Clinical Reminders

Manager's Manual

PXRM*2*12

October 2009

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Office of Enterprise 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

Clinical Reminders V. 2*12 Installation and Setup Guide (PXRM_2_12_IG.PDF)
Clinical Reminders V.2*12 Release Notes (PXRM_2_12_RN.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 HSD&D Reminders site	http://vista.med.va.gov/reminders
VA/DOD Guidelines - Office of Quality and Performance	http://vaww.oqp.med.va.gov/CPGintra/cpg/cpg.htm
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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May-June 2006	Page 286	Extract Management option changes	Tim Landy	JoAnn Green
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March 2006	Page 21	Added descriptions of new computed findings for appointments	Gloria Smith	JoAnn Green
February 2006	252	Rewrite of Patient List section, based on changes to software and need for more explanation and clarification	Gloria Smith	Debbie Trost
February 2006	Page 286	Rewrite of Extract Management section, based on changes to software and need for more explanation and clarification	Gloria Smith	Debbie Trost
February 2006	Appendix F	Demographic Report/Mail Merge Example	Gloria Smith	JoAnn Green
January-February 2006	Throughout	Updates, based on changes or corrections in software	Gloria Smith	JoAnn Green
July-August 2005	Throughout manual	Changes for Patch 4	Gloria Smith	JoAnn Green
March 2005	Throughout 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 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).

Updates to National Reminders in Patch 12

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

Component	Name	Change
RD	VA-ALCOHOL AUDIT-C POSITIVE F/U EVAL	Added SUD; added text dialog element for local health summary object for prior AUDIT-C display; reversed order of feedback and advice; made nothing required
RD	VA-EMBEDDED FRAGMENTS RISK EVALUATION	New*
RD	VA-IRAQ & AFGHAN POST-DEPLOY SCREEN	Added a FF to the cohort logic
RD	VA-TBI SCREENING	Changed dialog to have documentation of discussion of positive screen
RL	VA-OEF/OIF EXCLUSION STOPS	Added ultrasound stop code
RM	VA-ALCOHOL AUDIT-C POSITIVE F/U EVAL	Added SUD clinic visit exclusions
RM	VA-DEPRESSION SCREEN	Updated URLs and description.
RM	VA-EMBEDDED FRAGMENTS RISK EVALUATION	New *
RM	VA-IRAQ/AFGHAN POST DEPLOYMENT SCREEN	Uses OEF/OIF in dialog and logic; updated logic, fixed active duty problem
RM	VA-MHV BMI	Removed >, added text changes from NCP
RM	VA-MHV COLORECTAL CANCER SCREEN	Added upper age limit
RM	VA-OEF/OIF MONITOR REPORTING	Removed dialog from this reporting reminder.
RM	VA-TBI SCREENING	Changes to OEF/OIF in dialog and logic, fixed active duty issue
RT	VA-ACTIVE DUTY	Updated active duty term description
RT	VA-ALCOHOL NONE PAST 1YR	Removed MH test from term VA-ALCOHOL NONE PAST 1YR

RT	VA-IRAQ/AFGHAN SERVICE	Updated to include CFs for OEF/OIF service that point to the patient file
RT	VA-MHV HIGH RISK FOR FLU	Updated to use new taxonomy
RT	VA-MHV HIGH RISK FOR PNEUMONIA	Updated to use new taxonomy
RX	VA-OEF/OIF MONITOR	New extract
TX	VA-BREAST TUMOR	Changed description to include mass, pain, 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
TX	VA-HIGH RISK FOR FLU/PNEUMONIA	Inactivated
TX	VA-HIGH RISK FOR PNEUMONIA	New

12/17/09 NOTE: It isn't necessary to contact the TEFSC before activating the Embedded Fragment reminder, but please provide the TEFSC with 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. The point of contact is the person that TEFSC will contact to help arrange for follow-up activities such as biomonitoring.

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	Multiple changes: • Added Combat Vet to logic • Excluded those who did not serve from denominator • Added cognitive impairment to exclusions • Added done elsewhere to resolutions • Updated dates of health factors for

	depression/PTSD to 10/1/08
VA-MHV COLORECTAL CANCER SCREEN	VA-MHV BARIUM ENEMA added
VA-MHV HYPERTENSION	Uses reminder terms
VA-MHV DIABETES RETINAL EXAM	Frequency depends on no retinopathy only
VA-PTSD SCREENING	Added veteran status Added Acute Illness to the dialog

National Reminders

VA-*BREAST CANCER SCREEN
VA-*CERVICAL CANCER SCREEN
VA-*CHOLESTEROL SCREEN (F)
VA-*CHOLESTEROL SCREEN (M)
VA-*COLORECTAL CANCER SCREEN (FOBT)
VA-*COLORECTAL CANCER SCREEN (SIG.)
VA-*FITNESS AND EXERCISE SCREEN
VA-*IHD 412 ELEVATED LDL REPORTING
VA-*IHD 412 LIPID PROFILE REPORTING
VA-*IHD ELEVATED LDL REPORTING
VA-*IHD LIPID PROFILE REPORTING
VA-*INFLUENZA IMMUNIZATION
VA-*PNEUMOCOCCAL VACCINE
VA-*PROBLEM DRINKING SCREEN
VA-*SEATBELT AND ACCIDENT SCREEN
VA-*TETANUS DIPHTHERIA IMMUNIZATION
VA-*TOBACCO USE SCREEN
VA-*WEIGHT AND NUTRITION SCREEN
VA-ADVANCED DIRECTIVES EDUCATION
VA-ALCOHOL ABUSE EDUCATION
VA-ALCOHOL ABUSE SCREEN (AUDIT-C)
VA-ALCOHOL AUDIT-C POSITIVE F/U EVAL
VA-ALCOHOL USE SCREEN (AUDIT-C)
VA-ANTIPSYCHOTIC MED SIDE EFF EVAL
VA-BL DEPRESSION SCREEN
VA-BL OEF/OIF FEVER
VA-BL OEF/OIF GI SX
VA-BL OEF/OIF OTHER SX
VA-BL OEF/OIF SERVICE INFO ENTERED
VA-BL OEF/OIF SKIN SX
VA-BL PTSD SCREEN
VA-BLOOD PRESSURE CHECK
VA-BREAST EXAM
VA-BREAST SELF EXAM EDUCATION
VA-CV ELIG W/HF FOR NO SERVICE
VA-CV INELG W/HF FOR SERVICE

VA-DEPRESSION SCREENING
VA-DIABETIC EYE EXAM
VA-DIABETIC FOOT CARE ED.
VA-DIABETIC FOOT EXAM
VA-DIGITAL RECTAL (PROSTATE) EXAM
VA-EXERCISE EDUCATION
VA-FECAL OCCULT BLOOD TEST
VA-FLEXISIGMOIDOSCOPY
VA-GEC REFERRAL CARE COORDINATION
VA-GEC REFERRAL CARE RECOMMENDATION
VA-GEC REFERRAL NURSING ASSESSMENT
VA-GEC REFERRAL SOCIAL SERVICES
VA-GEC REFERRAL TERM SET (CC)
VA-GEC REFERRAL TERM SET (CR)
VA-GEC REFERRAL TERM SET (NA)
VA-GEC REFERRAL TERM SET (SS)
VA-HEP C RISK ASSESSMENT
VA-HTN ASSESSMENT BP >=140/90
VA-HTN ASSESSMENT BP >=160/100
VA-HTN LIFESTYLE EDUCATION
VA-IHD ELEVATED LDL
VA-IHD LIPID PROFILE
VA-INFLUENZA VACCINE
VA-IRAQ & AFGHAN POST-DEPLOY SCREEN
VA-MAMMOGRAM
VA-MHV BMI > 25.0
VA-MHV CERVICAL CANCER SCREEN
VA-MHV COLORECTAL CANCER SCREEN
VA-MHV DIABETES FOOT EXAM
VA-MHV DIABETES HBA1C
VA-MHV DIABETES RETINAL EXAM
VA-MHV HYPERTENSION
VA-MHV INFLUENZA VACCINE
VA-MHV LDL CONTROL
VA-MHV LIPID MEASUREMENT
VA-MHV MAMMOGRAM SCREENING
VA-MHV PNEUMOVAX
VA-MST SCREENING
VA- EPI LAB EXTRACT
VA- EPI RX EXTRACT
VA-NUTRITION/OBESITY EDUCATION
VA-OEF/OIF MONITOR REPORTING
VA-PAP SMEAR
VA-PNEUMOVAX
VA-POLYTRAUMA MARKER
VA-POS DEPRESSION SCREEN FOLLOWUP
VA-PPD
VA-PSA
VA-PTSD SCREENING
VA-QUERI REPORT IHD ELEVATED LDL
VA-QUERI REPORT LIPID STATUS

VA-SEATBELT EDUCATION
VA-TBI SCREENING
VA-TBI/POLYTRAUMA REHAB/REINTEGRATION PLAN OF CARE
VA-TEST
VA-TOBACCO EDUCATION
VA-VANOD SKIN ASSESSMENT
VA-VANOD SKIN REASSESSMENT
VA-WEIGHT
VA-WH MAMMOGRAM REVIEW RESULTS
VA-WH MAMMOGRAM SCREENING
VA-WH PAP SMEAR REVIEW RESULTS
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

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

```
        SL      List Reminder Sponsors
DM      Reminder Dialog Management ... [PXRM DIALOG MANAGEMENT]
        DP      Dialog Parameters ...
                RS      Reminder Resolution Statuses
                HR      Health Factor Resolutions
                FP      General Finding Type Parameters
                FI      Finding Item Parameters
                TD      Taxonomy Dialog Parameters
        DI      Reminder Dialogs
                DR      Dialog Reports
                        OR      Reminder Dialog Elements Orphan Report
                        ER      Empty Reminder Dialog Report
                        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
        PLM     Patient List Management
PAR     Reminder Parameters ... [PXRM REMINDER PARAMETERS]
        ESD     Edit Site Disclaimer
        EWS     Edit Web Sites
        MH      Edit Number of MH Questions
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	TXM	The REMINDER TAXONOMY file is used to define a range of coded values from ICD Diagnosis codes, ICD Operation/Procedures codes, and CPT codes that can be viewed as being part of a clinical category (taxonomy). Each entry has a low value and a high value. The software will search for matches on all the codes between the low and high values inclusive. If there is a match then the taxonomy finding will be true for the patient. This menu contains options for copying, editing taxonomies, as well as listing and inquiring about specific taxonomies.
Reminder Term Management	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 Parameters	PXRM REMINDER PARAMETERS	PAR	This menu contains the options, Edit Site Disclaimer and Edit Web Sites, which allow you to modify the parameters for these items.
Reminder Extract Menu	PXRM EXTRACT MENU	XM	This option allows management of extract definitions, extract runs, and extract transmissions.
GEC Referral Report	PXRM GEC REFERRAL REPORT	GEC	This is the option that is used to generate GEC Reports. GEC (Geriatrics Extended Care) is used for referral of geriatric patients to receive further care

Reminder Computed Finding Management

A computed finding is an M routine that takes a standard set of arguments. The computed finding must be entered into the REMINDER COMPUTED FINDING file #811.4 before it can be used as a finding in a reminder definition or term. When none of the standard finding types will work, a computed finding can be used.

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.

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)
  - ADMISSION TYPE
  - ATTENDING PHYSICIAN
  - DATE (FileMan format)
  - PRIMARY PROVIDER
  - TREATING SPECIALTY
  - WARD LOCATION
- Due to limitations in the single occurrence computed finding structure, date range checking is limited to a single date. Since weight measurements are made more frequently than height

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

Reminder Computed Finding Management Menu

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

Steps to Create a Computed finding

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

1. Write an M routine (developer).

For a *single occurrence* computed finding, the routine takes the following arguments: (DFN, TEST,DATE,DATA,TEXT). DFN is the patient ien and will be set when the computed finding routine is called. The following variables should be set by the computed finding routine.

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

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

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

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

For a *multiple occurrence* computed finding, the routine takes the following arguments:
(DFN, NGET,BDT,EDT, NFOUND,TEST,DATE,DATA,TEXT).

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

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

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

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

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

- TEST(N) is the logical value of the finding for occurrence N; this is set to 1 for each occurrence that is found. (Required)
- DATE(N) is the date of the finding in FileMan format for occurrence N. (Required)
- DATA is an array of values that can be used by the CONDITION field. For the N'th occurrence set DATA(N,"VALUE")=VALUE. You can also pass back other data using subscripts just as for a single occurrence computed finding, the only difference being the occurrence subscript comes first. For example, DATA(N,"COLOR")="RED".
- TEXT(N) is text to be displayed in the Clinical Maintenance output for occurrence N. (Optional)

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

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

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

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

- ^TMP($J,PLIST,DFN,N)=DAS^DATE^FILENUM^ITEM^VALUE
- N is a number specifying the number of the occurrence. N=1 is the most recent occurrence, N=2 the second most recent occurrence, and so on. N should never exceed NGET.
- DAS is the DA string. See the Clinical Reminder Index Technical Manual for an explanation of what a DA string is.
  NOTE: DAS is optional for a list computed finding, but if it's not set, a NULL should be used; i.e., ^TMP($J,PLIST,DFN,N)=^DATE^FILENUM^ITEM^VALUE
- DATE is the date of the finding.
- FILENUM is the file number where the result was found.
- ITEM is the internal entry number of the item that was found.
- VALUE is the default value, if there is not one then it should be null.

If you want to use a Condition with the computed finding, then you should return the values as follows:
^TMP($J,PLIST,DFN,N,SUB)=DATA(N,"SUB")
At a minimum, one of the subscripts must be "VALUE"; i.e., DATA(N, "VALUE"); then in the Condition you can use either V or V("VALUE"), because V is set equal to V("VALUE"). If you create other subscripts, you can use them in the Condition. For example:

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

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

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

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

Hint: make sure that you "new" all the variables you use, to avoid strange side effects.

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

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

File #811.4 contains a combination of nationally distributed and local entries. Nationally distributed entry names are prefixed with VA-. Local entry names can't start with VA-.

Complete each of the following fields:

NAME (.01 field) - this is the name of the computed finding. When a computed finding is added as a finding to a reminder definition, it is done using NAME. For example, type CF.VA-BMI to add the exported VA-BMI computed finding to your reminder definition.

ROUTINE (.02 field) - this is the name of the MUMPS routine.

ENTRY POINT (.03 field) - this is the entry point in the MUMPS routine (the line tag at which that finding begins).

PRINT NAME (.04 field) - this will be displayed on the Clinical Maintenance component as the name of the computed finding. If it is blank, NAME will be used.

TYPE (5 field) – this is a set of codes that specifies what type of computed finding this is. “S” stands for single occurrence, “M” for multiple occurrence, and “L” for list. If it is blank, single will be assumed.

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

The remaining fields are optional.

Example

```
Select Reminder Computed Finding Management Option: cfe Reminder Computed
Finding Edit

Select Reminder Computed Finding: AJEY TEST COMPUTED FINDING
...OK? Yes// <Enter> (Yes)

NAME: AJEY TEST COMPUTED FINDING Replace <Enter>
ROUTINE: PXRMZC1
ENTRY POINT: TEST
PRINT NAME: Test Computed Finding
TYPE: ?
     Choose from:
       M        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)=""
      Q
```

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

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

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:

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

Select section to edit: f  Findings

Reminder Definition Findings
```

```
Choose from:

CF BSA                                                          Finding #   2
CF VA-BMI                                                       Finding #   1

Select FINDING: VA-BMI

     Searching for a DRUG, (pointed-to by FINDING ITEM)

     Searching for a EDUCATION TOPICS, (pointed-to by FINDING ITEM)

     Searching for a EXAM, (pointed-to by FINDING ITEM)

     Searching for a REMINDER LOCATION LIST, (pointed-to by FINDING ITEM)

     Searching for a HEALTH FACTOR, (pointed-to by FINDING ITEM)

     Searching for a IMMUNIZATION, (pointed-to by FINDING ITEM)

     Searching for a LABORATORY TEST, (pointed-to by FINDING ITEM)

     Searching for a MH TESTS AND SURVEYS, (pointed-to by FINDING ITEM)

     Searching for a ORDERABLE ITEM, (pointed-to by FINDING ITEM)

     Searching for a RADIOLOGY PROCEDURE, (pointed-to by FINDING ITEM)


     Searching for a REMINDER COMPUTED FINDING, (pointed-to by FINDING ITEM)
  VA-BMI     NATIONAL
         ...OK? Yes//   (Yes)


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

An example of using the VA-BMI computed finding:
1)  Create a finding in a reminder that is the VA-BMI computed finding;
2)  Add logic in the CONDITION field to check for a particular BMI value:
"I V>25";
3)  This finding will be evaluated to true for patients with a BMI that is
greater than 25.

This is a multi-occurrence computed finding.

Editing Finding Number: 1
FINDING ITEM: VA-BMI//
REMINDER FREQUENCY:
MINIMUM AGE:
MAXIMUM AGE:
RANK FREQUENCY:
USE IN RESOLUTION LOGIC:
USE IN PATIENT COHORT LOGIC:
BEGINNING DATE/TIME:
ENDING DATE/TIME:
OCCURRENCE COUNT: 5// 6      ← You can change the occurrence count here.
CONDITION:
CONDITION CASE SENSITIVE:
USE STATUS/COND IN SEARCH:
COMPUTED FINDING PARAMETER:
```

```
FOUND TEXT:
  No existing text
  Edit? NO//
NOT FOUND TEXT:
  No existing text
  Edit? NO//

Reminder Definition Findings

Choose from:

CF BSA                                                          Finding #   2
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:

V or V("VALUE") = the ward to which the patient is currently 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("ADMIT DATE") = the date of admission for the patient in the
                  format 3010815.114255^AUG 15,2001@11:42:55
                  (Internal^External)
```

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:

```
V or V("VALUE") = the ward from which the patient was discharged
                  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.)
```

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
M	Mosteller
D	DuBois and Dubois
H	Haycock
G	Gehan and George
B	Boyd

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

Formulas for Body Surface Area Calculator

The Mosteller formula

BSA (m²) = ([Height(cm) x Weight(kg)]/ 3600)^{½} e.g. BSA = SQRT((cm*kg)/3600)
or in inches and pounds: BSA (m²) = ([Height(in) x Weight(lbs)]/ 3131)^{½}

The DuBois and DuBois² formula

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

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

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

The Haycock formula

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

The Gehan and George formula

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

The Boyd formula

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

References

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

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"
"589VA HEARTLAND - WEST, VISN 15^^^VAMC"
"636VA NWIHS, OMAHA DIVISION^^^VAMC"
"673^TAMPA VAMC^3001215.1327^3^VAMC"
"695^MILWAUKEE VAMC^3030328.13^3^VAMC"

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

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

Available Appointment Data Fields

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;N0-SHOW NSR;NO-SHOW & RESCHEDULED CP;CANCELLED BY PATIENT CPR;CANCELLED BY PATIENT & RESCHEDULED CC;CANCELLED BY CLINIC CCR;CANCELLED BY CLINIC & RESCHEDULED NT;NO ACTION TAKEN
4	PATIENT DFN and NAME	TEXT	DFN;name	Patient DFN and 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 NAME	TEXT	IEN;name	Eligibility code and name associated with the appointment	2;AID & ATTENDANCE 7;ALLIED VETERAN 13;COLLATERAL OF VET.
9	CHECK-IN DATE/TIME	DATE/TIME	YYYMMDD.HHMM	Date/time the patient checked in for the appointment	3031215.113
10	APPOINTMENT TYPE IEN and NAME	TEXT	IEN;name	Type of Appointment IEN and name	1;COMPENSATION & PENSION 3;ORGAN DONORS 7;COLLATERAL OF VET.
11	CHECK-OUT DATE/TIME	DATE/TIME	YYYMMDD.HHMM	Date/time the patient checked out of the appointment	3031215.113
12	OUTPATIENT ENCOUNTER	TEXT	NNN	The outpatient encounter IEN	4578

	IEN			associated with this appointment	
13	PRIMARY STOP CODE IEN and CODE	TEXT	IEN;code	Primary Stop code IEN and code associated with the clinic.	301;350
14	CREDIT STOP CODE IEN and CODE	TEXT	IEN;code	Credit Stop code IEN and code associated with the clinic.	549;500
15	WORKLOAD NON-COUNT	TEXT	**Y** or **N**	"Y" if clinic is non-count else "N"	Y N
16	DATE APPOINTMENT MADE	DATE	YYYMMDD	Date the appointment was entered into the Scheduling system	3031215
17	DESIRED DATE OF APPOINTMENT	DATE	YYYMMDD	The date the clinician or patient desired for the scheduling of this appointment.	3031215
18	PURPOSE OF VISIT	TEXT	Code (1, 2, 3, or 4) and short description (C&P, 10-10, SV, or UV)	The Purpose of Visit	1;C&P 2;10-10 3;SV 4;UV
19	EKG DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled date/time of the EKG tests in conjunction with this appointment	3031215.083
20	X-RAY DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled date/time of the X-RAY in conjunction with this appointment	3031215.083
21	LAB DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled date/time of the Lab tests in conjunction with this appointment	3031215.083
22	STATUS	TEXT	Status Code, Status Description, Print Status, Checked In Date/Time, Checked Out Date/Time, and Admission Movement IFN	Status Information for the Visit.	8;INPATIENT APPOINTMENT;INPATIENT/CHECKED OUT;;3030218.1548;145844
23	X-RAY FILMS	TEXT	**Y** or **N**	"**Y**" if x-ray films are required at clinic else "**N**"	Y 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:

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

Select section to edit: f  Findings

Reminder Definition Findings

Choose from:
EX   DIABETIC EXAM                                                Finding #: 2
TX   VA-DIABETES                                                  Finding #: 1

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//
```

```
Reminder Definition Findings

Choose from:
CF   VA-APPOINTMENTS FOR A PATIENT                                Finding #: 3
EX   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.

C:\My Documents\reminders\Introductic

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 INQUIRY	This option allows you to display a clinical reminder definition in an easy to read format.
RL	List Reminder Definitions	PXRM DEFINITION LIST	This option provides a brief summary of selected Clinical Reminder definitions.
RH	Reminder Edit History	PXRM REMINDER EDIT HISTORY	This option allows you to display a reminder definition's edit history. Edit history was formerly displayed as part of the Definition Inquiry , but was removed and made available within this option.

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 362 and the procedure(s) for making it available in the CPRS GUI is found on page 218.

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

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

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

REMINDER DEFINITION LIST                      FEB  8,2005  09:40    PAGE 1
-------------------------------------------------------------------------------


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

Class:                       NATIONAL

Sponsor:

Review Date:

Usage:                       CPRS

Priority:

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

REMINDER DEFINITION LIST                      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
--------------------------------------------------------------------------------

VA-IHD LIPID PROFILE               No.  70
--------------------------------------------

Print Name:                   IHD Lipid Profile

Class:                        NATIONAL

Sponsor:                      Office of Quality & Performance

Review Date:

Rescission Date:

Usage:                        CPRS, DATA EXTRACT, REPORTS

Related VA-* Reminder:

Reminder Dialog:              VA-IHD LIPID PROFILE

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.

   LDL          Enter 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.

   2. Use the Reminder Dialog edit option to define the national reminder
      dialog finding items which should be updated during CPRS GUI reminder
      processing.

      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 Type: A

                    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:

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

Select section to edit: a  All reminder details

NAME: JG DIABETIC EYE EXAM  Replace

PRINT NAME: Diabetic Eye Exam//

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

RELATED REMINDER GUIDELINE:

INACTIVE FLAG:

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

  Edit? NO//

TECHNICAL DESCRIPTION:
This reminder is based on the Diabetic Eye Exam reminder from the New
York VAMC which was designed to meet the guidelines defined by the PACT
panel.  Additional input came from the Saginaw VAMC.

  Edit? NO//

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

Baseline frequency age range set
Select REMINDER FREQUENCY: 0Y//
  REMINDER FREQUENCY: 0Y//
  MINIMUM AGE:
  MAXIMUM AGE:
```

```
  AGE MATCH TEXT:
    No existing text
    Edit? NO//
  AGE NO MATCH TEXT:
    No existing text
    Edit? NO//
Select REMINDER FREQUENCY:

Reminder Definition Findings

Choose from:
EX      DIABETIC EYE EXAM
TX      VA-DIABETES

Select FINDING: ex.DIAB

     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:

          A         All reminder details
```

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

Select section to edit:
Input your edit comments.
Edit? NO//
```

Editing part of the reminder definition

This is an example of editing Logic.

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

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

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:

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

Select section to edit: General


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

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

RELATED REMINDER GUIDELINE:

INACTIVE FLAG:

REMINDER DESCRIPTION:. . .
       . . .
        * PCE CPT procedure code
        * Completed consult order for outside procedure

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

  Edit? NO//


TECHNICAL DESCRIPTION:. . .
       . . .
    ordering options for the clinicians. Some sites have clinicians order
    a consult to a service that provides PAP smears.  If your site does
```

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

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

  Edit? NO//


PRIORITY:

     Select one of the following:

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

Select section to edit:
```

Reminder Definition Fields

Name	Description
NAME	This field is the name of a clinical reminder definition. Nationally distributed reminder definition names are prefixed with "VA-". The VA-prefixed reminder definitions cannot be altered by a site, but may be inactivated so they will not be selectable.
PRINT NAME	This is the name that is used when the results of a reminder evaluation are displayed.
CLASS	This is the class of definition. National definitions cannot be edited or created by sites. N NATIONAL V VISN L LOCAL
SPONSOR	This is the name of a group or organization that sponsors the reminder.
REVIEW DATE	The review date is used to determine when the definition should be reviewed to verify that it is current with the latest standards and guidelines.
USAGE	This field allows the reminder creator to specify how the reminder can be used. This is a free text field that can contain any combination of the following characters: C - CPRS (the reminder can be used in the CPRS GUI) L – Reminder Patient List R - Reminder Reports (the reminder can be used in reminder reports) X - Reminder Extracts (the reminder is used for data extraction) * - The reminder can be used for any of the above P – Patient; patients can view “My Health” reminders; the wildcard (*) excludes P NOTE: To enter more than one code, type the codes with no spaces or punctuation between them.
INACTIVE FLAG	Reminders that are inactive will not be evaluated. The Clinical Maintenance component will return a message stating the reminder is inactive and the date when it was made inactive. Other applications that use reminders may use this flag to determine if a reminder can be selected for inclusion.
REMINDER DESCRIPTION	This is a description of the clinical purpose of the reminder.
TECHNICAL DESCRIPTION	This is a description of how the reminder works.
PRIORITY	The reminder priority is used by the CPRS GUI for sorting purposes.
DO IN ADVANCE TIME FRAME	This field is used to let a reminder become due earlier than the date determined by adding the frequency to the date when the reminder was last resolved. For example, if the frequency is 1Y (one year) and the DO IN ADVANCE TIME FRAME is 1M (one month) the reminder would have a status of "DUE SOON" 11 months after it was last resolved. After one year has passed the STATUS would be "DUE."
SEX SPECIFIC	This field is used to make a reminder sex-specific. If an "F" is entered, the reminder applies only to females. If an "M" is entered, the reminder applies only to males. If it is left blank, then the reminder is applicable to either sex.

IGNORE ON N/A	This field allows the user to stop reminders from being printed in the Clinical Maintenance component if the reminder is N/A. This is a free- text field that can contain any combination of the following codes: Code Description A N/A due to not meeting age criteria. I N/A due to inactive reminder. R N/A due to the wrong race. S N/A due to the wrong sex. * N/A for any reason.
FREQUENCY AGE RANGE SET	The Frequency Age Range set is a multiple that allows you to define different frequencies for different non-overlapping age ranges. The fields in this multiple are: REMINDER FREQUENCY: This is the frequency to give the reminder. It is input as nD, nM, or nY, where D stands for days, M for months, Y for years, and n is a number. Thus, for a reminder that is to be given once a year, the values 365D, 12M, or 1Y would all work. If a reminder is only to be given once in a lifetime, use a frequency of 99Y. MINIMUM AGE: This field specifies the minimum age for defining an age range associated with a frequency. Leave it blank if there is no minimum age. MAXIMUM AGE: This field specifies the maximum age for defining an age range associated with a frequency. Leave it blank if there is no maximum age. AGE MATCH TEXT: This text will be displayed in the Clinical Maintenance component if the patient's age falls in the age range. AGE NO MATCH TEXT: This text will be displayed in the Clinical Maintenance component if the patient's age does not fall in the age range.
FINDING	The Findings multiple is documented later in this chapter, page 60.
FUNCTION FINDINGS	Function Findings are new in version 2.0. They are called Function Findings because they do a computation on the results from regular findings. Function Findings can be used in both patient cohort logic and resolution logic. 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 67.
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. 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	TX
Reminder Term	811.5	RT
Skin Test	9999999.28	ST
VA Drug Class	50.605	DC
VA Generic	50.6	DG
Vital Measurement	120.51	VM
Reminder Location List	810.9	RL

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. See the discussion of STATUS LIST in Appendix C.

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

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

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

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

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

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

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

- 'M' FOR MINIMAL
- 'MO' FOR MODERATE
- 'H' FOR HEAVY/SEVERE

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

Health Factors have a field called ENTRY TYPE. There are two possible values for this field: category and factor. Each factor health factor must belong to a category. Categories provide a way to group health factors. Typical examples of categories are alcohol use, breast cancer, and tobacco. When reminders are evaluated, if there is more than one health factor from a category in the definition, only the most recent health factor in the category can be true. This feature can be used to make a reminder applicable or not applicable for a patient.

Example:
A reminder for smoking cessation education provides a good example. A health factor of current smoker is used in the PATIENT COHORT LOGIC with the AND Boolean operator. A second health factor of non-smoker is included as an information finding. A patient comes in and is a current smoker so they are given the current smoker health factor; this makes the reminder applicable. The patient has the smoking cessation education; six months later he or she has quit, so is given the non-smoker health factor. Since non-smoker is more recent than current smoker, the reminder is not applicable. Another six months passes

and the patient is smoking again, so he is given the current smoker health factor, which makes the reminder applicable again. All the health factors are still in the patient's record, so you can see the progression of their smoker non-smoker status.

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

The field WITHIN CATEGORY RANK will let you change this categorization behavior. See that section, page 62, 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. See the discussion of STATUS LIST in Appendix C. 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 13, 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 83.

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 97.

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 103, 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 and the ENDING 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. For more information see Appendix C.

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

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

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

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

Finding Type	Results File	Result Fields 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	I V=1 I V=2 I V=3 I V=4 I V=5
Exam (9999999.15)	V EXAM (9000010.13)	RESULT	A for Abnormal N for Normal	I V="A" I V="N"
Health Factor (9999999.64)	V HEALTH FACTOR (9000010.23)	LEVEL/SEVERITY	M for Minimal MO for Moderate H for Heavy/Severe	I V="M" I V="MO" I V="H"
Immunization (9999999.14)	V IMMUNIZATION (9000010.11)	SERIES	P for Partially Complete C for Complete B for Booster 1 for Series 1 2 for Series 2 3 for Series 3 4 for Series 4 5 for Series 5 6 for Series 6 7 for Series 7 8 for Series 8	I V="P" I V="C" I V="B" I V=1 I V=2 I V=3 I V=4 I V=5 I V=6 I V=7 I V=8
Laboratory Test (60)	LAB RESULTS in “CH” node	Number returned from the Lab API as the lab result	180	I V>130

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="O" I V="E" I V="R" 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. See Appendix C, for more information about statuses and Status List.

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:

```
  ---- Begin: FF(1)--------------------------------------------------
               Function String: MRD(2)>MRD(9)

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

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

Select section to edit: FF  Function Findings

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

```
FUNCTION FINDINGS FUNCTION STRING: MRD(1,3)>MRD(11,8,4)
FUNCTION FINDING NUMBER: 1// <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 70.

```
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).

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 >=140/90
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 has replaced is now the Function String within FF(1), Function Finding 1.

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

Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
 FI(2)&FI(11)&FF(1)&'FI(13)
```

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

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.

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

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

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

Example: Function Findings in VA-IHD LIPID PROFILE

This is what the MRD logic looks like under 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.

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

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

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

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

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

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

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

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)
```

Example: Function Findings in VA-WH Mammogram Screening

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

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

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 Appendix C 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:
          A         ADD STATUS
          D         DELETE A STATUS
          S         SAVE AND QUIT
          Q        QUIT WITHOUT SAVING CHANGES

Enter response: S// ?
Display when adding a status
Enter response: S// a  ADD STATUS
1 - * (WildCard)
2 - CANCELLED
3 - COM
4 - COMPLETE
5 - EXAMINED
6 - TRANSCRIBED
7 - WAITING FOR EXAM
Select a Radiology Procedure Status or enter '^' to Quit:  (1-7): 2,3,6

Statuses already defined for this finding item:
CANCELLED
COM
COMPLETE
TRANSCRIBED
     Select one of the following:
          A         ADD STATUS
          D         DELETE A STATUS
          S         SAVE AND QUIT
          Q         QUIT WITHOUT SAVING CHANGES

Enter response: S// ?
View when deleting a status
```

```
Enter response: S// d  DELETE A STATUS
1 - CANCELLED
2 - COM
3 - COMPLETE
4 - TRANSCRIBED
Select which status to be deleted:  (1-4): 2,4

Statuses already defined for this finding item:
CANCELLED
COMPLETE

     Select one of the following:
          A         ADD STATUS
          D         DELETE A STATUS
          S         SAVE AND QUIT
          Q         QUIT WITHOUT SAVING CHANGES
Enter response: S//
```

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

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

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

Tip: Here is a tip that will make it work a little bit faster when you are using a Condition to check the status. The status is checked before the Condition is applied so if your status list does not contain the status you are checking for in the Condition the Condition will never be true. So when you are using a Condition set the status list to the wildcard "*", this makes the status check faster.

Activate/Inactivate Reminders

Use this option to make individual reminders active or inactive.

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

```
INACTIVE FLAG: ?
     Enter "1" to inactivate the reminder item.
     Choose from:
       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

This option provides the functions for 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.

List Reminder Sponsors

```
Select Reminder Sponsor Management Option: SL  List Reminder Sponsors
DEVICE:   ANYWHERE    Right Margin: 80//
REMINDER SPONSOR LIST                          JAN 28,2003  10:39    PAGE 1
-------------------------------------------------------------------------------

Name:  A NEW SPONSOR
Class: VISN

Name:  CRPROVIDER,TWO
Class: VISN

Name:  CRPROVIDER,THREE
Class: LOCAL

Name:  Guidelines committee
Class: LOCAL

Name:  HOSPITAL COMMITTEE
Class: LOCAL

Name:  INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
Class: NATIONAL

Name:  CRPROVIDER,FOUR
Class: NATIONAL

Name:  Mental Health Group
Class: LOCAL

Name:  Mental Health and Behavioral Science Strategic Group
Class: NATIONAL

Name:  Mental Health and Behavioral Science Strategic Group and Women Veterans
Health Program
Class: NATIONAL

Name:  NEW
Class: LOCAL

Name:  Office of Quality & Performance
Class: NATIONAL

Name:  PJH
```

```
Class: NATIONAL

Name:  QUERI IHD
Class: NATIONAL

Name:  SLC OIFO DEVELOPMENT
Class: NATIONAL

Name:  Women Veterans Health Program
Class: NATIONAL
```

Reminder Sponsor Inquiry

```
Select Reminder Sponsor Management Option: SI  Reminder Sponsor Inquiry
Select Reminder Sponsor: ?
 Answer with REMINDER SPONSOR NAME, or ASSOCIATED SPONSORS
 Do you want the entire REMINDER SPONSOR List? N  (No)
Select Reminder Sponsor: ??

   Choose from:
   Guidelines committee         LOCAL
   HOSPITAL COMMITTEE         LOCAL
   INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ         NATIONAL
   CRPROVIDER,TEN         NATIONAL
   Mental Health Group         LOCAL
   Mental Health and Behavioral Science Strategic Group         NATIONAL
   Office of Quality & Performance         NATIONAL
   QUERI IHD         NATIONAL
   SLC OIFO DEVELOPMENT         NATIONAL
   Women Veterans Health Program         NATIONAL

Select Reminder Sponsor: Office of Quality & Performance       NATIONAL
DEVICE:   ANYWHERE    Right Margin: 80//
REMINDER SPONSOR INQUIRY                     Jan 28, 2003 10:41:47 am  Page 1
-------------------------------------------------------------------------------

        NUMBER: 15

Name:  Office of Quality & Performance
Class: NATIONAL

Associated Sponsors:

Select Reminder Sponsor:
```

Add/Edit Reminder Sponsor

```
Select Reminder Sponsor Management Option: SE  Enter/Edit Reminder Sponsor

Select Reminder Sponsor:    Office of Quality & Performance     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 Taxonomy Item	PXRM TAXONOMY INQUIRY	This option provides a detailed report of a Taxonomy item's definition, with a list of all the ICD0, ICD9, and CPT codes included in the taxonomy.
TE	Add/Edit Taxonomy Item	PXRM TAXONOMY EDIT	This option is used to edit Reminder Taxonomy Item definitions.
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.
TX	Selected Taxonomy Expansion	PXRM TAXONOMY EXPANSION	This option can be used to selectively rebuild a taxonomy expansion.
TXV	Verify all taxonomy Expansions	PXRM TAXONOMY EXPANSION VERIFY	Option for verifying the correctness of all taxonomy expansions
TXA	Expand all Taxonomies	PXRM TAXONOMY EXPANSION ALL	This option can be used to rebuild all taxonomy expansions

Taxonomy Fields

Dialog taxonomy fields are listed on page 203.

NAME	DESCRIPTION
NAME	This is the name of the taxonomy. It must be unique. Nationally distributed taxonomies start with “VA-“.
BRIEF DESCRIPTION	This is a brief description of what the taxonomy represents. This may be used to further define the intended use of this taxonomy.
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.

```
Select Reminder Taxonomy Management Option: TL  List Taxonomy Definitions
DEVICE: <Enter>  ANYWHERE    Right Margin: 80//<Enter>
REMINDER TAXONOMY LIST
            ICD9 RANGE          ICD0 RANGE           CPT RANGE
NAME      LOW       HIGH      LOW       HIGH      LOW       HIGH
-----------------------------------------------------------------------------
FTEST1
         100.9     100.9     99.52     99.52

PAIN TAXONOMY
         388.71    388.72                        62350     62351
         719.40    719.49                        90783     90784
         724.1     724.1
         789.00    789.09
         724.2     724.2
         926.11    926.11
         724.5     724.5

PROBTEST 1
         311.      311.                          90724     90724

PROBTEST 2
         495.2     495.2

Pain - Lower Back
         388.71    388.72                        62350     62351
         719.40    719.49                        90783     90784
         724.1     724.1
         789.00    789.09
         724.2     724.2
         926.11    926.11
         724.5     724.5

RADTAX
                                                76091     76091
                                                71030     71030

SL ALCOHOL ABUSE
         291.0     291.9
         303.00    303.93
         305.00    305.03
         571.0     571.3
         760.71    760.71
         790.3     790.3
         980.0     980.0
         357.5     357.5
         425.5     425.5
         535.3     535.31
         V11.3     V11.3
```

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                   X


ICD0 Codes:

 Range 99.55-99.55  Adjacent Lower-99.54  Adjacent Higher-99.56

  Code    ICD Operation/Procedure         Activation  Inactivation
  ----    -----------------------         ----------  ------------
  99.55   VACCINATION NEC                 10/01/1978

 Range 99.59-99.59  Adjacent Lower-99.58  Adjacent Higher-99.60

  Code    ICD Operation/Procedure         Activation  Inactivation
  ----    -----------------------         ----------  ------------
  99.59   VACCINATION/INNOCULA NEC        10/01/1978


CPT Codes:
```

```
Range G0009-G0009  Adjacent Lower-G0008  Adjacent Higher-G0010

  Code    CPT Short Name                  Activation  Inactivation Selectable
  ----    --------------                  ----------  ------------ ----------
  G0009   Admin pneumococcal vaccine      07/01/1995                   X

 Range 90732-90732  Adjacent Lower-90731  Adjacent Higher-90733

  Code    CPT Short Name                  Activation  Inactivation Selectable
  ----    --------------                  ----------  ------------ ----------
  90732   PNEUMOCOCCAL VACCINE            06/01/1994
```

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 Q0060 is inactive.
Selectable CPT code Q0061 is inactive.

Taxonomy: VA-INFLUENZA IMMUNIZATION = TX(33)
Selectable CPT code 90724 is inactive.
Selectable CPT code Q0034 is inactive.

Taxonomy: CSTEST = TX(41)
Adjacent codes have changed for the range defined by:
 Low code  C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead

Adjacent codes have changed for the range defined by:
```

```
 Low code  C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead

Adjacent codes have changed for the range defined by:
 Low code  C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead

Adjacent codes have changed for the range defined by:
 Low code  C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead

The following are new CPT codes in the expansion for this taxonomy:
 C2804-Ventak Prizm 2 DR Defib
 C2805-Jewel AF 7250 Defib
 C2808-Contak TR 1241

Selectable CPT code C2804 is inactive.
Selectable CPT code C2805 is inactive.
Selectable CPT code C2806 is inactive.
Selectable CPT code C2807 is inactive.
Selectable CPT code C2808 is inactive.

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

Adjacent codes have changed for the range defined by:
 Low code  C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead

Adjacent codes have changed for the range defined by:
 Low code  C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead

Adjacent codes have changed for the range defined by:
 Low code  C2805-Jewel AF 7250 Defib
 High code C2807-Contak CD 1823
  Old adjacent lower code C2803-Ventak Prizm DR HE Defib
```

```
  New adjacent lower code C2804-Ventak Prizm 2 DR Defib
  Old adjacent higher code C2808-Contak TR 1241
  New adjacent higher code C3001-Kainox SL/RV defib lead

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 1
Line 2

Line 1
Line 2
Line 3
```

This was corrected.

Reminder Term Management Options

Synonym	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.
TC	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
    Class:         NATIONAL
    Date Created:
    Sponsor:
    Review Date:
    Description:   Represents any AIM evaluation that is positive or scored
                   above the cutoff defined as abnormal.  (AIMS greater than
                   or equal to 7)
    Findings:      AIMS (FI(2)=MH(234))


ALANINE AMINO (ALT) (SGPT)
    Class:         NATIONAL
    Date Created:  MAY 21,2000
    Sponsor:       INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Review Date:
    Description:   This term represents serum glutamic-pyruvic transaminase
                   or ALT laboratory tests. Enter the finding items from the
                   Laboratory Test file (#60) that represent the SGPT test.

                   National terms related to this term.
                     WKLD CODE file (#64): The national lab test term is
                   Transferase Alanine Amino  SGPT.

                     CPT File (#81) procedure:
                       CPT code: 84460    SHORT NAME: ALANINE AMINO (ALT) (SGPT)
                       CPT CATEGORY: CHEMISTRY              SOURCE: CPT
                       EFFECTIVE DATE: JUN 01, 1994         STATUS: ACTIVE
```

```
List Reminder Terms, cont'd
                      DESCRIPTION: TRANSFERASE;
                       DESCRIPTION: ALANINE AMINO (ALT) (SGPT)

                     Lexicon: The CPT code is in the Lexicon term as a
                   Laboratory Procedure term.
    Findings:

ANTIDEPRESSANT MEDICATIONS
    Class:         NATIONAL
    Date Created:  DEC 28,2000
    Sponsor:
    Review Date:
    Description:
    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
-------------------------------------------------------------------------------

IHD DIAGNOSIS                                                    No.27
-----------------------------------------------------------------------------
Class:                  NATIONAL
Sponsor:                Office of Quality & Performance
Date Created:           JUL 23,2001
Review Date:

Description:
    This term represents patients diagnosed with Ischemic Heart Disease
    (IHD).

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

Edit History:

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


Findings:

                  Finding Item:  VA-ISCHEMIC HEART DISEASE  (FI(1)=TX(14))
                  Finding Type:  REMINDER TAXONOMY
         Use Inactive Problems:  NO
```

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
     1   HBs Ab positive       NATIONAL
     2   HBs Ag positive       NATIONAL
CHOOSE 1-2: 1  HBs Ab positive     NATIONAL
Select Finding: HEPATITIS B SURFACE ANTIBODY
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>
```

This is where you enter the local finding name.

NOTE: In most cases, a finding modifier on a term takes precedence over the modifier in the definition. An exception to this is the Occurrence Count. The reason for this can be understood by looking at an

example. Let's say a term has been mapped to three findings with an Occurrence Count of 1 for finding 1, 2 for finding 2, and 3 for finding 3. If the maximum number of occurrences is found for each finding, then how do you determine how many occurrences to display? In this case, we would have 6 occurrences, so we have the possibility of displaying anywhere between 1 and 6 of them. The solution is to display the number of occurrences specified at the definition level.

