Order Checks will happen 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 need to determine if it should remove an orderable item from an existing group or add an orderable item to an 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]

This new menu contains three new options:

- Add/Edit Reminder Orderable Item Group [ PXRM ORDERABLE ITEM GROUP EDIT]
- Reminder Orderable Item Inquiry [PXRM ORDERABLE ITEM GROUP INQ]
- Reminder Orderable Item Group Test [PXRM ORDERABLE ITEM TESTER]

Add/Edit Reminder Orderable Item Group [ PXRM ORDERABLE ITEM GROUP EDIT] provides sites the option to create a new orderable item group and rules. This option is also used to edit existing

orderable item groups or rules. The description above states that there are two parts to the setup of a Reminder Order Check; both are available through this single option.

Reminder Orderable Item Inquiry [PXRM ORDERABLE ITEM GROUP INQ] provides a way for the site to see the details of the Orderable Item group and the corresponding rules.

When entering both of these options, the user is presented with:

- N: ORDERABLE ITEM GROUP NAME
- O: ORDERABLE ITEM
- **R: REMINDER DEFINITION**
- T: REMINDER TERM
- Q: QUIT

For Editing:

- Orderable Item Group Name allows the user to select an existing orderable item group by name or to create a new one.
- Orderable Item provides a list of orderable item groups that contain the selected orderable item. Users can then select the specific group they want to edit.
- Reminder Definition and Reminder Term provide a list of orderable item groups that have rules that contain the specific definition or the term. Users can then select the group they want to edit.

For Inquiry:

- Orderable Item Group Name allows the user to look up a specific Orderable Item Group Name. The output will display the orderable item group and the associated rules for the selected orderable item group.
- For the other options, the software will display all the orderable item groups and the associated rules that contain the selected item.

#### Reminder Orderable Item Group Test [PXRM ORDERABLE ITEM TESTER]

This option provides a way for the user to test the order check functionality in VistA. This option requires the selection of a patient and an orderable item. This duplicates the process of placing an order in CPRS. 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.

#### **Description of the setup fields for Reminder Orderable 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.
- Add Orderable Item by Drug Class: This prompt will allow users to add all the orderable items associated with a VA Drug Class. Users will still be able to edit the list of orderable items after

adding the orderable items associated with a VA Drug Class. Users should answer No if they are not adding medication orderable items or not adding orderable items for a particular VA Drug Class.

- Orderable Item: Users can assign specific orderable item at this prompt.
- Each Orderable Item Group can have multiple rules defined for the Orderable Item Groups.
- 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.
- Active Flag: This flag determines if the rule is active. If the flag is set to No, then the rule will not be evaluated when an orderable item is placed.
- Testing Flag: This flag is used to mark if the rule should only be used with the Clinical Reminder Order Check Testing Rule. With OR\*3.0\*280, two new Order Check Rules will be released.
  - Clinical Reminder Order Checks Live: This rule allows all users access to the Clinical Reminder Order Checks.
  - Clinical Reminder Order Checks Testing: 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.
- How the active and testing flag should be used together:
  - When creating/editing an order check rule, the active flag should be set to No. The testing flag should be set to Yes
  - When testing an order check rule, the active flag should be set to Yes and the Testing Flag should be set to Yes
  - When allowing the entire facility access to the order check rule, the active flag should be set to Yes and the Testing flag should be set to No.
  - When disabling an order check rule, the Active flag should be set to No.
- 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 that 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 reminder cohort logic 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 Orderable Item 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 at True.
- 5. Create the text that should appear in the order check window.

#### Example of the Output in CPRS:

Order Checking	
(1 of 1) Diagnosis of Glaucoma Use of first generation antihistamines is contraindicated in the presence of narrow angle glaucoma	
Accept Order Cancel Order	See Monograph

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. Note that the scenario began with the common misconception that what was needed is a drug-drug interaction order check, when in fact the final outcome was a much more specific drug-disease (diagnosis code) order check.

#### Example #2

#### Problem:

Order Check is needed when ordering Glyburide for patients age 65 or greater and serum creatinine 2.0 mg/dL 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 serum Cr 2.0 or greater.

- 2. Create an Orderable Item 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 creatinine 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.

#### **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 Referral Count Totals 6 Category-Referred Service 7 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// (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: All Patients Α М Multiple Patients Select Patients or ^ to exit: A// ll Patients Select one of the following: F Formatted Delimited D 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 IADL ADL Care Behaviors ACROSS Name SSN Date CRPATIENT, ONE (666009999) 06/15/2004 0 0 2 4 6 CRPATIENT, TWO (666009998) 06/15/2004 0 7 9 5 21 CRPATIENT, THREE (666009997) 05/04/2004 0 0 0 0 0 CRPATIENT,FOUR (666009996) 05/11/2004 0 0 0 0 0 CRPATIENT,FIVE(666009995)05/11/200400CRPATIENT,SIX(666009994)05/11/200400 0 0 0 0 Totals > > 0 7 \_\_\_\_\_11 9 27 1.8 1.5 Means > > 0.0 1.2 4.5 Standard Deviations > > 0.0 3.1 4.1 9.8 2.9 Enter RETURN to continue or '^' to exit:

# **Appendix A: Glossary**

## Acronyms

AAC - Austin Automation Center AIMS - Abnormal Involuntary Movement Scale API - Application Programmer Interface. CAC - Clinical Application Coordinator 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 IHD - Ischemic Heart Disease MDD - Major Depressive Disorder OEF/OIF - Operation Enduring Freedom/Operation Iraqi Freedom OQP - Office of Quality and Performance **OUERI - Ouality 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

#### AAC SAS Files

AAC SAS files contain data that is equivalent to data stored in the Reminder Extract Summary entry in the Reminder Extract Summary file. AAC manages SAS files for use by specifically defined users.

#### Applicable

The patients whose findings met the patient cohort reminder evaluation. In order for a reminder to be applicable, the Patient Cohort Logic must evaluate to true for the patient. In other words, when the Patient Cohort Logic is true, the patient is in the cohort and the reminder is applicable.

#### Autogenerate

Autogeneration is a tool for creating reminder dialogs from the reminder definition. It automatically adds dialog elements (sentences) to a reminder dialog for each finding on the reminder, with sentence text generated from the finding name. Appropriate parameters in the Dialog Parameters files that contain the prefix (e.g., *Patient received*) and suffix text (e.g., *at this encounter*) must be completed before autogeneration can work.

Example of autogenerated element: Patient received Tobacco Use Education at this encounter

#### **Boolean Logic Operators**

Boolean operators are connectors (AND, OR, NOT) used to produce more relevant/precise search results. See the **Error! Reference source not found.** in the FAQs and Tips section for details.

#### 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."

#### **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

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

With patch 4, the use of "CSUB" data has expanded beyond Condition statements.

#### Dialog

A dialog is a list of items/actions/sentences that can be used to collect patient data and create Progress Note text. By clicking on checkboxes, you can indicate what actions were taken during an encounter. These dialog items are based on guidelines at your site and how your Reminder Managers define the reminders and dialogs.

A dialog is an entry in the Reminder Dialog file. The entry may be a dialog element, a dialog group, an additional prompt, a result element, or a result group. These are defined below:

*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, 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.

Autogenerated components are based on the additional prompts defined in the Finding Type Parameters. Once a dialog element is autogenerated, the sites can modify it. Dialog elements may also be instructional text or a header. The FINDING ITEM and components are not defined in dialog elements.

*Dialog group* - Dialog groups are similar to menu options. They group dialog elements and dialog groups within its component multiple. The dialog group can be defined with a finding item and checkbox. The components in the group can be hidden from the CPRS GUI window until the dialog group is checked off.

*Prompt* - A prompt is defined for PCE prompts or as locally created comment checkboxes. The prompts do not have any components within them. PXRM-prefixed prompts are distributed in this file with the Clinical Reminder package.

*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.