Copy Reminder Term

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

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

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

Reminder Location List Management

Location Lists 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
LL	List Location Lists	PXRM LOCATION LIST LIST	This option is used to get a list of Location Lists.
LI	Location List Inquiry	PXRM LOCATION LIST INQUIRY	This option is used to 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: ll  List Location Lists
DEVICE: ;;999  ANYWHERE    Right Margin: 80//
REMINDER LOCATION LIST LIST                    SEP 16,2003  14:08    PAGE 1
                                   AMIS
                                   REPORTING
  CLINIC STOP                      STOP CODE
  HOSPITAL LOCATION
-------------------------------------------------------------------------------

Name:  TEST LOCATION LIST
Class: LOCAL

Clinic Stops:

Hospital Locations:
  CARDIOLOGY
  PULMONARY CLINIC
  OR 1
Name:  VA-IHD QUERI CLINIC STOPS
Class: NATIONAL

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

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

Clinic Stops:
  MENTAL HEALTH CLINIC - IND       502

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

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

Hospital Locations:
Name:  jg-list
```

```
Class: LOCAL

Clinic Stops:
  ALCOHOL SCREENING                706
  ALCOHOL TREATMENT                 81

Hospital Locations:
  8W SUBSTANCE ABUSE
Name:  new location list
Class: LOCAL

Clinic Stops:
  CARDIOLOGY                        29

Hospital Locations:
```

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
-------------------------------------------------------------------------------

        NUMBER: 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 Locations:
```

Add/Edit Location List

```
Select Reminder Location List Management Option: le  Add/Edit Location List

Select Location List: TEST LOCATION LIST       LOCAL
NAME: TEST LOCATION LIST// <Enter>
CLASS: LOCAL// <Enter>
DESCRIPTION:
  1>test list
EDIT? No//: <Enter>
Select CLINIC STOP: CARDIOLOGY// <Enter>
  Select CREDIT STOP TO EXCLUDE: ALCOHOL SCREENING
         //<Enter>
Select CLINIC STOP: <Enter>
```

```
Select 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// y
  (Yes)
   REMINDER LOCATION LIST CLASS: l  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// y
   (Yes)
  Select CREDIT STOP TO EXCLUDE: <Enter>
Select CLINIC STOP: alcohol tr
     1   ALCOHOL TREATMENT       81
     2   ALCOHOL TREATMENT-GROUP       556
     3   ALCOHOL TREATMENT-INDIVIDUAL       508
CHOOSE 1-3: 1  ALCOHOL TREATMENT     81
  Are you adding 'ALCOHOL TREATMENT' as
    a new CLINIC STOP LIST (the 2ND for this REMINDER LOCATION LIST)? No// y
  (Yes)
  Select CREDIT STOP TO EXCLUDE: <Enter>

Select CLINIC STOP: <Enter>
Select HOSPITAL LOCATION: ?
        You may enter a new HOSPITAL LOCATION LIST, if you wish
        Enter a hospital location

 Answer with HOSPITAL LOCATION NAME, or ABBREVIATION, or
     STOP CODE NUMBER, or CREDIT STOP CODE, or TEAM
 Do you want the entire 50-Entry HOSPITAL LOCATION List? NO

Select HOSPITAL LOCATION: 8w SUBSTANCE ABUSE
  Are you adding '8W SUBSTANCE ABUSE' as
    a new HOSPITAL LOCATION LIST (the 1ST for this REMINDER LOCATION LIST)? No//y
(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 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 REMINDER DIALOG  RGP4 ELEMENT 2, IEN=1536
Adding REMINDER DIALOG  RGP4 ELEMENT 1, IEN=1535
Adding REMINDER DIALOG  RESULT GROUP 4, IEN=1534
Adding REMINDER DIALOG  RGP1 ELEMENT 2, IEN=1520
Adding REMINDER DIALOG  RGP1 ELEMENT 1, IEN=1519
Adding REMINDER DIALOG  RESULT GROUP 1, IEN=1529
Adding REMINDER DIALOG  GP1 ELEMENT 2, IEN=1515
Adding REMINDER DIALOG  RGP2 ELEMENT 2, IEN=1522
Adding REMINDER DIALOG  RESULT ELEMENT 1, IEN=1537
Adding REMINDER DIALOG  RGP3 ELEMENT 2, IEN=1526
Adding REMINDER DIALOG  RGP3 ELEMENT 1, IEN=1525
Adding REMINDER DIALOG  RESULT GROUP 3, IEN=1533
Adding REMINDER DIALOG  RGP2 ELEMENT 1, IEN=1521
Adding REMINDER DIALOG  RESULT GROUP 2, IEN=1530
Adding REMINDER DIALOG VA-IHD LIPID OTHER DEFER, IEN=390
Adding REMINDER DIALOG VA-IHD SPACER, IEN=397
Adding REMINDER DIALOG VA-IHD LIPID 120-129 DONE ELSE, IEN=392
Adding REMINDER DIALOG VA-IHD LIPID >129 DONE ELSE, IEN=281
Adding REMINDER DIALOG VA-IHD LIPID 100-119 DONE ELSE, IEN=280
Adding REMINDER DIALOG VA-IHD LIPID <100 DONE ELSE, IEN=279
Adding REMINDER DIALOG VA-IHD LIPID DONE ELSEWHERE GROUP, IEN=404
Adding REMINDER DIALOG VA-IHD UNCONFIRMED DIAGNOSIS, IEN=276
Adding REMINDER DIALOG VA-IHD LIPID REFUSED, IEN=270
Adding REMINDER DIALOG VA-IHD DIRECT LDL ORDERED, IEN=278
Adding REMINDER DIALOG VA-IHD FASTING LIPID ORDERED, IEN=277
Adding REMINDER DIALOG VA-IHD LIPID ORDER GROUP, IEN=272
Adding REMINDER DIALOG VA-IHD LIPID PROFILE HEADER, IEN=209
Adding REMINDER DIALOG VA-IHD LIPID PROFILE, IEN=269
Adding REMINDER DIALOG  GP1 ELEMENT 1, IEN=1514
Adding REMINDER DIALOG  GROUP 1, IEN=1527
Adding REMINDER DIALOG EXCHANGE DIALOG, IEN=1709
Adding HEALTH SUMMARY COMPONENT PCE HEALTH FACTORS ALL, IEN=204
Adding HEALTH SUMMARY COMPONENT CLINICAL REMINDERS DUE, IEN=202
Adding HEALTH SUMMARY COMPONENT  TEST, IEN=5000147
Adding HEALTH SUMMARY COMPONENT PCE HEALTH FACTORS SELECTED, IEN=203
Adding HEALTH SUMMARY TYPE NP NEW HS TYPE, IEN=223
Adding HEALTH SUMMARY TYPE  TEST PROGESS, IEN=208
Adding HEALTH SUMMARY TYPE VA-BRADEN SCALE 30D, IEN=104
Adding HEALTH SUMMARY OBJECTS NP TIUHS OBJECT TEST (TIU), IEN=6600090
Adding HEALTH SUMMARY OBJECTS  LAB TEST (TIU), IEN=6600003
Adding HEALTH SUMMARY OBJECTS VA-BRADEN SCALE 30D (TIU), IEN=6600082
Adding TIU DOCUMENT DEFINITION PATIENT SEX, IEN=74
Adding TIU DOCUMENT DEFINITION PATIENT RACE, IEN=75
```

```
Adding TIU DOCUMENT DEFINITION NP TIUHS OBJECT TEST, IEN=1647
Adding TIU DOCUMENT DEFINITION  TIU TEST, IEN=1337
Adding TIU DOCUMENT DEFINITION BRADEN SCALE 30D, IEN=1332
Packing is complete.
```

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

Example 2

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

```
Select from the following reminder files:
   1 REMINDER COMPUTED FINDINGS
   2 REMINDER COUNTING GROUP
   3 REMINDER DEFINITION
   4 REMINDER DIALOG
   5 REMINDER EXTRACT COUNTING RULE
   6 REMINDER EXTRACT DEFINITION
   7 REMINDER LIST RULE
   8 REMINDER LOCATION LIST
   9 REMINDER SPONSOR
  10 REMINDER TAXONOMY
  11 REMINDER TERM
Select a file:  (1-11): 4
Select REMINDER DIALOG NAME: EXCHANGE2 DIALOG     reminder dialog     LOCAL
         ...OK? Yes//   (Yes)
Enter another one or just press enter to go back to file selection.
Select REMINDER DIALOG NAME:
Select from the following reminder files:
   1 REMINDER COMPUTED FINDINGS
   2 REMINDER COUNTING GROUP
   3 REMINDER DEFINITION
   4 REMINDER DIALOG
   5 REMINDER EXTRACT COUNTING RULE
   6 REMINDER EXTRACT DEFINITION
   7 REMINDER LIST RULE
   8 REMINDER LOCATION LIST
   9 REMINDER SPONSOR
  10 REMINDER TAXONOMY
  11 REMINDER TERM
Select a file:  (1-11):
**WARNING**
EXCHANGE2 DIALOG contains the following errors.
The dialog element INACTIVE OBJECT contains a reference to a TIU
Object NP TIUHS OBJECT TEST in the Dialog Text field. This TIU Object is
inactive.
Packing is complete.
```

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

Example 3

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

```
Select from the following reminder files:
   1 REMINDER COMPUTED FINDINGS
   2 REMINDER COUNTING GROUP
   3 REMINDER DEFINITION
   4 REMINDER DIALOG
   5 REMINDER EXTRACT COUNTING RULE
   6 REMINDER EXTRACT DEFINITION
   7 REMINDER LIST RULE
   8 REMINDER LOCATION LIST
   9 REMINDER SPONSOR
  10 REMINDER TAXONOMY
  11 REMINDER TERM
Select a file:  (1-11): 4
Select REMINDER DIALOG NAME: EXCHANGE3 DIALOG     reminder dialog     LOCAL
         ...OK? Yes//   (Yes)
Enter another one or just press enter to go back to file selection.
Select REMINDER DIALOG NAME:
Select from the following reminder files:
   1 REMINDER COMPUTED FINDINGS
   2 REMINDER COUNTING GROUP
   3 REMINDER DEFINITION
   4 REMINDER DIALOG
   5 REMINDER EXTRACT COUNTING RULE
   6 REMINDER EXTRACT DEFINITION
   7 REMINDER LIST RULE
   8 REMINDER LOCATION LIST
   9 REMINDER SPONSOR
  10 REMINDER TAXONOMY
  11 REMINDER TERM
Select a file:  (1-11):
Checking reminder dialog(s) for errors....
**FATAL ERROR**
EXCHANGE3 DIALOG contains the following errors.
The dialog element  BAD OBJECT contains a reference to a TIU Object
OBJECT NOT EXIST in the Dialog Text field. This TIU Object does not exist
on the system.
The dialog element  INACTIVE OBJECT contains a reference to a TIU
Object NP TIUHS OBJECT TEST in the Dialog Text field. This TIU Object is
inactive.
Cannot create the packed file. Please correct the above fatal error(s).
```

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

Terminology

Packing: When you create an Exchange File entry, you select one or more reminder file entries for packing. The packing process consists of going through the selected entries and building a list of everything they need to function. The entire list of items is included in the Exchange File entry. For example, if a reminder definition is being packed everything the definition needs to function is included. Some of the included components may not be transportable for various reasons such as being standardized, they will be included in the Exchange File entry so that we know they are used but they will not be installable.

Exchange File (#811.8): Stores entries of packed reminders and dialogs with their components Packed reminders can be exchanged through VistA MailMan or as a Host file. The default host file extension is .PRD (Packed Reminder Definition).

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

Host File: Often the domains for MailMan transmission for test accounts are closed. In this case, a host file is used to transport the packed reminders. When a host file is created, it is initially stored on the MUMPS server. (Host file is the terminology used in Kernel.) Typically, you would generate a host file for use on a web site. The Host File will have to be moved from the MUMPS server to the web server. Once it is on the web server, it can be downloaded using a web browser. This will initially put it on your PC. Then it will have to be moved from the PC to the MUMPS server, at which point it can be loaded into the Exchange File (#811.8).

Technical Overview

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

All the components used in the item selected for packing are included. Whenever an installation is done, a history of the installation details is retained in the Exchange File.
Reminder dialogs are installed with the disabled field set to “DISABLED IN REMINDER EXCHANGE.” (When you edit the dialog, one of the fields is DISABLE. If this field contains any text, then the dialog is disabled. To enable it, delete the text.)

Steps to Use Reminder Exchange

Summary of Steps
Detailed steps are provided in the following pages.

Export Steps

Step	Action
1. Decide which items to pack	LR – List Reminder Descriptions and RI – Reminder Inquiry
2. Create the Exchange File entry	CFE – Create File Entry
3. Export the packed entries	CHF – Create Host File or CMM – Create MailMan Message

Import Steps

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

Reminder Exchange Main Screen

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

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

```
Clinical Reminder Exchange          Sep 16, 2004@15:20:11         Page: 1 of    1
Exchange File Entries.

           Entry                        Source                 Date Packed
   1  CDUE                          CRUSER,ONE@SALT CITY      08/08/2003@10:59:52
   2  CHA UNVESTED PATIENTS         CRPROVIDER,TWO@VAMC ONE   09/26/2004@13:00:59
   6  EDUTEST                       CRUSER,ONE@SALT CITY      06/19/2004@11:59:52
   8  Hypertension Screen (VHACHS   CRPROVIDER,SIX@VAMC SIX   09/20/2004@10:59:22

          + Next Screen   - Prev 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
```

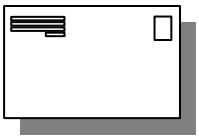
A: Steps to Export Reminders

Export Steps

1. Select item

2. Create an Exchange File Entry
   Enter description
   Enter key words

3. Create MailMan Message or Host File
   Enter subject
   Select recipient



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.

```
Clinical Reminder Exchange    Jan 02, 2009@11:21:47          Page:    1 of    1
Exchange File Entries.
           Entry                        Source                    Date Packed
   1  BLOOD PRESSURE CHECK          CRPROVIDER,ONE@VAMC1      03/28/2004@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      CRPROVIDER,TWO@VAMC2      03/29/2004@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    CRPROVIDER,SIX@VAMC6      03/27/2004@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   CRPROVIDER,TEN@VAMC10     3/27/2004@14:54:24
   5  VA-HEP C RISK ASSESSMENT      CRPROVIDER,ONE@VAMC1      03/27/2004@14:56:13

          + Next Screen   - Prev Screen   ?? More Actions
CFE  Create Exchange File Entry         IH   Installation History
CHF  Create Host File                   LHF  Load Host File
CMM  Create MailMan Message             LMM  Load MailMan Message
DFE  Delete Exchange File Entry         LR   List Reminder Definitions
IFE  Install Exchange File Entry        RI   Reminder Definition Inquiry
Select Action: Quit// CFE   Exchange File Entry Creation
```

```
Select 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 02, 2004@11:21:47          Page:    1 of    1
Exchange File Entries.
            Entry                          Source                     Date Packed
   1  BLOOD PRESSURE CHECK          CRPROVIDER,ONE@VAMC1      03/28/2004@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      CRPROVIDER,TWO@VAMC2      03/29/2004@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    CRPROVIDER,SIX@VAMC6      03/27/2004@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   CRPROVIDER,TEN@VAMC10     3/27/2004@14:54:24
   5  VA-HEP C RISK ASSESSMENT      CRPROVIDER,ONE@VAMC1      03/27/2004@14:56:13

          + Next Screen   - Prev 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// CHF
Select Entry(s):  (1-5): 2
```

```
Enter a path: USER$:[TEMP]// ?

A host file is a file in your host system.
A complete host file consists of a path, file name, and extension
A path consists of a device and directory name.
The default extension is prd (Packed Reminder Definiton).
The default path is USER$:[TEMP]

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

Enter a file name: ?

A file name has the format NAME.EXTENSION, the default extension is PRD
Therefore if you type in FILE for the file name, the host file will be
  USER$:[TEMP]FILE.PRD

Enter a file name: DiabeticEye
Will save reminder to host file USER$:[TEMP]DiabeticEye.PRD?: Y//<Enter> ES
```

3b. CMM-Create MailMan Message

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

```
Clinical Reminder Exchange     Apr 02, 2004@11:21:47          Page:    1 of    1
Exchange File Entries.

           Entry                          Source                    Date Packed
   1  BLOOD PRESSURE CHECK          CRPROVIDER,ONE@VAMC1      03/28/2004@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      CRPROVIDER,TWO@VAMC2      03/29/2004@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    CRPROVIDER,SIX@VAMC6      03/27/2004@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   CRPROVIDER,TEN@VAMC10     3/27/2004@14:54:24
   5  VA-HEP C RISK ASSESSMENT      CRPROVIDER,ONE@VAMC1      03/27/2004@14:56:13

          + Next Screen   - Prev Screen   ?? More Actions
CFE  Create Exchange File Entry         IH   Installation History
CHF  Create Host File                   LHF  Load Host File
CMM  Create MailMan Message             LMM  Load MailMan Message
DFE  Delete Exchange File Entry         LR   List Reminder Definitions
IFE  Install Exchange File Entry        RI   Reminder Definition Inquiry
Select Action: Quit// cmm   MailMan Message Creation
```

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
D.?                         for a list of devices

Enter '??' for detailed help.

Forward mail to: [Enter a user or Mail Group.]
Select basket to send to: IN//
And Forward to:
```

```
Clinical Reminder Exchange     May 03, 2004@11:27:25          Page:    1 of    1
Successfully stored entries in message 43035.

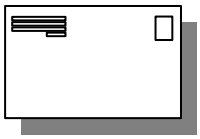
            Entry                          Source                    Date Packed
   1  BLOOD PRESSURE CHECK          CRPROVIDER,ONE@VAMC1      03/28/2004@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      CRPROVIDER,TWO@VAMC2      03/29/2004@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    CRPROVIDER,SIX@VAMC6      03/27/2004@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   CRPROVIDER,TEN@VAMC1      03/27/2004@14:54:24
   5  VA-HEP C RISK ASSESSMENT      CRPROVIDER,ONE@VAMC1      03/27/2004@14:56:13

          + Next Screen   - Prev Screen   ?? More Actions
CFE  Create Exchange File Entry          IH   Installation History
CHF  Create Host File                    LHF  Load Host File
CMM  Create MailMan Message              LMM  Load MailMan Message
DFE  Delete Exchange File Entry          LR   List Reminder Definitions
IFE  Install Exchange File Entry         RI   Reminder Definition Inquiry
Select Action: Quit//
```

B. Steps to Import Reminders

1. Request packed entry entry

2. Receive Mailman Message
   Usually in Production



3. Forward Mailman Message
   To test account (if necessary)

4. Load MailMan message
   Creates entry

1a. LMM – Load MailMan Message

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

```
Clinical Reminder Exchange    Jul 23, 2005@11:40:01          Page:    1 of    2
           Entry                        Source                     Date Packed


          + Next Screen   - Prev Screen   ?? More Actions
CFE  Create Exchange File Entry         IH   Installation History
CHF  Create Host File                   LHF  Load Host File
CMM  Create MailMan Message             LMM  Load MailMan Message
DFE  Delete Exchange File Entry         LR   List Reminder Definitions
IFE  Install Exchange File Entry        RI   Reminder Definition Inquiry
Select Action: Next Screen// lmm   Load MailMan Message

     1   CREX: diabetic eye exam
         CRPROVIDER,ONE JUL 23, 2001@11:39:51

     2   CREX: pain screening
         CRPROVIDER,ONE JUL 23, 2001@11:37:59

CHOOSE 1-2: 1  CREX: diabetic eye exam
         CRPROVIDER,ONE JUL 23, 2001@11:39:51

Loading MailMan message number 44024
```

1b. LHF – Load Host File

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

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

```
Clinical Reminder Exchange    Apr 02, 2004@11:21:47          Page:    1 of    1
Exchange File Entries.

           Entry                        Source                     Date Packed
   1  BLOOD PRESSURE CHECK          CRPROVIDER,ONE@VAMC1      03/28/2004@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      CRPROVIDER,TWO@VAMC2      03/29/2004@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    CRPROVIDER,SIX@VAMC6      03/27/2004@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   CRPROVIDER,TEN@VAMC10     3/27/2004@14:54:24
   5  VA-HEP C RISK ASSESSMENT      CRPROVIDER,ONE@VAMC1      03/27/2004@14:56:13

          + Next Screen   - Prev 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// lhf   Load Host File

Enter a path: USER$:[TEMP]// <Enter>
The following PRD files were found in USER$:[TEMP]
  DIABETICEYE.PRD;1
Enter a file name: DIABETICEYE
Loading host file USER$:[TEMP]DIABETICEYE.PRD

Select Action: Quit// -   -
```

```
Clinical Reminder Exchange     Jul 23, 2005@11:17:42          Page:    1 of    2
Host file USER$:[SPOOL]DIABETICEYE.PRD successfully loaded.


          + Next Screen   - Prev Screen   ?? More Actions
CFE  Create Exchange File Entry         IH   Installation History
CHF  Create Host File                   LHF  Load Host File
CMM  Create MailMan Message             LMM  Load MailMan Message
DFE  Delete Exchange File Entry         LR   List Reminder Definitions
IFE  Install Exchange File Entry        RI   Reminder Definition Inquiry

Select Action: Next Screen//
```

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

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

     Select one of the following:
          C         Create a new entry by copying to a new name
          I         Install or Overwrite the current entry
          Q         Quit the install
          S         Skip, do not install this entry
Enter response: S// C reate a new entry by copying to a new name
```

2a. Installing Reminders from the Exchange File

The action IFE allows a packed entry to be selected for installation from the Exchange File (#811.8). Details of the Exchange File entry are displayed. Individual components are displayed (grouped by type). All or individual components may be selected for installation.

```
Exchange File Components      Aug 24, 2009@11:19:18        Page:    1 of    3


      Component                                              Category     Exists
Source:      CRMANAGER@VAMCXXXX
Date Packed: 08/12/2009@11:07:26
Package Version: 2.0P12

Description:
Patient reminder due on anyone with 2 entries of a diagnosis of HTN in
the past 3 years.  This reminder does not resolve.  Additional text is
displayed to the patient if the last 3 BPs were <= 130/80, if the last BP
was >140/90 or if any of the last 3 BPs was >=160/100.

If you use a different taxonomy for HTN or for renal diseases, you can
substitute you local taxonomies into the national reminder term.

Keywords:

Components:


GMRV VITAL TYPE
      BLOOD PRESSURE                                                      X

REMINDER SPONSOR
```

```
   1  VA National Center for Health Promotion and
      Disease Prevention (NCP)
   2  Office of Quality & Performance                                    X
   3  National Clinical Practice Guideline Council                       X

REMINDER TAXONOMY
   4  VA-DIABETES                                                        X
   5  VA-HYPERTENSION                                                    X

REMINDER TERM
   6  VA-BP >130/80 (ANY OF LAST 3)
   7  VA-BP >=160/100                                                    X
   8  VA-BP >=140/90                                                     X
   9  VA-MHV DIABETES OR KIDNEY DISEASE                                  X
  10  VA-MHV HYPERTENSION DX                                             X

REMINDER DEFINITION
  11  VA-MHV HYPERTENSION                                                X
```

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 Components              Jan 26, 2005@12:38:51          Page:    1 of    1
Packed reminder dialog: SMOKING CESSATION EDUCATION
Item  Seq. Dialog Summary                                        Type     Exists

  1    1    HF ACTIVATE PNEUMOCOCCAL VACCINE DONE ELSEWHERE      element   X

  2    2    MH AIMS                                              element   X

  3    3    VM BLOOD PRESSURE DONE                               element   X

  4         SMOKING CESSATION EDUCATION                          dialog    X

          + Next Screen   - Prev Screen   ?? More Actions
DD   Dialog Details       DT   Dialog Text          IS   Install Selected
DF   Dialog Findings      DU   Dialog Usage         QU   Quit
DS   Dialog Summary       IA   Install All
Select Action: Quit//
```

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

Other views may be selected:

DD Dialog Details – displays dialog summary plus any PXRM type additional prompts.

DF Dialog Findings – displays the findings associated with each dialog component and if the finding already exists on the system.

DT Dialog Text – displays the dialog question text for each component. This gives a preview of how the dialog will display in CPRS.

DU Dialog Usage – displays any other existing reminder dialogs using these components.

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

3. Quick Install of Reminder Dialogs

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

```
Dialog Components              Jan 26, 2005@12:52:05          Page:    1 of    1
Packed reminder dialog: DEMO REMINDER - SIMPLE

 Item  Seq. Dialog Summary                                        Type     Exists
  1         DEMO REMINDER - SIMPLE                                 dialog

  2    5    IM HEP A DONE                                          element

  3    10   IM HEP A DONE ELSEWHERE                                element

  4    15   IM HEP A CONTRA                                        element

          + Next Screen   - Prev Screen   ?? More Actions
DD   Dialog Details       DT   Dialog Text          IS   Install Selected
DF   Dialog Findings      DU   Dialog Usage         QU   Quit
DS   Dialog Summary       IA   Install All
Select Action: Quit// IA   Install All

All dialog components for DEMO REMINDER - SIMPLE are new.
Install reminder dialog without making any changes: Y// ES
Reminder Dialog DEMO REMINDER - SIMPLE is not linked to a reminder.
Select Reminder to Link: LOCAL HEP A IMMUNIZATION
```

```
Dialog Components              Jan 26, 2005@12:52:05          Page:    1 of    1
Packed reminder dialog: DEMO REMINDER - SIMPLE
DEMO REMINDER - SIMPLE (reminder dialog) installed from exchange file.
 Item  Seq. Dialog Summary                                        Type     Exists
  1         DEMO REMINDER - SIMPLE                                 dialog

  2    5    IM HEP A DONE                                          element

  3    10   IM HEP A DONE ELSEWHERE                                element

  4    15   IM HEP A CONTRA                                        element

          + Next Screen   - Prev Screen   ?? More Actions
DD   Dialog Details       DT   Dialog Text          IS   Install Selected
DF   Dialog Findings      DU   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@11:27:15          Page:    1 of    2
Exchange File Entries.

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

```
Installation History          Jul 23, 2004@11:27:27          Page:    1 of    1

       Entry                          Source                    Date Packed
      A**A SG PAIN SCREENING       CRPROVIDER,ONE@VAMC1
07/23/2001@10:55:23
     Installation Date       Installed By
     -----------------       ------------
   1 07/23/2004@10:58:48     CRPROVIDER,ONE

          Enter ?? for more actions
DH   Delete Install History             ID   Installation Details
Select Action: Quit// ID   Installation Details

A**A SG PAIN SCREENING                 07/23/2001@10:55:23  07/23/2001@10:58:48
     Component                         Action  New Name

EDUCATION TOPICS
   1 MANAGING PAIN                       S

HEALTH FACTORS
   2 REMINDER FACTORS                    S
   3 Pain New Category                   S
   4 PAIN PATIENT DECLINED TO REPORT PAIN S
   5 PATIENT UNABLE TO REPORT PAIN SCORE  S
   6 PAIN PATIENT REPORTS NEW PAIN        S
   7 PATIENT REPORTS NEW PAIN             S
   8 HF.SG PATIENT NEEDS PAIN ASSESSMENT  S

TIU TEMPLATE FIELD
   9 S's   OLD/NEW                       S

Installation Detail           Jul 23, 2004@11:27:39          Page:    2 of    2
+      Entry                              Date Packed         Date Installed

REMINDER DEFINITION
  10 A**A SG PAIN SCREENING               S

          Enter ?? for more actions
Select Action:Quit//
```

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

```
IFE  Install Exchange File Entry        RI   Reminder Definition Inquiry
Select Action: Next Screen// DFE   Delete Exchange File Entry
Select Entry(s):  (1-5): 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 History
CHF  Create Host File                   LHF  Load Host File
CMM  Create MailMan Message             LMM  Load MailMan Message
DFE  Delete Exchange File Entry         LR   List Reminder Definitions
IFE  Install Exchange File Entry        RI   Reminder Definition Inquiry
Select Action: Next Screen//
```

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:

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

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

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

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.

Here is the inquiry for a reminder called EDUTEST.

```
Select Reminder Definition Management Option: RI  Inquire about Reminder Definition
Select Reminder Definition:  EDUTEST                 Dec 24, 2008 11:00:10 am  Page 1
-------------------------------------------------------------------------------

EDUTEST                                                          No. 660020
-------------------------------------------------------------------------------


Print Name:             Education Test

Class:                  LOCAL

Sponsor:                NONE

Review Date:

Rescission Date:

Usage:                  CPRS

Related VA-* Reminder:

Reminder Dialog:        EXCHANGE 4

Priority:

Description:

Technical Description:


Baseline Frequency:

      Do In Advance Time Frame:  Wait until actually DUE
                  Sex Specific:
                 Ignore on N/A:
       Frequency for Age Range:  1 month for ages 25 to 60
                    Match Text:  This is the age match text for age range 25
                                 to 60. Patient is in age range.  Line 2.
                 No Match Text:  Patient is not in age range.  Line 2
       Frequency for Age Range:  1 year for ages 61 to 70
                    Match Text:  This is match text for 61 to 70. The
                                 patient's age is |AGE|.
```

```
                 No Match Text:  This is no match text for 61 to 70, the
                                 patient's age is |AGE|.


Findings:

  ---- Begin: VA-SUBSTANCE ABUSE  (FI(1)=ED(1)) ----------------------------
                 Finding Type: EDUCATION TOPICS
             Occurrence Count: -4
  ---- End: VA-SUBSTANCE ABUSE ----------------------------------------------


  ---- Begin: VA-EXERCISE SCREENING  (FI(2)=ED(11)) ------------------------
                 Finding Type: EDUCATION TOPICS
      Use in Resolution Logic: OR
             Occurrence Count: 2
                   Found Text: VA-EXERCISE SCREENING FOUND TEXT.  Lets test
                                out some objects.  The patient was seen on
                                |VISIT DATE|.  His last blood pressure was
                                |BLOOD PRESSURE|.  His last weight was
                                |PATIENT WEIGHT|.
               Not Found Text: VA-EXERCISE SCREENING NOT FOUND TEXT.
  ---- End: VA-EXERCISE SCREENING ------------------------------------------


  ---- Begin: VA-EXERCISE  (FI(3)=ED(363)) ---------------------------------
                 Finding Type: EDUCATION TOPICS
             Occurrence Count: 2
  ---- End: VA-EXERCISE -----------------------------------------------------


  ---- Begin: VA-EXERCISE  (FI(4)=ED(363)) ---------------------------------
                 Finding Type: EDUCATION TOPICS
          Beginning Date/Time: T-5M
  ---- End: VA-EXERCISE -----------------------------------------------------


  ---- Begin: VA-DIABETES  (FI(5)=ED(360)) ---------------------------------
                 Finding Type: EDUCATION TOPICS
  ---- End: VA-DIABETES -----------------------------------------------------


  ---- Begin: EDUTEST  (FI(8)=RT(660006)) ----------------------------------
                 Finding Type: REMINDER TERM
             Occurrence Count: 3

                     Mapped Findings:
                  Mapped Finding Item: ED.VA-SUBSTANCE ABUSE

                  Mapped Finding Item: ED.VA-EXERCISE SCREENING

                  Mapped Finding Item: ED.VA-EXERCISE

                  Mapped Finding Item: ED.VA-ADVANCE DIRECTIVES

  ---- End: EDUTEST ---------------------------------------------------------


 Function Findings:

  ---- Begin: FF(1)---------------------------------------------------------
               Function String: MRD(1,2)>MRD(5)
      Expanded Function String:
```

```
       MRD(VA-SUBSTANCE ABUSE,VA-EXERCISE SCREENING)>MRD(VA-DIABETES)
       Use in Resolution Logic: AND
  ---- End: FF(1) ------------------------------------------------------


  ---- Begin: FF(2)----------------------------------------------------
               Function String: FI(1)&(FI(4)!FI(5))
      Expanded Function String:
       FI(VA-SUBSTANCE ABUSE)&(FI(VA-EXERCISE)!FI(VA-DIABETES))
  ---- End: FF(2) ------------------------------------------------------


  ---- Begin: FF(3)----------------------------------------------------
               Function String: COUNT(2)>1
      Expanded Function String:
       COUNT(VA-EXERCISE SCREENING)>1
       Use in Resolution Logic: AND
  ---- End: FF(3) ------------------------------------------------------


  ---- Begin: FF(4)----------------------------------------------------
               Function String: DIFF_DATE(1,2)>625
      Expanded Function String:
       DIFF_DATE(VA-SUBSTANCE ABUSE,VA-EXERCISE SCREENING)>625
  ---- End: FF(4) ------------------------------------------------------


General Patient Cohort Found Text:
    This is the general cohort found text.

General Patient Cohort Not Found Text:
    This is general cohort not found text. Line two of not found. Line 3 of
    not found. Patient's age is |AGE|.

General Resolution Found Text:
    This is the general resolution found text. Second line of resolution
    found text.

General Resolution Not Found Text:
    This is the general resolution not found text. Second line of not found.
    Third line of not found.

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

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

Default RESOLUTION LOGIC defines findings that resolve the Reminder:
 FI(2)&FF(1)&FF(3)

Expanded Resolution Logic:
 FI(VA-EXERCISE SCREENING)&FF(1)&FF(3)


Web Sites:

 Web Site URL:   Influenza Directive
 Web Site Title:
 Description:
```

Test option output for this reminder

```
Select Reminder Managers Menu Option: RT  Reminder Test
Select Patient:  CRPATIENT,TWO        10-10-72    666554444     YES     ACTIVE DUTY
 Enrollment Priority: GROUP 1    Category: IN PROCESS    End Date:

Select Reminder: edutest       LOCAL

Enter date for reminder evaluation: Dec 24, 2008//   (DEC 24, 2008)

Display all term findings? N// y  YES

The elements of the FIEVAL array are:
FIEVAL(1)=1
FIEVAL(1,1)=1
FIEVAL(1,1,"COMMENTS")=
FIEVAL(1,1,"CSUB","COMMENTS")=
FIEVAL(1,1,"CSUB","DATE")=2980700
FIEVAL(1,1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(1,1,"CSUB","VALUE")=
FIEVAL(1,1,"CSUB","VISIT")=3935
FIEVAL(1,1,"DAS")=200
FIEVAL(1,1,"DATE")=2980700
FIEVAL(1,1,"LEVEL OF UNDERSTANDING")=
FIEVAL(1,1,"VALUE")=
FIEVAL(1,1,"VISIT")=3935
FIEVAL(1,2)=1
FIEVAL(1,2,"COMMENTS")=
FIEVAL(1,2,"CSUB","COMMENTS")=
FIEVAL(1,2,"CSUB","DATE")=3000000
FIEVAL(1,2,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(1,2,"CSUB","VALUE")=
FIEVAL(1,2,"CSUB","VISIT")=3997
FIEVAL(1,2,"DAS")=212
FIEVAL(1,2,"DATE")=3000000
FIEVAL(1,2,"LEVEL OF UNDERSTANDING")=
FIEVAL(1,2,"VALUE")=
FIEVAL(1,2,"VISIT")=3997
FIEVAL(1,3)=1
FIEVAL(1,3,"COMMENTS")=
FIEVAL(1,3,"CSUB","COMMENTS")=
FIEVAL(1,3,"CSUB","DATE")=3000202.15
FIEVAL(1,3,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"CSUB","VALUE")=3
FIEVAL(1,3,"CSUB","VISIT")=3693
FIEVAL(1,3,"DAS")=159
FIEVAL(1,3,"DATE")=3000202.15
FIEVAL(1,3,"LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"VALUE")=3
FIEVAL(1,3,"VISIT")=3693
FIEVAL(1,4)=1
FIEVAL(1,4,"COMMENTS")=
FIEVAL(1,4,"CSUB","COMMENTS")=
FIEVAL(1,4,"CSUB","DATE")=3000217.085926
FIEVAL(1,4,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,4,"CSUB","VALUE")=3
FIEVAL(1,4,"CSUB","VISIT")=3720
FIEVAL(1,4,"DAS")=151
FIEVAL(1,4,"DATE")=3000217.085926
FIEVAL(1,4,"LEVEL OF UNDERSTANDING")=3
FIEVAL(1,4,"VALUE")=3
```

```
FIEVAL(1,4,"VISIT")=3720
FIEVAL(1,"COMMENTS")=
FIEVAL(1,"CSUB","COMMENTS")=
FIEVAL(1,"CSUB","DATE")=2980700
FIEVAL(1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(1,"CSUB","VALUE")=
FIEVAL(1,"CSUB","VISIT")=3935
FIEVAL(1,"DAS")=200
FIEVAL(1,"DATE")=2980700
FIEVAL(1,"FILE NUMBER")=9000010.16
FIEVAL(1,"FINDING")=1;AUTTEDT(
FIEVAL(1,"LEVEL OF UNDERSTANDING")=
FIEVAL(1,"VALUE")=
FIEVAL(1,"VISIT")=3935
FIEVAL(2)=1
FIEVAL(2,1)=1
FIEVAL(2,1,"COMMENTS")=
FIEVAL(2,1,"CSUB","COMMENTS")=
FIEVAL(2,1,"CSUB","DATE")=3000317.08
FIEVAL(2,1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(2,1,"CSUB","VALUE")=
FIEVAL(2,1,"CSUB","VISIT")=3787
FIEVAL(2,1,"DAS")=214
FIEVAL(2,1,"DATE")=3000317.08
FIEVAL(2,1,"LEVEL OF UNDERSTANDING")=
FIEVAL(2,1,"VALUE")=
FIEVAL(2,1,"VISIT")=3787
FIEVAL(2,2)=1
FIEVAL(2,2,"COMMENTS")=
FIEVAL(2,2,"CSUB","COMMENTS")=
FIEVAL(2,2,"CSUB","DATE")=3000106.131524
FIEVAL(2,2,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(2,2,"CSUB","VALUE")=3
FIEVAL(2,2,"CSUB","VISIT")=3646
FIEVAL(2,2,"DAS")=119
FIEVAL(2,2,"DATE")=3000106.131524
FIEVAL(2,2,"LEVEL OF UNDERSTANDING")=3
FIEVAL(2,2,"VALUE")=3
FIEVAL(2,2,"VISIT")=3646
FIEVAL(2,"COMMENTS")=
FIEVAL(2,"CSUB","COMMENTS")=
FIEVAL(2,"CSUB","DATE")=3000317.08
FIEVAL(2,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(2,"CSUB","VALUE")=
FIEVAL(2,"CSUB","VISIT")=3787
FIEVAL(2,"DAS")=214
FIEVAL(2,"DATE")=3000317.08
FIEVAL(2,"FILE NUMBER")=9000010.16
FIEVAL(2,"FINDING")=11;AUTTEDT(
FIEVAL(2,"LEVEL OF UNDERSTANDING")=
FIEVAL(2,"VALUE")=
FIEVAL(2,"VISIT")=3787
FIEVAL(3)=1
FIEVAL(3,1)=1
FIEVAL(3,1,"COMMENTS")=
FIEVAL(3,1,"CSUB","COMMENTS")=
FIEVAL(3,1,"CSUB","DATE")=3000317.08
FIEVAL(3,1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(3,1,"CSUB","VALUE")=
FIEVAL(3,1,"CSUB","VISIT")=3787
FIEVAL(3,1,"DAS")=215
FIEVAL(3,1,"DATE")=3000317.08
FIEVAL(3,1,"LEVEL OF UNDERSTANDING")=
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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)=0
FIEVAL("DFN")=54
FIEVAL("EVAL DATE/TIME")=3081224
FIEVAL("FF1")=0
FIEVAL("FF1","DETAIL")=0^MRD(1,2)>MRD(5)^3000317.08>3000317.08
FIEVAL("FF1","FINDING")=1;PXRMD(802.4,
FIEVAL("FF1","NUMBER")=1
FIEVAL("FF2")=1
FIEVAL("FF2","DETAIL")=1^FI(1)&(FI(4)!FI(5))^1&(0!1)
FIEVAL("FF2","FINDING")=5;PXRMD(802.4,
FIEVAL("FF2","NUMBER")=2
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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")=
TFIEVAL(8,1,1,"VALUE")=
TFIEVAL(8,1,1,"VISIT")=3787
TFIEVAL(8,1,2)=1
TFIEVAL(8,1,2,"COMMENTS")=
TFIEVAL(8,1,2,"CSUB","COMMENTS")=
TFIEVAL(8,1,2,"CSUB","DATE")=3000217.085926
TFIEVAL(8,1,2,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,2,"CSUB","VALUE")=3
TFIEVAL(8,1,2,"CSUB","VISIT")=3720
TFIEVAL(8,1,2,"DAS")=151
TFIEVAL(8,1,2,"DATE")=3000217.085926
TFIEVAL(8,1,2,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,2,"VALUE")=3
TFIEVAL(8,1,2,"VISIT")=3720
TFIEVAL(8,1,3)=1
TFIEVAL(8,1,3,"COMMENTS")=
TFIEVAL(8,1,3,"CSUB","COMMENTS")=
TFIEVAL(8,1,3,"CSUB","DATE")=3000202.15
TFIEVAL(8,1,3,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,3,"CSUB","VALUE")=3
TFIEVAL(8,1,3,"CSUB","VISIT")=3693
TFIEVAL(8,1,3,"DAS")=159
TFIEVAL(8,1,3,"DATE")=3000202.15
TFIEVAL(8,1,3,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,1,3,"VALUE")=3
TFIEVAL(8,1,3,"VISIT")=3693
TFIEVAL(8,1,"COMMENTS")=
TFIEVAL(8,1,"CSUB","COMMENTS")=
TFIEVAL(8,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,1,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,1,"CSUB","VALUE")=
TFIEVAL(8,1,"CSUB","VISIT")=3787
TFIEVAL(8,1,"DAS")=201
TFIEVAL(8,1,"DATE")=3000317.08
TFIEVAL(8,1,"FILE NUMBER")=9000010.16
TFIEVAL(8,1,"FINDING")=1;AUTTEDT(
TFIEVAL(8,1,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,1,"VALUE")=
TFIEVAL(8,1,"VISIT")=3787
```

```
TFIEVAL(8,2)=1
TFIEVAL(8,2,1)=1
TFIEVAL(8,2,1,"COMMENTS")=
TFIEVAL(8,2,1,"CSUB","COMMENTS")=
TFIEVAL(8,2,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,2,1,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,2,1,"CSUB","VALUE")=
TFIEVAL(8,2,1,"CSUB","VISIT")=3787
TFIEVAL(8,2,1,"DAS")=214
TFIEVAL(8,2,1,"DATE")=3000317.08
TFIEVAL(8,2,1,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,2,1,"VALUE")=
TFIEVAL(8,2,1,"VISIT")=3787
TFIEVAL(8,2,2)=1
TFIEVAL(8,2,2,"COMMENTS")=
TFIEVAL(8,2,2,"CSUB","COMMENTS")=
TFIEVAL(8,2,2,"CSUB","DATE")=3000106.131524
TFIEVAL(8,2,2,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,2,2,"CSUB","VALUE")=3
TFIEVAL(8,2,2,"CSUB","VISIT")=3646
TFIEVAL(8,2,2,"DAS")=119
TFIEVAL(8,2,2,"DATE")=3000106.131524
TFIEVAL(8,2,2,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,2,2,"VALUE")=3
TFIEVAL(8,2,2,"VISIT")=3646
TFIEVAL(8,2,3)=1
TFIEVAL(8,2,3,"COMMENTS")=
TFIEVAL(8,2,3,"CSUB","COMMENTS")=
TFIEVAL(8,2,3,"CSUB","DATE")=3000000
TFIEVAL(8,2,3,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,2,3,"CSUB","VALUE")=
TFIEVAL(8,2,3,"CSUB","VISIT")=3997
TFIEVAL(8,2,3,"DAS")=213
TFIEVAL(8,2,3,"DATE")=3000000
TFIEVAL(8,2,3,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,2,3,"VALUE")=
TFIEVAL(8,2,3,"VISIT")=3997
TFIEVAL(8,2,"COMMENTS")=
TFIEVAL(8,2,"CSUB","COMMENTS")=
TFIEVAL(8,2,"CSUB","DATE")=3000317.08
TFIEVAL(8,2,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,2,"CSUB","VALUE")=
TFIEVAL(8,2,"CSUB","VISIT")=3787
TFIEVAL(8,2,"DAS")=214
TFIEVAL(8,2,"DATE")=3000317.08
TFIEVAL(8,2,"FILE NUMBER")=9000010.16
TFIEVAL(8,2,"FINDING")=11;AUTTEDT(
TFIEVAL(8,2,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,2,"VALUE")=
TFIEVAL(8,2,"VISIT")=3787
TFIEVAL(8,3)=1
TFIEVAL(8,3,1)=1
TFIEVAL(8,3,1,"COMMENTS")=
TFIEVAL(8,3,1,"CSUB","COMMENTS")=
TFIEVAL(8,3,1,"CSUB","DATE")=3000317.08
TFIEVAL(8,3,1,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,1,"CSUB","VALUE")=
TFIEVAL(8,3,1,"CSUB","VISIT")=3787
TFIEVAL(8,3,1,"DAS")=215
TFIEVAL(8,3,1,"DATE")=3000317.08
TFIEVAL(8,3,1,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,1,"VALUE")=
TFIEVAL(8,3,1,"VISIT")=3787
```

```
TFIEVAL(8,3,2)=1
TFIEVAL(8,3,2,"COMMENTS")=
TFIEVAL(8,3,2,"CSUB","COMMENTS")=
TFIEVAL(8,3,2,"CSUB","DATE")=3000000
TFIEVAL(8,3,2,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,2,"CSUB","VALUE")=
TFIEVAL(8,3,2,"CSUB","VISIT")=3997
TFIEVAL(8,3,2,"DAS")=210
TFIEVAL(8,3,2,"DATE")=3000000
TFIEVAL(8,3,2,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,2,"VALUE")=
TFIEVAL(8,3,2,"VISIT")=3997
TFIEVAL(8,3,3)=1
TFIEVAL(8,3,3,"COMMENTS")=
TFIEVAL(8,3,3,"CSUB","COMMENTS")=
TFIEVAL(8,3,3,"CSUB","DATE")=2990318.100853
TFIEVAL(8,3,3,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,3,"CSUB","VALUE")=
TFIEVAL(8,3,3,"CSUB","VISIT")=2852
TFIEVAL(8,3,3,"DAS")=73
TFIEVAL(8,3,3,"DATE")=2990318.100853
TFIEVAL(8,3,3,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,3,"VALUE")=
TFIEVAL(8,3,3,"VISIT")=2852
TFIEVAL(8,3,"COMMENTS")=
TFIEVAL(8,3,"CSUB","COMMENTS")=
TFIEVAL(8,3,"CSUB","DATE")=3000317.08
TFIEVAL(8,3,"CSUB","LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,"CSUB","VALUE")=
TFIEVAL(8,3,"CSUB","VISIT")=3787
TFIEVAL(8,3,"DAS")=215
TFIEVAL(8,3,"DATE")=3000317.08
TFIEVAL(8,3,"FILE NUMBER")=9000010.16
TFIEVAL(8,3,"FINDING")=363;AUTTEDT(
TFIEVAL(8,3,"LEVEL OF UNDERSTANDING")=
TFIEVAL(8,3,"VALUE")=
TFIEVAL(8,3,"VISIT")=3787
TFIEVAL(8,4)=1
TFIEVAL(8,4,1)=1
TFIEVAL(8,4,1,"COMMENTS")=
TFIEVAL(8,4,1,"CSUB","COMMENTS")=
TFIEVAL(8,4,1,"CSUB","DATE")=3000211.153525
TFIEVAL(8,4,1,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,1,"CSUB","VALUE")=3
TFIEVAL(8,4,1,"CSUB","VISIT")=3716
TFIEVAL(8,4,1,"DAS")=147
TFIEVAL(8,4,1,"DATE")=3000211.153525
TFIEVAL(8,4,1,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,1,"VALUE")=3
TFIEVAL(8,4,1,"VISIT")=3716
TFIEVAL(8,4,2)=1
TFIEVAL(8,4,2,"COMMENTS")=
TFIEVAL(8,4,2,"CSUB","COMMENTS")=
TFIEVAL(8,4,2,"CSUB","DATE")=3000113.160726
TFIEVAL(8,4,2,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,2,"CSUB","VALUE")=3
TFIEVAL(8,4,2,"CSUB","VISIT")=3662
TFIEVAL(8,4,2,"DAS")=132
TFIEVAL(8,4,2,"DATE")=3000113.160726
TFIEVAL(8,4,2,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,2,"VALUE")=3
TFIEVAL(8,4,2,"VISIT")=3662
TFIEVAL(8,4,"COMMENTS")=
```

```
TFIEVAL(8,4,"CSUB","COMMENTS")=
TFIEVAL(8,4,"CSUB","DATE")=3000211.153525
TFIEVAL(8,4,"CSUB","LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,"CSUB","VALUE")=3
TFIEVAL(8,4,"CSUB","VISIT")=3716
TFIEVAL(8,4,"DAS")=147
TFIEVAL(8,4,"DATE")=3000211.153525
TFIEVAL(8,4,"FILE NUMBER")=9000010.16
TFIEVAL(8,4,"FINDING")=338;AUTTEDT(
TFIEVAL(8,4,"LEVEL OF UNDERSTANDING")=3
TFIEVAL(8,4,"VALUE")=3
TFIEVAL(8,4,"VISIT")=3716

The elements of the ^TMP(PXRMID,$J) array are:
^TMP(PXRMID,$J,660020,"PATIENT COHORT LOGIC")=1^(SEX)&(AGE)^(1)&(1)
^TMP(PXRMID,$J,660020,"REMINDER NAME")=Education Test
^TMP(PXRMID,$J,660020,"RESOLUTION LOGIC")=0^(0)!FI(2)&FF(1)&FF(3)^(0)!1&0&1
^TMP(PXRMID,$J,660020,"zFREQARNG")=1M^25^60^Baseline

The elements of the ^TMP("PXRHM",$J) array are:
^TMP("PXRHM",$J,660020,"Education Test")=DUE NOW^DUE NOW^unknown
^TMP("PXRHM",$J,660020,"Education Test","TXT",1)=Frequency: Due every 1 month fo
r ages 25 to 60.
^TMP("PXRHM",$J,660020,"Education Test","TXT",2)=This is the age match text for
age range 25 to 60. Patient is in age
^TMP("PXRHM",$J,660020,"Education Test","TXT",3)=range. Line 2.
^TMP("PXRHM",$J,660020,"Education Test","TXT",4)=This is no match text for 61 to
 70, the patient's age is 56.
^TMP("PXRHM",$J,660020,"Education Test","TXT",5)=This is the general cohort foun
d text.
^TMP("PXRHM",$J,660020,"Education Test","TXT",6)=This is the general resolution
not found text. Second line of not
^TMP("PXRHM",$J,660020,"Education Test","TXT",7)=found. Third line of not found.

^TMP("PXRHM",$J,660020,"Education Test","TXT",8)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",9)=Resolution:
^TMP("PXRHM",$J,660020,"Education Test","TXT",10)= Education Topic: Exercise Scr
eening
^TMP("PXRHM",$J,660020,"Education Test","TXT",11)=  03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",12)=  01/06/2000 level of understa
nding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",13)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",14)=  VA-EXERCISE SCREENING FOUND
TEXT. Lets test out some objects. The
^TMP("PXRHM",$J,660020,"Education Test","TXT",15)=  patient was seen on 03/17/00
 08:00. His last blood pressure was
^TMP("PXRHM",$J,660020,"Education Test","TXT",16)=  Blood Pressure: 120/76 (01/1
1/2001 19:24). His last weight was 233
^TMP("PXRHM",$J,660020,"Education Test","TXT",17)=  lb [105.9 kg] (03/30/2000 14
:15).
^TMP("PXRHM",$J,660020,"Education Test","TXT",18)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",19)=Information:
^TMP("PXRHM",$J,660020,"Education Test","TXT",20)= Education Topic: Substance Ab
use
^TMP("PXRHM",$J,660020,"Education Test","TXT",21)=  07/00/1998
^TMP("PXRHM",$J,660020,"Education Test","TXT",22)=  00/00/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",23)=  02/02/2000 level of understa
nding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",24)=  02/17/2000 level of understa
nding - GOOD
^TMP("PXRHM",$J,660020,"Education Test","TXT",25)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",26)= Education Topic: Exercise
^TMP("PXRHM",$J,660020,"Education Test","TXT",27)=  03/17/2000
```

```
^TMP("PXRHM",$J,660020,"Education Test","TXT",28)=  00/00/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",29)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",30)= Education Topic: Diabetes
^TMP("PXRHM",$J,660020,"Education Test","TXT",31)=  03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",32)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",33)= Reminder Term: EDUTEST
^TMP("PXRHM",$J,660020,"Education Test","TXT",34)=  Education Topic: Substance A
buse
^TMP("PXRHM",$J,660020,"Education Test","TXT",35)=   03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",36)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",37)=  Education Topic: Exercise Sc
reening
^TMP("PXRHM",$J,660020,"Education Test","TXT",38)=   03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",39)=
^TMP("PXRHM",$J,660020,"Education Test","TXT",40)=  Education Topic: Exercise
^TMP("PXRHM",$J,660020,"Education Test","TXT",41)=   03/17/2000
^TMP("PXRHM",$J,660020,"Education Test","TXT",42)=

Formatted Output:

                                    --STATUS-- --DUE DATE--  --LAST DONE--

Education Test                       DUE NOW     DUE NOW       unknown

Frequency: Due every 1 month for ages 25 to 60.
This is the age match text for age range 25 to 60. Patient is in age
range. Line 2.
This is no match text for 61 to 70, the patient's age is 56.
This is the general cohort found text.
This is the general resolution not found text. Second line of not
found. Third line of not found.

Resolution:
 Education Topic: Exercise Screening
  03/17/2000
  01/06/2000 level of understanding - GOOD

  VA-EXERCISE SCREENING FOUND TEXT. Lets test out some objects. The
  patient was seen on 03/17/00 08:00. His last blood pressure was
  Blood Pressure: 120/76 (01/11/2001 19:24). His last weight was 233
  lb [105.9 kg] (03/30/2000 14:15).

Information:
 Education Topic: Substance Abuse
  07/00/1998
  00/00/2000
  02/02/2000 level of understanding - GOOD
  02/17/2000 level of understanding - GOOD

 Education Topic: Exercise
  03/17/2000
  00/00/2000

 Education Topic: Diabetes
  03/17/2000

 Reminder Term: EDUTEST
  Education Topic: Substance Abuse
   03/17/2000

  Education Topic: Exercise Screening
   03/17/2000
```

```
Education Topic: Exercise
 03/17/2000
```

Reminder Test Explained

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

The first section is the FIEVAL (Finding EVALuation) array, which corresponds to the findings in the reminder definition. If we look back at our definition inquiry, we see there are 11 findings in this reminder.

- Five Education Topics
- One Reminder Term

The entries in FIEVAL(1) show us what was found for finding 1:

The elements of the FIEVAL array are:

```
FIEVAL(1)=1
FIEVAL(1,1)=1
FIEVAL(1,1,"COMMENTS")=
FIEVAL(1,1,"CSUB","COMMENTS")=
FIEVAL(1,1,"CSUB","DATE")=2980700
FIEVAL(1,1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(1,1,"CSUB","VALUE")=
FIEVAL(1,1,"CSUB","VISIT")=3935
FIEVAL(1,1,"DAS")=200
FIEVAL(1,1,"DATE")=2980700
FIEVAL(1,1,"LEVEL OF UNDERSTANDING")=
FIEVAL(1,1,"VALUE")=
FIEVAL(1,1,"VISIT")=3935
FIEVAL(1,2)=1
FIEVAL(1,2,"COMMENTS")=
FIEVAL(1,2,"CSUB","COMMENTS")=
FIEVAL(1,2,"CSUB","DATE")=3000000
FIEVAL(1,2,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(1,2,"CSUB","VALUE")=
FIEVAL(1,2,"CSUB","VISIT")=3997
FIEVAL(1,2,"DAS")=212
FIEVAL(1,2,"DATE")=3000000
FIEVAL(1,2,"LEVEL OF UNDERSTANDING")=
FIEVAL(1,2,"VALUE")=
FIEVAL(1,2,"VISIT")=3997
FIEVAL(1,3)=1
FIEVAL(1,3,"COMMENTS")=
FIEVAL(1,3,"CSUB","COMMENTS")=
FIEVAL(1,3,"CSUB","DATE")=3000202.15
FIEVAL(1,3,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"CSUB","VALUE")=3
FIEVAL(1,3,"CSUB","VISIT")=3693
FIEVAL(1,3,"DAS")=159
FIEVAL(1,3,"DATE")=3000202.15
FIEVAL(1,3,"LEVEL OF UNDERSTANDING")=3
FIEVAL(1,3,"VALUE")=3
FIEVAL(1,3,"VISIT")=3693
FIEVAL(1,4)=1
FIEVAL(1,4,"COMMENTS")=
FIEVAL(1,4,"CSUB","COMMENTS")=
FIEVAL(1,4,"CSUB","DATE")=3000217.085926
FIEVAL(1,4,"CSUB","LEVEL OF UNDERSTANDING")=3
FIEVAL(1,4,"CSUB","VALUE")=3
FIEVAL(1,4,"CSUB","VISIT")=3720
FIEVAL(1,4,"DAS")=151
FIEVAL(1,4,"DATE")=3000217.085926
FIEVAL(1,4,"LEVEL OF UNDERSTANDING")=3
```

The 1 tells us the finding is true. A 0 would mean it is false.

This is the first occurrence of finding 1. There are four occurrences.

The date of the finding in FileMan format.

This is the second occurrence of finding 1.

This entry in the Visit File is 3997.

This section shows the final value for the three occurrences.

```
FIEVAL(1,4,"VALUE")=3
FIEVAL(1,4,"VISIT")=3720
FIEVAL(1,"COMMENTS")=
FIEVAL(1,"CSUB","COMMENTS")=
FIEVAL(1,"CSUB","DATE")=2980700
FIEVAL(1,"CSUB","LEVEL OF UNDERSTANDING")=
FIEVAL(1,"CSUB","VALUE")=
FIEVAL(1,"CSUB","VISIT")=3935
FIEVAL(1,"DAS")=200
FIEVAL(1,"DATE")=2980700
FIEVAL(1,"FILE NUMBER")=9000010.16
FIEVAL(1,"FINDING")=1;AUTTEDT(
FIEVAL(1,"LEVEL OF UNDERSTANDING")=
FIEVAL(1,"VALUE")=
FIEVAL(1,"VISIT")=3935
```

200 is the DA string in the Patient Education file/education topic (see the Patch 12 technical manual for info on the DA strings.)

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 63 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)=1
FIEVAL(1,2,"CLINICAL TERM")=
FIEVAL(1,2,"CODEP")=2507
FIEVAL(1,2,"COMMENTS")=
FIEVAL(1,2,"CONDITION")=1
FIEVAL(1,2,"CSUB","CLINICAL TERM")=
FIEVAL(1,2,"CSUB","COMMENTS")=
FIEVAL(1,2,"CSUB","DATE OF INJURY")=
FIEVAL(1,2,"CSUB","MODIFIER")=
FIEVAL(1,2,"CSUB","PRIMARY/SECONDARY")=P
FIEVAL(1,2,"CSUB","PROBLEM LIST ENTRY")=
FIEVAL(1,2,"CSUB","PROVIDER NARRATIVE")=1082
FIEVAL(1,2,"CSUB","VISIT")=3970337
FIEVAL(1,2,"DAS")=1896973
FIEVAL(1,2,"DATE")=3020913.131038
FIEVAL(1,2,"DATE OF INJURY")=
FIEVAL(1,2,"FILE NUMBER")=9000010.07
FIEVAL(1,2,"FILE SPECIFIC")=P
FIEVAL(1,2,"FINDING")=52;PXD(811.2,
FIEVAL(1,2,"MODIFIER")=
FIEVAL(1,2,"PRIMARY/SECONDARY")=P
FIEVAL(1,2,"PROBLEM LIST ENTRY")=
FIEVAL(1,2,"PROVIDER NARRATIVE")=1082
FIEVAL(1,2,"VISIT")=3970337
FIEVAL(1,3)=1
FIEVAL(1,3,"CLINICAL TERM")=
FIEVAL(1,3,"CODEP")=2507
FIEVAL(1,3,"COMMENTS")=
FIEVAL(1,3,"CONDITION")=1
FIEVAL(1,3,"CSUB","CLINICAL TERM")=
FIEVAL(1,3,"CSUB","COMMENTS")=
FIEVAL(1,3,"CSUB","DATE OF INJURY")=
FIEVAL(1,3,"CSUB","MODIFIER")=
FIEVAL(1,3,"CSUB","PRIMARY/SECONDARY")=P
FIEVAL(1,3,"CSUB","PROBLEM LIST ENTRY")=
FIEVAL(1,3,"CSUB","PROVIDER NARRATIVE")=1082
FIEVAL(1,3,"CSUB","VISIT")=3967489
FIEVAL(1,3,"DAS")=1893712
FIEVAL(1,3,"DATE")=3020911.131046
FIEVAL(1,3,"DATE OF INJURY")=
FIEVAL(1,3,"FILE NUMBER")=9000010.07
FIEVAL(1,3,"FILE SPECIFIC")=P
```

```
FIEVAL(1,3,"FINDING")=52;PXD(811.2,
FIEVAL(1,3,"MODIFIER")=
FIEVAL(1,3,"PRIMARY/SECONDARY")=P
FIEVAL(1,3,"PROBLEM LIST ENTRY")=
FIEVAL(1,3,"PROVIDER NARRATIVE")=1082
FIEVAL(1,3,"VISIT")=3967489
FIEVAL(1,"CLINICAL TERM")=
FIEVAL(1,"CODEP")=12989
FIEVAL(1,"COMMENTS")=
FIEVAL(1,"CONDITION")=1
FIEVAL(1,"CSUB","CLINICAL TERM")=
FIEVAL(1,"CSUB","COMMENTS")=
FIEVAL(1,"CSUB","DATE OF INJURY")=
FIEVAL(1,"CSUB","MODIFIER")=
FIEVAL(1,"CSUB","PRIMARY/SECONDARY")=S
FIEVAL(1,"CSUB","PROBLEM LIST ENTRY")=
FIEVAL(1,"CSUB","PROVIDER NARRATIVE")=3906
FIEVAL(1,"CSUB","VISIT")=5161991
FIEVAL(1,"DAS")=3238132
FIEVAL(1,"DATE")=3050615.103
FIEVAL(1,"DATE OF INJURY")=
FIEVAL(1,"FILE NUMBER")=9000010.07
FIEVAL(1,"FILE SPECIFIC")=S
FIEVAL(1,"FINDING")=52;PXD(811.2,
FIEVAL(1,"MODIFIER")=
FIEVAL(1,"PRIMARY/SECONDARY")=S
FIEVAL(1,"PROBLEM LIST ENTRY")=
FIEVAL(1,"PROVIDER NARRATIVE")=3906
FIEVAL(1,"TERM")=VA-IHD DIAGNOSIS^^^3010723
FIEVAL(1,"TERM IEN")=26
FIEVAL(1,"VISIT")=5161991
FIEVAL(2)=0
FIEVAL(3)=0
FIEVAL(3,"TERM")=VA-OUTSIDE LDL <100^^^3011113
FIEVAL(3,"TERM IEN")=35
FIEVAL(4)=0
FIEVAL(4,"TERM")=VA-OUTSIDE LDL 100-119^^^3010910
FIEVAL(4,"TERM IEN")=34
FIEVAL(5)=0
FIEVAL(5,"TERM")=VA-OUTSIDE LDL 120-129^^^3010925
FIEVAL(5,"TERM IEN")=52
FIEVAL(6)=0
FIEVAL(6,"TERM")=VA-OUTSIDE LDL >129^^^3011113
FIEVAL(6,"TERM IEN")=36
FIEVAL(7)=0
FIEVAL(7,"TERM")=VA-ORDER LIPID PROFILE HEALTH FACTOR^^^3020131
FIEVAL(7,"TERM IEN")=61
FIEVAL(8)=0
FIEVAL(8,"TERM")=VA-REFUSED LIPID PROFILE^^^3011022
FIEVAL(8,"TERM IEN")=40
FIEVAL(9)=0
FIEVAL(9,"TERM")=VA-OTHER DEFER LIPID PROFILE^^^3011022
FIEVAL(9,"TERM IEN")=41
FIEVAL(10)=0
FIEVAL(10,"TERM")=VA-UNCONFIRMED IHD DIAGNOSIS^^^3011017
FIEVAL(10,"TERM IEN")=42
FIEVAL(12)=0
FIEVAL(12,"TERM")=VA-LIPID LOWERING MEDS^^^3011007
FIEVAL(12,"TERM IEN")=54
FIEVAL(14)=0
FIEVAL("AGE")=1
FIEVAL("AGE",1)=1
FIEVAL("DFN")=36167
```

```
FIEVAL("EVAL DATE/TIME")=3060125
FIEVAL("FF1")=1
FIEVAL("FF1","FINDING")=1;PXRMD(802.4,
FIEVAL("FF1","NAME")=
FIEVAL("FF1","VALUE")=1
FIEVAL("PATIENT AGE")=86
FIEVAL("SEX")=1

Term findings:
Finding 1:
TFIEVAL(1,1)=1
TFIEVAL(1,1,1)=1
TFIEVAL(1,1,1,"CLINICAL TERM")=
TFIEVAL(1,1,1,"CODEP")=12989
TFIEVAL(1,1,1,"COMMENTS")=
TFIEVAL(1,1,1,"CONDITION")=1
TFIEVAL(1,1,1,"CSUB","CLINICAL TERM")=
TFIEVAL(1,1,1,"CSUB","COMMENTS")=
TFIEVAL(1,1,1,"CSUB","DATE OF INJURY")=
TFIEVAL(1,1,1,"CSUB","MODIFIER")=
TFIEVAL(1,1,1,"CSUB","PRIMARY/SECONDARY")=S
TFIEVAL(1,1,1,"CSUB","PROBLEM LIST ENTRY")=
TFIEVAL(1,1,1,"CSUB","PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,1,"CSUB","VISIT")=5161991
TFIEVAL(1,1,1,"DAS")=3238132
TFIEVAL(1,1,1,"DATE")=3050615.103
TFIEVAL(1,1,1,"DATE OF INJURY")=
TFIEVAL(1,1,1,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,1,"FILE SPECIFIC")=S
TFIEVAL(1,1,1,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,1,"MODIFIER")=
TFIEVAL(1,1,1,"PRIMARY/SECONDARY")=S
TFIEVAL(1,1,1,"PROBLEM LIST ENTRY")=
TFIEVAL(1,1,1,"PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,1,"VISIT")=5161991
TFIEVAL(1,1,2)=1
TFIEVAL(1,1,2,"CLINICAL TERM")=
TFIEVAL(1,1,2,"CODEP")=2507
TFIEVAL(1,1,2,"COMMENTS")=
TFIEVAL(1,1,2,"CONDITION")=1
TFIEVAL(1,1,2,"CSUB","CLINICAL TERM")=
TFIEVAL(1,1,2,"CSUB","COMMENTS")=
TFIEVAL(1,1,2,"CSUB","DATE OF INJURY")=
TFIEVAL(1,1,2,"CSUB","MODIFIER")=
TFIEVAL(1,1,2,"CSUB","PRIMARY/SECONDARY")=P
TFIEVAL(1,1,2,"CSUB","PROBLEM LIST ENTRY")=
TFIEVAL(1,1,2,"CSUB","PROVIDER NARRATIVE")=1082
TFIEVAL(1,1,2,"CSUB","VISIT")=3970337
TFIEVAL(1,1,2,"DAS")=1896973
TFIEVAL(1,1,2,"DATE")=3020913.131038
TFIEVAL(1,1,2,"DATE OF INJURY")=
TFIEVAL(1,1,2,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,2,"FILE SPECIFIC")=P
TFIEVAL(1,1,2,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,2,"MODIFIER")=
TFIEVAL(1,1,2,"PRIMARY/SECONDARY")=P
TFIEVAL(1,1,2,"PROBLEM LIST ENTRY")=
TFIEVAL(1,1,2,"PROVIDER NARRATIVE")=1082
TFIEVAL(1,1,2,"VISIT")=3970337
TFIEVAL(1,1,3)=1
TFIEVAL(1,1,3,"CLINICAL TERM")=
TFIEVAL(1,1,3,"CODEP")=2507
TFIEVAL(1,1,3,"COMMENTS")=
```

```
TFIEVAL(1,1,3,"CONDITION")=1
TFIEVAL(1,1,3,"CSUB","CLINICAL TERM")=
TFIEVAL(1,1,3,"CSUB","COMMENTS")=
TFIEVAL(1,1,3,"CSUB","DATE OF INJURY")=
TFIEVAL(1,1,3,"CSUB","MODIFIER")=
TFIEVAL(1,1,3,"CSUB","PRIMARY/SECONDARY")=P
TFIEVAL(1,1,3,"CSUB","PROBLEM LIST ENTRY")=
TFIEVAL(1,1,3,"CSUB","PROVIDER NARRATIVE")=1082
TFIEVAL(1,1,3,"CSUB","VISIT")=3967489
TFIEVAL(1,1,3,"DAS")=1893712
TFIEVAL(1,1,3,"DATE")=3020911.131046
TFIEVAL(1,1,3,"DATE OF INJURY")=
TFIEVAL(1,1,3,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,3,"FILE SPECIFIC")=P
TFIEVAL(1,1,3,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,3,"MODIFIER")=
TFIEVAL(1,1,3,"PRIMARY/SECONDARY")=P
TFIEVAL(1,1,3,"PROBLEM LIST ENTRY")=
TFIEVAL(1,1,3,"PROVIDER NARRATIVE")=1082
TFIEVAL(1,1,3,"VISIT")=3967489
TFIEVAL(1,1,"CLINICAL TERM")=
TFIEVAL(1,1,"CODEP")=12989
TFIEVAL(1,1,"COMMENTS")=
TFIEVAL(1,1,"CONDITION")=1
TFIEVAL(1,1,"CSUB","CLINICAL TERM")=
TFIEVAL(1,1,"CSUB","COMMENTS")=
TFIEVAL(1,1,"CSUB","DATE OF INJURY")=
TFIEVAL(1,1,"CSUB","MODIFIER")=
TFIEVAL(1,1,"CSUB","PRIMARY/SECONDARY")=S
TFIEVAL(1,1,"CSUB","PROBLEM LIST ENTRY")=
TFIEVAL(1,1,"CSUB","PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,"CSUB","VISIT")=5161991
TFIEVAL(1,1,"DAS")=3238132
TFIEVAL(1,1,"DATE")=3050615.103
TFIEVAL(1,1,"DATE OF INJURY")=
TFIEVAL(1,1,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,"FILE SPECIFIC")=S
TFIEVAL(1,1,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,"MODIFIER")=
TFIEVAL(1,1,"PRIMARY/SECONDARY")=S
TFIEVAL(1,1,"PROBLEM LIST ENTRY")=
TFIEVAL(1,1,"PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,"VISIT")=5161991
Formatted Output:

                                   --STATUS-- --DUE DATE--  --LAST DONE--

IHD Lipid Profile                   DUE NOW     DUE NOW       unknown

Frequency: Due every 1 year

Cohort:
 Reminder Term: VA-IHD DIAGNOSIS
  Encounter Diagnosis:
   06/15/2005 414.00 COR ATHEROSCL UNSP TYP-VES rank: SECONDARY
   09/13/2002 414.9 CHR ISCHEMIC HRT DIS NOS rank: PRIMARY
   Prov. Narr. - CHRONIC ISCHEMIC HEART DISEASE, UNSPECIFIED
   09/11/2002 414.9 CHR ISCHEMIC HRT DIS NOS rank: PRIMARY
   Prov. Narr. - CHRONIC ISCHEMIC HEART DISEASE, UNSPECIFIED
```

Parts of the reminder test have been removed for brevity's sake. Under the Term Evaluation part of the reminder test, you will notice the TFIEVAL and subscripts. This looks very similar to the results of the

FIEVAL, except that it is the results of each mapped finding within the term. There is a minimum of two subscripts for each mapped finding. The first subscript is the number of the actual finding (the term). The second subscript is the number of the mapped finding. In this instance, the evaluation of the mapped finding is "True."

TFIEVAL(1,1)=1

Sometimes there may be three subscripts. This third subscript is the occurrence of the mapped finding. In the above example (the complete reminder test output), you will notice there are three occurrences for mapped finding number 1. This is because the reminder term has an occurrence count of 3. This is also displayed in the clinical maintenance section of the reminder test output.

Note: The "CSUB" values of an occurrence of a mapped finding can be used as a condition of a finding just as the "CSUB" values of a regular finding can be.

```
TFIEVAL(1,1,1)=1
TFIEVAL(1,1,1,"CLINICAL TERM")=
TFIEVAL(1,1,1,"CODEP")=12989
TFIEVAL(1,1,1,"COMMENTS")=
TFIEVAL(1,1,1,"CONDITION")=1
TFIEVAL(1,1,1,"CSUB","CLINICAL TERM")=
TFIEVAL(1,1,1,"CSUB","COMMENTS")=
TFIEVAL(1,1,1,"CSUB","DATE OF INJURY")=
TFIEVAL(1,1,1,"CSUB","MODIFIER")=
TFIEVAL(1,1,1,"CSUB","PRIMARY/SECONDARY")=S
TFIEVAL(1,1,1,"CSUB","PROBLEM LIST ENTRY")=
TFIEVAL(1,1,1,"CSUB","PROVIDER NARRATIVE")=3906
TFIEVAL(1,1,1,"CSUB","VISIT")=5161991
TFIEVAL(1,1,1,"DAS")=3238132
TFIEVAL(1,1,1,"DATE")=3050615.103
TFIEVAL(1,1,1,"DATE OF INJURY")=
TFIEVAL(1,1,1,"FILE NUMBER")=9000010.07
TFIEVAL(1,1,1,"FILE SPECIFIC")=S
TFIEVAL(1,1,1,"FINDING")=52;PXD(811.2,
TFIEVAL(1,1,1,"MODIFIER")=
TFIEVAL(1,1,1,"PRIMARY/SECONDARY")=S
TFIEVAL(1,1,1,"PROBLEM LIST ENTRY")=
TFIEVAL(1,1,1,"PROVIDER NARRATIVE")=3906
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 **V***IST***A** 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 **V***IST***A** packages for setting up and maintaining clinical reminders.

Syno-nym	Option	Option Name	Description
TM	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
   LE     List Values for a Selected Entity
   LP     List Values for a Selected Package
   LT     List Values for a Selected Template
   EP     Edit Parameter Values
   ET     Edit Parameter Values with Template
   EK     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 (HISTORICAL)        NATIONAL
   4  INACTIVATE                         NATIONAL
   5  INFORMATIONAL                      NATIONAL
   6  LOCAL                              LOCAL
   7  ORDERED                            NATIONAL
   8  OTHER                              NATIONAL
   9  OTHER - DUE TO CLINICIAN DECISION  LOCAL
  10  OTHER - DUE TO COHORT AGE          LOCAL
  11  PATIENT REFUSED                    NATIONAL
          + Next Screen   - Prev Screen   ?? More Actions
AD   Add                  PT   List/Print All            QU   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 Status         National/Local
   1  CONTRAINDICATED                    NATIONAL
   2  DONE AT ENCOUNTER                  NATIONAL
   3  DONE ELSEWHERE (HISTORICAL)        NATIONAL
   4  ORDERED                            NATIONAL
   5  OTHER                              NATIONAL
   6  PATIENT REFUSED                    NATIONAL

          + Next Screen   - Prev Screen   ?? More Actions
AD   Add                  PT   List/Print All       QU   Quit
Select Item: Quit// AD   Add
```

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

```
   PATIENT REFUSED

     You may enter a new REMINDER RESOLUTION STATUS, if you wish
     Answer must be 3-40 characters in length.

Select new RESOLUTION STATUS name: OTHER-DUE TO LIFE EXPECTANCY
  Are you adding 'OTHER-DUE TO LIFE EXPECTANCY' as
    a new REMINDER RESOLUTION STATUS (the 7TH)? No// Y  (Yes)
NAME: OTHER-DUE TO LIFE EXPECTANCY  Replace <Enter>
DESCRIPTION:
  1>Other due to life expectancy
  2><Enter>
EDIT Option: <Enter>
ABBREVIATED NAME: OTHER - LIFE EXPECT
REPORT COLUMN HEADING: OTHER - LIFE EXPECT
INACTIVE FLAG: <Enter>

This resolution status must be linked to a national status

SELECT NATIONAL RESOLUTION STATUS: OTHER
         ...OK? Yes// <Enter>  (Yes)

Selection List                  May 05, 2000 12:15:50          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
   7  PATIENT REFUSED                   NATIONAL


          + Next Screen   - Prev Screen   ?? More Actions
AD   Add                  PT   List/Print All       QU   Quit
Select Item: Quit// <Enter>
```

ED - Edit resolution status

When you select a specific resolution status (for example, #6 in the list above), details of that status are displayed. You can then perform any of the actions listed below on that status. National statuses may not be added or deleted. Column headings are used in Reminder Activity Reports. Local statuses must be mapped to a national status.

```
Edit List           May 05, 2000 12:18:05                    Page:    1 of    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 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   Edit
NAME: OTHER-DUE TO LIFE EXPECTANCY  Replace <Enter>
DESCRIPTION:
  1>Other due to life expectancy
EDIT Option: <Enter>
ABBREVIATED NAME: OTHER - LIFE EXPECT// <Enter>
REPORT COLUMN HEADING: OTHER - LIFE EXPECT// OTHER - LIFE EXPECT with OTHER -
LIFE EXP. <Enter>
INACTIVE FLAG: <Enter>
```

```
Edit List                    May 05, 2000 12:20:02              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 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                      Resolution Status
   1  ALCOHOL USE                         OTHER
   2  BINGE DRINKING                      OTHER
   3  CURRENT SMOKER                      PATIENT REFUSED
   4  DRINKING ALONE                      OTHER
   5  FAMILY HX OF ALCOHOL ABUSE          OTHER
   6  NUTRITION                           OTHER
   7  PAIN MGMT                           OTHER
   8  TOBACCO                             DONE AT ENCOUNTER/DONE ELSEWHERE




          + Next Screen   - Prev Screen   ?? More Actions
AD   Add                  PT   List/Print All             QU   Quit
Select Item: Quit//
```

When you select a health factor resolution by number, an edit screen appears that displays the related resolution statuses and lets you edit or delete them. A health factor may be associated with more than one resolution status.

```
Edit List                     May 05, 2000 15:50:41       Page:    1 of    1
Health Factor Resolution Name:  PAIN MGMT HF(660003)

Resolution Statuses
 OTHER









          + Next Screen   - Prev Screen   ?? More Actions
ED   Edit                 INQ  Inquiry/Print        QU   Quit
Select Action: Quit//
```

Allocating Resolution Statuses for all Health Factors on a reminder

The option HR Health Factor Resolutions allows selection of reminders:

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

```
     Select one of the following:

          I         Individual Health Factor
          A         All Health Factors for a Selected Reminder

SELECTION OPTION: I// All Health Factors for a Selected Reminder

SELECT REMINDER: TOBACCO USE SCREEN

HEALTH FACTORS: <Enter>

ACTIVATE TOBACCO USE SCREEN (Resolution defined)
INACTIVATE TOBACCO USE SCREEN

MODIFY resolution status for ACTIVATE TOBACCO USE SCREEN: N//<Enter> O
ADD resolution status for INACTIVATE TOBACCO USE SCREEN: N// YES
NAME: INACTIVATE TOBACCO USE SCREEN// <Enter>
Select RESOLUTION STATUS: OTHER
         ...OK? Yes// <Enter>  (Yes)

Select RESOLUTION STATUS: <Enter>
```

General Finding Type Parameters (FP)

This option allows display of the REMINDER FINDING TYPE PARAMETER file #801.45 used in generating reminder dialogs. There is limited edit on this file to allow customization of prefix and suffix text. Parameters may also be disabled if not required at your site.
The file is structured by finding type and within that resolution status. A generated reminder dialog will include a sentence (dialog element) for each resolution type enabled in the finding type parameter file.

The sentence text is constructed as: prefix_finding item name_suffix. Health factors are treated slightly differently. Health factors are linked to resolution statuses by the Health Factor Resolutions option. For reminders with health factors, sentences are only generated if there is a resolution mapping AND an enabled finding type parameter.

The first screen in this option displays the finding types held in this file:

```
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   - Prev Screen   ?? More Actions
PT   List All             QU   Quit
Select Item: Quit//
```

When you select an item from this screen, all of the finding type parameters for the finding type selected are displayed. The reminder dialog generation process uses this file to create dialog as follows:

For each finding item on the reminder, the REMINDER FINDING TYPE PARAMETER file is checked to see if there are any “enabled” resolution statuses for the finding type. If an enabled resolution status exists, then a dialog element (sentence) is added to the reminder dialog with sentence text generated from the finding name concatenated with prefix and suffix text
Example: Patient had ALCOHOL USE education at this encounter

Clicking on the checkbox displayed with this sentence in CPRS causes the finding item (from the original reminder definition) to be posted to this patient’s record.
Additional prompts are also added to the dialog element as specified in the finding type parameter file.

Note: Dialog elements created by reminder dialog generation are given a standard name based on the finding type, finding name, and resolution status (from the REMINDER FINDING TYPE PARAMETER file)

Example: ED ALCOHOL USE DONE ELSEWHERE

The dialog elements created are shared by reminder dialogs for reminders with the same finding item.

The example below is the finding type parameter for education findings:

```
Finding Type Parameter List        May 05, 2000 16:11:10     Page:    1 of    1
Finding Type Parameter Name: ED - EDUCATION TOPIC

  Resolution Status          Prefix//Suffix & Prompts/Values/Actions   Status
1 DONE AT ENCOUNTER           Patient had/                             Enabled
                              /at this encounter
                              1] PXRM COMMENT
                              2] PXRM LOU (EDUCATION)

2 DONE ELSEWHERE (HISTORICAL) Patient indicated/                      Disabled
                              /was received outside the VA
                              1] PXRM COMMENT
                              2] PXRM VISIT DATE
                              3] PXRM OUTSIDE LOCATION

3 PATIENT REFUSED             Patient declined/                       Disabled
                              /at this encounter
                              1] PXRM REFUSED (forced value)
                              2] PXRM COMMENT
          + Next Screen   - Prev Screen   ?? More Actions
INQ  Inquiry/Print        QU   Quit
Select number of Resolution Status to Edit: Quit//
```

If a number is entered to select a resolution status, the following fields can be edited:

```
ED - EDIT FINDING TYPE PARAMETER

Finding Type Parameter Name: ED - EDUCATION TOPIC
RESOLUTION STATUS : DONE AT ENCOUNTER
DISABLE RESOLUTION STATUS: DISABLED// <Enter>
PREFIX TEXT: Patient had// <Enter>
SUFFIX TEXT: at this encounter// <Enter>
Select ADDITIONAL PROMPTS: PXRM LOU (EDUCATION)// <Enter>
  DISABLE ADDITIONAL PROMPT: <Enter>
  OVERRIDE PROMPT CAPTION: <Enter>
  START NEW LINE: <Enter>
  EXCLUDE FROM PN TEXT: <Enter>
  REQUIRED: <Enter>
```

Finding Item Parameters (FI)

This file allows reminder finding items to be linked to a specific dialog element (i.e. sentence and prompts) or a group of dialog elements. The reminder dialog generated for a reminder with a finding item entry in this file will include the dialog element or dialog group specified in this file instead of creating a dialog using the REMINDER FINDING TYPE PARAMETER file.

The first screen in this option displays the finding items held in this file:

```
 Selection List                 May 05, 2000 10:35:36          Page:    1 of    1
Finding Item Parameters

 Item Finding Item Type & Name           Dialog Group/Element            Status
    1  HF-ED SUBSTANCE ABUSE (OVERRIDE)  ED SUBSTANCE ABUSE REFUSED      Enabled
    2  HF-ALCOHOL                        ALCOHOL DIALOG GROUP            Disabled



          + Next Screen   - Prev Screen   ?? More Actions
AD   Add                  PT   List/Print All             QU   Quit
Select Item: Quit//
```

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

```
Edit List                     May 05, 2000 10:48:25       Page:    1 of    1
Finding Item Parameter Name:  ALCOHOL  (ENABLED)

 Finding Type: HF(6)          Finding Item: ALCOHOL

Dialog Group: ALCOHOL DIALOG GROUP  (ENABLED)

 1) Dialog Element: HF BINGE DRINKING OTHER  (ENABLED)
    Dialog Text: Binge drinking
    Additional Prompts: PXRM COMMENT

 2) Dialog Element: HF DRINKING ALONE OTHER  (ENABLED)
    Dialog Text: Drinking alone
    Additional Prompts: PXRM COMMENT

          + Next Screen   - Prev Screen   ?? More Actions
ED   Edit                 INQ  Inquiry/Print        QU   Quit
Select Action: Quit//
```

In the example above, the dialog elements have been previously generated automatically as part of another reminder dialog. A dialog group (ALCOHOL DIALOG GROUP) has then been created in Dialog Edit using these existing dialog elements. Finally an entry has been created in the finding item parameter to link HF(6) to the dialog group.

Taxonomy Dialog Edit (TD)

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

Changes may be made through this option to:

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

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

The first screen in this option displays all taxonomies:

```
Selection List                    May 05, 2000 11:14:48       Page:    1 of    3
Taxonomy Dialog

 Item Reminder Taxonomy
    1  FTEST1
    2  PAIN TAXONOMY
    3  PROBTEST 1
    4  PROBTEST 2
    5  RADIOLOGY TAXONOMY
    6  SLC DIABETES
    7  SLC-Ear Mites
    8  VA-ALCOHOL ABUSE
    9  VA-ALCOHOLISM SCREENING
   10  VA-BREAST TUMOR
   11  VA-CERVICAL CA/ABNORMAL PAP
   12  VA-CERVICAL CANCER SCREEN
   13  VA-CHOLESTEROL
   14  VA-COLORECTAL CA
   15  VA-COLORECTAL CANCER SCREEN
          + Next Screen   - Prev Screen   ?? More Actions
PT  List All              QU   Quit
Select Item: Next Screen//
```

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

```
Edit List                    May 05, 2000 11:17:16        Page:   1 of    1
Taxonomy Name:  SLC DIABETES
Taxonomy Dialog
  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
          + Next 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

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

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

		enable/disable dialog.
INQ	Inquiry/Print (for Reminder Dialogs only)	Print details of this reminder dialog.

Dialog Edit Options

The edit options allow changes to the selected reminder dialog. When making changes to dialog elements and prompts, it should be remembered that dialog elements and prompts might be used in more than one reminder dialog. Changing one reminder dialog may affect others.When editing any of the sub items, a list is presented that displays any other dialogs, groups, or elements that are using the item that is being edited. Additional prompts, forced values, dialog elements, and dialog groups may be edited or printed.

```
Dialog Edit List              Dec 15, 2004@14:04:59                Page:    1 of    4
REMINDER DIALOG NAME: VA-DEPRESSION ASSESSMENT [NATIONAL] *LIMITED EDIT*
 Item  Seq.    Dialog Summary
  1    5   Element: VA-TEXT DEPRESSION EVAL INSTRUCTIONS

  2    7   Element: VA-TEXT BLANK LINE WITH TEMPLATE FIELD

  3    10  Group: VA-GP DEP MDD CRITERIA DISPLAY

  4    10.5   Element: VA-TEXT MDD DSM-IV CRITERIA DISPLAY

  5    12  Group: VA-GP PHQ 9

  6    12.5   Element: VA-TEXT PHQ 9

  7    15  Element: VAA-TEXT BLANK LINE

  8    20  Group: VA-GP DEP ASSESSMENT RESULTS
          + Next Screen   - Prev Screen   ?? More Actions
ADD  Add Element/Group    DS   Dialog Summary       INQ  Inquiry/Print
CO   Copy Dialog          DO   Dialog Overview      QU   Quit
DD   Detailed Display     DT   Dialog Text
DP   Progress Note Text   ED   Edit/Delete Dialog
Select Item: Next Screen//
```

Dialog Overview

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

```
Dialog Edit List              Dec 15, 2004@14:04:59                Page:    1 of    4
REMINDER DIALOG NAME: VA-DEPRESSION ASSESSMENT [NATIONAL] *LIMITED EDIT*
 Item  Seq.    Dialog Overview
  1     5   Element: VA-TEXT DEPRESSION EVAL INSTRUCTIONS

  2     7   Element: VA-TEXT BLANK LINE WITH TEMPLATE FIELD

  3     10  Group: VA-GP DEP MDD CRITERIA DISPLAY

  4     12  Group: VA-GP PHQ 9

  5     15  Element: VAA-TEXT BLANK LINE

  6     20  Group: VA-GP DEP ASSESSMENT RESULTS

  7     24  Element: VAA-TEXT BLANK LINE

  8     30  Element: VA-HF PT FOLLOWED FOR DEPRESSION

          + Next Screen   - Prev Screen   ?? More Actions
ADD  Add Element/Group    DS   Dialog Summary       INQ  Inquiry/Print
CO   Copy Dialog          DO   Dialog Overview      QU   Quit
DD   Detailed Display     DT   Dialog Text
DP   Progress Note Text   ED   Edit/Delete Dialog
Select Item: Next Screen//
```

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 instrucment 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:

```
Dialog List                    Sep 25, 2007@12:38:19          Page:    1 of    2
DIALOG VIEW (RESULT GROUPS)

 Item Dialog Name                              Dialog type              Status
    6  PXRM AIMS RESULT GROUP                   Result Group
    7  PXRM AUDC RESULT GROUP                   Result Group
```

```
   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 GROUP                   Result Group
  13  PXRM DOM80 RESULT GROUP                  Result Group
  14  PXRM DOMG RESULT GROUP                   Result Group
  15  PXRM MISS RESULT GROUP                   Result Group
  16  PXRM MORSE FALL RESULT GROUP             Result Group
  17  PXRM PCLC RESULT GROUP                   Result Group
  18  PXRM PCLM RESULT GROUP                   Result Group
  19  PXRM PHQ2 RESULT GROUP                   Result Group
  20  PXRM PHQ9 RESULT GROUP                   Result Group
  21  PXRM PTSD RESULT GROUP                   Result Group
  22  PXRM ZUNG RESULT GROUP                   Result Group
+
+          + Next Screen   - Prev Screen   ?? More Actions                >>>
AD   Add                   CV   Change View          INQ  Inquiry/Print
CO   Copy Dialog           PT   List/Print All       QU   Quit
Select Item: Quit//
```

Mental Health Test Dialogs, cont'd

This is the Inquiry/Print for result group AIMS:

```
Dialog List                    Jun 06, 2007@09:09:50          Page:    1 of    2
DIALOG VIEW (RESULT GROUPS)

 Item Dialog Name                              Dialog type              Status
   1  AGP BPRS 210 RG                          Result Group
   2  AGP BPRS 212 RG                          Result Group
   3  AGP PTSD RESULT GROUP                    Result Group
   4  AGP PTSD RESULT GROUP 2                  Result Group
   5  PXRM AIMS RESULT GROUP                   Result Group
   6  PXRM AUDC RESULT GROUP                   Result Group
   7  PXRM AUDIT RESULT GROUP                  Result Group
   8  PXRM BDI II RESULT GROUP                 Result Group
   9  PXRM BDI RESULT GROUP                    Result Group             Disabled
  10  PXRM BRADEN RESULT GROUP                 Result Group
  11  PXRM CAGE RESULT GROUP                   Result Group
  12  PXRM DOM80 RESULT GROUP                  Result Group
  13  PXRM DOMG RESULT GROUP                   Result Group
  14  PXRM MISS RESULT GROUP                   Result Group
  15  PXRM PHQ2 RESULT GROUP                   Result Group
  16  PXRM PHQ9 RESULT GROUP                   Result Group
+         + Next Screen   - Prev Screen   ?? More Actions                  >>>
AD   Add                  CV   Change View          INQ  Inquiry/Print
CO   Copy Dialog          PT   List/Print All       QU   Quit
Select Item: Next Screen// INQ   Inquiry/Print
Select Dialog Definition: PXRM AIMS RESULT GROUP       result group     NATIONAL
         ...OK? Yes//   (Yes)

DEVICE:   HOME
REMINDER DIALOG INQUIRY                          Jun 06, 2007 9:10:37 am  Page 1
-------------------------------------------------------------------------------

        NUMBER: 208
                           Name:  PXRM AIMS RESULT GROUP
                        Disable:
                           Type:  result group
                          Class:  NATIONAL
                        Sponsor:
                    Review Date:
                        MH Test:  AIMS
                MH Scale Number:  1
                Exclude from PN:

  Edit History:

 GROUP COMPONENTS:

         Sequence:  1
   Result Element:  PXRM AIMS RESULT ELEMENT 1
Element Condition:
    Element text:
     The patient was evaluated for symptoms of tardive dyskinesia using the
     AIMS.
       Total score for items 1-7:           |SCORE|

Informational text:
```

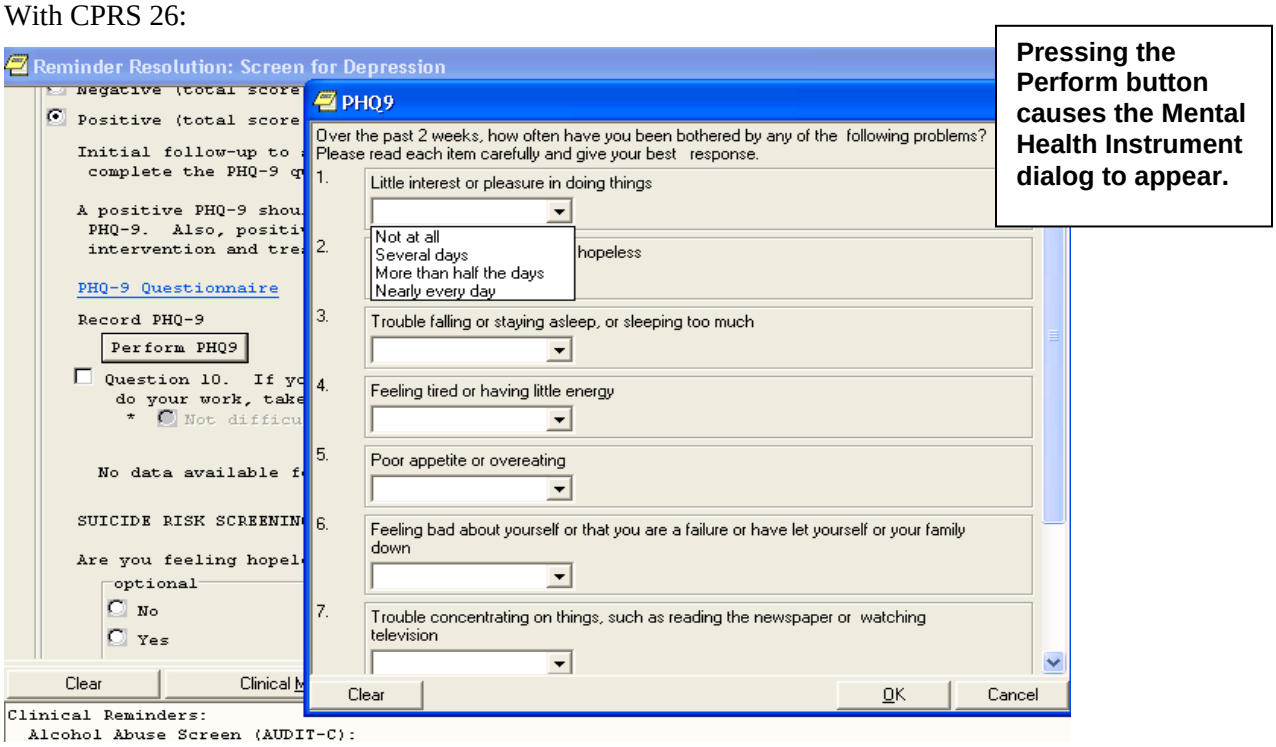
Action CV within Reminder Dialogs allows result groups and result elements to be modified. The position of the score in the progress note text is defined by a |SCORE| marker in the result element.