#### Drawer

Drawers are what we call the buttons on the Notes tab for Templates, Reminders, and Encounters. After you begin a new note, you will see the Reminders button or "drawer." Click to open the drawer and see a tree view of reminders that are due, applicable, and other reminders.

#### **Due Evaluation**

The process by which the Clinical Reminders program analyzes the patient database to determine if a reminder is due, applicable, or not applicable.

Reminders whose evaluation status meets due criteria for a patient.

#### Findings

Data from **VISTA** packages (Lab, Mental Health, PCE, Pharmacy, Radiology, Vitals, etc., and Computed Findings) are called Findings. Findings are used to define the Patient Cohort Logic and Resolution Logic and to provide relevant clinical information.

#### Finding type

This refers to the source of the finding, such as the files for Drugs, Education Topics, Exams, Health Factors, Immunizations, Laboratory Tests, Mental Health Instruments, Orderable Items, Radiology Procedures, Reminder Computed Findings, Reminder Taxonomies, Reminder Terms, Skin Tests, VA Drug Class, VA Generic, and Vital Measurements.

#### Folders:

All Evaluated This folder contains all reminders that have been evaluated.
Due This folder contains reminders that are due.
Applicable This folder contains reminders that are applicable but not due.
Not Applicable - This folder contains reminders that are not applicable.
Other Categories This folder contains Reminder Categories if they have been created at your site.
Categories group together related reminders, to make processing more efficient. Each Category will have its own folder within the Other Categories folder.

#### **Forced Value**

Values that are automatically stuffed into dialogs. Two forced values are included in this release, PXRM REFUSED and PXRM REPEAT CONTRAINDICATED. The effect of a forced value is to automatically fill the PCE education "refused" field. These don't display on the dialog, but are built into the dialog when the autogenerate runs.

#### **Health Factors**

Patient information that can't be coded, such as Alcohol Use, Binge Drinking, Current Non-Smoker, Current Smoker, Currently Pregnant, Family Hx of Alcohol Abuse, Lifetime Non-Smoker, No Risk Factors For Hep C, etc.

#### National Database

All sites running IHD and Mental Health QUERI software transmit their data to a compliance totals database at the AAC.

#### Not Applicable

Reminders for patients whose findings did not meet the patient cohort reminder evaluation.

#### Not Due

Reminders for patients whose reminder evaluation status is not due.

#### **Operation Enduring Freedom/Operation Iraqi Freedom**

The Clinical Reminder, *Iraq & Afghan Post-Deployment Screen*, which identified veterans of Operation Enduring Freedom in Afghanistan and Operation Iraqi Freedom, was enhanced and distributed to sites in November 2005. The OEF/OIF data will be rolled up for regional and national reporting purposes.

#### **Patient Cohort**

A group of patients that meet the defined criteria (Patient Cohort Logic) for a reminder. In other words, if the reminder is applicable, the patient is in the cohort.

#### **Patient Cohort Logic**

This is the logic that specifies how findings are used to select the applicable patient population; i.e., the patient cohort. It is based on Mumps Boolean operators and their negations. The operators are: ! (OR), & (AND), !' (OR NOT), and &' (AND NOT).

#### **Reminder Categories**

A category defines a group of reminders and may include other sub-categories. Categories appear in the Other folder in the Notes and Consults tabs of the CPRS GUI.

#### **Reminder Definitions**

Reminder Definitions comprise a set of finding items used to identify patient cohorts and reminder resolutions. Reminders are used for patient care and/or report extracts.

#### **Reminder Dialog**

Reminder Dialogs comprise a set of text and findings that together provide information to the CPRS GUI, which collects and updates appropriate findings while building a progress note.

#### **Resolution Logic**

Resolution logic specifies how findings are used in resolving a reminder. It is based on Mumps Boolean operators and their negations. The operators are: ! (OR), & (AND), !' (OR NOT), and &' (AND NOT)

#### **Reminder Patient List**

A list of patients that is created from a set of List Rules and/or as a result of report processing. Each Patient List is assigned a name and is defined in the Reminder Patient List File. Reminder Patient Lists may be used as an incremental step to completing national extract processing or for local reporting needs.