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

Mental Health Test Dialogs, cont'd

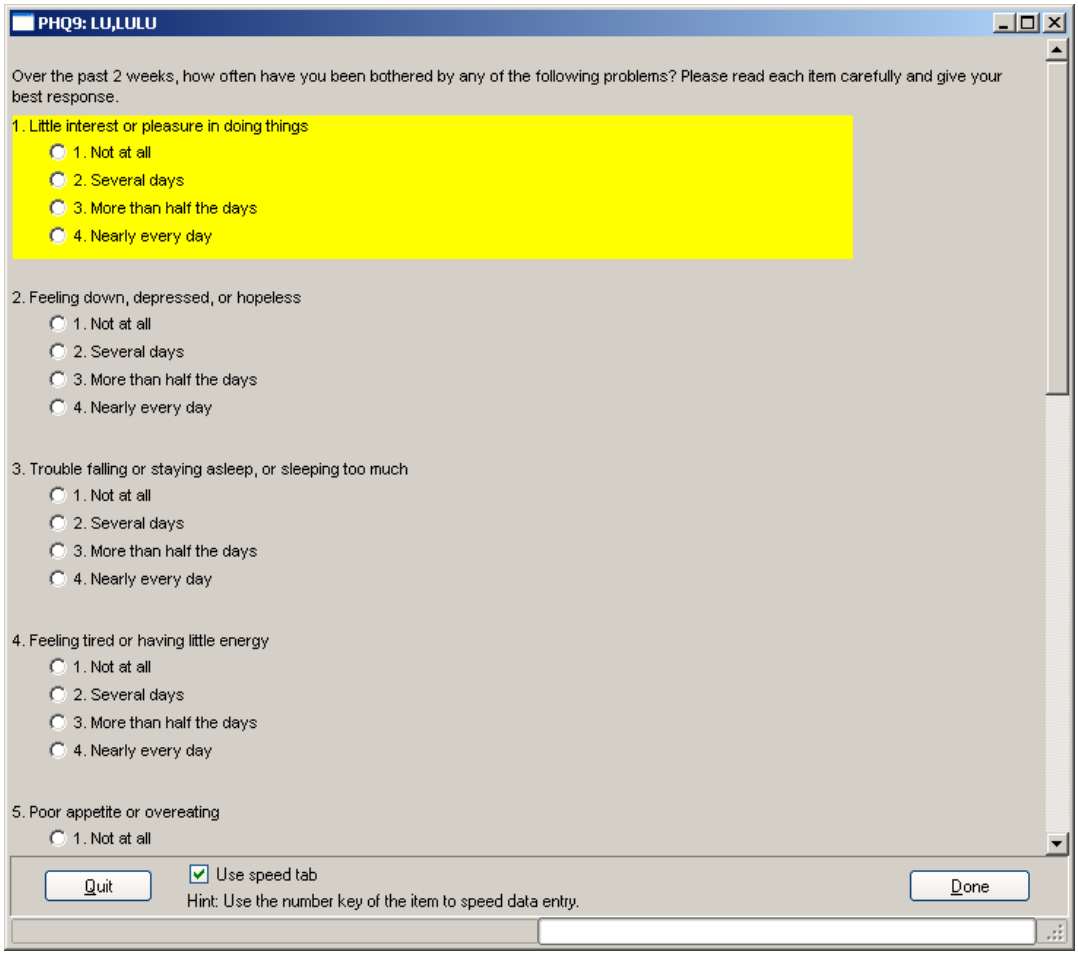
Example of giving a Mental Health Instrument:

With CPRS 26:



Pressing the Perform button causes the Mental Health Instrument dialog to appear.

With CPRS 27 and MH DLL:



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
         //
  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.

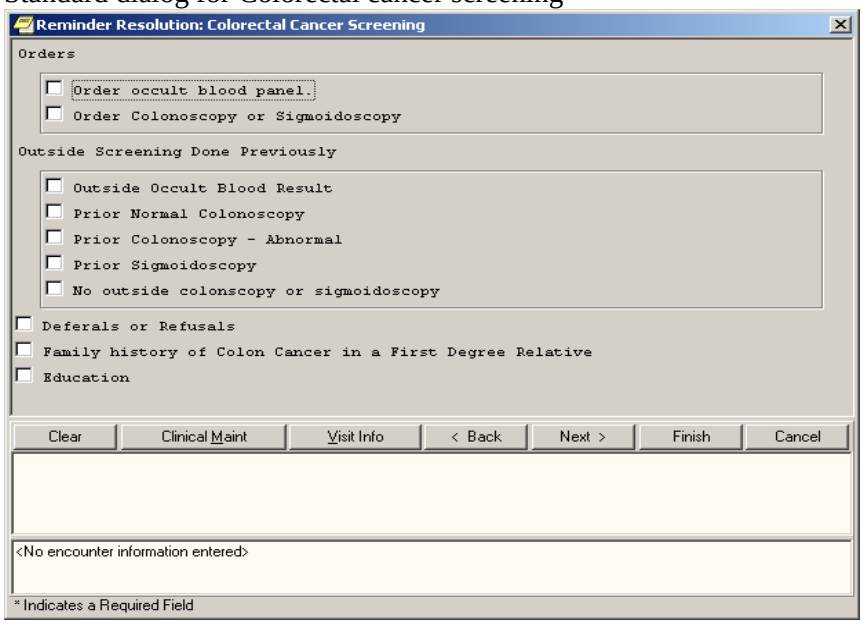
Group 1 has a reminder term (A) that looks for a score of 8 or higher, if true then group 1 is displayed and it contains the more limited set of interventions. If (A) is false, then the replacement group is displayed which has the interventions for scores 4-7 (women 3-7).

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.

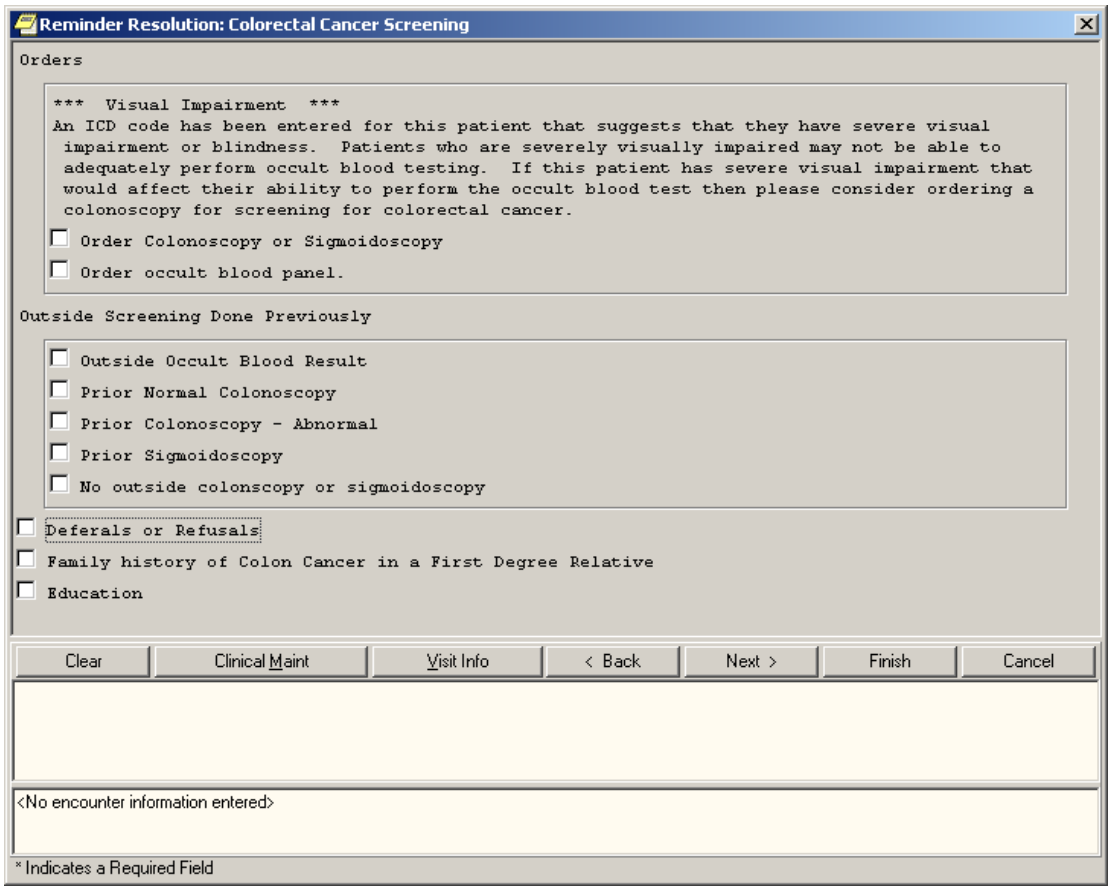
Another scenario is a new integrated pneumovax reminder that might better accomplish the true nature of the recommended guidelines without presenting too much information to the user.
For example, the reminder dialog could show one version for patients who had never had a pneumovax administration before, 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

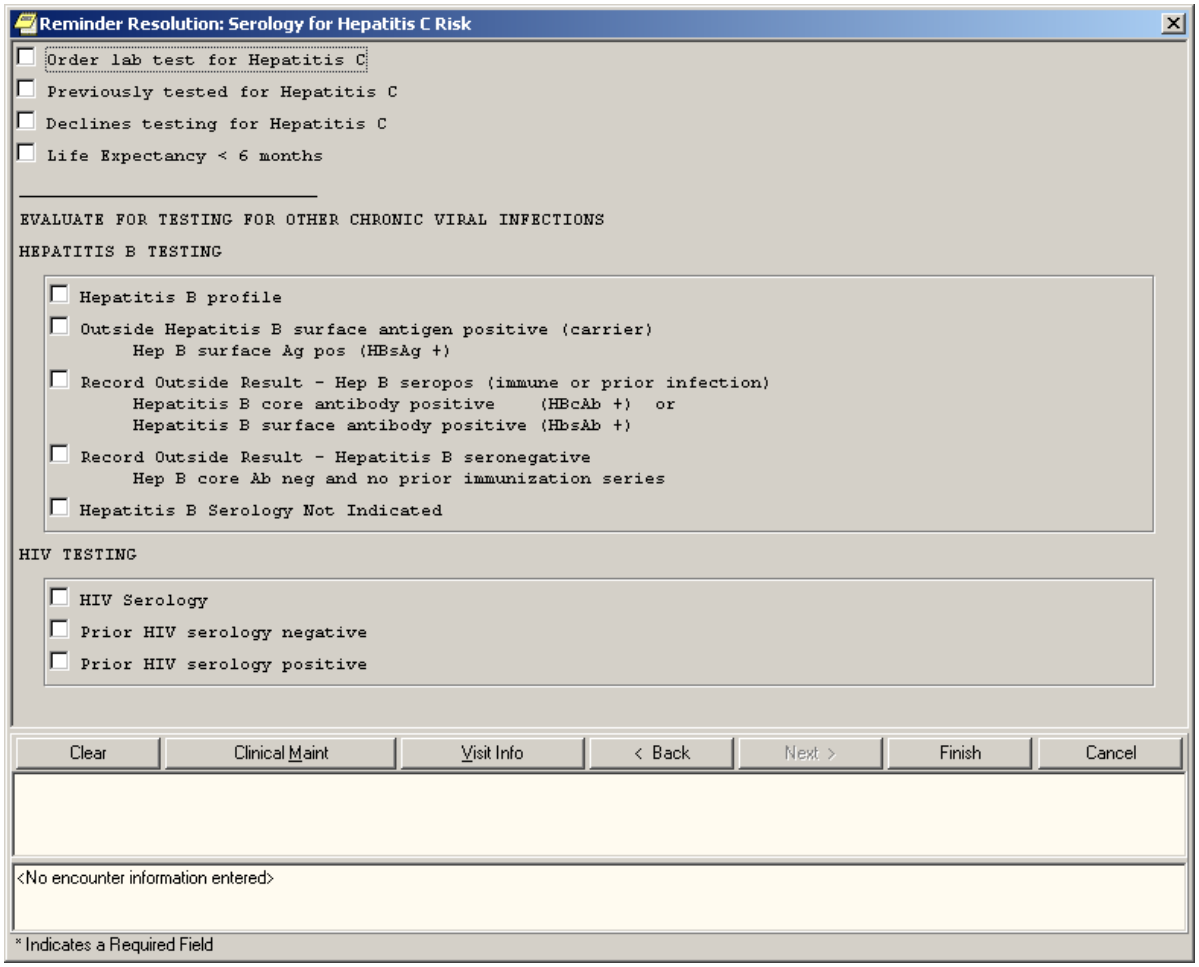


Same reminder, but the first dialog group is replaced by a different one if the patient has an ICD code that suggests visual impairment.

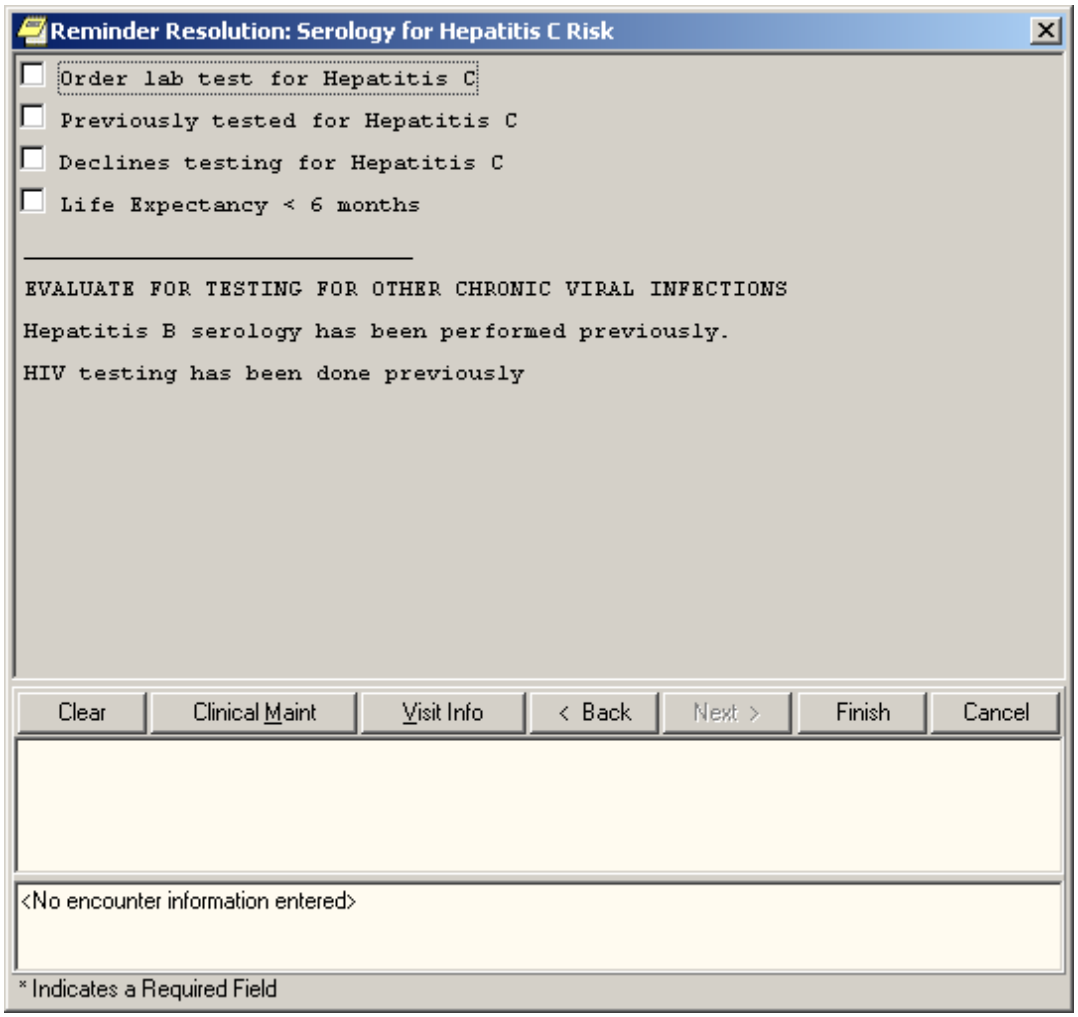


Example 4

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



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



Branching logic problem

Ways that are acceptable for branching – and some pitfalls

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

The branching logic will allow branching continually throughout the dialog, but it will not allow multiple branching at the same level in the dialog.

Reported questions/problems and solutions:

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

A Make sure the PATIENT SPECIFIC field is set to True; this field can be found by editing the dialog itself.

Q I 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.

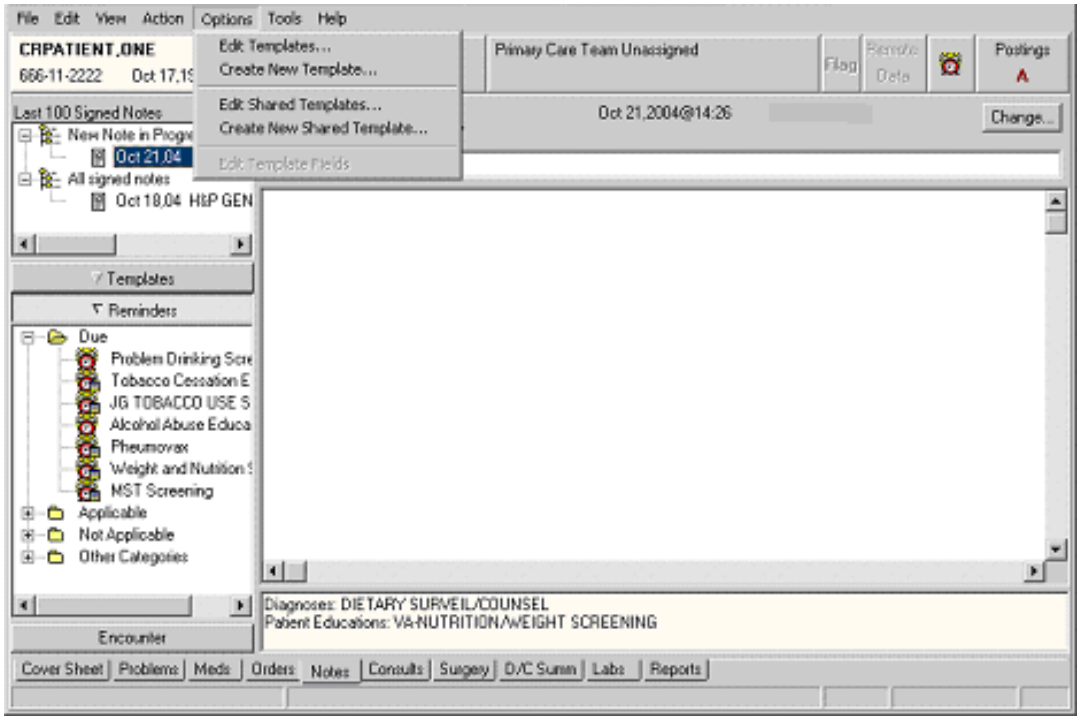
Q I think I set everything up correctly, but the branching logic does not seem to be working correctly.

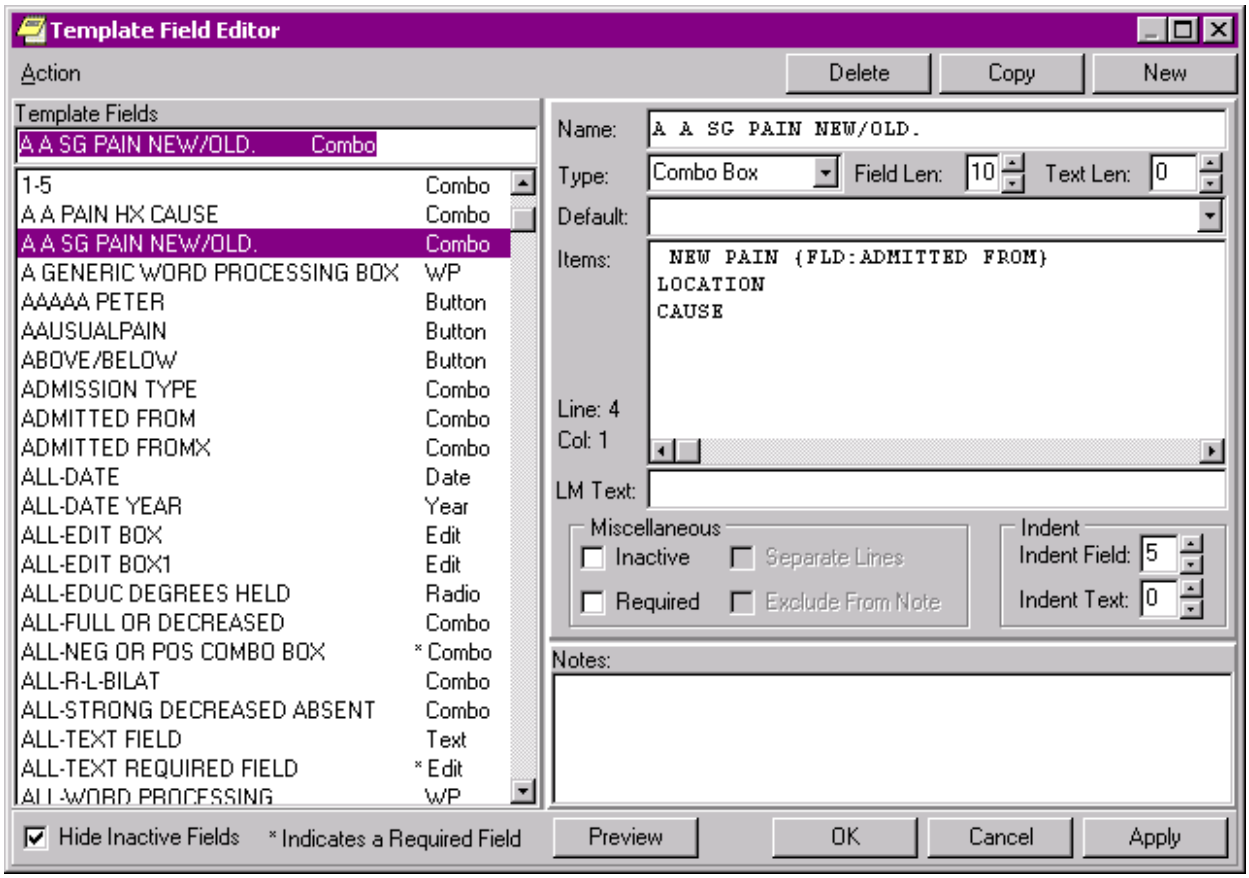
A Verify that the term is evaluating correctly for your patient; you can do this by running the reminder test output from VistA.

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.





In order to use the Edit Template Fields option to edit template fields used in Reminder Dialogs, the following are required:

1. New option: TIU Template Reminder Dialog Parameter, on the CPRS Parameter menu on the Reminder Manager Menu
2. TIU parameter TIU FIELD EDITOR CLASSES
3. User Class of Clinical Coordinator

TIU parameter TIU FIELD EDITOR CLASSES

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

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

TIU FIELD EDITOR CLASSES may be set for the following:

     1   User          USR    [choose from NEW PERSON]
     3   Service       SRV    [choose from SERVICE/SECTION]
     4   Division      DIV    [choose from INSTITUTION]
```

```
     5   System        SYS    [DVF.FO-SLC.MED.VA.GOV]
     6   Package       PKG    [TEXT INTEGRATION UTILITIES]

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

     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

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

Select TIU Maintenance Menu Option: 3  User Class Management

                      --- User Class Management Menu ---


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

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

Current User Classes          Jan 23, 2003@14:55:15                Page:    1 of    1
                                   CRPROVIDER,ONE                     2 Classes
     User Class                                          Effective  Expires
1    Clinical Coordinator                                04/28/00
2    Physician                                           11/16/98   04/11/15

          + Next Screen   - Prev Screen   ?? More Actions
     Add                      Remove                    Quit
     Edit                     Change View
```

Add a New Class to an Existing User

```
Current User Classes          Jan 23, 2003@14:55:15        Page:    1 of    1
                                 CRPROVIDER,ONE                      2 Classes
     User Class                                            Effective  Expires
1    CRPROVIDER's Consult Class
2    Business Rule Manager                                    09/22/00
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
     1   Clinical And Laboratory Immuno  CLINICAL AND LABORATORY IMMUNOLOGIST
     2   Clinical Biochemical Geneticis  CLINICAL BIOCHEMICAL GENETICIST
     3   Clinical Biochemical Molecular  CLINICAL BIOCHEMICAL MOLECULAR
GENETICIST
     4   Clinical Clerk  CLINICAL CLERK
     5   Clinical Coordinator  CLINICAL COORDINATOR
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 5  CLINICAL COORDINATOR
EFFECTIVE DATE: t  (JAN 23, 2003)
EXPIRATION DATE: t+1  (JAN 24, 2003)

Select Another USER CLASS:
Rebuilding membership list.

Current User Classes          Jan 23, 2003@14:55:15        Page:    1 of    1
                                 CRUSER,TWO                          2 Classes
     User Class                                            Effective  Expires
1    A Consult Class
2    Business Rule Manager                                 09/22/00
3    Clinical Coordinator                                  01/23/03   01/28/03
4    Medical Administration Special                        09/11/01
5    Social Worker Supervisor
          + Next Screen   - Prev Screen   ?? More Actions
     Add                       Remove                     Quit
     Edit                      Change View
```

Dialog Reports

Option Name		Synonym	Description
Reminder Dialog Elements Orphan Report	PXRM DIALOG ORPHAN REP ORT	OR	This option is used to run the Reminder Dialog Elements Orphan Report.
Empty Reminder Dialog Report	PXRM DIALOG EMPTY REPORT	ER	This Option will run the Empty Reminder Dialog report.
Check Reminder Dialog for invalid items	PXRM DIALOG CHECKER	CH	This option runs a routine that checks a selected reminder dialog for 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 ...
   IA     Inactive Codes Mail Message

Select Reminder Dialog Management Option: DR  Dialog Reports

   OR     Reminder Dialog Elements Orphan Report
   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//
```

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

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

Dialog Groups
=============
    DG LEVEL 2 GROUP
    EXCLUDE FROM P/N GROUP
    GP DEMO GROUP
```

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

Result Groups
=============
    PXRM AIMS RESULT GROUP
    PXRM AUDC RESULT GROUP
    PXRM AUDIT RESULT GROUP
    PXRM BDI RESULT GROUP
    PXRM CAGE RESULT GROUP
    PXRM DOM80 RESULT GROUP
    PXRM DOMG RESULT GROUP
    PXRM MISS RESULT GROUP
    PXRM ZUNG RESULT GROUP
    SLC ZUNG RESULT GROUP
    SLC ZUNG2

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

Force Values
============
    A A *PAIN TRIGGERS PROMPT
    A A ENTER ALL THAT APPLY
    A A PAIN ACCEPTABLE PROMPT
    A A PAIN NEW HX PROMPT
    A ASUSAN'S TEST
    PXRM FORCE DATE TEST
    PXRM WH NOTIFICATION TYPE
    PYRM SERIES FORCED
    WH NOTIFICATION FORCE VALUE
    a new forced value
```

```
Enter RETURN to continue or '^' to exit:

   OR     Reminder Dialog Elements Orphan Report
   ER     Empty Reminder Dialog Report
   CH     Check Reminder Dialog for invalid items
```

Empty Reminder Dialog Report

```
Select Dialog Reports Option: ER  Empty Reminder Dialog Report
DEVICE: HOME// ;;99999999999  ANYWHERE    Right Margin: 80//

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


Enter RETURN to continue or '^' to exit:

   OR     Reminder Dialog Elements Orphan Report
   ER     Empty Reminder Dialog Report
   CH     Check Reminder Dialog for invalid items


Select Dialog Reports Option:
```

Check Reminder Dialog for Invalid Items

This option scans the selected dialog items for invalid sub-items, findings, TIU Objects, and/or TIU Templates. If any invalid items are found in the dialog, the results will be displayed to the user. This option allows for any dialog items to be selected, except for Additional Prompts and Forced Values.

The dialog checker report will check for the following items.

1. Disabled dialog items in the selected dialog.
2. Incomplete sequences in the selected dialog.
3. All sub-items in the selected dialog are pointing to valid entry on the system.
4. All finding items, additional finding items, and orderable items are pointing to a valid entry on the system.
5. Result groups are pointing to a valid MH Test and a MH scale has been defined for the result group.
6. An odd number of "|" characters in a dialog text field. If this is the case, it would not be possible to determine which part is a TIU Object.
7. Progress Note Text and the Alternate Progress Note text fields have valid TIU Objects and TIU Template Field.

Example of output

```
Select Dialog Reports Option: CH  Check Reminder Dialog for invalid items
Select Dialog Definition:    EXCHANGE DIALOG     reminder dialog     LOCAL
```

```
         ...OK? Yes//   (Yes)

EXCHANGE DIALOG contains the following errors.
The dialog element INACTIVE OBJECT contains a reference to a TIU
Object NP TIUHS OBJECT TEST in the Dialog Text field. This TIU Object is
inactive.
```

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.

CPRS Reminder Configuration Menu

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

Syn	Option	Option Name	Description
CA	Add/Edit Reminder 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 207.

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

```
Selection List                Aug 18, 1999 15:04:41         Page:  1 of    1
Reminder Categories

 Item Reminder Category
   1  DIABETES CLINIC REMINDERS
   2  WEIGHT AND NUTRITION









          + Next Screen   - Prev Screen   ?? More Actions
AD   Add                  PT   List/Print All             QU   Quit
Select Item: Quit//
```

Actions

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

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

```
Edit List                  Apr 18, 2000 15:04:41           Page:    1 of  1
Reminder Category Name: SLC DEMO CATEGORY

Category Description:
    This is the text for that summarizes what this category represents. A
    category may contain reminders and/or a number of sub-categories.

Sequence:  1   Reminder: SLC CANCER SCREEN
Sequence:  2   Reminder: SLC DIABETIC EYE EXAM
Sequence:  3   Reminder: SLC LIFE STYLE EDUCATION
Sequence:  4   Reminder: SLC PNEUMOCOCCAL VACCINE
Sequence: 90   Reminder: SLC DIABETIC FOOT CARE ED
Sequence: 99   Reminder: MHTEST

Sub-category: SUBSTANCE ABUSE                     Sequence: 3
     Sequence:  1   Reminder: TOBACCO EDUCATION
     Sequence:  2   Reminder: TOBACCO USE SCREEN
     Sequence:  3   Reminder: VA-*PROBLEM DRINKING SCREEN
          + Next Screen   - Prev Screen   ?? More Actions
ED   Edit                     INQ   Inquiry/Print               QU   Quit
Select Action: Quit//ED
```

Actions

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

CPRS Lookup Categories

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

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

Reminder Categories for Lookup may be set for the following:

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

Enter selection: 1  User   NEW PERSON
Select NEW PERSON NAME:  CRPROVIDER,ONE     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 213), you won't use this option; instead you will manage the cover sheet list through the CPRS GUI.

```
Select CPRS Reminder Configuration Menus Option: CS  CPRS Cover Sheet Reminder List

Clinical Reminders for Search may be set for the following:

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

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)
     40                                   VA-*HYPERTENSION SCREEN

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:

     1   User          USR    [choose from NEW PERSON]
     2   Service       SRV    [choose from SERVICE/SECTION]
     3   Division      DIV    [choose from INSTITUTION]
     4   System        SYS    [DEVCUR.ISC-SLC.VA.GOV]

Enter selection: 1  User   NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,SIX     sc

---------- Setting Mental Health Active  for User: CRPROVIDER,SIX -------
MENTAL HEALTH ACTIVE: YES// <Enter>

   CA     Add/Edit Reminder Categories
   CL     CPRS Lookup Categories
   CS     CPRS Cover Sheet Reminder List
   MH     Mental Health Dialogs Active
   PN     Progress Note Headers
   RA     Reminder GUI Resolution Active
   DL     Default Outside Location
   PT     Position Reminder Text at Cursor
   NP     New Reminder Parameters

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.

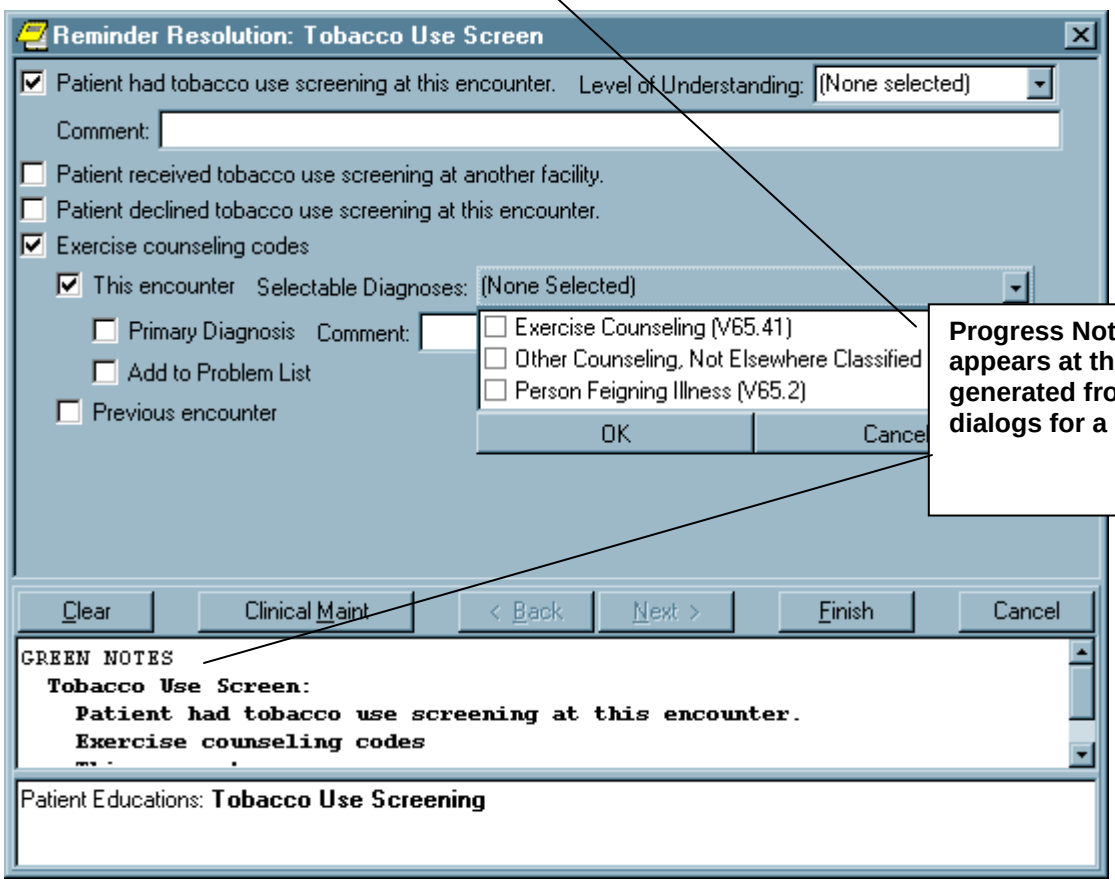
```
Select CPRS Reminder Configuration Menus Option: PN  Progress Note Headers
Progress Note Header may be set for the following:
     1   User          USR    [choose from NEW PERSON]
     2   Location      LOC    [choose from HOSPITAL LOCATION]
     3   Service       SRV    [choose from SERVICE/SECTION]
     4   Division      DIV    [REGION 5]
     5   System        SYS    [DEVCUR.ISC-SLC.VA.GOV]
     6   Package       PKG    [CLINICAL REMINDERS]

Enter selection: 1  User   NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,ONE     jg

------------ Setting Progress Note Header  for User: CRPROVIDER,ONE -------
PROGRESS NOTE HEADER: ?

This response can be free text.

PROGRESS NOTE HEADER: GREEN NOTES
```



Progress Note Header text appears at the top of all text generated from reminder dialogs for a given note.

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]
     2   Service       SRV    [choose from SERVICE/SECTION]
     3   Division      DIV    [choose from INSTITUTION]
     4   System        SYS    [DEVCUR.ISC-SLC.VA.GOV]

Enter selection: 1  User   NEW PERSON
Select NEW PERSON NAME:  CRPROVIDER,ONE     jg

-------------- Setting Reminders Active  for User: CRPROVIDER,ONE --------------
REMINDERS ACTIVE: YES// <Enter>
```

Default Outside Location

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

Example

```
Select CPRS Reminder Configuration Option: dl  Default Outside Location
Default Outside Locations may be set for the following:
     1   User          USR    [choose from NEW PERSON]
     3   Service       SRV    [choose from SERVICE/SECTION]
     4   Division      DIV    [choose from INSTITUTION]
     5   System        SYS    [DEVCUR.ISC-SLC.VA.GOV]
     6   Package       PKG    [ORDER ENTRY/RESULTS REPORTING]
Enter selection: 1   User   NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,TWO     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

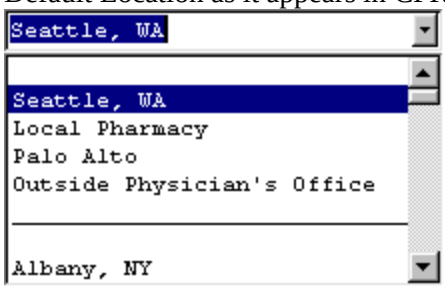
Display Sequence: 2// <Enter>
Outside Location (Text or Pointer): Local Pharmacy

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:



Note that Seattle, WA and Palo Alto are entries in the institution file with internal entry numbers of 663 and 640, respectively.

Position Reminder Text at Cursor

The default behavior of reminder dialogs is to insert any text generated by the reminder dialog at the bottom of the current note. When the ORQQPX REMINDER TEXT AT CURSOR parameter is set, text will be inserted at the current cursor location.

```
Select CPRS Reminder Configuration Option: PT  Position Reminder Text at Cursor

Position Reminder Text at Cursor may be set for the following:

     1   User          USR    [choose from NEW PERSON]
     3   Service       SRV    [choose from SERVICE/SECTION]
     4   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:

     1   User          USR    [choose from NEW PERSON]
     3   Service       SRV    [choose from SERVICE/SECTION]
     4   Division      DIV    [choose from INSTITUTION]
     5   System        SYS    [DVF.FO-SLC.MED.VA.GOV]

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:
     1   User          USR    [choose from NEW PERSON]
     2   Service       SRV    [choose from SERVICE/SECTION]
     3   Division      DIV    [choose from INSTITUTION]
     4   System        SYS    [DEVCUR.ISC-SLC.VA.GOV]
     5   Package       PKG    [ORDER ENTRY/RESULTS REPORTING]

Enter selection: 1  User   NEW PERSON
Select NEW PERSON NAME: CRPROVIDER,ONE    OC

--------- 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

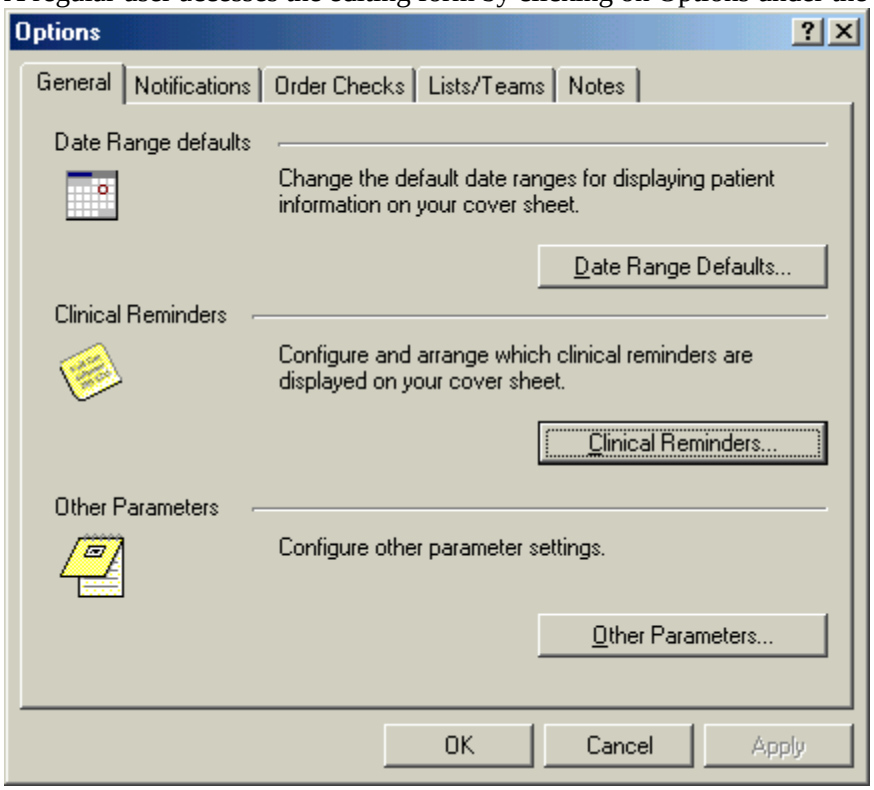
A reminder manager is anyone who has PXRM MANAGERS MENU as a primary or secondary menu option. A regular user can only edit their own cover sheet list, while a reminder manager can edit and manage cover sheet lists at all levels.

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."

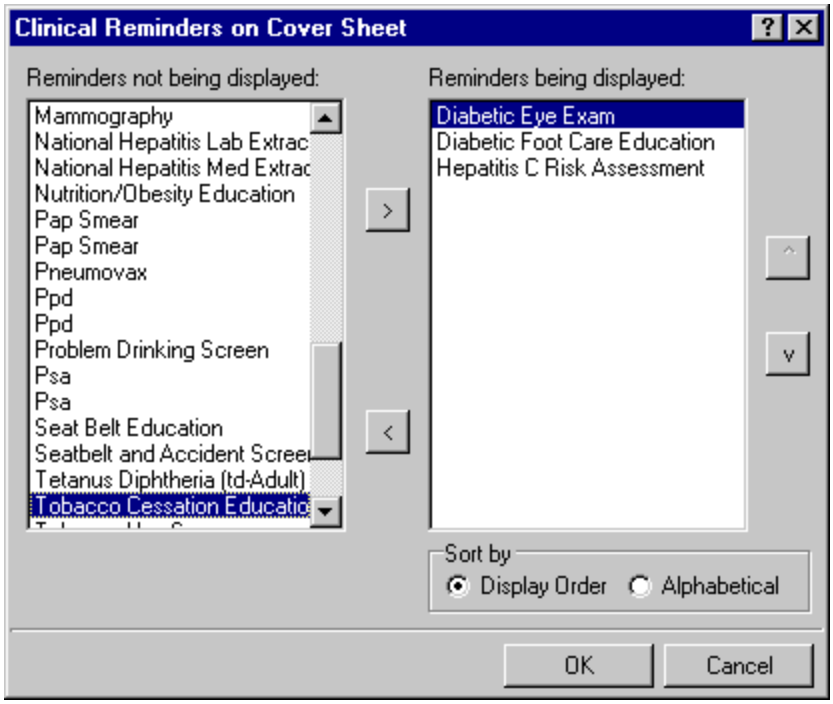
If your site is using the new cover sheet list functionalty, then you can skip the following section.