Patient Lists created from the Reminders Due reporting process are based on patients that met the patient cohort, reminder resolution, or specific finding extract parameters. These patient lists are used only at local facilities.

#### **Reminder Terms**

Reminder terms provide a way to map findings to a concept. For example a concept could be a diabetes diagnoses. If a site had used both a health factor and a taxonomy to record a diabetes diagnosis then they would map the health factor and the taxonomy to the term.

#### **Report Reminders**

Reminders may be defined specifically for reporting. Report Reminders do not have a related Reminder Dialog in CPRS and are not used by clinicians for patient care. However, clinical reminders that are used in CPRS may also be used for reminder reporting. All reminders targeted for national reporting are defined in Extract Parameters.

#### **Resolve, Reminders**

Recording or taking action that satisfies a reminder. For example, if

#### Resolution

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.

#### Taxonomies

Coded data such as diagnoses or procedures with ICD or CPT codes. 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.

#### Term

Reminder terms provide a way to define a general term, for example diabetes diagnosis, which can be linked to specific findings.

#### Tree View

A hierarchical view of reminder categories, with reminders listed underneath. This view is visible when you press the Reminders button or when the reminders drawer is open. It shows the reminders divided into the Due, Applicable, and Other categories.

# Appendix B: Entering "DEFAULT" local values for the Point of Contact Section of the VA-EMBEDDED FRAGMENTS SCREENING Dialog

The VA-EMBEDDED FRAGMENTS SCREENING Reminder Dialog was revised with Patch 17 to allow the designation of a default value for local point of contact information.

🖉 Reminder Resoluti	on: Evaluation of Embedded Fragments
	POINT OF CONTACT INFORMATION: Please provide contact information for the veteran's primary healthcare provider or enter contact information for the VA medical center staff member deemed appropriate by your VA facility. This contact may be needed if the patient cannot be reached or questions arise that the patient cannot answer.
	Primary Care Provider or VA Staff Contact
	Name: * Primary Care Provider or VA Staff Contact Phone #: *
	Primary Care Provider or VA Staff Contact Email:

There are three point-of-contact reminder dialog elements, each of which is associated with an ADDITIONAL PROMPT/FORCED VALUE. The three elements and their associated ADDITIONAL PROMPT/FORCED VALUEs are:

```
Element 1:
EF CONTACT NAME
Associated prompt: TEXT EF CONTACT NAME
```

Element 2: EF CONTACT PHONE Associated prompt: TEXT EF CONTACT PHONE

```
Element 3:
```

EF CONTACT EMAIL Associated prompt: TEXT EF CONTACT EMAIL

Sites can enter default values for each of the three ADDITIONAL PROMPT/FORCED VALUEs that are associated with each element. The default values will be visible in the Edit Box, though the user may still override the default information with different contact information if applicable.

The following steps describe the process to edit the prompts.

\*\*\*PLEASE NOTE: These local edits may get overwritten with future reminder dialog patch releases. In this case, sites would need to re-enter the local values.\*\*\*

1. Select the REMINDER DIALOG MANAGEMENT option from the Reminders Managers Menu:

CF	Reminder Computed Finding Management
RM	Reminder Definition Management
SM	Reminder Sponsor Management
TXM	Reminder Taxonomy Management
TRM	Reminder Term Management
LM	Reminder Location List Management
RX	Reminder Exchange
RT	Reminder Test
OS	Other Supporting Menus
INFO	
INFO <mark>DM</mark>	Reminder Information Only Menu Reminder Dialog Management
-	Reminder Information Only Menu
DM	Reminder Information Only Menu Reminder Dialog Management
DM CP	Reminder Information Only Menu Reminder Dialog Management CPRS Reminder Configuration
DM CP RP	Reminder Information Only Menu Reminder Dialog Management CPRS Reminder Configuration Reminder Reports
DM CP RP MST	Reminder Information Only Menu Reminder Dialog Management CPRS Reminder Configuration Reminder Reports Reminders MST Synchronization Management
DM CP RP MST PL	Reminder Information Only Menu Reminder Dialog Management CPRS Reminder Configuration Reminder Reports Reminders MST Synchronization Management Reminder Patient List Menu