ORQQPX NEW REMINDER PARAM set to "NO"

A regular user accesses the editing form by clicking on Options under the tools menu



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



Highlight an item in the **Reminders not being displayed** field and then click the Add arrow ">" to add it to the **Reminders being displayed** field. You may hold down the Control key and select more than one reminder at a time. When you have all of the desired reminders in the **Reminders being displayed** field, you may highlight a reminder and use the up and down buttons on the right side of the dialog to change the order in which the reminders will be displayed on the Cover Sheet.

Sort by
Select Display Order to display the reminders in the order that you choose. Click Alphabetical to have the reminders displayed in alphabetic order.

This list is the list defined at the user level and takes precedence over any lists defined at higher levels, i.e. Location, Service, Division, System, or Package. A regular user cannot edit the list at any of these higher levels. A reminder manager can edit the list at these higher levels through the CPRS Cover Sheet Reminder List (CS) option described above (page 208).

ORQQPX NEW REMINDER PARAM set to "YES"

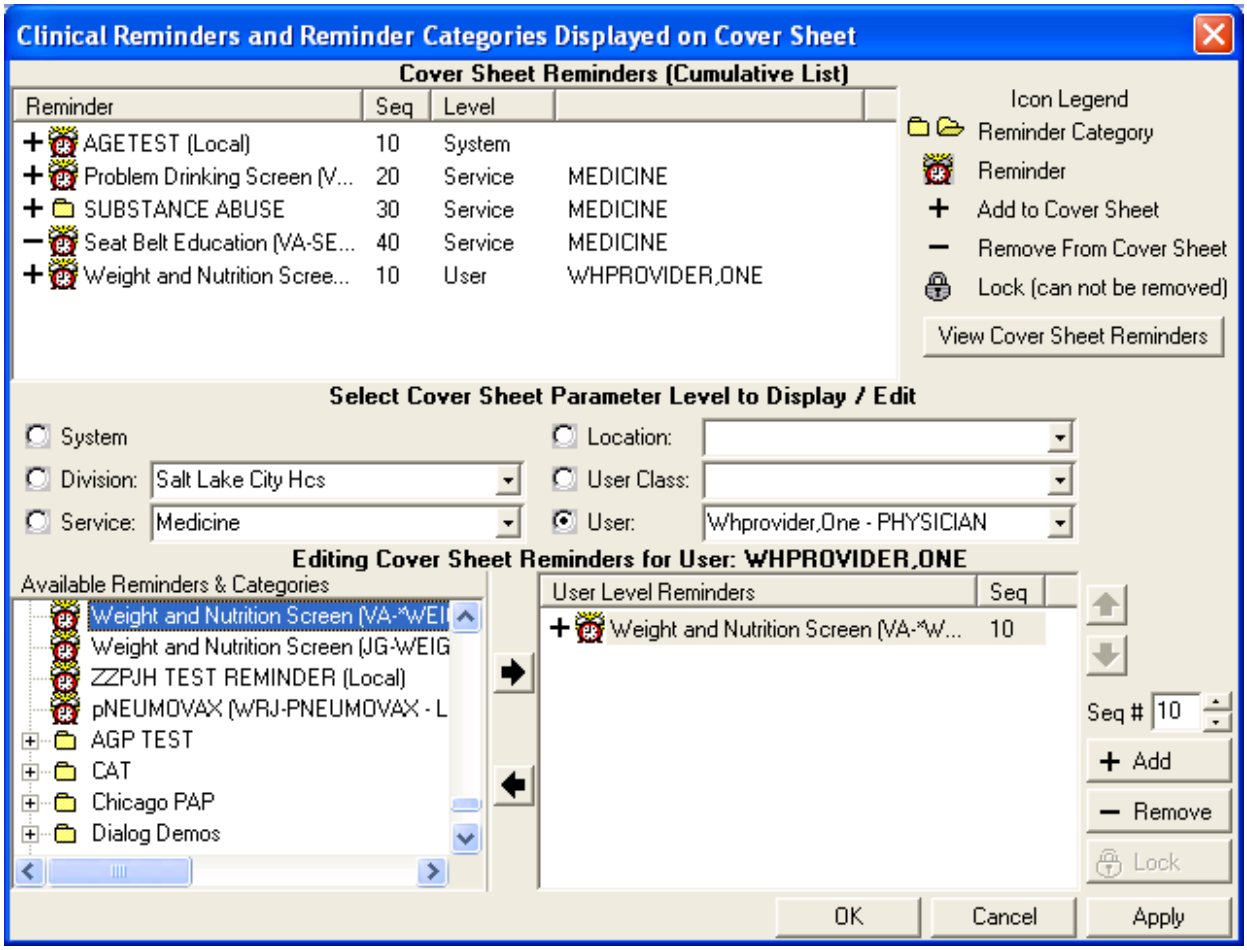
The new type of cover sheet list provides a great deal of flexibility, allowing the reminder manager to build lists at the User, User Class, Location, Service, Division, and System levels. Note that these levels are not exactly the same as with the old type of list, where they were User, Location, Service, Division, and Package.

An important distinction between the new type of list and the old type is the new list is cumulative and removable. For example, if a list is defined at the system level, reminders can be added to or removed from the list at the User level. There may be certain reminders that should be on all users' coversheet lists and these can be locked by the reminder manager.

The reminder manager accesses this functionality by clicking on the reminder button next to the CWAD button in the upper right hand corner of the CPRS GUI.

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

Edit Cover Sheet Reminder List



This reminder manager form provides very extensive cover sheet list management capabilities. It consists mainly of three large list areas.

- Cover Sheet Reminders (Cumulative List) displays selected information on the Reminders that will be displayed on the Cover Sheet.
- Available Reminders & Categories lists all available Reminders and serves as a selection list.
- User Level Reminders displays the Reminders that have been added to or removed from the cumulative list.

You may sort the Reminders in *Cover Sheet Reminders (Cumulative List)* by clicking on any of the column headers. Click on the Seq (Sequence) column header to view the Reminders in the order in which they will be displayed on your cover sheet.

Icon Legend

An icon legend is displayed to the right of *Cover Sheet Reminders (Cumulative List)*.

- Folder icon represents a group of reminders
- Red alarm clock represents an individual reminder.
- Plus sign in the first column means a reminder has been added to the list
- Minus sign in the first column means a reminder has been removed from the list

- Padlock icon means you can't remove reminder (mandatory)

Cover Sheet Reminders (Cumulative List)

The Level column of the Cover Sheet Reminders (Cumulative List) field displays the originating authority of the Reminder, which can include System, Division, Location, User Class, and User. Reminders on this list that display a small gray padlock icon at the beginning of the line cannot be removed. These Reminders are mandatory. The Seq (Sequence) column defines the order in which the Reminders will be displayed on the Cover Sheet. If there are two or more Reminders with the same sequence number, the Reminders are listed by level (System, Division, Service, Location, User class, User).

Available Reminders & Categories

This area displays all of the Reminders and Categories available to the user. Categories are groups of related reminders that can be added as a group. Individual reminders within a category can be removed from the User Level Reminders field. Highlight a Reminder or Category from the field and click the right arrow to add them to the User Level Reminders field.

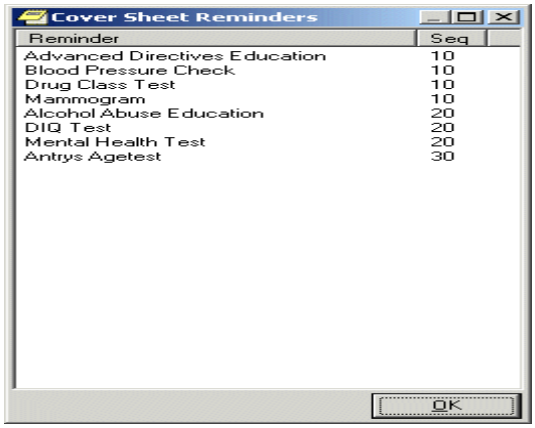
Select Cover Sheet Parameter Level to Display / Edit

This section has radio buttons for System, Division, Service, Location, User Class, and User. When one of the radio buttons is clicked, the list of reminders included at that parameter level appears in the box on the lower right-hand side of the form.You can then perform any of the following editing actions:

- To add a reminder, highlight the desired reminder in the Available Reminders & Categories field and click the right arrow button.
- To delete a reminder, highlight the reminder and click the left arrow.
- To make a reminder mandatory, select a reminder and then click on the Lock button.
- To make a mandatory reminder no longer mandatory, click on either the Add or Remove buttons, depending on if you want it to remain on the list or be removed.
- To determine the order in which the reminders will be displayed on the Cover Sheet, change the reminder's Sequence number. To do this click on the reminder and then change its sequence number in the sequence number box.

View Cover Sheet Reminders

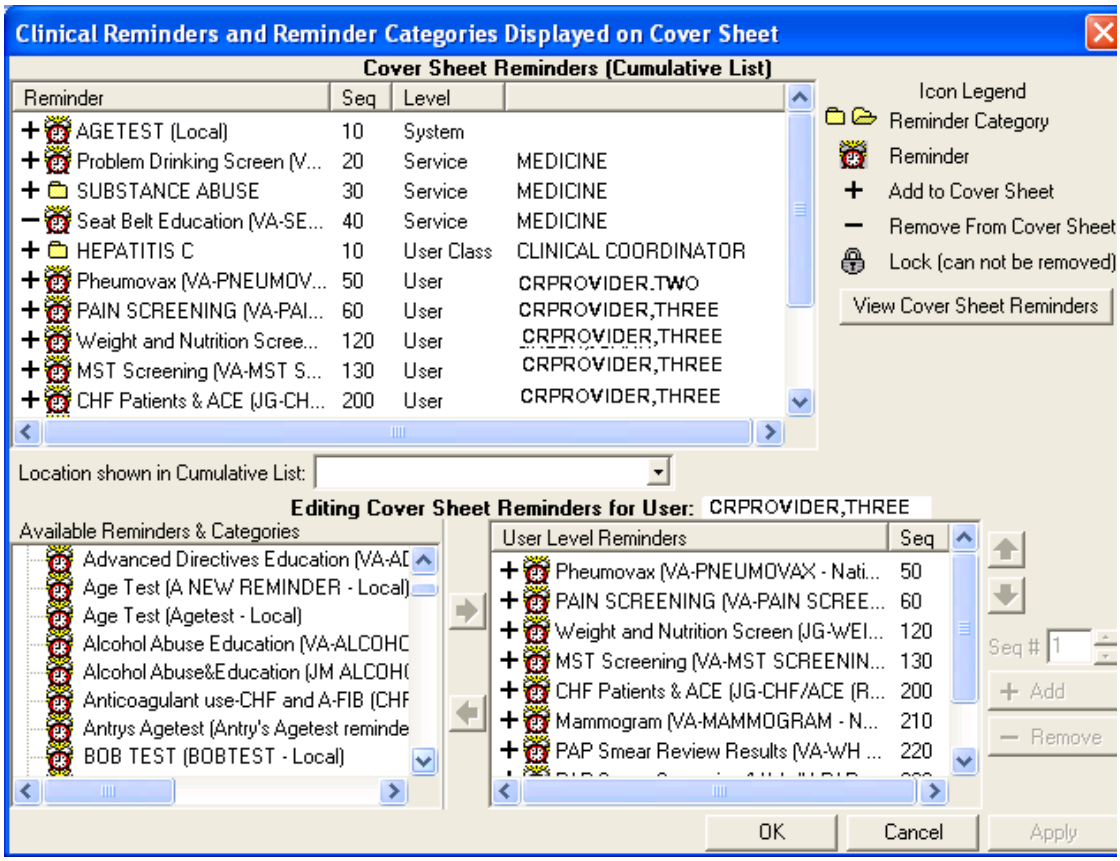
Since the cover sheet list is cumulative and removable, it is not always easy to determine exactly which reminders will be on a user's cover sheet list. Clicking on the **View Cover Sheet Reminders** button will display the final list for the user that has been selected at the User parameter level.



User level Cover Sheet Reminder Screen

A user level editing form is also available by clicking on the Tools menu, then options, then Clinical Reminders This is the same sequence as shown in the previous section for getting to the user editing form.

This form lets the user add or remove reminders (with the exception of locked reminders) to their cover sheet list. The functionality is basically the same as that described above.



Setting User and System Levels

The following Forum dialog might clarify some issues about setting levels:

Subj: CPRS COVERSHEET REMINDERS SETUP THRU GUI

We are having some problems with appropriate clinical reminders showing on coversheet when set up at SYSTEM or SERVICE level in GUI. Reminders set for SYSTEM are also showing for a user in a service that is also set up (EX: Medical). In other words, all of the reminders set for Medical Service show on coversheet as well as those set under SYSTEM. When I completely remove the GUI setup for SYSTEM, users no longer have those clinical reminders show on coversheet. I need the SYSTEM setting for those not set up in a service.
Per NOIS CAH-1003-31162, site had a similar problem and resolution stated there was a specific hierarchy (that seems to be different from others). I thought that if there was something set at USER level, that would take precedence over SERVICE or SYSTEM, but that doesn't seem to be true in this case.

MY QUESTION IS THIS: Can someone explain what the hierarchy is when setting clinical reminders in GUI vs VISTA. Should we only have setup in one or the other? I cannot find anything on this in documentation.

1. The hierarchy for reminders displaying on the GUI cover sheet is cumulative, so there is really no hierarchy, only the ability to add to the list at different levels. System displays to all users, division adds to system for users in that division, service adds to division and/or system for users in that service, etc.
   There used to be a hierarchy but that changed some time ago.
2. Check out HUN-0701-20018 RESTRICTED REMINDERS
   You can have it both ways - Cumulative and Restricted.
3. You just have to remember you have two different set-ups if you add or subtract reminders.
4. You have to have the parameter for using the new reminder parameters set to yes to take advantage of this:

```
Select CPRS Reminder Configuration Option: NP  New Reminder Parameters

Use New Reminder Parameters may be set for the following:

     1   User          USR     [choose from NEW PERSON]
     2   Service       SRV    [choose from SERVICE/SECTION]
     3   Division      DIV    [choose from INSTITUTION]
     4   System        SYS    [MARTINEZ.MED.VA.GOV]

Enter selection: 4  System   MARTINEZ.MED.VA.GOV

-- Setting Use New Reminder Parameters  for System: XXXVAMC.MED.VA.GOV ----
USE NEW REMINDER PARAMS: YES//
HUN-0701-20018     RESTRICTED REMINDERS
Description:
```

Q Our mental health providers should only see certain reminders due on a patient. I have them set under service to see:

```
Setting ORQQPX COVER SHEET REMINDERS  for Service: MENTAL HEALTH ------
Select Display Sequence: ?
```

```
     Display Sequence                     Value
     ----------------                     -----
     10                                   LR1006
     20                                   LR581016
     30                                   LR581011
     40                                   LR581002
     50                                   LR581007
```

They are seeing all reminders set at SYSTEM level + the additional reminders. Is something set up wrong or is this now cumulative? Is there a way so that they will only see the reminders relative to their service?

```
(12) Jul 05, 2001@09:43:26        CRSUPPORT,ONE
Well, we took a look at the parameters and the following...
Select  CPRS Reminder Configuration Option: np  New Reminder Parameters

Use New Reminder Parameters may be set for the following:

     1   User          USR    [choose from NEW PERSON]
     2   Service       SRV    [choose from SERVICE/SECTION]
     3   Division      DIV    [VAMC ALBANY PIA]
     4   System        SYS    [CPR.ISC-ALBANY.VA.GOV]
     5   Package       PKG    [ORDER ENTRY/RESULTS REPORTING]

Enter selection: 4  System   CPR.ISC-ALBANY.VA.GOV

-- Setting Use New Reminder Parameters  for System: CPR.ISC-ALBANY.VA.GOV ---
USE NEW REMINDER PARAMS: NO//
```

These can be set to YES or NO at any of the levels. I suggested they set the Mental Health and Optometry service to NO. Hopefully, now they will only see their DUE reminders and not everyone else's.
The other alternative is to set the ORQQPX REMINDER FOLDERS to Other Categories for these services. Then within the Other Categories, set up specific category names for the service's specific reminders. This would group the reminders together.

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   Team          TEA    [choose from TEAM]

Enter selection: 1  User   NEW PERSON
Select NEW PERSON NAME:   CRPROVIDER,ONE     OC

-------------- Setting Gec Status Check  for User: CRPROVIDER,ONE -------------
GEC Status Check: YES// <Enter>
```

WH Print Now Active

The "Print Now" button on the Women's Health review reminders is optional. A parameter can be set (at the system level) to allow the "Print Now" button to be added to the dialog. By default, "Print Now" is turned off: the CPRS Reminder Configuration Option called WH Print Now Active is released with a Value of NO. If the value is changed to YES, the "Print Now" button will appear on the dialog. Whether the "Print Now" button is added to the dialog or not, the default will always be that the letter is queued to the WH package.

The text in the progress note will be one of the following:

Print Now Active/**Yes**: Letter queued to print at Device Name on finish Date/Time
Print Now Active/**No**: Letter queued to WH package Date/Time

```
Select CPRS Reminder Configuration Option: WH  WH Print Now Active

WH Print Now Option Active may be set for the following:

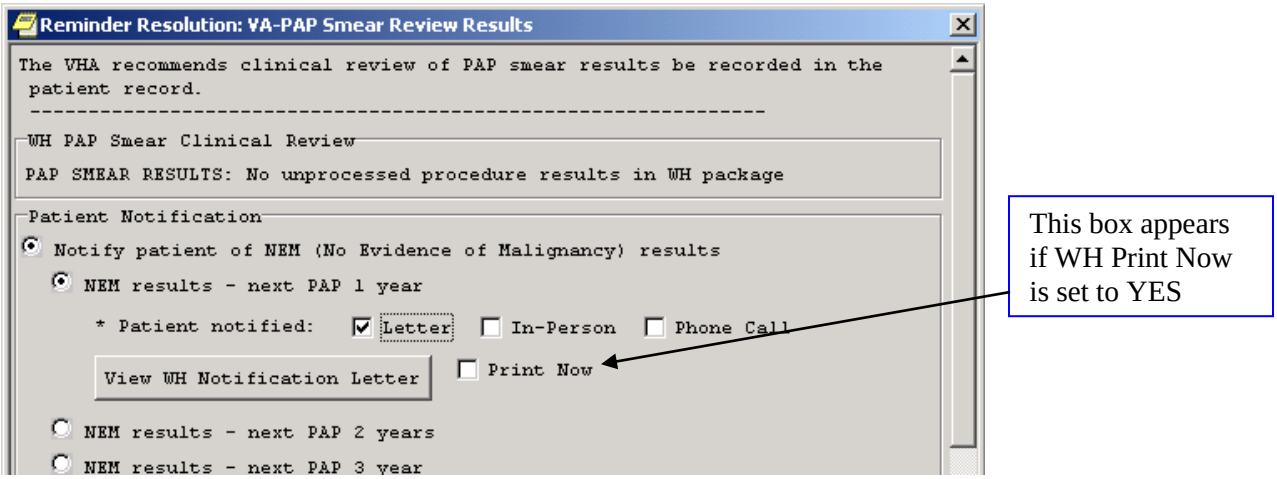
     1   System        SYS    [DVF.FO-SLC.MED.VA.GOV]
     2   Division      DIV    [choose from INSTITUTION]
     3   Location      LOC    [choose from HOSPITAL LOCATION]
     4   Service       SRV    [choose from SERVICE/SECTION]
     5   Team (OE/RR)  OTL    [choose from OE/RR LIST]
     6   User          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: VA-PAP Smear Review Results
The VHA recommends clinical review of PAP smear results be recorded in the patient record.
WH PAP Smear Clinical Review
PAP SMEAR RESULTS: No unprocessed procedure results in WH package
Patient Notification
Notify patient of NEM (No Evidence of Malignancy) results
NEM results - next PAP 1 year
* Patient notified:
Letter
In-Person
Phone Call
View WH Notification Letter
Print Now
NEM results - next PAP 2 years
NEM results - next PAP 3 year
This box appears if WH Print Now is set to YES

Reminder Reports

The Reports menu contains Clinical Reminder reports that Clinical Reminders Managers and/or clinicians can use for summary and detailed level information about patients' due and satisfied reminders. This menu also contains reports that clinical coordinators can use to review extracted data, based on reminder definitions.

The EPI extract finding list and total options are specific to the Hepatitis C Extract project. The extracted data is based on the following reminders: VA-HEP C RISK ASSESSMENT, VA-NATIONAL EPI LAB EXTRACT, and VA-NATIONAL EPI RX EXTRACT.

The Extract QUERI totals option reports reminder and finding totals from extract summaries created by automatic QUERI extract runs.

The GEC Referral Report option is used to generate GEC Reports. Clinical Reminders V.2.0 includes a nationally standardized computer instrument called VA Geriatric Extended Care (GEC), which replaces paper forms for evaluating veterans for extended care needs.

Changes in Patch 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.

Reminder Reports menu

Syn.	Display Name	Option Name	Description
RD	Reminders Due Report	PXRM REMINDERS DUE	For a selected patient and reminder, the report lists any reminders that are currently due.
RDU	Reminders Due Report (User)	PXRM REMINDERS DUE (USER)	Reminders Due Reports may be run from any report template allocated to a specific user.
RDT	User Report Templates	PXRM REPORT TEMPLATE (USER)	This option allows you to modify the PXRM REPORT TEMPLATE (USER) parameter. This parameter defines which reminder report templates are available to a restricted user.
EPT	Extract EPI Totals	PXRM EXTRACT EPI TOTALS	This option is used to summarize total counts for each type of finding item that was extracted for the target date range of the LREPI extract option run.
EPF	Extract EPI List by Finding and SSN	PXRM EXTRACT EPI FINDING LIST	This option allows you to print extract results. Extracted data is listed by finding item and social security number.
EQT	Extract Queri Totals	PXRM EXTRACT QUERI TOTALS	This option prints reminder and finding totals for extract summaries created by automatic extracts.
REV	Review Date Report	PXRM REVIEW DATES	The Review Date Report may be run for the following files: Computed Findings, Reminder Definition, Reminder Dialogs, and Reminder Taxonomies. A cutoff date may be entered and all review dates prior or equal to that date in the file selected are reported.
FUR	Finding Usage Report	PXRM FINDING USAGE REPORT	This provides a report of where selected Clinical Reminder findings are used in reminder definitions, reminder terms, and reminder dialogs.
GEC	GEC Referral Report	PXRM GEC REFERRAL REPORT	This is the option that is used to generate GEC Reports. GEC (Geriatrics Extended Care) are used for referral of geriatric patients to receive further care.

Multiple Uses for Reminder Reports

Reminder reports can be used for a variety of purposes:

Patient care:
- Future Appointments
- Which patients need an intervention?

Past Visits
- Which patients missed an intervention?
- Action Lists

Inpatients
- Which patients need an intervention prior to discharge?

Identify patients for case management

- Diabetic patients with poor control
- Identify patients with incomplete problem lists
- Patients with (+) Hep C test but no PL entry
- Identify high risk patients; e.g., on warfarin, amiodarone, etc.
- Track annual PPD due (Employee Health)

Quality Improvement

- Provide feedback (team/provider)
- Identify *(and share)* best practices
- Identify under-performers *(develop action plan)*
- Track performance
- Implementation of new reminders or new processes
- Identify process issues early (mismatch of workload growth versus staffing)
- Provide data for external review (JCAHO)

Management Tool

- Aggregate reports
- Facility / Service
- Team (primary care team)
- Clinic / Ward
- Provider-specific reports
- Primary Care Provider
- Encounter location
- If one provider per clinic location

Employee Performance & Evaluation

- Re-credentialing data for providers
- Annual Proficiency - Nursing
- Support for Special Advancement
- Support for Bonuses
- Employee Rewards & Recognition

Changes to finding date search

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

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

Benefits of date range finding searches

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

How date range searching works

As noted above, you can use dates like T-3M for the beginning date/time and T for the ending date/time. Since T stands for today, this tells Clinical Reminders to search between today and 3 months ago for results. When you run a reminder report, one of the prompts is for EFFECTIVE DUE DATE, and when a reminder report is run, "today" becomes whatever date is input in response to the EFFECTIVE DUE DATE prompt.

For example, if the beginning date/time was T-3M and the ending date/time was T and the effective due date was April 1, 2004, Clinical Reminders would search for results between January 1, 2004 and April 1, 2004. If you use an actual, as opposed to a symbolic, date/time, then it is never affected by what is input for EFFECTIVE DUE DATE. Each finding in the definition can have different values for beginning date/time and ending date/time, so you can search in different date ranges, as appropriate.

The key thing to remember is that "T" in a symbolic date is set to the value input for EFFECTIVE DUE DATE.

Reminders Due Report option

For a selected reminder, the report lists any reminders that are currently due.

Available report options are:

- Individual Patient
- Reminder Patient List
- Hospital Location (all patients with encounters)
- OE/RR Team (all patients in team)
- PCMM Provider (all practitioner patients)
- PCMM Team (all patients in team)

A SUMMARY report displays totals of how many patients of those selected have reminders due.

Alternatively, a DETAILED report displays patients with reminders due in alphabetical order. The report displays for each patient the date the reminder is due, the date the reminder was last done, and next appointment date. The detailed report can also list all future appointments.

A DETAILED report may be saved as a local patient list.

Example

```
Select Reminder Managers Menu Option: rp  Reminder Reports

   RD     Reminders Due Report
   RDU    Reminders Due Report (User)
   RDT    User Report Templates
   EPT    Extract EPI Totals
   EPF    Extract EPI List by Finding and SSN
   EQT    Extract QUERI Totals
   GEC    GEC Referral Report
   REV    Review Date Report
   FUR    Finding Usage Report

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
```

```
          P         PCMM Provider
          T         PCMM Team

PATIENT SAMPLE: L// o  OE/RR Team

Select TEAM: CRPROVIDER1         teamqa
Select another TEAM:

Enter EFFECTIVE DUE DATE: Aug 25, 2009//   (AUG 25, 2009)

     Select one of the following:

          D         Detailed
          S         Summary

TYPE OF REPORT: S// ummary

     Select one of the following:

          I         Individual Teams only
          R         Individual Teams plus Totals by Facility
          T         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       9          21    100       0
6    CR MAM
                             0       0           0      0       0
7    NONVA test DFN=37
                            43      43         100    100       0
8    Pap Smear-Screening
                            13      13          31    100       0
9    Pap Smear-Review of Results
                             6       2          14     34      66
10   Pap Smear-F/U of Abnormal Results
                             0       0           0      0       0
11   WH SCREEN
                            41      41          96    100       0
12   PAP Smear Screening
                            13      13          31    100       0

Report run on 43 patients.

End of the report. Press ENTER/RETURN to continue...
```

Reminders Due Report – Patient List Template

```
Select Reminder Reports Option: d  Reminders Due Report

Select an existing REPORT TEMPLATE or return to continue: 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:

          I         Individual Locations only
          R         Individual Locations plus Totals by Facility
          T         Totals by Facility only

REPORT TOTALS: I// R  Individual Locations plus Totals by Facility

Print delimited output only: N// O

Include deceased patients on the list? N// O

Include test patients on the list? N// YES

Save due patients to a patient list: N// O

DEVICE: HOME//   HOME


Building hospital locations list -
Elapsed time for building hospital locations list: 0 secs

Building patient list /
Elapsed time for building patient list: 0 secs

Removing invalid encounter(s) /
Elapsed time for removing invalid encounter(s): 0 secs

Evaluating Reminders |
```

```
Evaluating reminders /
Elapsed time for reminder evaluation: 0 secs

                                                Aug 25, 2009 12:36:04 pm  Page 1

                 Clinical Reminders Due Report - Summary Report
          Report Title:         HEP C
          Patient Sample:       Location
          Location:             All Outpatient Locations (Prior Encounters)
          Date Range:           8/25/2006 to 8/25/2009
          Effective Due Date:   8/25/2009
          Date run:             8/25/2009 12:34:40 pm
          Template Name:        jgtest
          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
                                                  ----------         ---
1    LABTEST                                               3           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
                                                  ----------         ---
1    LABTEST                                               3           3
2    National Hepatitis Lab Extract                        3           3
3    National Hepatitis Med Extract                        3           3

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)
   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:  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// 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
                                                  ----------         ---
1    AGP ERROR                                             0           0
2    NONVA test DFN=37                                    14          14
3    Pap Smear-Screening                                   3           3
4    Pap Smear-Review of Results                           2           0
5    Pap Smear-F/U of Abnormal Results                     0           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
14   ITC 2001 diabetes example                             1           1
15   ITC 2001 Mammogram Example                            3           3
16   SLC Diabetic Foot Care Education                     14          14
```

```
17   Diabetic Eye Exam                                    14          14
18   SLC Cancer Screen                                     5           5
19   Ischemic HD/Post MI Follow Up                         0           0
20   Breast Exam                                           4           4
21   Advanced Directives Education                        14          13
22   LTC Oversight Visit                                  14          14
23   Weight and Nutrition Screen                          13          13
24   IHD Lipid Profile                                     2           2
25   EXCHANGE CHANGES                                      0           0
26   Tobacco Cessation Education                          11          11
27   JG TOBACCO USE SCREEN                                14          14
28   Problem Drinking Screen                              14          14
29   Weight and Nutrition Screen                          13          13
30   Alcohol Abuse Education                              14          14
31   Weight                                               14          14
32   Exercise Education                                   14          14
33   JG-Weight                                            14          14
34   Taxonomy Test                                        14          14
35   Patch5 VA-Pain Screening                             14          14
36   PAP Smear Review Results                              2           2
37   Iraq&Afghan Post-Deployment Screen                    1           1
38   PAP Smear Screening                                   3           3
39   Depression Screening                                 14          14
40   Mammogram Screening                                   2           2

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
        161          LREPI 00/06 073100     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//
REMINDER EXTRACT TOTALS                        JAN  6,2006  16:30    PAGE 1
-------------------------------------------------------------------------------

LREPI 05/02 031505              Date Range: FEB  1,2005-FEB 28,2005
                               Extract Date: MAR 15,2005  22:16
    Total Patients Evaluated:        766
    Total Patients with Findings:    718

    Totals by Finding Item               Finding  Unique Patient
                                           Count       Count
         INTERFERON ALFA-2B                    1           1
         HEPATITIS C ANTIBODY                207         207
         TOT. BILIRUBIN                      190         190
         RIBAVIRIN                            35          35
         AST                                 192         192
         ALT                                 198         198
         VA-HEPATITIS C INFECTION            127         127
         INTERFERON BETA-1B                    4           4
         INTERFERON BETA-1A                   18          18
         INTERFERON ALFACON-1                  5           5
         RISK FACTOR FOR HEPATITIS C         110         110
         NO RISK FACTORS FOR HEP C           319         319
         DECLINED HEP C RISK ASSESSMENT        8           8

LREPI 05/03 041505              Date Range: MAR  1,2005-MAR 31,2005
                               Extract Date: APR 15,2005  22:12
    Total Patients Evaluated:        841
    Total Patients with Findings:    802

    Totals by Finding Item               Finding  Unique Patient
                                           Count       Count
         INTERFERON ALFA-2B                    2           2
         HBSAG                                 1           1
         HEPATITIS C ANTIBODY                446         223
         RIBAVIRIN                            47          47
         VA-HEPATITIS C INFECTION            119         119
         INTERFERON BETA-1B                    9           9
         INTERFERON BETA-1A                   16          16
         INTERFERON ALFACON-1                  8           8
         HBSAB                                33          33
         RISK FACTOR FOR HEPATITIS C         132         132
         NO RISK FACTORS FOR HEP C           372         372
         DECLINED HEP C RISK ASSESSMENT        3           3
Press RETURN to continue...
```

Extract QUERI Totals

```
   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: 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.
         160          LREPI 00/05 061500     Jun 15,2000@14:52:36
         161          LREPI 00/06 073100     Jul 15,2000@14:55:40
         162          LREPI 00/07 081500     Aug 15,2000@15:42:24
         163          LREPI 00/05 082200     Aug 22,2000@02:44:54
         164          LREPI 00/08 082500     Aug 25,2000@14:24:59

START WITH NAME: FIRST// <Enter>
START WITH NAME: FIRST// 164
GO TO NAME: LAST// <Enter>
DEVICE:   ANYWHERE    Right Margin: 80// <Enter>
REMINDER EXTRACT SUMMARY LIST                 JAN 10,2003  09:14    PAGE 1
-------------------------------------------------------------------------

VA MH QUERI 2000 M2              Date Range: FEB  1,2000-FEB 28,2000
                              Extract Date: JAN  3,2003

 Extract Sequence: 001
 Reminder:         VA-DEPRESSION SCREENING
 Station:          CRSITE ONE
 Patient List:     VA-MH QUERI 2000 M2 QUALIFYING VISIT

  Reminder Totals:     Total      Applicable       N/A       Due   Not Due
                        1000            899       101       200       699

  Finding Totals:

    Sequence:      001
    Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE
    Term:          DEPRESSION DIAGNOSIS
    Group Type:    MOST RECENT FINDING PATIENT COUNT
    Group Status:  TOTAL PATIENTS
    Finding Count by Reminder Status:
                  Total      Applicable       N/A       Due     Not Due
                     20             20         0        20         0

    Sequence:      002
    Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE
    Term:          PSYCHOTHERAPY
    Group Type:    MOST RECENT FINDING PATIENT COUNT
    Group Status:  TOTAL PATIENTS
    Finding Count by Reminder Status:
```

```
                  Total      Applicable       N/A       Due     Not Due

   Sequence:      003
   Finding Group: VA-DEPRESSION SCREEN NON APPLICABLE
   Term:          ANTIDEPRESSANT MEDICATION
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

   Sequence:      004
   Finding Group: VA-DEPRESSION SCREEN RESULT
   Term:          DEPRESSION SCREEN NEGATIVE
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  APPLICABLE PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

   Sequence:      005
   Finding Group: VA-DEPRESSION SCREEN RESULT
   Term:          DEPRESSION SCREEN POSITIVE
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  APPLICABLE PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

   Sequence:      006
   Finding Group: VA-REFUSED DEPRESSION SCREEN
   Term:          REFUSED DEPRESSION SCREENING
   Group Type:    MOST RECENT FINDING COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

Extract Sequence: 002
Reminder:         VA-POS DEPRESSION SCREEN FOLLOW UP
Station:          CRSITE HCS
Patient List:     VA-MH QUERI 2000 M2 QUALIFYING VISIT

 Reminder Totals:     Total      Applicable       N/A       Due   Not Due

                       1000            300       700        10       690

 Finding Totals:

   Sequence:      001
   Finding Group: VA-POS DEPRESSION SCREEN FOLLOW UP
   Term:          DEPRESSION SCREEN NEGATIVE
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS


   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due


   Sequence:      002
   Finding Group: VA-POS DEPRESSION SCREEN FOLLOW UP
```

```
   Term:          DEPRESSION ASSESS INCONCLUSIVE (?MDD)
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due


   Sequence:      003
   Finding Group: VA-POS DEPRESSION SCREEN FOLLOW UP
   Term:          REFERRAL TO MENTAL HEALTH
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

   Sequence:      004
   Finding Group: VA-POS DEPRESSION SCREEN FOLLOW UP
   Term:          DEPRESSION TO BE MANAGED IN PC
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

Extract Sequence: 003
Reminder:         VA-ANTIPSYCHOTIC MED SIDE EFF EVAL
Station:          CRSITE HCS
Patient List:     VA-MH QUERI 2000 M2 QUALIFYING VISIT

 Reminder Totals:     Total      Applicable       N/A       Due   Not Due
                       1000              3       997         1         2

 Finding Totals:

   Sequence:      001
   Finding Group: VA-ANTIPSYCHOTIC DRUGS
   Term:          AIM EVALUATION NEGATIVE
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

   Sequence:      002
   Finding Group: VA-ANTIPSYCHOTIC DRUGS
   Term:          AIM EVALUATION POSITIVE
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:

                  Total      Applicable       N/A       Due     Not Due

   Sequence:      003
   Finding Group: VA-ANTIPSYCHOTIC DRUGS
   Term:          REFUSED ANTIPSYCHOTICS
   Group Type:    MOST RECENT FINDING PATIENT COUNT
   Group Status:  TOTAL PATIENTS
   Finding Count by Reminder Status:
```

Future Appointments

A new prompt has been added that will only display if Show All future appointment is selected. The prompt is Display Appointment Location. If you answer Y, the clinic name will appear with the future appointment date/time. If you enter N, only the date/time will display.

If the patient is an outpatient, it will sort by next appointment date. If the patient is a currently an inpatient and has an outpatient appointment schedule, it will sort by the Room-Bed location.

When displaying the next appointment, if the patient is an inpatient, the Room-Bed will be displayed followed by (Inp.). Then the next appointment will display under this data. If you select Display All future appointments, the appointment will display under the patient name.

GEC Referral Report

GEC Referral Reports display the percentage of patients referred to select GEC programs who meet the eligibility criteria as outlined in the Under Secretary for Health's Information Letter IL 10-2003-005 and VHA Handbook 1140.2.

VA GEC Reports provide quarterly statistical reports on the following VA-funded programs.

- Homemaker/Home Health Aide, when Funding Source=VA
- Adult Day Health Care, when Funding Source=VA
- VA In-Home Respite, when Funding Source=VA
- Care Coordination, when Funding Source=VA

When sites submit their quarterly reports, the national office will be able to generate a report for the General Accounting Office/Office of Inspector General that demonstrates compliance with the standards for assessing patients prior to placement in VA-funded programs.

These same reports can be used at the local level to evaluate how well a site is performing in meeting compliance standards for placement of patients in VA funded GEC programs.

Changes in Patch 4

- An undefined error, <UNDEFINED>CALCMON+12<>PXRMG2M1, occurred when the scheduled event fired off at the beginning of each month. That has now been repaired.

- Several of the GEC Reports were not showing a complete list of patients or providers. This has now been corrected. The division and age of the patient has been added to some reports to help in identifying the patient.

- There is a new choice in the GEC reports menu that will give the sites the option to open a closed referral, merge two referrals, or close an open referral.

- The GEC Care Recommendation Dialog has been modified to allow more than one selection when a person wants to refer a patient to more than one location.

- A problem with the user being able to take some editing actions on GEC dialogs have been corrected, so the user is not able to copy or delete dialog groups from the GEC dialogs.

- Geriatric Extended Care Reports were not collecting the correct data. This was corrected.

- The email addresses of the remote members of mail group GEC NATIONAL ROLLUP are updated.

- As requested by the primary GEC stakeholder, several reminder dialog entries were moved from the Nursing Assessment GEC dialog to the Care Recommendation GEC dialog. A post-install routine changes several Health Factors from one GEC dialog to another.

Example

```
Select Reminder Reports Option: GEC  GEC Referral Report

All Reports will print on 80 Columns
     Select one of the following:
          1         Category
          2         Patient
          3         Provider by Patient
          4         Referral Date
          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:
          A         All Patients
          M         Multiple Patients

Select Patients or ^ to exit: A//<Enter> ll Patients
     Select one of the following:
          F         Formatted
          D         Delimited

Select Report Format or ^ to exit: F//<Enter> ormatted
DEVICE: HOME//<Enter>   ANYWHERE    Right Margin: 80// <Enter>

==============================================================================
GEC Patient-Summary (Score)
Data on Complete Referrals Only
From: 05/01/2004 To: 06/30/2004

                                 Finished        Basic Skilled Patient   TOTAL
Name                   SSN       Date       IADL ADL   Care    Behaviors ACROSS
==============================================================================
CRPATIENT,ONE        (666809999) 06/15/2004   0    0     2       4         6
CRPATIENT,ONE        (666809999) 06/15/2004   0    7     9       5        21
CRPATIENT,TWO        (666809990) 05/04/2004   0    0     0       0         0
CRPATIENT,SIX        (666009999) 05/11/2004   0    0     0       0         0
CRPATIENT,SIX        (666009999) 05/11/2004   0    0     0       0         0
CRPATIENT,SIX        (666009999) 05/11/2004   0    0     0       0         0
                                              ____________________________
                                 Totals > >   0    7    11       9        27
                                  Means > > 0.0  1.2   1.8     1.5       4.5
                     Standard Deviations > > 0.0  3.1   4.1     2.9       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
     1   INFLUENZA       INFLUENZA
     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

```
Select Reminders MST Synchronization Management Option: rep
  Reminders MST Synchronization Report

Clinical Reminders MST Synchronization Report
---------------------------------------------
Initial synchronization date: Aug 28, 2001@15:12:15
Number of updates made: 4
Elapsed time: 4:00:34

Last daily synchronization date: Sep 05, 2001@08:45:48
Number of updates made: 0
Elapsed time:  3:57:34
```

Reminder Parameters Menu

This menu contains three options: Edit Site Disclaimer, Edit Web Sites, and Edit Number of MH Questions.

Edit Web Sites was created in response to the NOIS, MAC-1000-60473 - Web site shows in all reminders. Sites were unable to get websites to show for an individual reminder – a default URL and website text overrides individual entries. In Version 1.5, the only way to edit or delete the default website was through VA FileMan. It was recommended that developers create an easier way for a user edit the default URL Web addresses.

Syn.	Name	Option Name	Description
ESD	Edit Site Disclaimer	PXRM EDIT SITE DISCLAIMER	This option allows the site disclaimer used in Health Summary components to be modified.
EWS	Edit Web Sites	PXRM EDIT WEB SITES	This option allows the reminder web sites used in CPRS GUI to be modified.
MH	Edit Number of MH Questions	PXRM MH QUESTIONS	This option allows the site to select the maximum number of MH questions to be used as Reminder Dialog Finding Items.

Edit Site Disclaimer Example

```
Select Reminder Parameters Option: esd  Edit Site Disclaimer
SITE REMINDER DISCLAIMER:
  No existing text
  Edit? NO// y  YES

==[ WRAP ]==[ REPLACE ]=====< SITE REMINDER DISCLAIMER >=====[ <PF1>H=Help ]====
The following disease screening, immunization and patient education
 recommendations are offered as guidelines to assist in your practice.
 These are only recommendations, not practice standards.  The
 appropriate utilization of these for your individual patient must be
 based on clinical judgment and the patient's current status.

<=======T=======T=======T=======T=======T=======T=======T=======T=======T>======

Press RETURN to continue...
```

Edit Web Sites Example

```
Select Reminder Parameters Option: ews  Edit Web Sites

Choose from:
        http://vista.med.va.gov/reminders
        http://www.oqp.med.va.gov/cpg/cpg.htm

Select URL: ?
    Answer with WEB SITES URL
   Choose from:
   http://vista.med.va.gov/remind

        You may enter a new WEB SITES, if you wish
        Enter the URL for the web site.

Select URL: http://vista.med.va.gov/reminders
```

Edit Number of MH Tests Example

This option allows the site to select the Maximum number of MH questions to be used as a Reminder Dialog Finding Items. If the number of question in the selected MH test exceed the number in this parameter than the MH test cannot be used in the reminder dialog.

```
Select Reminder Managers Menu Option: PAR  Reminder Parameters


   ESD    Edit Site Disclaimer
   EWS    Edit Web Sites
   MH     Edit Number of MH Questions

Select Reminder Parameters Option: MH  Edit Number of MH Questions
MAXIMUM NUMBER OF MH QUESTIONS: 100//


   ESD    Edit Site Disclaimer
   EWS    Edit Web Sites
   MH     Edit Number of MH Questions

Select Reminder Parameters Option:
```

Reminder Patient List Management

New tools for creating and managing reminder patient lists were introduced with Clinical Reminders V2.0. The patient list functionality provides a way to identify patients with specific findings or combinations of findings, without having to search one-by-one through every patient registered on the system.

> Patient List summary (from Patty Hoey, Puget Sound HCS)
>
> Clinical Reminder patient lists and extracts represent a watershed advance in VA's clinical information armamentarium. Before their creation, front-line clinicians wishing to search for clinical data (for evidence-based medicine, process improvements, or clinical research) were limited to VA FileMan. While powerful, FileMan is too esoteric and resource-intensive for many clinicians. Alternatively, several VISNs have data warehouses and allow clinicians to write SQL scripts to search them; but again, the learning curve is steep and the data can be historical and, therefore, not useful for time-sensitive searches.
>
> Because FileMan and SQL are difficult to learn, clinicians are often reliant on technical intermediaries and are subject to their availability. In contrast, the clinical reminder patient list functionality is relatively accessible and comprehensible (with minimal training) to front-line clinicians, allowing any clinician to become an informaticist, avoiding the risk of clinical questions being diluted or lost in translation. With the number of VA clinicians nationwide finally able to access the rich VA database, the potential for advances in patient safety, patient therapy, and processes that realize time and budget savings is boundless. Reminder indexes make the queries fast and consume relatively few computer resources. The searchable database is up-to-date, making patient lists useful for daily patient safety surveillance reporting. Lists can be auto-tasked to run monthly, quarterly, and annually and rolled up into a message for possible transmission to regional patient registries or county health departments.

The patient list functionality was originally created to support reminder extract reports. Reminder extract reports rely on the patient list tools to build patient lists that meet specific finding criteria. The numbers of patients on the patient lists created and used for extract reports are often referred to as patient denominators. The lists of patients are used to evaluate specific reminders to calculate compliance totals and finding totals.

Patient lists can also be created and used independently of extract reporting.

This patient list-building tool uses the Clinical Reminders Index global; consequently, it can build patient lists very quickly. The Clinical Reminders Index provides indexes that support finding all patients with a particular finding (also known as "across-patient look-ups"). The Index global also supports rapidly accessing finding data for a specific patient.

> **Example**: At one site, the Index global was used to build a list of all patients with a diabetic diagnosis in the last five years at a medium-sized site in about two minutes. There were approximately 10,000 patients on the list.

Once a patient list has been created by the reminder patient list tools, it can be stored and used for a number of purposes: reminder extract reports, input to reminder reports, input to health summaries, and creation of mailing lists and personalized form letters.

The reminder patient lists are stored in the Reminder Patient List file (#810.5). The Reminder Patient List Menu (PXRM PATIENT LIST MENU) provides access to the patient list management and list rule management functionality.

Change in Patch 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	Abbreviation
• Finding Rule	FR
• Reminder Rule	RR
• 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 across-patient look-ups. However, the Global Index is not used for computed findings linked to a reminder term, unless the computed finding has hard-coded logic to access the Global Index. The typical computed finding assumes the patient is already selected and does not support across-patient look-up. However, with V2.0, a computed finding can be specifically created for list-building purposes by defining the Type field in the computed finding definition as "List." The List type computed finding can be used as the first rule, or any subsequent rule in a rule set where the ADD PATIENT Operation is used. When a computed finding is used to SELECT or REMOVE patients from an existing patient list, a "single" or "multiple" type computed finding may be used.

2. Reminder rules are used to build lists of patients based on a reminder definition and its patient cohort logic. Before a reminder definition is used to build a patient list, the cohort logic is checked to make sure it meets certain criteria. If it doesn't, a warning message will be issued. This is done to make sure that building the list is computationally feasible. The criteria for using a reminder definition are:

- The cohort logic cannot start with a logical not
- The cohort logic cannot contain a logical or not
- If AGE is used in the cohort logic, then a baseline age range must be defined
- If SEX is used in the cohort logic the reminder must be sex-specific
- SEX cannot be the first element in the cohort logic unless it is followed by AGE
- If a finding sets the frequency to 0Y, which effectively removes the patient from the cohort, it can't have an associated age range
- The USAGE field must be specified as "L" for Patient List

3. Patient List rules are used to build a new reminder patient list based on the patients in an existing reminder patient list. An existing patient list can be used to create a new list, add patients to a list, remove patients from a list if they are defined in the specified list, and remove patients from a list if they are not defined in the specified list.

4. List Rule Sets
A rule set combines list rules and logical operations into a series of steps which are processed to build a patient list. The steps are processed in a numerical order that is based on the value of the SEQUENCE field, which is a three-digit number 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 page **Error! Reference source not found.Error! Bookmark not defined.**) for the term will be stored with the list and can be used in the Patient Demographic Report; see page 367.

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.