2. Select the REMINDER DIALOGS option from the Reminder Dialog Management menu:

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

3. In the Reminder Dialog Screen, you will need to CHANGE VIEW to the Prompts screen.

Select Item: Next Screen// CV Change View

Select one of the following:

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)

TYPE OF VIEW: R// P Additional Prompts

4. In the ADDITIONAL PROMPTS screen, navigate down the list until you see the 3 prompts needing editing:

TEXT EF CONTACT NAME, TEXT EF CONTACT PHONE, TEXT EF CONTACT EMAIL

- 5. Select the TEXT EF CONTACT NAME
- 6. Hit the Return key until you get to the DEFAULT field.

Dialog Name: TEXT EF CONTACT NAME Current dialog element/group name: TEXT EF CONTACT NAME Used by: EF CONTACT NAME (Dialog Element) NAME: TEXT EF CONTACT NAME Replace DISABLE: CLASS: LOCAL// SPONSOR: REVIEW DATE: PROMPT CAPTION: Comment:// EXCLUDE FROM PROGRESS NOTE: DEFAULT VALUE: <ENTER PROVIDER NAME HERE> Select CHECKBOX SEQUENCE: Input your edit comments. Edit? NO//

7. Repeat the above steps to edit the TEXT EF CONTACT PHONE and TEXT EF CONTACT EMAIL.

Dialog Name: TEXT EF CONTACT PHONE

Current dialog element/group name: TEXT EF CONTACT PHONE Used by: EF CONTACT PHONE (Dialog Element)

NAME: TEXT EF CONTACT PHONE Replace DISABLE: CLASS: LOCAL// SPONSOR: REVIEW DATE: PROMPT CAPTION: Comment:// EXCLUDE FROM PROGRESS NOTE: DEFAULT VALUE: 000-000-0000// Select CHECKBOX SEQUENCE:

Dialog Name: TEXT EF CONTACT EMAIL

Current dialog element/group name: TEXT EF CONTACT EMAIL Used by: EF CONTACT EMAIL (Dialog Element)

NAME: TEXT EF CONTACT EMAIL Replace DISABLE: CLASS: LOCAL// SPONSOR: REVIEW DATE: PROMPT CAPTION: Comment:// EXCLUDE FROM PROGRESS NOTE: DEFAULT VALUE: XXXXX.XXXX@VA.GOV// Select CHECKBOX SEQUENCE:

# 8. Exit out of the Reminder Dialog editor.

# The VA-EMBEDDED FRAGMENT SCREENING Dialog will now display your default values:

ion: Evaluation of Embedded Fragments	
POINT OF CONTACT INFORMATION: Please provide contact information for the veteran's primary healthcare provider or enter contact information for the VA medical center staff member deemed appropriate by your VA facility. This contact may be needed if the patient cannot be reached or questions arise that the patient cannot answer.	
Primary Care Provider or VA Staff Contact	
Name: * <enter here="" name="" provider=""></enter>	
Primary Care Provider or VA Staff Contact	
Phone #: * 000-000-0000	
Primary Care Provider or VA Staff Contact	
Email: X00000X.X0000X@VA.GOV	

# Appendix C: Technical Manual Changes Affecting Mental Health Screens

#### February 7, 2011

The national clinical reminders for depression, PTSD and alcohol screening have not yet been updated to reflect the new criteria related to management of patients with severe cognitive disorders. These reminders currently include logic that will permanently turn off all three screening reminders if a provider has indicated that a patient has severe cognitive impairment, as indicated by the generation of the health factor HF. SEVERE CHRONIC COGNITIVE IMPAIRMENT.