```
Display/Edit Rule             Jun 08, 2006@12:29:21          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 QUERI AMI DIAGNOSIS WITHIN 60 DAYS
         Description: Patients with Inpatient AMI Diagnosis within 60 days.
           Rule Type: FINDING RULE
         Reminder Term: VA-IHD AMI DIAGNOSIS WITHIN 60 DAYS

            Sequence: 004
           Operation: INSERT FINDING
           List Rule: VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION
         Description: Associate primary facility.
           Rule Type: FINDING RULE
         Reminder Term: VA-IHD STATION CODE
```

This rule set gets all patients with an IHD Diagnosis documented within 5 years prior to the report start date. This list of patients is modified in sequence 002 to remove all patients that have not had a visit documented for an EPRP clinic location during the reporting month, where T in the Beginning Date

represents the report start date and T in the Ending Date represents the report ending date.This list is further modified in sequence 003 to remove patients that have an AMI diagnosis documented within the past 60 days. The patient list after sequence 003 is further modified by associating each patient's primary care station and storing the station with each patient in the patient list.
National list rules cannot be modified.

Steps to Create a Patient List

This is the sequence of steps to create a patient list:

1. Create list rules (FR, RR, or PLR)
2. Create rule sets
3. Create patient list

You must create list rules first. Once list rules are defined, they can be referenced in a rule set. Once the rule set is defined, the patient list tools can use the rule set to create a patient list.

NOTE: The Reminder Definition that is used in a Reminder Rule must have "L" (Reminder Patient List) in the Usage field or it will not be able to be used in the Reminder Rule

Prior to creating list rules and rule sets, it is a good idea to write down the criteria clearly enough so that anyone else will know exactly how the patient list should be built.

- What patient finding(s) should be used to build the list of patients?
- What finding should be used to create the first list of patients?
- Should this list be modified to remove patients with a particular finding?
- Should this list be modified to remove patients that do not have a particular finding?
- For each finding, what are the appropriate beginning and ending dates?
- What sequence will have the least impact on computer system resources?
- Who should be able to see the patient list?

The criteria for building a reminder patient list can be documented in the description field of the rule set. The criteria should take into consideration the most efficient sequence in which patient extracts should occur, to limit unnecessary impacts on system operations.

Patient List Menu

The Patient List Menu option on the PXRM MANAGERS MENU provides the following options for creating and managing list rules and patient lists.

Syn.	Name	Option Name	Description
LRM	List Rule Management	PXRM LIST RULE MANAGEMENT	This option allows creation of list rules, which build patient lists and test rule set criteria. Nationally released list rules are used by nationally released extract definitions for national extract runs. There are four types of list rules: Finding Rule, Reminder Rule, Patient List Rule, and Rule Set.
PLM	Patient List Management	PXRM EXTRACT PATIENT LIST	This option manages reminder patient lists. Local patient lists may be created from list rules, copied to OE/RR teams, copied to other patient lists, or deleted. Local patient lists and national patient lists (from the extract process) are listed. Individual lists may be displayed or printed or used to run health summaries.

List Rule Management Option

The List Rule Management option presents a list of existing reminder rule file entries. The possible actions available for each type of entry are presented in the bottom portion of the screen.

List Rule Management screen example:

```
List 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

```
Rule Set Test          Oct 17, 2005@10:05:06          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
```

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

```
List Rule Management          Jun 01, 2006@08:55:48          Page:    1 of    1

 Item  Finding Rule Name                                                Class
    1  FR-BMI                                                          LOCAL
    2  FR-DIABETIC DIAGNOSIS                                           LOCAL
    3  VA-*IHD QUERI 412 DIAGNOSIS                                     NATIONAL
    4  VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS                      NATIONAL
    5  VA-*IHD QUERI ANCHOR VISIT                                      NATIONAL
    6  VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION                    NATIONAL
    7  VA-*IHD QUERI DIAGNOSIS                                         NATIONAL
    8  VA-*IHD QUERI LIPID LOWERING MEDS                               NATIONAL
    9  VA-*IHD QUERI QUALIFYING VISIT                                  NATIONAL
   10 VA-*MH QUERI QUALIFY MH VISIT                                    NATIONAL
   11 VA-*MH QUERI QUALIFY PC VISIT                                    NATIONAL
          + Next Screen   - Prev Screen   ?? More Action
CV   Change View                        TEST Test Rule Set
CR   Create Rule                        QU   Quit
DR   Display/Edit Rule
Select Item: Quit//
```

When you are in the desired view, the CR (Create Rule) action is used to create a new list rule and the DR (Display/Edit Rule) action is used to display/edit an existing rule. Note that typing the item number is the same as selecting the DR action.

Patient List Management Option

The Patient List Management option presents a list of available reminder patient lists. The patient lists displayed will include local and national patient lists that you have access to.

Note on national patient lists: The example below includes several national patient lists created by the monthly VA-IHD QUERI extract runs. Each month the VA-IHD QUERI extract was run, there were five different national patient lists created. Each patient list has a unique name with abbreviated text in the patient title to reflect the criteria used to create the list. Each of the five patient lists was used by extract reporting tools to evaluate reminders and create compliance and finding totals. See the section called National Reminder Extract Reporting for more information on Reminder Extract Report processing.

Patient List Management screen example

```
Reminder User Patient List    Jun 01, 2006@12:08:18          Page:    1 of    7
Available Patient Lists.
 Item  Reminder Patient List Name                      Created          Patients
    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 Screen   - Prev Screen   ?? More Action
CO   Copy Patient List    DE   Delete Patient List  CV   Change View
COE  Copy to OE/RR Team   DCD  Display Creation Doc LRM  List Rule Management
CR   Create Patient List  DSP  Display Patient List QU   Quit
Select Item: Next Screen//
```

The actions on this screen are:

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

When creating a local patient list, you are given the option to secure the list or to make it public for all to use. The type of security on the list is available by scrolling the list to the right.
When viewing the list of patient lists, there are two symbols: "<<<"and ">>>" on the action line. These are standard List Manager symbols that mean you can scroll the view to the left using the left arrow key

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

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

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

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

```
Reminder User Patient List    Sep 27, 2005@09:36:05          Page:    1 of    8
Available Patient Lists.
+Item  Reminder Patient List Name                        Type  Access
    5  AGP IHD EXTRACT WITH QUALIFY VISIT                 PVT    F
    6  AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS      PVT    F
    7  AGP OE/RR TEAM 1                                   PUB    F
    8  AGP OERR TEAM LIST                                 PUB    F
    9  CRPATIENT                                          PUB    F
   10  CRPATIENT2                                         PUB    F
   11  DIAB PTS W/O DIAB EYE EXAM                         PUB    F
   12  PJH EXTRACT 2004 M10 BP                            PVT    V
          + Next Screen   - Prev Screen   ?? More Action
CO   Copy Patient List    DE   Delete Patient List  CV   Change View
COE  Copy to OE/RR Team   DCD  Display Creation Doc LRM  List Rule Management
CR   Create Patient List  DSP  Display Patient List QU   Quit
Select Item: Next Screen//
```

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 refered to as BDT, and Ending Date is refered 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
11	BDT	Sep 01, 2005		0 (zero)		No beginning date
	EDT	Sep 30, 2005		Mar 28, 2003		Mar 28, 2003
12	BDT	Sep 01, 2005		Apr 09, 2001		Apr 09, 2001
	EDT	Sep 30, 2005		Mar 28, 2003		Mar 28, 2003
13	BDT	Sep 01, 2005		Apr 09, 2001		Apr 09, 2001
	EDT	Sep 30, 2005		0 (zero)		End of day on date the list is built.
14	BDT	Sep 01, 2005			T-2Y	Sep 30, 2003
	EDT	Sep 30, 2005			T-1Y	Sep 30, 2004
15	BDT	Sep 01, 2005			0 (zero)	No beginning 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
18	BDT	Sep 01, 2005	Jun 01, 2003	BDT		Sep 1, 2005 (BDT > EDT; no finding match will be found)
	EDT	Sep 30, 2005	Jul 25, 2004	T-6M		March 30, 2005
19	BDT	Sep 01, 2005	T-1Y	BDT-6M	T-1Y	Sep 30, 2004
	EDT	Sep 30, 2005	T	BDT	T-6M	Mar 31, 2005
20	BDT	Sep 01, 2005	Apr 09, 2001		T-2Y	Sep 30, 2003
	EDT	Sep 30, 2005	Feb 28, 2002		Blank or T	Sep 30,2005
21	BDT	Sep 01, 2005	T-2Y		T-1Y	Sep 30, 2004
	EDT	Sep 30, 2005	0 (zero)		T-6M	Mar 31, 2005
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 Lit Build Ending date/time.

Date range #19 is an example of beginning and ending date values defined at every level, and where the Reminder Term Finding Beginning date/time and Ending date/time override all other levels.

Date range #20-22 is an example of the Reminder Term Findings beginning and ending date/times overriding miscellaneous other levels of beginning and ending date/time definitions.

Creating a Simple Patient List

As an example, let's build a list of all our diabetic patients.

1. Create a Reminder rule using a reminder term

The first thing we must do is find or create a reminder term that identifies diabetes patients. If you are not familiar with how to do this, see the Reminder Term Management section of this manual. The examples below assume the following Reminder Term defines the criteria to identify diabetes patients.

Diabetic Diagnosis term:

```
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 Rule Management                Jun 03, 2005@10:41:29 Page: 1 of 1

 Item  Rule Set Name                                                Class
    1  VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT          NATIONAL
    2  VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT ON LLA M NATIONAL
    3  VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT              NATIONAL
    4  VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT ON LLA MEDS  NATIONAL
    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 Actions                >>>CV
Change View                        TEST Test Rule Set
CR   Create Rule                        QU   Quit
DR   Display/Edit Rule
Select Item: Quit// CV   Change View
```

1b. Select CV to change the view

```
     Select one of the following:

          F         Finding Rule
          P         Patient List Rule
          R         Reminder Rule
          S         Rule Set

TYPE OF VIEW: F// Finding Rule
```

1c. Press Enter to accept the default of Finding Rule

1d. Select CR to create the rule.

```
List Rule Management          Jun 03, 2005@10:41:33          Page:    1 of    1
 Item  Finding Rule Name                                            Class

    1  VA-*IHD QUERI 412 DIAGNOSIS                                  NATIONAL
    2  VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS                   NATIONAL
    3  VA-*IHD QUERI ANCHOR VISIT                                   NATIONAL
    4  VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION                 NATIONAL
    5  VA-*IHD QUERI DIAGNOSIS                                      NATIONAL
    6  VA-*IHD QUERI LIPID LOWERING MEDS                            NATIONAL
    7  VA-*IHD QUERI QUALIFYING VISIT                               NATIONAL
    8  VA-*MH QUERI QUALIFY MH VISIT                                NATIONAL
    9  VA-*MH QUERI QUALIFY PC VISIT                                NATIONAL
          + Next Screen   - Prev Screen   ?? More Actions                >>>CV
Change View                        TEST (Test Rule Set)
CR   Create Rule                        QU   Quit
DR   Display/Edit Rule
Select Item: Quit// CR   Create Rule
```

1e. Respond to the prompts as indicated below to define the local rule.

```
Select FINDING RULE to add: FR-DIABETIC DIAGNOSIS
  Are you adding 'FR-DIABETIC DIAGNOSIS' as
    a new REMINDER LIST RULE (the 19TH)? No// Y  (Yes)

NAME: FR-DIABETIC DIAGNOSIS  Replace
SHORT DESCRIPTION:
CLASS: L  LOCAL
REMINDER TERM:    DIABETIC DIAGNOSIS     LOCAL
         ...OK? Yes// Y  (Yes)

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

1f. The new finding rule is now displayed in the list of Finding Rules.

```
List Rule Management  Jun 03, 2005@10:42:11          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   Create Rule                        QU   Quit
DR   Display/Edit Rule
Select Item: Quit//
```

2. Create the rule set.

Now that the finding rule has been created, we need to create the rule set.

2a. Select the List Rule Management option.

2b. Select CV to change the view to Rule Set.

```
List Rule 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   Create Rule                        QU   Quit
DR   Display/Edit RuleSelect Item: Quit// CV   Change View
```

2c. Select S for Rule Set.

```
     Select one of the following:

          F         Finding Rule
          P         Patient List Rule
          R         Reminder Rule
          S         Rule Set

TYPE OF VIEW: F// S  Rule Set
```

2d. Select CR for Create Rule.

```
List Rule Management          Jun 03, 2005@11:09:03          Page:    1 of    1

 Item  Rule Set Name                                                    Class

    1  VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT               NATIONAL
    2  VA-*IHD QUERI 412 PTS WITH QUALIFY AND ANCHOR VISIT ON LLA M      NATIONAL
    3  VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT                   NATIONAL
    4  VA-*IHD QUERI PTS WITH QUALIFY AND ANCHOR VISIT ON LLA MEDS       NATIONAL
    5  VA-*IHD QUERI PTS WITH QUALIFY VISIT                              NATIONAL
    6  VA-*MH QUERI QUALIFYING PC VISIT                                  NATIONAL
          + Next Screen   - Prev Screen   ?? More Actions                >>>CV
Change View                        DR   Display/Edit Rule
CR   Create 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.

```
List Rule 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   Create Rule                   QU   QuitSelect Item: Quit//
```

3. Build the Patient List

Once the rule set has been created, the patient list can be built via the patient list management option.
3a. Select the Patient List Management option from the Patient List Menu.

```
Reminder User Patient List    Aug 10, 2005@15:02:21          Page:    1 of    1
Available Patient Lists.
 Item  Reminder Patient List Name                      Created          Patients
    1  VA-*IHD QUERI 2001 M01 412 PTS WITH QUALIFY A  8/5/05@11:12:16         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 412 PTS WITH QUALIFY AN  8/5/05@11:19:42         0
    7  VA-*IHD QUERI 2005 M1 412 PTS WITH QUALIFY AN  8/5/05@11:19:43         0
    8  VA-*IHD QUERI 2005 M1 PTS WITH QUALIFY AND AN  8/5/05@11:19:42         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 VISIT   8/5/05@11:19:42         0
          + Next Screen   - Prev Screen   ?? More Actions                >>>CO
Copy Patient List    DE   Delete Patient List  CV   Change View
COE  Copy to OE/RR Team   DCD  Display Creation Doc LRM  List Rule Management
CR   Create Patient List  DSP  Display Patient List QU   Quit
Select Item: Quit// CR   Create Patient List
```

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

```
Select PATIENT LIST name: DIABETIC PATIENTS 5Y
  Are you adding 'DIABETIC PATIENTS 5Y' as
    a new REMINDER PATIENT LIST? No// Y  (Yes)

Secure list?: N// O

Purge Patient List after 5 years?: N// O

Select LIST RULE SET: RS-DIABETIC PATIENTS       RULE SET

Enter Patient List BEGINNING DATE: T-5Y  (AUG 10, 2000)
Enter Patient List ENDING DATE: T  (AUG 10, 2005)

Include deceased patients on the list? N// O

Include test patients on the list? N// O
Queue the  CREATE PATIENT LIST for DIABETIC PATIENTS 5Y:
Enter the date and time you want the job to start.
It must be on or after 08/10/2005@15:02:49 N
Task number 236638 queued.
```

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

```
Reminder User Patient List    Aug 10, 2005@15:02:53          Page:    1 of    1
Available Patient Lists.
 Item  Reminder Patient List 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 Actions                >>>CO
Copy Patient List    DE   Delete Patient List  CV   Change View
COE  Copy to OE/RR Team   DCD  Display Creation Doc LRM  List Rule Management
CR   Create Patient List  DSP  Display Patient List QU   QuitSelect Item: Quit//
```

3d. The new Patient List entry is added to the list of patient lists. When the tasked job has completed successfully, the new Patient List created by the job is displayed in the Reminder User Patient List with the date/time created and the number of patients included in the list.

Create Patient List - Expanded example

```
Reminder User Patient List    Aug 11, 2005@14:22:31
Page:    1 of    8
Available Patient Lists.
 Item  Reminder Patient List Name                      Created          Patients
    1  AGP 1                                           7/10/05@19:55:43       24
    2  AGP CREATED REMINDER REP                        7/26/05@13:48:23       25
    3  AGP EXTRACT TEST                                                        0
    4  AGP IHD EXTRACT WITH QUALIFY VISIT              7/1/05@11:03            0
    5  AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS   7/1/05@11:03:02         0
    6  AGP OE/RR TEAM 1                                7/10/05@20:51:42       16
    7  AGP OERR TEAM LIST                              7/10/05@20:47:17       16
    8  AGP REMINDER TEST                               7/25/05@11:17:24       25
    9  AGP REPORT TEST OF PURGE                        7/19/05@16:06:35        3
   10  AGP T4                                          7/10/05@20:05:02       24
   11  AGP TEST REMINDER 1                             7/25/05@11:48:36       23
   12  AGP TEST REMINDERS 2                            7/25/05@12:01:46       47
   13  FINGERSTICK                                     6/28/05@11:15:35       13
   14  FINGERSTICK (DEF)                               7/6/05@09:51:42        15
   15  PJH EXTRACT 2004 M10 BP                         11/2/04@15:58:14        1
   16  PKR PUB                                         8/9/05@11:33           22
          + Next Screen   - Prev Screen   ?? More Actions                >>>CO   Copy
Patient List    DE   Delete Patient List  CV   Change View
COE  Copy to OE/RR Team   DCD  Display Creation Doc LRM  List Rule Management
CR   Create Patient List  DSP  Display Patient List QU   Quit
Select Item: Next Screen// CR   Create Patient List
```

```
Select PATIENT LIST name: DIAB PTS W/O DIAB EYE EXAM
  Are you adding 'DIAB PTS W/O DIAB EYE EXAM' as
    a new REMINDER PATIENT LIST? No// Y  (Yes)

Secure list?: N// O

Purge Patient List after 5 years?: N// O

Select LIST RULE SET: RS-DIAB
     1   RS-DIAB PTS W/O DIAB EYE EXAM       RULE SET
     2   RS-DIABETIC PATIENTS       RULE SET
CHOOSE 1-2: 1  RS-DIAB PTS W/O DIAB EYE EXAM     RULE SET

Enter Patient List BEGINNING DATE: T-5Y  (AUG 11, 2000)
Enter Patient List ENDING DATE: T  (AUG 11, 2005)

Include deceased patients on the list? N// O

Include test patients on the list? N// O
Queue the  CREATE PATIENT LIST for DIAB PTS W/O DIAB EYE EXAM:
Enter the date and time you want the job to start.
It must be on or after 08/11/2005@14:23:04 N
Task number 237005 queued.
```

```
Reminder User Patient List    Aug 11, 2005@14:23:08          Page:    1 of    8
Available Patient Lists. Item  Reminder Patient List Name                     Created
Patients     1  AGP 1                                          7/10/05@19:55:43
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 Actions                >>>CO   Copy
Patient List    DE   Delete Patient List  CV   Change View
COE  Copy to OE/RR Team   DCD  Display Creation Doc LRM  List Rule Management
CR   Create Patient List  DSP  Display Patient List QU   Quit
```

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:

```
Reminder User Patient List     Sep 29, 2005@10:25:44          Page:  1 of    8
Available Patient Lists. Item  Reminder Patient List Name                    Created
Patients

    6  AGP IHD QUERI PTS WITH QUALIFY AND ANCHOR VIS 7/1/05@11:03:02        0
    7  AGP OE/RR TEAM 1                              7/10/05@20:51:42       6
    8  AGP OERR TEAM LIST                            7/10/05@20:47:17      16
    9  AGP REMINDER TEST                             7/25/05@11:17:24      25
   10  AGP REPORT TEST OF PURGE                      7/19/05@16:06:35       3
   11  AGP T4                                        7/10/05@20:05:02      24
   12  AGP TEST REMINDER 1                           7/25/05@11:48:36      23
   13  AGP TEST REMINDERS 2                          7/25/05@12:01:46      47
   14  CRPATIENT                                     8/11/05@14:56:11      14
   15  CRPATIENT2                                    8/11/05@15:16:44      14
   16  DIAB PTS W/O DIAB EYE EXAM                    8/11/05@14:23:08      19
   17  FINGERSTICK                                   6/28/05@11:15:35      13
   18  FINGERSTICK (DEF)                             7/6/05@09:51:42       15
   19  PJH EXTRACT 2004 M10 BP                       11/2/04@15:58:14       1
   20  PKR PUB                                       9/29/05@10:19:51       2
   21  PKR PVT                                       6/17/05@12:13:15      26
          + Next Screen   - Prev Screen   ?? More Actions                >>>CO   Copy
Patient List    DE   Delete Patient List  CV   Change View
COE  Copy to OE/RR Team   DCD  Display Creation Doc LRM  List Rule Management
CR   Create Patient List  DSP  Display Patient List QU   QuitSelect Item: Next
Screen// DSP   Display Patient List
Select (s):  (6-21): 20
```

Enter DSP, and select the item number next to the patient list you want to view.

```
Reminder Patient List         Sep 29, 2005@15:08:17          Page:  1 of    1
List Name: PKR PUB (22 patients)
 Created: 09/29/2005@10:19:51           Creator: CRPROVIDER,THREE
 Class: Local                           Type: PUBLIC
 Source: List Rule - RS-DIABETIC PATIENTS       Patient Name                    DFN
PCMM Institution        1  AWHPATIENT,THREE                  40               NONE
    2  CRPATIENT,EIGHT                  39               NONE
    3  CRPATIENT,FIVE                   24               SALT LAKE CITY
    4  CRPATIENT,FOUR                   10               NONE
    5  CRPATIENT,ONE                 91290               NONE
    6  CRPATIENT,SEVEN                  54               NONE
    7  CRPATIENT,TEN           912345678906               NONE

          + Next Screen   - Prev Screen   ?? More Actions                >>>CV
Change View          DEM  Demographic Report   QU   Quit
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

Reminder Patient List          Feb 22, 2006@18:14:03          Page:    1 of    2
List Name: Diabetic Eye Exam (7 patients)
 Created: 08/11/2005@15:16:44           Creator: CRPROVIDER,ONE
 Class: Local                           Type: PUB
 Source: Reminder Due Report
       Patient Name                      DFN
    1  AWHPATIENT,THREE                   40
    2  CRPATIENT,EIGHT                    39
    3  CRPATIENT,FIVE                     24
    4  CRPATIENT,FOUR                     10
    5  CRPATIENT,ONE                   91290
    6  CRPATIENT,SEVEN                    54
    7  CRPATIENT,TEN            912345678906


+         + Next Screen   - Prev Screen   ?? More Actions                  >>>
CV   Change View           DEM  Demographic Report   QU   Quit
HSA  Health Summary All    ED   Edit Patient List
HSI  Health Summary Ind   USR  (View Users)
Select Item: Next Screen// DEM   Demographic Report


Select the items to include on the report.

Select from the following address items:
 1 - CURRENT ADDRESS
 2 - PHONE NUMBER
Enter your selection(s):  (1-2): 1

Select from the following future appointment items:
 1 - APPOINTMENT DATE
 2 - CLINIC
Enter your selection(s):  (1-2): 1-2

Maximum number of appointments to display:  (1-25): 1// 2

Select from the following demographic items:
 1 - SSN
 2 - DATE OF BIRTH
 3 - AGE
 4 - SEX
 5 - DATE OF DEATH
 6 - REMARKS
 7 - HISTORIC RACE
 8 - RELIGION
 9 - MARITAL STATUS
10 - ETHNICITY
11 - RACE
Enter your selection(s):  (1-11): 1-4
```

```
Print full SSN: N// O

Include the patient's preferred facility? N// O

Select from the following eligibility items:
 1 - PRIMARY ELGIBILITY CODE
 2 - PERIOD OF SERVICE
 3 - % SERVICE CONNECTED
 4 - VETERAN
 5 - TYPE
 6 - ELIGIBILITY STATUS
 7 - CURRENT MEANS TEST
Enter your selection(s):  (1-7):

Select from the following inpatient items:
 1 - WARD LOCATION
 2 - ROOM-BED
 3 - ADMISSION DATE/TIME
 4 - ATTENDING PHYSICIAN
Enter your selection(s):  (1-5): 4

Include due status information for the following reminder(s):
 1 - Breast Exam
 2 - Problem Drinking Screen
 3 - Weight and Nutrition Screen
 4 - Cholesterol Screen (Male)
 5 - Hepatitis C Risk Assessment
 6 - Pheumovax
 7 - Alcohol Abuse Education
 8 - Exercise Education
 9 - Advanced Directives Education
 10 - Weight
 11 - IHD Lipid Profile
 12 - MST Screening
 13 - Smoking Cessation Education
 14 - Diabetic Eye Exam
Enter your selection(s):  (1-14): 30

Delimited Report:? Y// ES

DEVICE: HOME// ;;999  HOME
```

```
Patient Demographic Report
   Patient List: CRPROVIDER,ONE
   Created on Aug 11, 2005@15:16:44
PATIENT^STREET ADDRESS #1^STREET ADDRESS #2^STREET ADDRESS #3^CITY^STATE^ZIP^APP
OINTMENT DATE1^CLINIC1^APPOINTMENT DATE2^CLINIC2^SSN^DOB^AGE^SEX^ATTENDING^REMIN
DER30^STATUS30^DUE DATE30^LAST DONE30^\\
AWHPATIENT,THREE^123 SESAME ST^^^SALT LAKE CITY^UTAH^84101^^^^^0003^JAN 1,
1951^55^FEMALE^WHPROVIDER,THREE^Diabetic Eye Exam^DUE NOW^DUE NOW^unknown^\\
CRPATIENT,EIGHT^^^^^^^^^^^7892^MAY 19,1952^53^FEMALE^^Diabetic Eye Exam^DUE NOW^DUE NO
W^unknown^\\
CRPATIENT,FIVE^^^^^^^^^^^3242^MAR 3,1914^91^MALE^^Diabetic Eye Exam^DUE NOW^DUE N
OW^unknown^\\
CRPATIENT,FOUR^^^^^^^^^^^3242^OCT 23,1927^78^^^Diabetic Eye 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 Appendix F 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 V.2.0 (CR V.2.0) includes extract tools that enable sites to create extract summary reports based on an extract definition. An extract definition defines extract criteria similar to performance measure criteria. The extract definition specifies what patient lists should be created, which reminders should be run against each patient list, and what kind of totals should be accumulated. An extract run uses the extract definition to create extract totals and stores these results in the Reminder Extract Summary file.

The extract tools were developed to meet generic extract report and transmission needs. The tools provide options to:

- Manage extract criteria
- Manage extract runs (manual and automated)
- Manage transmissions to AAC
- View extract reporting results
- View the list of patients making up the patient denominator

The functionality supports corporate level management analysis by providing reports that:

- Summarize patient reminder compliance totals (not applicable, applicable, due, not due), similar to Reminder Due summary reports
- Summarize finding total counts that reflect the most recent findings resulting from reminder evaluation
- Summarize finding total counts that reflect site activities during the reporting month.

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.

Changes in Patch 6

- The List Manager Extract Summary display was changed to use the reminder print name if it exists. If it does not exist, then the .01 is used. This makes the name display in Extracts consistent with Clinical Maintenance and Reminder Reports.

- 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."

- 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.

- Two problems that arose when running an extract against a reminder definition were repaired: 1) an undefined error when the reminder definition did not have a print name and 2) the reminder output was not stored in the correct sequence order.

- Extracts were changed to increment the patient list name created from extract, if the extract is re-run for a previous period. The number at the end of the patient list will match the number at the end of the extract.

- Display of the operation was added to output for Rule Set Test.

- It was found that the SEQUENCE fields in Reminder Extract Definitions, Reminder Extract Counting Rules, Reminder Counting Groups, and Reminder List Rule Sets did not enforce uniqueness. In other words, there was nothing to prevent creation of a Rule Set with two number 1 sequences. A key that enforces uniqueness was added to each of these fields.

- 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

- Two problems that arose when running an extract against a reminder definition were repaired: 1) an undefined error when the reminder definition did not have a print name and 2) the reminder output was not stored in the correct sequence order.

- Extracts were changed to increment the patient list name created from extract, if the extract is re-run for a previous period. The number at the end of the patient list will match the number at the end of the extract.

Comparison of Reminders Due and Reminder Extract report functionality

Reminder Due Reports	Reminder Extracts
Use report criteria and pre-defined report templates with location/clinic stop, provider, and team lists to build the list of patients that will be used to evaluate reminders.	Combine extract criteria into an extract definition that is used to build one or more lists of patients that are used to evaluate one or more reminders.
National Reminders Due report criteria and pre-defined report templates are not nationally distributed.	An extract definition can be nationally distributed.
The Reminders Due report evaluates reminders and provides counts for Total patients, applicable patients and patients Due.	Compliance total counts are accumulated based on the reminder status for each patient: total, applicable, not applicable, due, and not due. The extract criteria used to create the totals is stored with the total counts on the local system.
Patients with a Due status can be saved in a Reminder Patient List for further follow-up through Patient Demographic and Health Summary reporting.	Patients on the patient list(s) can be followed up through Patient Demographic and Health Summary reporting.
The findings in the reminder are not used to accumulate counts.	Finding total counts are accumulated for pre-defined finding groups based on the findings found during reminder evaluation for the patient. The finding counts are totaled into categories that reflect the reminder status for each patient: total, applicable, not applicable, due and not due patient counts. Utilization counts are accumulated for pre-defined finding groups that count how many times specified findings were entered during the reporting period for patients on each patient list.
An existing Reminder Patient List can be used to identify target patients, instead of report criteria and report templates.	
The Reminders Due report can be created in a Summary or detailed report format, and is typically queued to run in a job during off-hours.	
	For national extracts compliance and finding totals are transmitted monthly to the Austin Automation Center via HL7 messages.

Extract Definition Overview

Reminder extract definitions can be defined for local, VISN, or national level extracts. The extract definition defines criteria to use in an extract run. The extract criteria includes:

- List Rule sets to build patient lists
- Reminders to run against each patient list
- Counting rules and counting groups (optional)

Once an extract definition is defined, the Extract Management menu will allow you to:

- Start a manual run
- Review status of extract runs
- Review next extract reporting period to be run
- Review extract results from a completed extract run
- Review status of national extract transmissions to Austin Automation Center (AAC)

Extract Runs Overview

Local and VISN level extracts are run using Extract Management's Manual Run action. The Manual Run action asks what reporting period should be run for the extract definition. National extract definitions may also be run manually. Running a national extract run will allow you to specify whether to also transmit the results to the AAC. It is recommended that a national extract should initially be run manually so that the results stored in the Reminder Extract Summary can be reviewed before transmitting reports to the AAC.

National extract definitions may also be set up to run automatically. This requires IRM to schedule a national option specifically defined to represent the extract definition. Once an extract run has been automated for an extract definition, the scheduled extract job will reschedule a new task to run for the subsequent month automatic.

The report created by an extract run is stored as a unique entry in the Reminder Extract Summary file. The patient lists created by the extract run are stored in the Reminder Patient List file.The extract run uses the patient list to create the equivalent of Performance Measure denominators. The extract run uses the reminder status to create the equivalent of Performance Measure numerators.

The extract run may generate different types of totals stored in the Reminder Extract Summary file:

- Compliance Totals (similar to reminde due summary report totals)
- Compliance and Finding Totals (counts true findings)

Compliance Totals Only are similar to Reminder Due Summary reports, with the difference being multiple patient lists are used to evaluate multiple reminders, resulting in compliance totals based on the reminder status (applicable, not applicable (N/A), due, and not due).

```
Example: PATIENT LIST 1
  REMINDER 1 COMPLIANCE TOTALS for Applicable, N/A, Due, Not Due
  REMINDER 2 COMPLIANCE TOTALS for Applicable, N/A, Due, Not Due

 PATIENT LIST 2
  REMINDER 1 COMPLIANCE TOTALS for Applicable, N/A, Due, Not Due
  REMINDER 3 COMPLIANCE TOTALS for Applicable, N/A, Due, Not Due
```

Compliance and Finding Totals will additionally report on totals for findings found during reminder evaluation. Counting rules indicate how to count findings defined in a counting group. Counting Groups often group patient cohort findings, resolution findings and information findings in different groups. The finding counts are totaled based on the reminder's status (N/A, applicable, due, not due).

```
Example: PATIENT LIST 1
 REMINDER 1 COMPLIANCE TOTALS for Applicable, N/A, Due, Not Due
  GROUP 1 (most recent finding counts eachfinding found in the group,
  regardless of when it was entered into VistA)
   FINDING 1 TOTALS for Applicable, N/A, Due,Not Due
   FINDING 2 TOTALS for Applicable, N/A, Due, Not Due
  GROUP 2 (most recent finding patient counts one finding from the
    group for each patient, regardless of when it was entered in VistA)
   FINDING 1 TOTALS for Applicable, N/A, Due, Not Due
   FINDING 2 TOTALS for Applicable, N/A, Due, Not Due
   FINDING 3 TOTALS for Applicable, N/A, Due, Not Due
   FINDING 4 TOTALS for Applicable, N/A, Due, Not Due
  GROUP 3 (utilitzation counts how many of the findings were entered
    during the reporting period)
   FINDING 3 TOTALS for Applicable, N/A, Due, Not Due
   FINDING 4 TOTALS for Applicable, N/A, Due, Not Due
   FINDING 5 TOTALS for Applicable, N/A, Due, Not Due
 REMINDER 2 COMPLIANCE TOTALS for Applicable, N/A, Due, Not Due
    GROUP 4 (most recent finding: counts each finding found in the
    group, regardless of when it was entered into VistA)
      FINDING 10 TOTALS for Applicable, N/A, Due, Not Due
      FINDING 11 TOTALS for Applicable, N/A, Due, Not Due
      FINDING 12 TOTALS for Applicable, N/A, Due, Not Due
      FINDING 13 TOTALS for Applicable, N/A, Due, Not Due
    GROUP 5 (most recent finding patient: counts one finding from the
    group for each patient, regardless of when it was entered in VistA)
     FINDING 9 TOTALS for Applicable, N/A, Due, Not Due
      FINDING 8 TOTALS for Applicable, N/A, Due, Not Due
      FINDING 7 TOTALS for Applicable, N/A, Due, Not Due
     GROUP 6 (utilization: counts how many of the findings were
    entered during the reporting period)
      FINDING 11 TOTALS for Applicable, N/A, Due, Not Due
      FINDING 12 TOTALS for Applicable, N/A, Due, Not Due

  PATIENT LIST 2
   REMINDER 1 COMPLIANCE TOTALS for Applicable, N/A, Due, Not Due
    GROUP 1 (utilization counts: how many of the findings were entered
    during the reporting period)
     FINDING 1 TOTALS for Applicable, N/A, Due, Not Due
     FINDING 2 TOTALS for Applicable, N/A, Due, Not Due
     FINDING 3 TOTALS for Applicable, N/A, Due, Not Due
     FINDING 4 TOTALS for Applicable, N/A, Due, Not Due
  FINDING 5 TOTALS for Applicable, N/A, Due, Not Due
```

Extract Compliance Totals Overview

Extract runs accumulate compliance totals for each unique combination of patient list and reminder. Compliance totals are the count of patients based on their reminder status (similar to reminder due summary reports)

The Extract report summarizes compliance totals for each unique combination of Patient List and Reminder:

Patient List Total	Reminder Appl	Not Appl	Due	Not Due

The following is a comparison of Compliance Totals in Extract Summaries and Reminder Due Summary Totals.

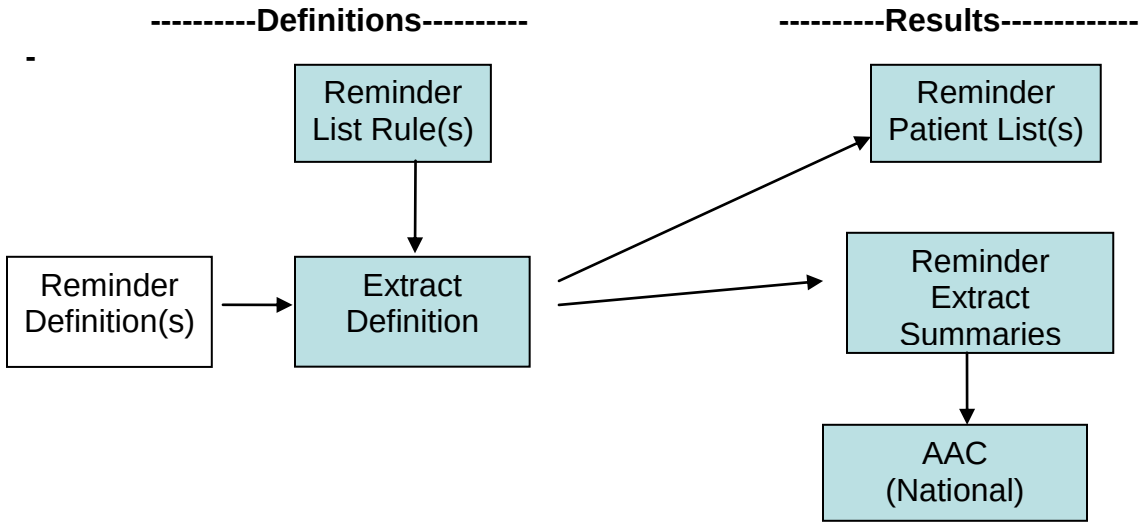
Extract Compliance Totals in Extract Summary example:
(can include dead patients)

```
Item  Patient List/Station/Reminder          Total    Appl.    N/A   Due  Not
Due
   1 VA-*IHD QUERI 2005 M1 PTS WITH QUALIFY VISIT
     552GD/VA-IHD LIPID PROFILE                344     344      0    79   265
     552GD/VA-IHD ELEVATED LDL                 344      44    300    44     0
```

Reminder Due Summary example:
(can include dead patients)

```
                                            # Patients with Reminders
                                           Applicable          Due
                                           ----------       ----------
17   Diabetes Elevated LDL (V04.11)               344            79
Report run on 344 patients.
```

The following diagram shows extract file relationships for generating compliance total extract results:



Identifying Extract Criteria for a COMPLIANCE TOTALS ONLY Extract

The following questions need to be answered in order to develop extract criteria that can be defined in an extract definition.

- What patient lists need to be built for the extract? This determines how many rule sets need to be defined in an extract definition.
- Which findings should be used to create the patient list? This determines what List Rules should be defined.
- Is there a particular sequence that findings should be evaluated to build the patient list? This determines the sequence that list rules will be defined in a list rule set.
  (e.g., target NEXUS visits first, then Diabetic Diagnosis finding or
  Diabetic diagnosis first, then target NEXUS visits)
- How should the list rules be used to add to, select from, or remove patients from a patient list?
- What date ranges should be used when building the patient list at what levels? (List Build, Rule Set Sequence, List Rule, and Reminder Term Finding)
- Should Date of Death be used to identify patients to be included in the extract? This determines whether the new national finding rule, VA-FR-DATE OF DEATH, should be a finding rule in each rule set used to create a patient list.
- What extract patient list name should be assigned to the patient lists built by an extract?
- What reminders should be run against each patient list?
- How often should the extract be run? (Monthly, Quarterly, or Yearly)

Once the criteria is identified, the following steps should be taken:

- Create List Rule (refer to Reminder Patient List Management chapter)
- Create List Rule Set
- Test the List Rule Set
- Create the Reminder Definitions (clinical and/or reporting)
- Create an Extract Definition with List Rule Set and Reminders
- Run a manual extract to generate compliance totals only
- Review extract summary report generated.
- Review patient list(s) created by the extract run.

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.

Reminder Extract Menu changes in Patch 4

Since the original reminder extract report functionality went out in PXRM*2.0, we have received feedback that the terminology used for file and field names and descriptions was confusing, so changes were made to improve the understanding and usability of the extract functionality.

Summary

- Reference to extract parameter or report/extract parameter are changed to extract definition
- List rules explanation of beginning and ending dates
- Changed reference of finding rules to counting rules (finding rules had two different meaning – as a list rule and as a counting rule – so renamed the counting context.)
- Changed reference of finding group to counting group (finding group was confusing users – it simplifies training by referring to this group with the context of counting)

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 wh are used to build patient lists.

LR List Rule Management is discussed in detail in the Reminder Patient List/List Rule section.

Extract criteria: List Rule Management option

The List Rules Management option is used to define the list rule set(s) that the extract will use to build patient list(s). Each list rule (finding rule, patient list rule, or reminder rule) must be defined first as separate entries in the List Rule file. Then rule sets can be defined that with unique combinations of list rules and operations in the sequence they should be performed.

The List Rule Management option opens up to a List Manager view of existing rule sets. Each list rule set and list rule may be named with a meaningful name that summarizes the intent of the list rule or list rule set. In the list rule management display below, the rule set names are national list rule sets, prefixed with VA-*.

```
List Rule Management          Oct 15, 2007@09:20:45          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 Actions
CV   Change View                        TEST Test Rule Set
CR   Create Rule                        QU   Quit
DR   Display/Edit Rule
Select Item: Quit//
```

Extract criteria: List Rules

The Change View action allows you to select which type of list rules you want to view. By specifying the Finding Rule view, the Finding Rule list rules will be displayed, instead of the default List Rule Set view. Note the list manager display below shows the national finding rules defined as of PXRM*2.0*4. The national entries are prefixed with VA-* or VA-.