The National Clinical Reminders Committee (NCRC) is currently working on updates to these reminders that would allow for the more complex logic consistent with updated exclusion criteria for FY11. In the interim, however, it is suggested that sites make a minor change to the cognitive impairment term for these three screening reminders in order to be in compliance with the current technical manual. The NCRC recommends that sites simply add a date -(T-1y) - to the findings inside the term for cognitive impairment. This can be done without having to copy or modify the national reminders.

The result of this change is that patients who are identified by providers as having severe cognitive impairment will be excluded from screening for one year only. No patients will be permanently excluded from screening. However, an evaluation of a number of sites from different VISNs has revealed that the burden of having to rescreen patients who may, in fact, be demented, will be small. Additionally, it is anticipated that there will be new reminders out before FY12 that will allow these patients to be permanently excluded from screening in the appropriate circumstances.

#### Detailed instructions on how to modify the reminder term, VA-COGNITIVE IMPAIRMENT

From the Reminder Managers Menu:

CF	Reminder Computed Finding Management
RM	Reminder Definition Management
SM	Reminder Sponsor Management
TXM	Reminder Taxonomy Management
TRM	Reminder Term Management
LM	Reminder Location List Management
RX	Reminder Exchange
RT	Reminder Test
OS	Other Supporting Menus
INFO	Reminder Information Only Menu
DM	Reminder Dialog Management
CP	CPRS Reminder Configuration
RP	Reminder Reports
MST	Reminders MST Synchronization Management
PL	Reminder Patient List Menu
PAR	Reminder Parameters
XM	Reminder Extract Menu
GEC	GEC Referral Report

Select Reminder Managers Menu Option: TRM Reminder Term Management

TLList Reminder Terms ΤI Inquire about Reminder Term Add/Edit Reminder Term ΤE TC Copy Reminder Term Select Reminder Term Management Option: TE Add/Edit Reminder Term Select Reminder Term: VA-COGNITIVE IMPAIRMENT NATIONAL ...OK? Yes// (Yes) Choose from: HF SEVERE CHRONIC COGNITIVE IMPAIRMENT Finding # 1 MH BOMC Finding # 2 Select Finding: `1 SEVERE CHRONIC COGNITIVE IMPAIRMENT Editing Finding Number: 1 FINDING ITEM: SEVERE CHRONIC COGNITIVE IMPAIRMENT 11 BEGINNING DATE/TIME: T-1Y + Enter T-1Y Here ENDING DATE/TIME: OCCURRENCE COUNT: WITHIN CATEGORY RANK: INCLUDE VISIT DATA: CONDITION: CONDITION CASE SENSITIVE: USE STATUS/COND IN SEARCH: Choose from: HF SEVERE CHRONIC COGNITIVE IMPAIRMENT Finding # 1 MH BOMC Finding # 2 Select Finding: `2 BOMC Remember that the score is returned as raw score<sup>transformed</sup> score, so if your Condition uses the raw score use +V or P(V,U,1) and if it uses the transformed score use P(V,U,2). Editing Finding Number: 2 FINDING ITEM: BOMC// BEGINNING DATE/TIME: T-1Y ← Enter T-1Y Here ENDING DATE/TIME: OCCURRENCE COUNT: MH SCALE: 516// CONDITION: I +V>10// CONDITION CASE SENSITIVE: USE STATUS/COND IN SEARCH: Choose from: HF SEVERE CHRONIC COGNITIVE IMPAIRMENT Finding # 1 MH BOMC Finding # 2 Select Finding: Input your edit comments. Edit? NO//

Select Reminder Term:

\*\*PLEASE NOTE\*\*: The Reminder Term VA-COGNITIVE IMPAIRMENT was nationally exported with only two (2) mapped findings.

HF SEVERE CHRONIC COGNITIVE IMPAIRMENT MH BOMC

Finding # 1 Finding # 2

If you locally mapped additional findings to the VA-COGNITIVE IMPAIRMENT term, you will need to apply the same T-1Y time frame in the BEGINNING DATE/TIME field for those additional mapped items.

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