```
List Rule Management          Oct 15, 2007@09:20:45      Page:    1 of    2

 Item  Finding Rule Name                                              Class
    1  VA-*IHD QUERI 412 DIAGNOSIS                                    NATIONAL
    2  VA-*IHD QUERI AMI DIAGNOSIS WITHIN 60 DAYS                     NATIONAL
    3  VA-*IHD QUERI ANCHOR VISIT                                     NATIONAL
    4  VA-*IHD QUERI ASSOCIATE PRIMARY CARE STATION                   NATIONAL
    5  VA-*IHD QUERI DIAGNOSIS                                        NATIONAL
    6  VA-*IHD QUERI LIPID LOWERING MEDS                              NATIONAL
    7  VA-*IHD QUERI QUALIFYING VISIT                                 NATIONAL
    8  VA-*MH QUERI QUALIFY MH VISIT                                  NATIONAL
    9  VA-*MH QUERI QUALIFY PC VISIT                                  NATIONAL
   10  VA-FR-DATE OF DEATH                                            NATIONAL
+         + Next Screen   - Prev Screen   ?? More Actions
CV   Change View                        TEST (Test Rule Set)
CR   Create Rule                        QU   Quit
DR   Display/Edit Rule
Select Item: Next Screen//
```

Each national finding rule is defined with a beginning date/time and ending date/time that defines the date range to use when evaluating a patient's findings. The Reminder Term Findings referenced by the national finding rules are not defined with beginning and ending dates, so the Finding Rule date range will not be overwritten.

The Create Rule (CR) action allows you to create Finding Rules. When each Local and VISN class Finding Rule is created they will also be displayed in the list. The beginning date/time and ending date/time may be defined at the List Rule Set Sequence, List Rule (Finding rules), or Reminder Term Finding level. If the beginning date/time and ending date/time are not defined at any of these levels, then the extract reporting period will be used as the date range to use to look for findings.

An example of prompts for creating a finding rule to look for qualifying NEXUS visits during the extract reporting period follows:

```
Select Item: Quit// CR   Create Rule

Select FINDING RULE to add: FR QUALIFYING NEXUS VISIT
  Are you adding 'FR QUALIFYING NEXUS VISIT' as
    a new REMINDER LIST RULE (the 41ST)? No// Y  (Yes)

Used by: Not used by any rule set

NAME: FR QUALIFYING NEXUS VISIT  Replace
SHORT DESCRIPTION:
CLASS: L  LOCAL
REMINDER TERM: VA-*LOCATION LIST NEXUS PRIMARY CARE CLINICS     NATIONAL
LIST RULE BEGINNING DATE/TIME: BDT
LIST RULE ENDING DATE/TIME: T
Input your edit comments.
Edit? NO//
```

Notice, The FR is used as a prefix to identify the list rule entry as a finding rule. The FR could alternatively have been used as a suffix (FR).

Extract criteria: List Rule Sets

A list rule set needs to be defined for each patient list that should be created during an extract run. An example of prompts used to create a rule set that uses qualifying NEXUS visits, anchor visits, Diabetes Mellitus diagnosis, and Date of Death to build a patient list.as follows:

```
Select RULE SET to add: RS DM PTS WITH QUALIFY AND ANCHOR VISIT
  Are you adding 'RS DM PTS WITH QUALIFY AND ANCHOR VISIT' as
    a new REMINDER LIST RULE (the 42ND)? No// Y  (Yes)
NAME: RS DM PTS WITH QUALIFY AND ANCHOR VISIT  Replace
SHORT DESCRIPTION: QUALIFY, ANCHOR AND DM PATIENTS
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 QUALIFYING NEXUS VISIT       FINDING RULE
  LIST RULE: FR QUALIFYING NEXUS VISIT//
```

```
  OPERATION: AD  ADD PATIENT
  SEQUENCE BEGINNING DATE/TIME:
  SEQUENCE ENDING DATE/TIME:
Select SEQUENCE: 2
  Are you adding '2' as a new SEQUENCE (the 2ND for this REMINDER LIST RULE)?
N Y(Yes)
   SEQUENCE LIST RULE: FR ANCHOR VISIT PRIOR 13-24M
  Are you adding 'FR ANCHOR VISIT PRIOR 13-24M' as
    a new REMINDER LIST RULE? No// Y  (Yes)
REMINDER LIST RULE TYPE: S??
     Choose from:
       1        FINDING RULE
       3        RULE SET
       5        PATIENT LIST
       2        REMINDER RULE
   REMINDER LIST RULE TYPE: 5  PATIENT LIST
  LIST RULE: FR ANCHOR VISIT PRIOR 13-24M//
  OPERATION: S  SELECT
  SEQUENCE BEGINNING DATE/TIME:
  SEQUENCE ENDING DATE/TIME:
Select SEQUENCE: 3
  Are you adding '3' as a new SEQUENCE (the 3RD for this REMINDER LIST RULE)?
N Y (Yes)
   SEQUENCE LIST RULE: FR DM DX 2Y
  Are you adding 'FR DM DX 2Y' as a new REMINDER LIST RULE? No// Y  (Yes)
   REMINDER LIST RULE TYPE: 1  FINDING RULE
  LIST RULE: FR DM DX 2Y//
  OPERATION: S  SELECT
  SEQUENCE BEGINNING DATE/TIME:
  SEQUENCE ENDING DATE/TIME:
Select SEQUENCE: 4
  Are you adding '4' as a new SEQUENCE (the 4TH for this REMINDER LIST RULE)?
NY
  (Yes)
   SEQUENCE LIST RULE: FR ASSOCIATE PCMM FACILITY
  Are you adding 'FR ASSOCIATE PCMM FACILITY' as
    a new REMINDER LIST RULE? No// Y  (Yes)
   REMINDER LIST RULE TYPE: F  FINDING RULE
  LIST RULE: FR ASSOCIATE PCMM FACILITY//
  OPERATION: I  INSERT FINDING
  SEQUENCE BEGINNING DATE/TIME:
  SEQUENCE ENDING DATE/TIME:
Select SEQUENCE:
Input your edit comments.
Edit? NO//
```

The last sequence in the rule set above uses an INSERT FINDING operation to tell the list build logic to include the patients primary care institution in the patient list created by the extract. The patient's primary care facility in the extract patient list will be used to accumulate totals by facility.

The sequence of the list rules defined in the rule set could have been defined to look for all patients in a different sequence:

1 add patients with Diabetes diagnosis to a patient list,
2 select the subset of the patient list resulting from 001 that have a qualifying NEXUS visit,

3 select the subset of the patient list resulting from 002 that have an anchor visit in the 13-24 months,
4 remove the subset of the patient list resulting from 003 that have a date of death prior to the beginning of the extract reporting period,
5 insert finding PCMM facility, when available for each patient in the subset of the patient list resulting from 004.

The goal of the sequence of list rules in the rule set should be to optimize processing time taken to evaluate patient findings in the list build logic. The list build processing time is optimized when Finding Rules, that are not based on computed findings, are defined in the rule set due to the use of the PXRM cross-references.

Using a reminder rule (RR) in a rule set will take about the same amount of time as the reminder due reports.

Test Date Range that will be used to look for Findings

The Test Rule Set action can be used to make sure the correct date ranges will be used to look for each finding. The action will ask you to specify the beginning and ending dates that should be used to build a patient list. The list build logic will use the list rule set to indicate what date ranges will be used when the extract is run with the specified beginning and ending dates.

```
Select Item: Next Screen// TEST   Test Rule Set
Select (s):  (1-14): 1

Enter Patient List BEGINNING DATE: 09-01-07  (SEP 01, 2007)
Enter Patient List ENDING DATE: 09-30-07  (SEP 30, 2007)
```

The Rule Set Test action returns the dates that will be used for each finding rule.

```
Rule Set Test              Oct 15, 2007@09:43:06          Page:    1 of    1
Rule Set Test

List Build Beginning Date: 09/01/2007
List Build Ending Date: 09/30/2007

SEQUENCE 1 FR QUALIFYING NEXUS VISIT
 Operation: ADD PATIENT
 TERM VA-*LOCATION LIST NEXUS PRIMARY CARE CLINICS

SEQUENCE 2 FR ANCHOR VISIT PRIOR 13-24M
 Operation: SELECT



          + Next Screen   - Prev Screen   ?? More Actions

Select Action:Quit//
```

Create an Extract Definition for Complianced Totals only

The following options and actions must be taken to define an extract definition. From the Reminder Mangers Menu option, select the Reminder Extract Menu (XM), then select Extract Definition Management (ED).

The Extract Definition Management (ED) option uses the List Manager tool to display the currently defined list of extract definitions. The extract definition names prefixed with VA- in the example below are national extract definitions. An extract definition can be displayed or edited, and new extract definitions can be created from this option. National extract definitions cannot be edited.

```
Extract Definition Management Aug 10, 2006@03:40:59          Page:    1 of  1


 Item  Extract Name                                                Class
    1  VA-IHD QUERI                                                NATIONAL
    2  VA-MH QUERI                                                 NATIONAL


+         + Next Screen   - Prev Screen   ?? More Actions
CR   Create Extract Definition          QU   Quit
DE   Display/Edit Extract Definition
Select Item: Quit//
```

The Create Extract Definition action will ask the following prompts to define an extract definition, that will be used to accumulate compliance totals. The Create Extract Definition below is based on creating a Diabetes Mellitus Performance Measure 12 extract (abbreviated as DM PM12).

When setting up a reminder extract definition, the Extract PT List Name field will be used to create unique Reminder Patient List entries when an extract is run for a specified extract reporting period. This is done by adding Mnn for month or Qnn for quarter, and yyyy as the year in the Extract PT List Name field. The yyyy is replaced with the year of the extract reporting period and the nn either represents 01-12 months, or 01-04 for Quarter, or 00 for year. In each case nn is replaced by the numeric value representing the reporting period during the calendar year. For example, if the extract was run for June 2006, then Mnn becomes M06 and yyyy becomes 2006. For the VA-IHD QUERI extract, the name of the patient list created will beVA-*IHD QUERI yyyy Mnn PTS WITH QUALIFY VISIT. If the extract was run for May of 2006 then the name of the patient list would be VA-*IHD QUERI 2006 M05 PTS WITH QUALIFY VISIT .

Reminder extracts can be set up to run for a monthly, quarterly, or yearly reporting period. This is determined by the response to the Report Frequency prompt when setting up the extract definition. Also there is the extract type prompt; there are two possible responses: Compliance total or Compliance and finding totals. Compliance totals only return the reminder evaluation count. Compliance and finding totals return the reminder evaluation count and the count for each finding in the extract.

```
Select Item: Quit// cr   Create Extract Definition

Select EXTRACT DEFINITION to add: DM PM12
  Are you adding 'DM PM12' as
    a new REMINDER EXTRACT DEFINITION (the 3RD)? No// Y  (Yes)
NAME: DM PM12//
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:
  1>
REPORT FREQUENCY: M  MONTHLY
Select EXTRACT SEQUENCE: 1
  Are you adding 1 as a new EXTRACT SEQUENCE (the 1ST for this REMINDER EXTY
  (Yes)
   EXTRACT SEQUENCE LIST RULE SET: (RS) DM PTS WITH QUALIFY AND ANCHOR VISIT
  LIST RULE SET: (RS) DM PTS WITH QUALIFY AND ANCHOR VISIT
         //
  EXTRACT PT LIST NAME: PM12 yyyy Mnn DM PTS WITH QUALIFY AND ANCHOR VISIT
  INCLUDE DECEASED PATIENTS: Y  YES
  INCLUDE TEST PATIENTS: N  NO
  Select REMINDER SEQUENCE: 1
  Are you adding 1 as a new REMINDER SEQUENCE (the 1ST for this EXTRACT RULY
  (Yes)
   REMINDER SEQUENCE REMINDER: REPORT-DIABETES LDL>119       LOCAL
    REMINDER: REPORT-DIABETES LDL>119//
    COUNTING RULE:

  Select REMINDER SEQUENCE: 2
  Are you adding 2 as a new REMINDER SEQUENCE (the 2ND for this EXTRACT RULE)
NO//Y <enter>
  (Yes)
   REMINDER SEQUENCE REMINDER: DIABETIC HEMOGLOBIN A1C       L
    REMINDER: DIABETIC HEMOGLOBIN A1C
         //
    COUNTING RULE:
  Select REMINDER SEQUENCE:
Select EXTRACT SEQUENCE:
Input your edit comments.
Edit? NO//
```

After creating a new extract definition, the name of the extract definition will be displayed in the list of extract definitions. A separate option is not available to Inquire about an Extract Definition. To view an extract definition on the screen, the Display/Edit Extract Defnition (DE) action must be selected, and the extract definition item must be selected. To view an entire extract definition, several returns may need to be entered to view the next screen page of the definition.

```
Extract Definition Management Aug 10, 2006@03:45:29          Page: 1 of    1

 Item  Extract Name                                                  Class
    1  DM PM12                                                       LOCAL
    2  VA-IHD QUERI                                                  NATIONAL
    3  VA-MH QUERI                                                   NATIONAL


+         + Next Screen   - Prev Screen   ?? More Actions
CR   Create Extract Definition          QU   Quit
DE   Display/Edit Extract Definition
Select Item: Quit//DE
```

The Extract Definition will display the current rule sets defined in the extract definition. Each rule set is expanded to show the list rules making up the rule set.

```
Select Item: Quit// 1

Display/Edit Extract Def      Jul 12, 2006@10:40:22          Page: 1 of  4


                 Extract Name:  DM PM12             Number:11
                        Class:  LOCAL

                 Extract Type:  COMPLIANCE TOTALS ONLY
               Reporting Period  MONTHLY

        Last Reporting Period:
        Next Reporting Period:

                Last Run Date:


 Extract Sequence: 1
 -----------------
 Patient List:
     PM12 yyyy Mnn DM PTS WITH QUALIFY VISIT
+         + Next Screen   - Prev Screen   ?? More Actions
ED   Edit Extract Definition            QU   Quit
Select Item(s): Next Screen//
```

An existing Extract Definition can be edited by selecting the Edit Extract Definition (ED) action. The standard list manager Print List (PL) action can be used to print the extract definition to a printer or to the screen without page breaks. At the DEVICE prompt, enter ;;9999 to print up to 9999 lines to the screen without a page break.

```
Select Item(s): PL
DEVICE: HOME// ;;9999  HOME

Display/Edit Extract Def      Jul 12, 2006@10:40:39          Page: 1 of  1
-------------------------------------------------------------------------------
                 Extract Name:  DM PM12             Number:11
                        Class:  LOCAL

                 Extract Type:  COMPLIANCE TOTALS ONLY
               Reporting Period  MONTHLY

        Last Reporting Period:
        Next Reporting Period:

                Last Run Date:

 Extract Sequence: 1
 -----------------
 Patient List:
     PM12 yyyy Mnn DM PTS WITH QUALIFY AND ANCHOR VISIT

 Rule Set:    RS PM12 DM PTS WITH QUALIFY AND ANCHOR VISIT
 Description: Get pts with NEXUS visit in PCE and a Diabetic dx
```

```
[Notice the Rule Set has been expanded to show you rules that will be
followed to create the patient list]
  List Rules:
  1  FR QUALIFYING NEXUS VISIT IN RPTING PERIOD              ADD PATIENT
            List Rule: FR QUALIFYING NEXUS VISIT IN RPTING PERIOD
          Description: NEXUS clinic visits in rpting period
            Rule Type: FINDING RULE
          Reminder Term: NEXUS CLINICS
      LR Beginning Date: BDT
         LR Ending Date: T

  2  FR DIABETIC DIAGNOSIS 2Y                                SELECT PATIENT
            List Rule: FR DIABETIC DIAGNOSIS 2Y
          Description: Diabetic patients within 2 years prior to the rpt
period
            Rule Type: FINDING RULE
          Reminder Term: DIABETIC DIAGNOSIS
      LR Beginning Date: BDT-2Y
         LR Ending Date: T

  3  VA-FR-DATE OF DEATH                                     REMOVE PATIENT
            List Rule: VA-FR-DATE OF DEATH
          Description: Date of Death
            Rule Type: FINDING RULE
          Reminder Term: VA-DATE OF DEATH

  4  ASSOCIATE PCMM INSTITUTION                               INSERT FINDING
            List Rule: ASSOCIATE PCMM INSTITUTION
          Description: Associate primary facility.
            Rule Type: FINDING RULE
          Reminder Term: VA-PCMM INSTITUTION
          Extract Reminders and Related Counting Total Rule:

          1 Reminder: REPORT-DIABETES LDL>119
              Counting Rule:
```

Reminder Extract Management (MA) option

The Reminder Extract Management (MA) option lets you view an extract definition, examine and schedule an extract run or transmission run, view extract summary results, and view extract patient lists.

Each extract definition is identified by an Extract Name. Extract names are displayed as selectable items. When an item related to an extract name is selected, the list manager actions allow you to:

- view and edit the extract definition
- view the existing history of extract run information, with the most recent extract runs displayed first.

Viewing the existing history of extract runs, provides a list of extract summary names of completed extract runs. When selecting a particular extract summary item in the list, list manager actions allow you to:

- Change the view
- View the extract results stored in the Extract Summary file
- Schedule a manual extract run
- Schedule a manual transmission run for an existing national extract run
- View the Transmission History

When the Extract Summary action is selected, the user can

- view the patient lists created for the extract
- view the extract summary results.

The extract summary results contain compliance totals, similar to a reminder due report. The extract results may optionally contain finding totals if the extract definition contains counting rules for a particular reminder.

Prior extract summaries for a given extract type can be displayed with their HL7 transmission status and history. Reminder and finding totals of individual extract summaries may be displayed or printed if required. The patient lists generated by each extract may be displayed or used to print health summaries if required.

National extract runs and transmissions to the Austin Automation Center (AAC) can be monitored from the actions. National extracts are the only extracts that can be transmitted to the AAC.

Once the extract definition has been defined, the Reminder Extract Management (MA) option, available from the Reminder Extract Menu, can be used to schedule manual extract runs and view existing extract run results. The Reminder Extact Management option uses list manager tools to display a list of current Extract Definition entries.

```
   MA     Reminder Extract Management
   ED     Extract Definition Management
   EC     Extract Counting Rule Management
   EG     Extract Counting Group Management
   LR     List Rule Management

Select Reminder Extract Menu Option: MA  Reminder Extract Management


Reminder Extract Management   Jul 12, 2006@10:51:25          Page: 1 of  1
Available Extract Definitions:

 Item  Extract Type                                                  Class
    1  DM PM12                                                       LOCAL
    2  VA-IHD QUERI                                                  NATIONAL
    3  VA-MH QUERI                                                   NATIONAL


+         + Next Screen   - Prev Screen   ?? More Actions
EDM  Extract Definition Management      QU   Quit
VSE  View/Schedule Extract
Select Item: Quit//
```

Extract Definition Management (EDM) action

The Extract Definition Management action can be selected, and the Extract Type can be selected to display or edit the current extract definition. Once the selected extract definition is displayed. The Print List (PL) action, with a DEVICE of “;;999” will display the first 999 lines before adding a page break.

View/Schedule Extract (VSE) action

The View/Schedule Extract (VSE) action can be selected, and the Extract Type can be slected to display the Examine/Schedule Extract list manager. The list displays extract summary entries that have been created during extract runs for the selected Extract Type.

Examine/Schedule Extract display

The View/Schedule Extract action creates a new Examine/Schedule Extract list manager display that summarizes the following information: Extract Definition Name, Next Reporting Period (used for automated scheduled runs), Date of the next automated Scheduled Run, and an itemized list of extract runs that have completed. This list includes the unique Reminder Extract Summary information that identifies the completed run. (Extract Summay name, Date created, Transmission Date, and a Yes/No flag to indicate whether the extract was run manually (N) or from automated processing (Y).

The Extract Summary name is made up of the Extract Definition Name concatenated with yyyy and Mnn for the reporting period. If one extract reporting period has been rerun, each of the reruns will have "/" followed by an incremented number so that the multiple extract runs can be identified from each run. The Examine/Schedule Extract List manager display below shows an example of multiple extract runs done for the same extract reporting period. The most recent Extract run for the month will be displayed first in the list. Noter that VA-IHD QUERI 2001 M01/13 is the most recent run for the 2001 M01 extract reporting period.

```
Examine/Schedule Extract      Jul 12, 2006@10:51:28          Page:    1 of    6

          Extract Type: VA-IHD QUERI
   Next Extract Period: M11/2005
      Scheduled to Run:                          View: Creation Date Order

 Item    Extract Summary          Date Created         Transmission Date   Auto
    1 VA-IHD QUERI 2001 M02/03    10/05/2005@14:47:50  Not Transmitted       N
    2 VA-IHD QUERI 2001 M01/13    10/05/2005@14:42:24  Not Transmitted       N
    3 VA-IHD QUERI 2001 M01/12    10/05/2005@14:38:55  Not Transmitted       N
    4 VA-IHD QUERI 2001 M01/11    09/28/2005@15:57:34  Not Transmitted       N
    5 VA-IHD QUERI 2001 M01/10    09/28/2005@15:53:58  Not Transmitted       N
    6 VA-IHD QUERI 2001 M01/09    09/28/2005@15:51:26  Not Transmitted       N
    7 VA-IHD QUERI 2001 M01/08    09/27/2005@16:39:04  09/30/2005@09:16:40   N
    8 VA-IHD QUERI 2001 M02/02    09/27/2005@16:34:20  Not Transmitted       N
    9 VA-IHD QUERI 2001 M01/05    09/27/2005@15:05:07  Not Transmitted       N
   10 VA-IHD QUERI 2001 M01/03    09/27/2005@14:35:16  Not Transmitted       N
   11 VA-IHD QUERI 2001 M09       09/27/2005@13:25:18  Not Transmitted       N
+          + Next Screen   - Prev Screen   ?? More Actions
CV   Change View          ME   Manual Extract       TH   Transmission History
ES   Extract Summary      MT   Manual Transmission  QU   Quit
Select Item: Next Screen//
```

Available actions on the Examine/Schedule Extract screen:

- CV Change View
  Toggle view of extract summaries between creation date order and extract period order.

- ES Extract Summary
  Display reminder compliance and finding totals for extract summary. Also displays patient list with option to print Health Summary.

- ME Manual Extract
  Initiate a new extract for a selected period with option to transmit.

- MT Manual Transmission
  Initiate a transmission or retransmission of an existing extract summary.
  The Manual Transmission (MT) action is currently only used for national extract processing. The Manual Transmission (MT) action allows an existing national Reminder Extract Summary entry to be transmitted via a background job to the AAC. When the AAC receives the transmission, the AAC sends a message back to the site indicating the transmission was received. Transmissions are accumulated in a queue until the 10th of each month. On the 10th of each month, the transmission messages in the queue are emptied from the queue and saved for processing, which will occur on the 15th of each month. When each transmission is processed successfully by the AAC, a message is sent back to the site indicating the processing was successful, The current AAC transmission status is displayed in the Examine/Schedule Extract List Manager list, with the most recent status received from the AAC.

- TH Transmission History
  Display transmission history and HL7 message ID's for an existing extract.
  The Transmission History (TH) action is currently only used for national extract processing to display a list of transmissions that have occurred and current status for the specified extract type.

At the end of an extract processing job, the extract system will attempt to clean up the extract summary file and the reminder patient list file. If an extr act summary entry is over five years old and the AUTOMATICALLY PURGE field is set to true, the patient list will be deleted. The same is true for the extract results if it is over five years old and the AUTOMATICALLY PURGE field is set to true.

```
Select Item: Quit// VSE   View/Schedule Extract
Select (s):  (1-11): 1
Examine/Schedule Extract      Aug 10, 2006@03:48:11          Page: 1 of    1

          Extract Type: DM PM12
   Next Extract Period:
      Scheduled to Run:                          View: Creation Date Order

 Item    Extract Summary        Date Created         Transmission Date   Auto
    1  DM PM12 2006 M06         08/10/2006@03:47:10  Not Transmitted       N



+         + Next Screen   - Prev Screen   ?? More Actions
CV   Change View          ME   Manual Extract       TH   Transmission History
ES   Extract Summary      MT   Manual Transmission  QU   Quit
Select Item: Quit//
```

The following prompts must be answered to schedule a Manual Extract Run.

```
Select Item: Quit// ME   Manual Extract

Select EXTRACT PERIOD (Mnn/yyyy): // M06/2006
Are you sure you want to run a DM PM12 extract for M06 2006? N// y  YES
```

```
Purge Patient List after 5 years?: N// 0
Purge Extract Summary after 5 years?: N// O

Queue a Reminder Extract DM PM12 for M06/2006
Enter the date and time you want the job to start.
It must be after 07/12/2006@11:01:42
Start the task at: NOW
Task number 29191 queued.
```

Viewing Extract Run Results

After the tasked job has completed, the extract results will be stored in the Reminder Extract Summary file and the Reminder Patient List file. The VSE action can be reselected to see when the extract run has completed.

```
Examine/Schedule Extract      Jul 12, 2006@11:05:19          Page:  1 of    1

          Extract Type: DM PM12
   Next Extract Period:
      Scheduled to Run:                           View: Creation Date Order

 Item    Extract Summary          Date Created       Transmission Date   Auto
    1 DM PM12 2006 M06          07/12/2006@11:04     Not Transmitted       N


+         + Next Screen   - Prev Screen   ?? More Actions
CV   Change View          ME   Manual Extract       TH   Transmission History
ES   Extract Summary      MT   Manual Transmission  QU   Quit
Select Item: Quit//1
```

When the extract run has completed, the list will display a new item representing the completed extract run's results.

Extract Summary (ES) action

Once the new item for the completed extract run is displayed, the results can be viewed by select the Item, and the Extract Summary (ES) action. The Extract Summary (ES) Action will display the extract results stored in the Extract Summary file for the selected Extract item. This action presents the Extract Summary list manager. The screen displays information about the Extract Summary entry:

- Extract Summary Name (notice the yyyy Mnn is added to the extract definition title to create the unique entry in the Extract Summary file)
- Extract Period that was used to create this extract summary entry
- The date/time the extract summary entry was created.
- The listed items represent each patient list created during extract processing. The name of the patient list will include the extract reporting period in the name. The name is created by replacing the yyyy Mnn in the Extract Patient List Name field of the Extract Definition.
- Following each patient list item, the station number and reminder name that was evaluated for each patient in the list is displayed. Station counts are accumulated for the patient's primary care facility, or the primary institute if now primary care facility is defined. To the left of each station/reminder combination, the Compliance Totals are displayed.

```
Select Action:  (ES/MT/TH): ES//   Extract Summary

Extract Summary                Aug 10, 2006@03:49:27          Page: 1 of    1
Extract Summary Name: DM PM12 2006 M06
      Extract Period: 06/01/2006 - 06/30/2006   Created: 08/10/2006@03:47:10

 Item  Patient List/Station/Reminder     Total   Appl.    N/A    Due  Not Due
   1 PM12 2006 M06 DM PTS WITH QUALIFY AND ANCHOR VISIT

     500/REPORT-DIABETES LDL>119           29      27      2     18      9

     500/DIABETIC HEMOG                    29      29      0     21      8



+         + Next Screen   - Prev Screen   ?? More Actions
DPL  Display Patient List                QU   Quit
DSF  Display/Suppress Finding Totals
Select Item: Quit//
```

Display Patient List (DPL) action

The patient list item listed can be selected to view the list of patients used to accumulate the extract summary compliance totals. Enter the patient list item you want to view, and then select the Display Patient List (DPL) action. The Reminder Patient List List Manager option will display the Patient Name and DFN for each patient in the Patient List. A separate item number is displayed for each patient in the patient list. If INSERT FINDINGs were defined in the list rule set, the findings would be displayed to the right of the DFN.

The entries in the patient list can be used to print Health Summary and Demographic reports. The patient list can also be used as the patient source to run a Reminder Due Report.

```
Select Item: Quit// DPL   Display Patient List
Reminder Patient List          Aug 10, 2006@03:51:19          Page: 1 of    3
List Name: PM12 2006 M06 DM PTS WITH QUALIFY AND ANCHOR VISIT (29 patients)
 Created: 08/10/2006@03:47:06           Creator: TROST,DEBBIE
 Class: Local                           Type: PRIVATE
 Source: Extract Parameter - DM PM12
       Patient Name                        DFN
    1  CRPATIENT,ONEHUNDREDFIFTY           100250
    2  CRPATIENT,ONEHUNDREDFORTY           100139
    3  CRPATIENT,ONEHUNDREDFORTYEIGHT      100248
    4  CRPATIENT,ONEHUNDREDFORTYFIVE       100144
    5  CRPATIENT,ONEHUNDREDFORTYFOUR       100143
    6  CRPATIENT,ONEHUNDREDFORTYNINE       100249
    7  CRPATIENT,ONEHUNDREDFORTYONE        100140
    8  CRPATIENT,ONEHUNDREDFORTYSEVEN      100247
    9  CRPATIENT,ONEHUNDREDFORTYSIX        100145
   10  CRPATIENT,ONEHUNDREDFORTYTHREE      100142
   11  CRPATIENT,ONEHUNDREDFORTYTWO        100141
   12  CRPATIENT,ONEHUNDREDTHIRTY          100129
```

```
   13  CRPATIENT,ONEHUNDREDTHIRTYEIGHT     100137
+         + Next Screen   - Prev Screen   ?? More Actions
HSA  Health Summary All                  USR  View Users
HSI  Health Summary Ind                  QU   Quit
DEM  Demographic Report
Select Item: Next Screen//
```

Display/Suppress Finding Totals (DSF) action

Once an extract summary entry is selected and displayed in the Extract Summary, the Display/Suppress Finding Totals (DSF) action can be taken to print Finding Totals. This action displays compliance and finding total from the Extract Summary. If the extract definition was defined to report compliance totals only, then the finding counts will be zero. In order to get Finding Totals, the extract definition Type of Totals field must be "Compliance and Finding Totals".

```
Select Item: Quit// DSF   Display/Suppress Finding Totals

Extract Summary               Aug 10, 2006@03:51:59          Page: 1 of    3
Extract Summary Name: DM PM12 2006 M06
      Extract Period: 06/01/2006 - 06/30/2006   Created: 08/10/2006@03:47:10

 Item  Patient List/Station/Reminder     Total   Appl.    N/A    Due  Not Due
   1  PM12 2006 M06 DM PTS WITH QUALIFY AND ANCHOR VISIT

     500/REPORT-DIABETES LDL>119           29      27      2     18      9
        DIABETES                            0       0      0      0      0
        DIABETES REMINDERS INACTIVATED      0       0      0      0      0
        OUTSIDE LIPID PROFILE RESU          0       0      0      0      0
        TOTAL CHOLESTEROL                   0       0      0      0      0
        TRIGLYCERIDE                        0       0      0      0      0
        VA-OUTSIDE LDL <100                 0       0      0      0      0
        VA-OUTSIDE LDL 100-119              0       0      0      0      0
        VA-OUTSIDE LDL 120-129              0       0      0      0      0
        VA-OUTSIDE LDL >129                 0       0      0      0      0
+         + Next Screen   - Prev Screen   ?? More Actions
DPL  Display Patient List                QU   Quit
DSF  Display/Suppress Finding Totals
Select Item: Quit//
```

Note: The reminder results, by station, are displayed for each unique combination of Patient List/Station/Reminder. The station is the primary care facility for a patient, when it is defined. If the primary care facility is not defined for a patient, the primary institute on the system is used as the patient's station.

You can use the Print List (PL) action to print the extract summary with finding totals to the screen and then scroll through the extract summary entry.

```
Select Item: Next Screen// PL   PL
DEVICE: HOME// ;;9999  TELNET PORT
```

Extract criteria to create Extract Finding Totals

Reminders are evaluated during extracts, based on findings which are either evaluated as "True" (found) or "False" (not found). "True" findings can be counted during an extract run using an extract counting rule.

One extract counting rule can be defined for each unique combination of a patient list and reminder defined in the extract definition. This extract criteria can be viewed in the extract definition hierarchy as follows:

Extract Definition
    Extract sequence
        List Rule Set to build the patient list
            Reminder(s) to run against patient list
                Counting rule (optional) to define multiple ways to count findings for each reminder

Extract Counting Rule

A counting rule is created for a reminder in the extract definition. A counting rule defines one or more combinations of the following items in the sequence to be counted and reported.

- Counting Group includes one of more Reminder Terms
- Reminder Status defines how to count findings, based on the reminder evaluation results. A count will be accumulated for each "true" finding in columns for Total, Applicable, Due, or Not Due depending on whether the reminder was applicable, not applicable, due or not due.
    - Total: counts the finding in the appropriate column based on the patient's reminder status
    - Applicable: counts the finding in the applicable, due and not due columns when the reminder is applicable for the patient. For applicable patients, the total and applicable counts will be the same
    - Due: counts the finding in the due column when the reminder is due for the patient. For due patients, the total and applicable counts will be the same as the Due total for the finding.

Extract Counting Group

A counting group contains one or more reminder terms. A counting group is used to identify findings that should be counted. Each reminder term is assigned a sequence; this number is used to determine the order in which the finding totals are displayed in the output.

In order to count the findings, the reminder terms need to be grouped together logically to get meaningful counts. One finding can be defined in multiple counting groups. Multiple counting groups can be defined in a counting rule.

A common starting place for defining groups is to look at how findings are used in the reminder definition:

- Patient Cohort logic
- Resolution logic
- Information finding

Count Type in the Counting Group

A count type is associated with each counting group. The count type is used to determine how the finding items should be counted. There are three different count types:

MRF Most Recent Finding
Using *Reminder evaluation's* Most Recent "true" Findings, count each finding in the counting group. If 10 reminders terms are defined in a counting group, and reminder evaluation found findings for 8 of the reminder terms, then counts will be accumulated for the 8 reminder terms.

MRFP Most Recent Finding for the Patient
Using *Reminder evaluation's* Most Recent "true" Findings, count only the most recent true finding out of the group of findings. If 10 reminder terms are defined in a counting group, and the reminder evaluation found findings for 8 of the reminder terms, the finding with the most recent date is counted. Only 1 count is accumulated for the most recent reminder term out of the 8 reminder terms.

UTIL Utilization
Using the reminder term's defined in the group, the reminder term look-up for the finding is done, rather than using the reminder evaluation results. The utilization counts reflect how many times each finding in the group was documented during the reporting period for all the patients in the patient list.
If a historical entry was documented for a finding during the reporting month, the historical entry will be counted for the related reminder term to represent the collection activity of the historical finding.

Note: When using the MRF and/or the MRFP Counting Type the terms defined in the Counting Group must also be defined in the Reminder Definitions. The terms do not need to be part of the Reminder Logic. They can be information only findings.

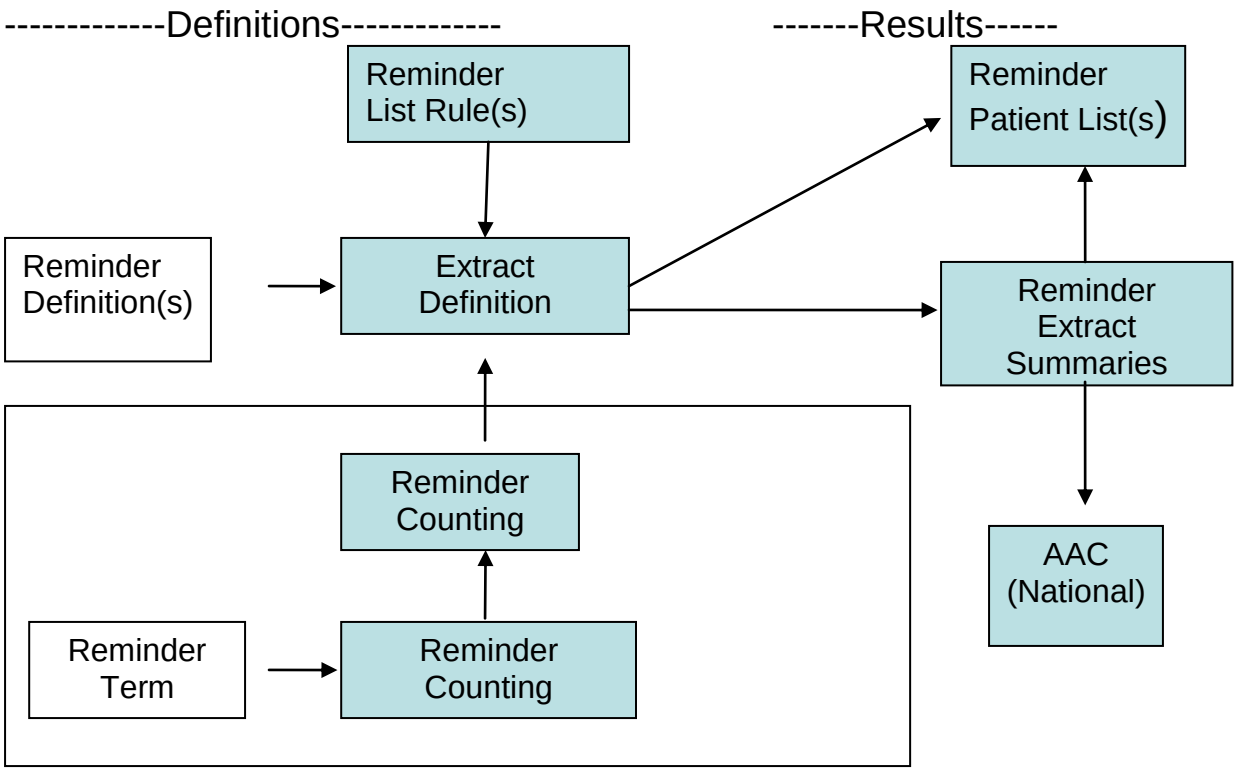
Reporting Compliance and Finding Totals

When the counting rules are followed and counts are accumulated for each reminder term during an extract run, the counts are stored in the Reminder Extract Summary file. The Extract Summary will include finding totals for each unique combination of Patient List, Reminder and Counting Rule.

Compliance Totals
Patient List Reminder
Total Appl Not Appl Due Not Due

Finding Totals based on counting rule components
(Reminder Term, Counting Group, Patient Reminder Status, Count Type)
Total Appl Not Appl Due Not Due

The following diagram shows extract file relationships for generating compliance and finding total extract results:



Create/Modify an Extract Definition with Finding Totals

The Extract Definition Management option/action supports creation and editing of extract definitions for use in extract processing.

In order to change an existing extract definition to accumulate finding totals,
1) the Type of Totals needs to be changed to Compliance and Finding Totals and
2) a Counting Rule needs to be added for each rules set/reminder combination. If a Counting Rule is not added for particular rule set/reminder combinations, the default finding totals accumulated will be for the Most Recent Finding (MRF) Count Type for each reminder term defined in the reminder.

In order for the finding totals to be accumulated, the reminder terms must be mapped. The extract summary created from the manual extract run can be reviewed to ensure finding counts are accumulating as intended.

The following prompts are an example of creating an extract definition for compliance and finding totals.

```
Select Item: Quit//CR  Create Extract Definition

Select EXTRACT DEFINITION to add: DM PM12
  Are you adding 'DM PM12' as
    a new REMINDER EXTRACT DEFINITION (the 11TH)? No// Y <enter> (Yes)
NAME: DM PM12// <enter>
CLASS: LOCAL// <enter>
TYPE OF TOTALS: COMPLIANCE TOTALS ONLY//? <enter>
     Choose from:
       CT       COMPLIANCE TOTALS ONLY
       CF       COMPLIANCE AND FINDING TOTALS
TYPE OF TOTALS: CF <enter> COMPLIANCE AND FINDING TOTALS
DESCRIPTION:
  No existing text
  Edit? NO// NO <enter>
REPORT FREQUENCY: M// <enter>  MONTHLY
Select EXTRACT SEQUENCE: 1  <enter>
   EXTRACT SEQUENCE LIST RULE SET: RS-PM12 DM PTS WITH QUALIFY AND ANCHOR
VISIT// <enter>
  LIST RULE SET: RS-PM12 DM PTS WITH QUALIFY AND ANCHOR VISIT
         // <enter>
  EXTRACT PT LIST NAME: PM12 yyyy Mnn DM PTS WITH QUALIFY AND ANCHOR VISIT //
<enter>
  INCLUDE DECEASED PATIENTS: Y <enter>  YES
  INCLUDE TEST PATIENTS: N <enter>  NO
  Select REMINDER SEQUENCE: 002// 001 <enter>
   REMINDER SEQUENCE REMINDER: REPORT-DIABETES LDL>119// <enter>
    COUNTING RULE: PM12 LDL REMINDER COUNTING RULE <enter>
  Select REMINDER SEQUENCE: ^ <enter>
   REMINDER SEQUENCE REMINDER: <enter>
    COUNTING RULE: <enter>
  Select REMINDER SEQUENCE: <enter>
Select EXTRACT SEQUENCE: <enter>
Input your edit comments.
Edit? NO// <enter>
```

Extract Counting Rule Management Option

The Extract Counting Rule Management (EC) option allows creating/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).

```
Extract Counting Rule Mgmt    Jun 01, 2006@08:34:47          Page:    1 of    1


 Item  Extract Counting Rule                                          Class
    1  AGP COUNTING RULE                                              LOCAL
    2  AGP FINDING RULE TEST                                          LOCAL
    3  AGP FINDING TEST                                               LOCAL
    4  HYPERTENSION COUNTS FOR BP READING EXTRACT                     LOCAL
    5  VA-*IHD 412 ELEVATED LDL REPORT FINDINGS                       NATIONAL

          + Next Screen   - Prev Screen   ?? More Actions
CR   Create Counting Rule                QU   Quit
DE   Display/Edit Counting Rules
Select Item: Quit//
```

Creating a new Counting Rule

```
Select Item: Quit// cr   Create Counting Rule

Select EXTRACT COUNTING RULE to add: PM12 LDL REMINDER COUNTING RULE
Are you adding 'PM12 LDL REMINDER COUNTING RULE' as
    a new REMINDER EXTRACT COUNTING RULE (the 15TH)? No// Y  (Yes)
NAME: PM12 LDL REMINDER COUNTING RULE//
CLASS: L  LOCAL
DESCRIPTION:
  No existing text
  Edit? NO//
Select SEQUENCE NUMBER: 1
  Are you adding 1 as a new SEQUENCE NUMBER (the 1ST for this REMINDER EXTRACT
COUNTING RULE SEQUENCE NUMBER?//Y
  (Yes)
   SEQUENCE NUMBER COUNTING GROUP: ?
        This is a pointer to the Reminder Counting Group File. Each group defines
        reminder terms and type of count to be totaled by the extract process.

   SEQUENCE NUMBER COUNTING GROUP: PM12 DM COHORT (MRFP)
  COUNTING GROUP: PM12 DM COHORT (MRFP)// <enter>
  REMINDER STATUS: ??
        This field determines which group of patients the counting group is accd
        for. The default value for this field is TOTAL PATIENTS (i.e. all  patin
        the denominator list are used to accumulate counts.

     Choose from:
       T        TOTAL PATIENTS
       A        APPLICABLE PATIENTS
       D        DUE PATIENTS
       N        NOT DUE PATIENTS
  REMINDER STATUS: T  TOTAL PATIENTS
Select SEQUENCE NUMBER: 2
  Are you adding 2 as a new SEQUENCE NUMBER (the 2ND for this REMINDER EXTRACT
COUNTING RULE SEQUENCE NUMBER?//Y
  (Yes)
```

```
  SEQUENCE NUMBER COUNTING GROUP: PM12 LDL RANGES (MRFP)
  COUNTING GROUP: PM12 LDL RANGES (MRFP)// <enter>
  REMINDER STATUS: A APPLICABLE PATIENTS
Select SEQUENCE NUMBER: 3
  Are you adding 3 as a new SEQUENCE NUMBER (the 2ND for this REMINDER EXTRACT
COUNTING RULE SEQUENCE NUMBER?//Y
  (Yes)

  SEQUENCE NUMBER COUNTING GROUP: PM12 LDL REMINDER (UTIL)
  COUNTING GROUP: PM12 LDL REMINDER (UTIL)// <enter>
  REMINDER STATUS: T TOTAL PATIENTS
Select SEQUENCE NUMBER: 4
  Are you adding 4 as a new SEQUENCE NUMBER (the 2ND for this REMINDER EXTRACT
COUNTING RULE SEQUENCE NUMBER?//Y
  (Yes)

  SEQUENCE NUMBER COUNTING GROUP: REMINDER DEMOGRAPHICS (MRF)
  COUNTING GROUP: REMINDER DEMOGRAPHICS (MRF)//<enter>
  REMINDER STATUS: T TOTAL PATIENTS
Select SEQUENCE NUMBER: 5
  Are you adding 5 as a new SEQUENCE NUMBER (the 2ND for this REMINDER EXTRACT
COUNTING RULE SEQUENCE NUMBER?//Y
  (Yes)

  SEQUENCE NUMBER COUNTING GROUP: REMINDER DEMOGRAPHICS (MRF)
  COUNTING GROUP: PM12 LIPID PROFILE (MRF)//<enter>
  REMINDER STATUS: A  APPLICABLE PATIENTS

Input your edit comments.
Edit? NO//
```

The counting groups above defined in the counting rule will accumulate counts for:

PM12 DM COHORT (MRFP) will use the total patients to determine how many patients were not applicable because the Diabetic Reminders were Inactivated.

PM12 LDL RANGES (MRFP) will use the Applicable patients to count the most recent LDL range that applies to the applicable patient. The finding totals will reflect how many patients had the most recent LDL value within particular LDL ranges.

PM12 LDL REMINDER (UTIL) will count findings related to remionder terms, where the finding is documented during the extract reporting period. This count will include historical entries for earlier months/years that are documented in the extract reporting period.

REMINDER DEMOGRAPHICS (MRF) will count how many patients were male vs female, and how many are veterans. The reminder terms related to demographics are defined in the reminder definition as informational findings to count.

PM12 LIPID PROFILE (MRF) will count any true findings representing VA or Outside Lipid Profiles found during reminder evaluation.

Display/Edit Extract Counting Rule Action

The following example summarizes a counting rule created to use with a Diabetes LDL Reminder and the Patient List created from the DM PM12 extract definition used as our example in Reminder Extract Tools documentation.

The counting rule will use reminder evaluation "true" findings that are part of each counting group. Additionally, the counting rule can specify whether to count for Total Patients, Applicable Patients, or Due Patients which is based on the reminder status.

```
Display/Edit Counting Rule    Aug 09, 2006@14:54:17          Page:    1 of    1
-------------------------------------------------------------------------------

     Name:  PM12 LDL REMINDER COUNTING RULE           Number:4
    Class:

  Description:

  Seq.   Finding Group                                      Reminder Status
  001    PM12 DM COHORT (MRFP)                              TOTAL PATIENTS
  002    PM12 LDL RANGES (MRFP)                             APPLICABLE PATIENTS
  003    PM12 LDL REMINDER (UTIL)                           TOTAL PATIENTS
  004    REMINDER DEMOGRAPHICS (MRF)                        TOTAL PATIENTS
  005    PM12 LIPID PROFILE (MRF)                           APPLICABLE PATIENTS

+          + Next Screen   - Prev Screen   ?? More Actions
ED   Edit Counting Rule                 QU   Quit
CG   Extract Counting Groups
Select Item(s):Quit//
```

If you select the Extract Counting Groups action in the above example, you will be taken to the counting group list manager editor, but it will only show the counting groups that are assigned to this counting rule. This is a quick way to edit a counting group from a counting rule.

Extract Counting Group Management (EC) Option

The Extract Counting Group Management (EC) 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.

```
Extract Counting Group Mgmt    Jun 01, 2006@08:23:17          Page:    1 of    2


 Item  Extract Finding Group                                    Class
    1  AGP FINDING GROUP                                        LOCAL
    2  AGP FINDING GROUP TEST                                   LOCAL
    3  DEMO HYPERTENSION (MRF) COUNT                            LOCAL
    4  DEMO HYPERTENSION (UR) COUNT                             LOCAL
    5  DEMO MRFP COUNT                                          LOCAL
    6  VA-ANTIPSYCHOTIC DRUGS                                   NATIONAL
    7  VA-DEPRESSION SCREEN NOT APPLICABLE                      NATIONAL
```

```
    8  VA-DEPRESSION SCREENING RESULT                                NATIONAL
    9  VA-IHD 412 PATIENT                                            NATIONAL
   10  VA-IHD ELEVATED LDL                                           NATIONAL
   11  VA-IHD LDL                                                    NATIONAL
   12  VA-IHD LIPID LOWERING MEDS (LLA)                              NATIONAL
   13  VA-IHD LIPID PROFILE                                          NATIONAL
   14  VA-IHD PATIENT                                                NATIONAL
+         + Next Screen   - Prev Screen   ?? More Actions
CR   Create Extract Finding Group       QU   Quit
DG   Display/Edit Extract Finding Group
Select Item: Next Screen//
```

Creating a new counting group

```
Select Item: Next Screen// cr   Create Counting Group

Select EXTRACT COUNTING GROUP to add: PM12 DM COHORT (MRFP)
  Are you adding 'PM12 DM COHORT (MRFP) as
    a new REMINDER COUNTING GROUP (the 19TH)? No// Y  (Yes)
NAME: PM12 DM COHORT (MRFP)// <Enter>
CLASS: L  LOCAL
COUNT TYPE: MOST RECENT FINDING COUNT// ??
        Count is used to specify the different ways the extract can count
        findings:

        MRF (Most Recent Finding count) counts the most recent occurrence of
        each  term in the group. This is also the default if no extract
        finding is  selected and all reminder terms are counted.

        MRFP (Most Recent Finding for Patient) counts only the most recent
        finding across the group. One count is accumulated for the one
        finding in the group of findings that is the most recent finding for
        each patient.

        UR (Utilization in Reporting period) counts all occurrences of
        findings from  the group that were documented during the reporting
        period.




     Choose from:
       MRF      MOST RECENT FINDING COUNT
       MRFP     MOST RECENT FINDING PATIENT COUNT
       UR       UTILIZATION IN REPORTING PERIOD FINDING COUNT
Select SEQUENCE: 1
  Are you adding 1 as a new SEQUENCE (the 1ST for this REMINDER COUNTING GROUP? Y
  (Yes)
   SEQUENCE TERM: DIABETES       LOCAL
         ...OK? Yes// <Enter>   (Yes)

  TERM: DIABETES// <Enter>
Select SEQUENCE: 2
  Are you adding 2 as a new SEQUENCE (the 2ND for this REMINDER COUNTING GROUP? Y
  (Yes)
   SEQUENCE TERM: DIABETES REMINDERS INACTIVATED      LOCAL
         ...OK? Yes// <Enter>   (Yes)

  TERM: DIABETES REMINDERS INACTIVATED// <Enter>
```

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

The new counting group will be added as a new item displayed on the Extract Counting Group list manager.

Displaying a counting group

```
Select Item: Next Screen// DE   Display/Edit Extract Counting Group
Select (s):  (1-15): <enter the item number for the group just added>
```

```
Display/Edit Counting Group    Aug 09, 2006@14:54:17          Page:    1 of    1
-------------------------------------------------------------------------------
     Name:  PM12 DM COHORT (MRFP)                      Number:6
    Class:
  Count Type:  MOST RECENT FINDING PATIENT COUNT

  Seq.   Reminder Term

  1    DIABETES
  2    DIABETES REMINDERS INACTIVATED


+         + Next Screen   - Prev Screen   ?? More Actions
ED   Edit Extract Finding Group         QU   Quit
Select Item(s): Quit// ed   Edit Extract Finding Group
```

Two additional examples of Reminder Extract Setup

Basic Reminder Extract Setup

There are several steps that need to be done to set up an extract. The steps can be broken down into three main sections.

1. Create a reminder list rule (See the section on list rules for detailed instructions)
2. Create a reminder and reminder terms to gather the count data
3. Create a reminder definition

In this scenario, the extract should collect a list of patients that were seen in the last month and had a blood pressure reading done on them. For the list of patients seen, count each patient with a diagnosis of hypertension and a count of the different blood pressure readings (patients with a diastolic pressure less then 80, a diastolic pressure between 81 and 90, a systolic pressure less then 131, and a systolic pressure between 131 and 140).

Steps

1. Create List Rule
    a. Create term to define patient cohort.
    b. Create a List Rule finding rule and add the term to the finding rule
    c. Create a List Rule rule set and add the finding rule to the rule set by adding a new sequence of 1
    d. Set the operation to Add Patient.

2. Reminder and reminder term creation
    a. Create a reminder term to capture patients with a diastolic less then 80
    b. Create a reminder term to capture patients with a diastolic between 81 and 90
    c. Create a reminder term to capture patients with a systolic less then 131
    d. Create a reminder term to capture patients with a systolic between 131 and 140
    e. Create a reminder term to capture patients with a diagnosis of hypertension
    f. Add these reminder terms to a new reminder definition

3. Create a reminder extract definition
    a. Create a new extract definition
    b. Select COMPLIANCE AND FINDING TOTALS for the extract type
    c. Add 1 as an extract sequence to the definition
    d. At the rule set prompt type the name on the rule set created in step 1c
    e. At the patient List name prompt type a name that the patient list should be store.
    f. Add a reminder/finding sequence 1 to the parameter
    g. At the reminder prompt add the reminder that was created in step 2f

4. Run the extract
5. View the result

Example

This example includes screen captures of the above steps.

1. List Rule set-up

a) Create a term to define cohort (collect all patients with blood pressure readings)

```
Name:         DEMO BP READING
Class:          LOCAL
Findings:
Finding Item:  BLOOD PRESSURE  (FI(1)=VM(1))
                     Finding Type:  VITAL MEASUREMENT
```

b) Create a finding rule (PL/LRM/CV finding rules/CR)

```
NAME: DEMO BP READING//
SHORT DESCRIPTION:
CLASS: LOCAL//
REMINDER TERM: DEMO BP READING//
BEGINNING DATE/TIME:
ENDING DATE/TIME:
```

c) Create a rule set and add finding rule (PL/LRM/CR)

```
NAME: DEMO BP READING SET//
SHORT DESCRIPTION:
CLASS: LOCAL//
Select SEQUENCE: 1//
        SEQUENCE: 1//
       LIST RULE: DEMO BP READING//
       d OPERATION: ADD PATIENT//
        EXTRACT START SEQUENCE:
        EXTRACT START LIST:
        EXTRACT PERMANENT LIST:
```

2. Reminder and reminder terms creation

```
DEMO REMINDER          No.  660085
Print Name:                   DEMO REMINDER
Class:                        LOCAL
Usage:                        Reporting

Baseline Frequency:

      Do In Advance Time Frame:  Wait until actually DUE
                  Sex Specific:
                 Ignore on N/A:
       Frequency for Age Range:

Findings:
              Finding: DEMO DIS < 80  (FI(1)=RT(480))
                        Finding Type: REMINDER TERM
                               Mapped Findings:
                               Mapped Finding Item: VM.BLOOD PRESSURE
                                   Condition: I $P(V,"/",2)<80

Finding:  DEMO DIS >130 <141  (FI(2)=RT(482))
                        Finding Type: REMINDER TERM
```

```
                              Mapped Findings:
                              Mapped Finding Item: VM.BLOOD PRESSURE
                           Condition: I $P(V,"/",1)<141&($P(V,"/",1)>130)

              Finding: DEMO SYS < 131  (FI(3)=RT(481))
                       Finding Type: REMINDER TERM
                              Mapped Findings:
                              Mapped Finding Item: VM.BLOOD PRESSURE
                           Condition: I $P(V,"/",1)<131

              Finding: DEMO SYS >80 <91  (FI(4)=RT(483))
                       Finding Type: REMINDER TERM
                              Mapped Findings:
                              Mapped Finding Item: VM.BLOOD PRESSURE

Finding: DEMO HYPERTENSION  (FI(5)=RT(484))
                       Finding Type: REMINDER TERM
                              Mapped Findings:
                              Mapped Finding Item: TX.VA-HYPERTENSION SCREEN
```

3. Create extract definition (XM/ED/CR)

```
a) NAME: DEMO BP READINGS//
CLASS: LOCAL//
b) EXTRACT TYPE: COMPLIANCE AND FINDING TOTALS//
DESCRIPTION:
       No existing text
       Edit? NO//
REPORT FREQUENCY: MONTHLY//
c) Select EXTRACT SEQUENCE: 1//
       EXTRACT SEQUENCE: 1//
       d) RULE SET: DEMO BP READING SET//
       e) PATIENT LIST NAME: MONTHLY BP ANALYSIS yyyy Mnn
        Replace
       f) Select REMINDER/FINDING SEQUENCE: 1//
       REMINDER/FINDING SEQUENCE: 1//
       g) REMINDER: DEMO REMINDER - WITH GROUP//
       EXTRACT FINDING RULE:
```

4. Run a manual extract (XM/MA/VSE/ME)

```
Select Item: Quit// ME   Manual Extract
Select EXTRACT PERIOD: // M1/2003
Are you sure you want to run a DEMO BP READINGS extract for M1 2003: N// YES
Transmit extract results to AAC : N// O
Queue the IHD QUERI EXTRACT M1/2003 for M1/2003
Enter the date and time you want the job to start.
It must be on or after 10/08/2003@14:40:40 NOW
Task number 5269523 queued.
```

5. Examine the compliance totals (XM/MA/VSE/ES)

```
Extract Summary               Oct 08, 2003@14:42:22          Page:    1 of    1
Extract Summary Name: DEMO BP READINGS 2003 M1
      Extract Period: 01/01/2003 - 01/31/2003   Created: 10/08/2003@14:40:55

 Item  Patient List/Station/Reminder        Total   Appl.    N/A    Due  Not
Due
   1 MONTHLY BP ANALYSIS 2003 M1

     660/DEMO REMINDER - WITH GROUP            46       0     46      0      0
```

```
          + Next Screen   - Prev Screen   ?? More Actions
DPL  Display Patient List                QU   Quit
DSF  Display/Suppress Finding Totals
Select Item: Quit//
```

8. Examine the finding totals (XM/MA/VSE/ES/DSF)

```
Extract Summary                Oct 08, 2003@16:16:33          Page:    1 of    1
Extract Summary Name: DEMO BP READINGS 2003 M1
      Extract Period: 01/01/2003 - 01/31/2003   Created: 10/08/2003@16:16:20

 Item  Patient List/Station/Reminder        Total   Appl.    N/A    Due  Not Due
   1 MONTHLY BP ANALYSIS 2003 M1

     660/DEMO REMINDER - WITH GROUP            46       0     46      0      0

        DEMO DIS < 80                          11       0     11      0      0
        DEMO DIS >130 <141                      9       0      9      0      0
        DEMO SYS < 131                         24       0     24      0      0
        DEMO SYS >80 <91                       19       0     19      0      0
        DEMO HYPERTENSION                       3       0      3      0      0


          + Next Screen   - Prev Screen   ?? More Actions
DPL  Display Patient List                QU   Quit
DSF  Display/Suppress Finding Totals
Select Item: Quit//
```

More Complex Reminder Extract Setup

Using the scenario above, modify the extract to only count Hypertension items.

Steps

1. Create three new Reminder Counting Groups
   a. Create a group to count patients most recent finding of a diagnosis of hypertension within the reporting period
   b. Create a group to count all hypertension diagnosis in the reporting period
   c. Create a group to count the most recent of either a diagnosis of hypertension or an incorrect diagnosis of hypertension
2. Create a Reminder Extract Counting Rule this Counting rule will contain all three Counting groups
3. Add the extract finding rule to the extract parameter created in the first example
4. Run the extract
5. View the extract summary

Example

1. **Create Extract Finding Groups (XM/EG)**

   a) Group to count patients with hypertension terms

```
NAME: DEMO HYPERTENSION (MRF) COUNT
CLASS: LOCAL//
COUNT TYPE: MOST RECENT FINDING COUNT//
Select SEQUENCE: 1//
              SEQUENCE: 1//
              TERM: DEMO HYPERTENSION DIAGNOSIS//
```

   b) Group to count all hypertension terms in the report period

```
NAME: DEMO HYPERTENSION (UR) COUNT
CLASS: LOCAL//
COUNT TYPE: UTILIZATION IN REPORTING PERIOD FINDING COUNT//
Select SEQUENCE: 1//
              SEQUENCE: 1//
              TERM: DEMO HYPERTENSION DIAGNOSIS//
```

   c) Group to count patients with latest term of either hypertension or incorrect diagnosis

```
NAME: DEMO MRFP COUNT//
CLASS: LOCAL//
COUNT TYPE: MOST RECENT FINDING PATIENT COUNT//
Select SEQUENCE// 1
              SEQUENCE: 1
              TERM: DEMO INCORRECT HTN DIAGNOSIS//
Select SEQUENCE// 2
SEQUENCE: 2
              TERM: DEMO HYPERTENSION DIAGNOSIS//
```

   The MRF and UR groups may contain multiple terms. Terms identified in MRF or MRFP must be in the reminder definition.

2. **Create Extract Counting Rule (XM/EC)**

   The Extract Finding is created to include the three extract finding groups:

```
NAME: HYPERTENSION COUNTS FOR BP READING EXTRACT
CLASS: LOCAL//
DESCRIPTION:
Used by BP READING Extract
Groups for reminder DEMO REMINDER
              Edit? NO//
Select SEQUENCE NUMBER: 1
              SEQUENCE NUMBER: 1//
              FINDING GROUP: DEMO HYPERTENSION (UR) COUNT//
              REMINDER STATUS:
Select SEQUENCE NUMBER: 2
              SEQUENCE NUMBER: 2//
              FINDING GROUP: DEMO HYPERTENSION (MRF) COUNT//
              REMINDER STATUS:
Select SEQUENCE NUMBER: 3
              SEQUENCE NUMBER: 3//
              FINDING GROUP: DEMO MRFP COUNT//
              REMINDER STATUS:
```

In this example the REMINDER STATUS field is left blank so totals are collected for all patients with BP readings, regardless of the reminder status.

3. Add Extract Counting Rule to BP Reading extract parameter (XM/EPM)

```
NAME: BP READING//
CLASS: LOCAL//
EXTRACT TYPE: COMPLIANCE AND FINDING TOTALS//
DESCRIPTION:
       No existing text
       Edit? NO//
REPORT FREQUENCY: MONTHLY//
Select EXTRACT SEQUENCE: 1//
       EXTRACT SEQUENCE: 1//
       RULE SET: DEMO BP READING SET//
       PATIENT LIST NAME: MONTHLY BP ANALYSIS yyyy Mnn
           Replace
       Select REMINDER/FINDING SEQUENCE: 1//
       REMINDER/FINDING SEQUENCE: 1//
       REMINDER: DEMO REMINDER//
       EXTRACT COUNTING RULE: HYPERTENSION COUNTS FOR BP READING EXTRACT//
```

This is the display of the extract definition:

```
Display/Edit Extract Parameter   Mar 25, 2004@11:25:35         Page:  1 of    1
-------------------------------------------------------------------------------

                 Extract Name:  BP READING                 Number:2
                        Class:  LOCAL

                 Extract Type:  COMPLIANCE AND FINDING TOTALS
               Reporting Period  MONTHLY

        Last Reporting Period:
        Next Reporting Period:

                Last Run Date:

 Extract Sequence: 1
 -----------------
 Patient List: MONTHLY BP ANALYSIS yyyy Mnn

 Rule Set:    DEMO BP READING SET
 Description:

  List Rules:
  001  DEMO BP READING                                            ADD PATIENT
   Description:
     Rule Type:  FINDING RULE
 Reminder Term:  DEMO BP READING

          Extract Reminders and Related Finding Total Rule:

          1 Reminder:  DEMO REMINDER
              Finding Rule: HYPERTENSION COUNTS FOR BP READING EXTRACT

              1 Finding Group: DEMO HYPERTENSION (UR) COUNT
                  Utilization in period finding counts for TOTAL patients
                       Terms: DEMO HYPERTENSION DIAGNOSIS

              2 Finding Group: DEMO HYPERTENSION (MRF) COUNT
                  Most recent finding counts for TOTAL patients
```

```
                    Terms: DEMO HYPERTENSION DIAGNOSIS

            3 Finding Group: DEMO MRFP COUNT
                Most recent finding patient counts for TOTAL patients
                    Terms: DEMO INCORRECT HTN DIAGNOSIS
                           DEMO HYPERTENSION DIAGNOSIS
```

4. Run a manual extract (XM/MA/VSE/ME)

```
Select Item: Quit// ME   Manual Extract

Select EXTRACT PERIOD: // M03/2004


Are you sure you want to run a DEMO BP READINGS extract for M03 2004: N// YES

Transmit extract results to AAC : N// O
Queue the BP READINGS M03/2004 for M03/2004
Enter the date and time you want the job to start.
It must be on or after 10/08/2003@14:40:40 NOW
Task number 5269523 queued.
```

5. Examine the compliance totals (XM/MA/VSE/ES)

```
Extract Summary              Mar 25, 2004@11:30:50          Page:    1 of    1
Extract Summary Name: BP READING 2004 M03
      Extract Period: 03/01/2004 - 03/31/2004   Created: 03/25/2004@11:09:33

 Item  Patient List/Station/Reminder        Total   Appl.    N/A    Due  Not Due
   1 MONTHLY BP ANALYSIS 2004 M03

     660/DEMO REMINDER                          5       5      0      5      0


          + Next Screen   - Prev Screen   ?? More Actions
DPL  Display Patient List                QU   Quit
DSF  Display/Suppress Finding Totals
Select Item: Quit//
```

6. Examine the finding totals (XM/MA/VSE/ES/DSF)

```
Extract Summary              Mar 25, 2004@11:32:41          Page:    1 of    2
Extract Summary Name: BP READING 2004 M03
      Extract Period: 03/01/2004 - 03/31/2004   Created: 03/25/2004@11:09:33

 Item  Patient List/Station/Reminder        Total   Appl.    N/A    Due  Not Due
   1 MONTHLY BP ANALYSIS 2004 M03

     660/DEMO REMINDER                          5       5      0      5      0

      Finding Group: DEMO HYPERTENSION (UR) COUNT
      Utilization in period finding counts for TOTAL patients
        DEMO HYPERTENSION DIAGNOSIS            18      18      0     18      0

      Finding Group: DEMO HYPERTENSION (MRF) COUNT
      Most recent finding counts for TOTAL patients
        DEMO HYPERTENSION DIAGNOSIS             2       2      0      2      0

      Finding Group: DEMO MRFP COUNT
```

```
      Most recent finding patient counts for TOTAL patients
        DEMO INCORRECT HTN DIAGNOSIS            1       1      0      1      0
        DEMO HYPERTENSION DIAGNOSIS             1       1      0      1      0

          + Next Screen   - Prev Screen   ?? More Actions
DPL  Display Patient List               QU   Quit
DSF  Display/Suppress Finding Totals
Select Item: Next Screen//
```

National Extracts

Access to the National Extract options:

- The PXRM Manager Menu provides access to the extract tools. The national extract definitions are prefixed with VA-* or VA-.
- The PXRM MANAGER KEY needs to be assigned to staff that can manage all patient lists, including national patient lists.

The following national extracts were distributed with CR. 2.0 (not mandatory)

- VA-IHD QUERI (Ischemic Heart Disease)
- VA-MH QUERI (Mental Health Depression Disorder)

The List Manager Print List (PL) action can be used to print extract components:

- Extract definitions
- List rules
- Counting rules
- Counting groups

The national extract definitions can be printed using the Print List (PL) action on the Extract Definition Management list manager. Use DEVICE as ";;9999" to print to the screen will no page breaks for up to 9999 lines.

National Extract Tracking

Before sites can start national extract runs, there are some setup requirements:

Sites running national should track the success of monthly extract runs and transmissions. The results of the national extract runs are stored in the Reminder Extract Summary. The Reminder Extract Management option will provide access to the results. The Extract Summary should be reviewed to determine whether the totals appear reasonable.

The national reminder terms defined in the national extract's reminder definitions and counting groups should be reviewed to ensure that the reminder terms have been mapped appropriately. If the mapping is not completed, the finding counts will not be accumulated correctly.

The Examine/Schedule Extract list manager option can be used to view extract summary entries that have been created by national extract runs. The national extract summary entries are also transmitted to AAC via HL7 Messages through a HL Logical Link called PXRM7. The Transmission Status for each extract summary entry displays whether the HL7 message was sent to AAC, received by the AAC queue, emptied from the queue and stored temporarily for processing (queue emptied on the 10th of each month), and processed by AAC (the 15th of each month).

The national extract runs also create national Reminder Patient List entries that can be used to run:

- Reminder due reports
- Demographic reports
- Health Summaries

The PXRM MANAGER key must be held in order to have access to the national patient lists created from the national extract runs. The national patient list names will be pre-fixed with VA-* or VA-. The extract reporting period will be reflected in the Reminder Patient List name.

Sites should run a Manual Extract for a national extract before scheduling the option that automates the national extract runs to reschedule itself for the next month's processing.

Summary of Steps for Automated Roll-up

- Map local findings to national reminder terms
- Set up HL7 Logical Link – PXRM7
- Define the next reporting period to run in the extract definition for the VA-IHD QUERI and VA-MH QUERI extracts. (Use Fileman to modify this field)
- Schedule the following options to run 7-9 days into the month following the end of the extract reporting period.
    - PXRM EXTRACT VA-IHD QUERI
    - PXRM EXTRACT VA-MH QUERI
- If the scheduled extract run completes before the 10th of the month, the results will be sent to AAC and be included in the messages stored at AAC for processing on the 15th of the month. If the extract runs on the local systems are not completed by the 10th of the month, then the extract results won't be reflected in AAC reports until the next month.
- Manual extract runs can be run independent of automated scheduled extract runs. This is possible because the Next Extract Period is only used by the automated schedule extract run. The manual extract runs will prompt you for the extract reporting period. The manual extract reporting period does not update the Next Extract Period.

What Extract Period will be Used by the Automated Extract Run?

The national extract definitions were originally distributed with a 01/2005 value in the Next Extract Period field in the Extract Definition. Currently the only way to edit the Next Extract Period is to use FileMan. If the automated option is scheduled without changing the Next Extract Period, the first extract run will be for M1/2005.

Sites should check what month is currently defined in the Next Extract Period field. If the Next Extract Period is not the current month and scheduled to run 7-9 days into next month, then FileMan should be used to change the Next Extract Period to be equal to the current month. Check to make sure the automated extract is scheduled to run 7-9 days into the next month.

The Examine/Schedule Extract list manager display below illustrates how manual extract runs (Item 1 in the list) are run independent of the automated scheduled jobs.

```
Examine/Schedule Extract      Aug 11, 2006@13:23:49     Page: 1 of    1

          Extract Type: VA-IHD QUERI
   Next Extract Period: M1/2005
      Scheduled to Run:                          View: Creation Date Order

 Item  Extract Summary       Date Created        Transmission Date Auto
    1  VA-IHD QUERI 2006 M6 08/03/2006@15:49:33  Not Transmitted    N



          + Next Screen   - Prev Screen   ?? More Actions
CV   Change View          ME   Manual Extract       TH   Transmission History
ES   Extract Summary      MT   Manual Transmission  QU   Quit
Select Item: Quit//
```

The automated extract run will:

- Use the Next Extract Period as the month to be processed and reported
- Update the next reporting period/year prior to ending the scheduled job. The Next Extract Period is increased by one month.
- Schedule the next extract job to run next month.

Manual catch-up of Missed National Roll-ups

- Sites need to decide what months they want to run for missed national roll-ups. Since the current national extracts are not mandatory to run, catching up is currently optional. However, future national extracts may be mandatory.
- If sites want to run missed extract months, the Reminder Extract Management option can be used to identify missed extract months.
- The missed extract months can be run using the Manual Extract action to task each missed month's extract on weekends.
- The Manual Transmission action can be used to transmit national extracts that have a 'Not Transmitted' Status. If the extract summary was created for a month, but was not transmitted or unsuccessfully transmitted, the Manual Transmission can be used to re-transmit. Before transmitting, make sure the PXRM7 HL logical link is active.

AAC Extract Functionality

- AAC saves the HL7 messages for each extract report received in the message queue on the 10th of each month. This is when the message queue is emptied. The message queue begins receiving messages sent to the queue again, which will be emptied the 10th of the next month.
- AAC empties the queue on the 10th of each month
- AAC processes the messages on the 15th of each month. The messages processed are those messages emptied from the queue on the 10th.
- If the AAC processing is successful, the messges are used to store the extract report in a table format (flat file)
- AAC provides results in a SAS format for authorized requestors

Access to National Extracts at AAC

1) Go to vaww.aac.va.gov, which will require you to enter your national access username e.g:
User: VHAXXXXXX\vhaisxxxxx
Password: enter your national password

2) Register for access to Austin system to get customer ID and initial logon password
Go to http://vaww.aac.va.gov/servicedesk/ on the VA intranet
Select Publications and Forms on the service desk webpage
Under the Forums category: Select VA FORM 9957

Questions? Access the following FAQ webpage:
http://vaww.aac.va.gov/servicedesk/HDDocs/FAQ.pdf

GEC Referral Report

This option is used to generate GEC Reports. GEC (Geriatrics Extended Care) is used for referral of geriatric patients to receive further care. This report is also available on the reminder reports menu.

```
Select Reminder Managers Menu Option: GEC  GEC Referral Report

All Reports will print on 80 Columns
     Select one of the following:

          1         Category
          2         Patient
          3         Provider by Patient
          4         Referral Date
          5         Location
          6         Referral Count Totals
          7         Category-Referred Service
          8         Summary (Score)
          9         'Home Help' Eligibility
          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:

          A         All Patients
          M         Multiple Patients
Select Patients or ^ to exit: A// ll Patients

     Select one of the following:

          F         Formatted
          D         Delimited
Select Report Format or ^ to exit: F// ormatted
DEVICE: HOME//   ANYWHERE    Right Margin: 80//

==============================================================================
GEC Patient-Summary (Score)
Data on Complete Referrals Only
From: 05/01/2004 To: 06/30/2004

                                 Finished        Basic Skilled Patient   TOTAL
Name                  SSN        Date       IADL ADL   Care    Behaviors ACROSS
==============================================================================
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)    05/11/2004   0    0     0       0         0
CRPATIENT,SIX     (666009994)    05/11/2004   0    0     0       0         0
                                              ____________________________
                                 Totals > >   0    7    11       9        27
                                  Means > > 0.0  1.2   1.8     1.5       4.5
                     Standard Deviations > > 0.0  3.1   4.1     2.9       9.8

Enter RETURN to continue or '^' to exit:
```

Appendixes

Appendix A – Glossary

Appendix B – Helpful Hints

Appendix C – Status Enhancements

Appendix D – Setting up Clinical Reminders Components in Health Summary

Appendix E – Health Summary: Remote Clinical Reminders

Appendix F – Creating a mailing list with Patient List Demographic Reports and Mail Merge

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
QUERI - Quality Enhancement Research Initiative
SAS - Statistical Analysis System
SRS - Software Requirements Specification
VHA - Veterans Health Administration.
VISN - Veterans Integrated Service Networks.
VISTA - Veterans Health Information System and Technology Architecture.

Definitions

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 Boolean Logic Primer for Clinical Reminders 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

Reminders whose evaluation status meets due criteria for a patient.

Evaluation

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

Findings

Data from **V*IST*A** 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: Q & A – Helpful Hints

Q What is a National Reminder?

A National reminders are clinical reminders and reminder dialogs that have gone through an approval process for national distribution. Some national reminders are related to statutory, regulatory, or Central Office mandates such as Hepatitis C, MST, or Pain. Other national reminders are being developed under the guidance of the VA Clinical Practice Guideline Council.
Guideline-related reminders are being developed for two reasons:

1. To provide reminders for sites that don't have reminders in place for a specific guideline (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).

Most of the VA- and VA*- national reminders previously distributed are being rescinded with Version 2.0 of Clinical Reminders. The installation will rename these with a ZZ prefix.

NOTE: A new committee has been formed, the National Clinical Reminders Committee (NCRC), whose charter is to direct

Q What diagnoses are used to define "IHD" for these reminders?

A ICD-9 codes 410.0-412 and 414.0-414.9, which include the following diagnoses: acute myocardial infarction, old myocardial infarction, post MI syndrome, and coronary atherosclerosis.

Q Why are health factors for outside LDL levels included in these reminders?

A Capture of outside (historical) lab results is important in the management of veterans with IHD. Some veteran patients choose to receive health care from both VA as well as private health care providers (co-managed care). Other veterans seek seasonal care at VA sites other than their "home" VA.

Q Are there restrictions on the drugs we can order?

A Check with your local VA site regarding the formulary medication choices available for lipid management.

Q Is there any way to do a reminder report on an individual finding item?
We want to add a check box that indicates depression is a new diagnosis. Is there a way to do a reminder report just on that one finding that will tell us how many of the patients that were seen that this was applicable for?

A **1:** Set up a local reminder with that one finding as a resolution finding. Define the reminder USAGE field as Reports, then it will not appear on the cover sheet.

A **2:** I use a little trick when I do these. I put the finding in the reminder, make the frequency to be 1 day, and put an OR for the resolution logic and AND for the COHORT logic. That then gives you output in the CM or health summary that gives the date it was last done so not only do you get a list of folks who have the finding, but you also can tell when it was entered.

Q We started receiving multiple PXRM errors in the error trap today. A user queued three clinical reminder reports on 1/13/04 beginning at 3pm. This a.m. the FOBT reminder was edited. A finding item was deleted from the cohort and resolution logic. I don't know that this makes a difference, but

the person who updated the reminder did not disable the reminder. Could the fact the reminder was not disabled before it was edited, cause the errors to be generated?
We should be able to make changes to the reminders without affecting reports that are already running or are queued to run. (At least that's my way of thinking.) What caused this problem to occur, editing the reminder without disabling it first or is there a software problem that needs to be fixed?

A A clinical reminder is a basically a file setup/definition for a search logic. When the reports are queued, the code sets variables for this search logic and also makes dynamic lookups into the file setup. So if the file setup/logic is edited while the process is running, then executing code in the stack is looking for data (aka definition) which no longer exists or has been changed. The result is undefined errors.
Recommendations.
For users with the ability to queue reminder reports/searches, only allow queuing starting Friday afternoon. Then do not edit any reminders from Friday afternoon until Monday morning. Most reminder reports should finish in this timeframe.
OR - if a user needs to run the report before the weekend. Then make a copy of the reminder and run the report off the copy. Then edits could be made to the original reminder definition without affecting the running process. The report will reflect the logic/findings of the copy.

Q I tried to run a report last night, but got this message this morning when I went to look at the task number.

6294955: ^PXRMXPR, Reminder Due Report - print. Device NT_SPOOL. VAH,ROU.
From Yesterday at 13:14, By you. Created without being scheduled.

Does this mean that there's an error with the report processing?

A No, that message doesn't mean there's an error. Clinical Reminders processes its reports in two tasks, one for SORT and one for PRINT. The print task will always show "created without being scheduled" until the sort task is complete.

Q: HD#78872 Reminder element's PXRM COMMENT box doesn't display
Could someone please look at this and verify about the 'pxrm comment' field not displaying? And then tell me WHY it's not displaying? I'm waiting for guidance on how I can get this to work in this reminder template. All other sections for P&O (Prosthetics & Orthotics) have been built -- and it's a pretty complicated structure. It's just this ONE issue that's holding this up at this point - from being able to ACTIVATE this template for the clinicians.

A: I looked at one of the Location elements:

```
1     Group: DG POLYTRAUMA P&O PROB LE PAIN RESIDUAL
          Text: Residual limb pain
                [NO BOX, NO SUPPRESS, SHOW, ONE ONLY]

   2   5   Element: POLYTRAUMA P&O PROBLEM LE PAIN RESID LOCATION
              Text: Location:
           Prompts:

   3   10  Element: POLYTRAUMA P&O PROBLEM LE PAIN RESID SEVERITY
              Text: Severity level
           Prompts: Scale 1-10:
```

Try deleting the MULTIPLE SELECTION prompt from:

5.80.40.10.5.17.15 Group: DG POLYTRAUMA P&O PROB LE PAIN RESIDUAL
5.80.40.10.5.17.25 Group: DG POLYTRAUMA P&O PROB LE PAIN SECONDARY

They are currently set to "ONE SELECTION ONLY", which is different from the Upper Extremities settings. I made the change and now I am seeing the comment text box.

THANKS! I never expected that that 'multiple selection' prompt [meaning that it controls whether the items have radio buttons or checkboxes and whether a selection is required or not] would have such an effect on a PXRM COMMENT, because the 2 items in that dialog group (location & severity) each have a SUPPRESSED checkbox---so I assumed it just wouldn't have <any> effect. So when I went over this myself several times trying to figure out why it wasn't displaying, I just missed seeing this as the problem.

Forced Value in Dialogs

Q I have an element that has a single ICD code in it and whenever this template is used, I want this ICD code to be entered and for it to automatically go in as the primary diagnosis. I can get the ICD code to be automatically entered, but I cannot seem to create a forced value prompt from the PXRM PRIMARY DIAGNOSIS prompt that works correctly. If I set the forced value to PRIMARY or to PRIMARY DIAGNOSIS, it does not seem to work and the diagnosis is always recorded as the secondary diagnosis.
Here is the element:

```
NAME: TX V CODE FOR TB SCREEN  Replace
DISABLE:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
RESOLUTION TYPE:
ORDERABLE ITEM:
FINDING ITEM: V74.1//
DIALOG/PROGRESS NOTE TEXT:
Enter ICD Code for "Screening for TB" (V code for checkout)

  Edit? NO// y  YES

ICD Code for "Screening for TB" (V code for checkout)

ALTERNATE PROGRESS NOTE TEXT:
  No existing text
  Edit? NO//
EXCLUDE FROM PROGRESS NOTE: YES//
SUPPRESS CHECKBOX: SUPPRESS//
Select ADDITIONAL FINDINGS:
RESULT GROUP/ELEMENT:
Select SEQUENCE: 5//
  SEQUENCE: 5//
  ADDITIONAL PROMPT/FORCED VALUE: PXRM PRIMARY DIAGNOSIS
         //
  OVERRIDE PROMPT CAPTION:
  START NEW LINE:
  EXCLUDE FROM PN TEXT: YES//
  REQUIRED: NO//
Select SEQUENCE:
```

```
Input your edit comments.
Edit? NO//
```

Here is the forced value that does not work:

```
Forced value NAME: ICD PRIMARY DIAGNOSIS  Replace
DISABLE Forced value:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
FORCED VALUE: PRIMARY//
RESTRICTED TO FINDING TYPE: POV//
```

A Here's an undocumented feature.. If you want the Primary diagnosis to automatically be populated, define a Prompt as below and apply it to the appropriate dialog element

```
Forced value NAME: FORCE PRIMARY DIAGNOSIS  Replace
DISABLE Forced value:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
FORCED VALUE: 1// << Value of 1 will set the field TRUE.
RESTRICTED TO FINDING TYPE: POV//

 Notes:
```

(1) Jun 16, 2003@15:52:40
Is this dialog just being used as a TIU template and not as a Reminder dialog ? Let me play with this a bit..
(2) Jun 16, 2003@15:58:31
It is both. Help me out - why would that make a difference?
(3) Jun 16, 2003@16:08:39
Forced value NAME: ICD PRIMARY DIAGNOSIS Replace
but in the element..
ADDITIONAL PROMPT/FORCED VALUE: PXRM PRIMARY DIAGNOSIS
Wouldn't you put this: ICD PRIMARY DIAGNOSIS above?
(4) Right - I had to take out the one that did not work ICD PRIMARY DIAGNOSIS and put back in the national one so that the nurses could check the box for primary diagnosis - I'd strongly prefer that they not have to even see or check that box from PXRM PRIMARY DIAGNOSIS - hence the attempt to make it default/force the value to primary.
Here's a FORCED Primary Dx from our account that seems to work:

```
Forced value NAME: FORCE PRIMARY DIAGNOSIS  Replace
DISABLE Forced value:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
FORCED VALUE: 1// << Value of 1 will set the field TRUE.
RESTRICTED TO FINDING TYPE: POV//
```

I tested the Prinary DX prompt on my account and it does identify the dx in the encounter box without any user intervention as Primary.
(5) Thanks - how did you know to use a '1'? - I could not find that in any documentation.
(6) We had one in our account..I guess we can call this an undocumented feature. :-)

Q When Clinical Maintenance is run on a reminder that is applicable due to a problem list entry, why is today's date pulled rather than the date of problem list entry?

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

Q Flu vaccine reminder

Last year our flu vaccine reminder worked well, but now for some reason we are getting the following:

This is how the reminder dialog is set up:
Additional Finding: VACCIN FOR INFLUENZA [11266]
Additional Finding: IMMUNIZATION ADMIN [90471]
Additional Finding: FLU VACCINE, 3 YRS, IM [90658]
Additional Finding: OFFICE/OUTPATIENT VISIT, EST [99211]

I just put in a vaccine using the reminder and found the following show (the computer is automatically adding codes):

```
 5 CPT Code:  90471    IMMUNIZATION ADMIN
 6 CPT Code:  90658    FLU VACCINE, 3 YRS, IM
 7 CPT Code:  99211    OFFICE/OUTPATIENT VISIT, EST
 8 CPT Code:  90659    FLU VACCINE, WHOLE, IM    <-------
 9 Immunization:  INFLUENZA                      <-------
10 Immunization:  FLU,3 YRS
11 Immunization:  FLU,WHOLE                      <------
```

Any ideas as to why this is happening would be appreciated.

A **1:** Almost for sure, this is as a result of the same problem we had!! (Same code!) Your Encounter Form for that specific clinic may have that code (90659) as a choice. If so, it's most probably being entered by either:

1. The provider who checks out the appointment themselves...standalone. Clicking on the encounter button, brings up the encounter form codes that are on that EF for that clinic; or
2. The check-out clerk may be just entering codes checked-off on the EF by the provider.

A **2:** Agree ....We have ours set up such that if the reminder is processed...it stuffs in the CPT codes... so the user should NOT enter any CPT's for the flu vaccine (eg. 90658).
Well, we had some users still doing that (which BTW, is additional work for them)
I sent emails out to all of them yesterday explaining the process.. hopefully it will help eliminate some of the duplicates..
4) Thanks for the info. I think the major problem is that with being integrated, a VISN reminder finding item and ours somehow crossed. I just went in and edited our local reminder findings to meet out needs. We will also be making sure the staff members do not enter the encounter also.

Drug for patient cohort logic

Q Can I use a drug for patient cohort logic? I thought that I could, but then I tried the drug and use the logic of and it shows that the patient is not applicable for this reminder..... Can anyone help me ?

A You can use a DC or Drug Class as a finding as I've done on the reminder for Beta Blocker after an acute MI. Here's what it looks like:

```
Select Reminder Definition Management Option: re  Add/Edit Reminder Definition
Select Reminder Definition: v1-beta BLOCKER AFTER MI       LOCAL
     Select one of the following:
          A         All reminder details
          G         General
          B         Baseline Frequency
          F         Findings
          L         Logic
          D         Reminder Dialog
          W         Web Addresses
Select section to edit: f  Findings

Findings
Choose from:
DC      CV100   <----  That one right there!!!!
HF      ACTIVE OUTSIDE RX FOR BETA BLOCKER
HF      INACTIVATE BETA BLOCKER AFTER ACUTE MI
RT      LOW PULSE
RT      LOW SYSTOLIC BP
TX      ASTHMA
TX      HEART BLOCKS
TX      PRO-ACUTE MYOCARDIAL INFARCTION

Select FINDING:
```

Q Allocation Errors

The user errored out while running a clinical reminder in CPRS.

```
$ZE= ETRAP+4^XWBTCPC:1, %DSM-E-ALLOC, allocation failure

 S XWBERC=$$EC^%ZOSV,XWBERR=$C(24)_"M  ERROR="_XWBERC_$C(13,10)_"LAST
REF="_$$LG
R^%ZOSV_$C(4)
Last Global Ref: ^PXRMD(801.41,570,1)
```

A It seems that two nodes were configured below the standard partition size. Once the partition size parameters were updated and the nodes re-booted, errors stopped.

Q I have been asked about when viewing the CPRS GUI cover sheet, clinical reminders have statuses of DUE NOW and some have just dates. I understand the status of Due Now but am unsure as to why the due dates appear instead of Due Now.
Clinicians are stating it is confusing to them when viewing the Cover Sheet, because they overlook the due dates and only process the Due Now's. Can someone please shed a little light on this, so I may explain to the clinical staff?

A The Date due column in elementary form is calculated with the date that the reminder was last satisfied and the frequency of the reminder. There are a number of factors that can affect the DUE DATE as the complexity of the reminder grows, but this is a basic definition. If the reminder was never satisfied, then the Due Date cannot be calculated, and therefore, the system displays DUE NOW. If just a date appears then the reminder is not currently due, but will be due on the date shown.

Q Our Director of Managed Care runs reminder reports every month on 20 Clinical Reminders on his providers and also provides info for the teams, etc.

We have run into a problem, particularly with the HTN Reminders. They are based on BP > 160/100. The reminder resolves based on intervention health factors, but gets re-triggered if BP is over threshold.

This is the problem. Reports are run monthly, if the Primary Care Provider addressed the reminder on the 15th of the month, and the patient is seen in the ER on the 29th. And on the 29th the BP is over threshold. When the report is run, it shows as patient is due, thus counting against the provider even though they had addressed it on the 15th.

Have any other sites run into a similar problem and what have you done about it?

A We run ours monthly also, but what I have done is to take the some of the reminders that are displayed to users in CPRS and copy them to use as reporting reminders only. Then I can change the frequency due or the date range slightly to make them better for reporting. For example, because so many diagnoses of COPD are inaccurate, the reminder displayed to users looks back 2 years but for reporting, we only look back one year. For yearly interventions, I have the reporting reminders actually due only every 13 months - that way if they saw the pt. at the beginning of December and the reminder was not due yet but became due at the end of December, then I do not penalize them when running the reportfor December.

Q I would like to have the ICD9 and procedure codes displayed as choices in a clinical reminder dialog for a current visit just like they are displayed when you have the Codes (e.g. Immunization Codes) displayed for the Historical visits.

I have placed an element in my dialog with the Taxonomy for Influenza. However, I cannot get them to display like they are displayed for a historical visit (procedure). I put in the TX Immunization codes and then tried to edit under DI - I changed the Dialog Header test, the current visit DX dialog HDR, the Historical Visit DX Dialog Hdr, etc. I also added the selectable procedure codes.
Does anyone know how we can force this to occur for current diagnoses and procedures?

A If you have a TX finding item in a dialog, then you should be prompted for both current and historical entries unless the dialog parameters are disabled. Suggest you check PROCEDURE and DIAGNOSIS finding parameters are enabled as follows:

```
Select Dialog Parameters Option: fp  General Finding Type Parameters

Selection List                Jan 16, 2003@13:27:54          Page:    1 of 1
Finding Type Parameters

 Item Finding Type Parameter

   1  PROCEDURE (CPT)
   2  EDUCATION TOPIC
   3  EXAM
   4  HEALTH FACTOR
   5  IMMUNIZATION
   6  ORDERABLE ITEM
   7  DIAGNOSIS (POV)
   8  SKIN TEST
   9  VITAL MEASUREMENT

         + Next Screen   - Prev Screen   ?? More Actions                  >>>
PT   List/Print All       QU   Quit
Select Item: Quit// 1

Finding Type Parameter List   Jan 16, 2003@13:28:06          Page:    1 of  1
```

```
FINDING TYPE PARAMETER NAME: CPT - Procedure (Taxonomy)

  Resolution Status          Prefix//Suffix & Prompts/Values/Actions   Status

1 DONE AT ENCOUNTER          /                                         Enabled
                             /done.
                             1] PXRM QUANTITY
                             2] PXRM COMMENT

2 DONE ELSEWHERE (HISTORICAL)/                                         Enabled

                             /previously done.
                             1] PXRM QUANTITY
                             2] PXRM VISIT DATE
                             3] PXRM OUTSIDE LOCATION
                             4] PXRM COMMENT

          + Next Screen   - Prev Screen   ?? More Actions                >>>
INQ  Inquiry/Print        QU   Quit
Select number of Resolution Status to Edit: Quit//
```

Q Which takes precedence: finding modifiers on terms or finding modifiers in the reminder definition?

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

Q How do you add a Finding item twice to a reminder?
For example in the National HTN reminder for >140/90.
Vital Measure measurement is in the logic twice. FI (11) and FI (13) with 2 separate conditions.

```
                Finding Item: BLOOD PRESSURE  (FI(11)=VM(1))
                Finding Type: VITAL MEASUREMENT
  Use in Patient Cohort Logic: AND
                   Condition: I $P(V,"/",1)>139!($P(V,"/",2)>89)

                Finding Item: BLOOD PRESSURE  (FI(13)=VM(1))
                Finding Type: VITAL MEASUREMENT
  Use in Patient Cohort Logic: AND NOT
                   Condition: I $P(V,"/",1)>160!($P(V,"/",2)>100)
```

A Enter the finding in quotes.

Non-VA Med Start Date problem

Q: I am having a problem with non-VA meds that have a start date.
A reminder to use aspirin is working fine if no start date is entered on the non-VA med. Once a start date is entered, then the reminder no longer sees that medication.

A: This is really subtle and it took me awhile to track down exactly what is happening. This patient has 7 entries for the non-VA med, only one of which is active; the rest are discontinued. Where the active entry falls on the list depends on whether or not USE START is set to YES or NO.

List with USE START DATE=YES, active med is fifth on list

Drug: ASPIRIN 81MG EC TAB
Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 01/18/2006 Discontinued Date: 01/18/2006 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 01/18/2006 Discontinued Date: 01/18/2006 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 06/02/2004 Discontinued Date: 12/28/2005 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 81MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 06/02/2004 Discontinued Date: 12/28/2005 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 81MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 01/01/1999 Discontinued Date: NONE Status: ACTIVE
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 00/00/1999 Discontinued Date: 01/18/2006 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Reminder Term: PKR ASA
Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 01/01/1999 Discontinued Date: NONE Status: ACTIVE
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

List with USE START DATE=N active med is second on list

Drug: ASPIRIN 81MG EC TAB
Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 06/02/2004 Discontinued Date: 12/28/2005 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 81MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 01/01/1999 Discontinued Date: NONE Status: ACTIVE
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 01/18/2006 Discontinued Date: 01/18/2006 Status:

DISCONTINUED
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 00/00/1999 Discontinued Date: 01/18/2006 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 01/18/2006 Discontinued Date: 01/18/2006 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 162MG Medication Route: MOUTH

Non-VA med: ASPIRIN ENTERIC COATED
Start Date: 06/02/2004 Discontinued Date: 12/28/2005 Status: DISCONTINUED
Dosage Form: TAB,EC Dosage: 81MG Medication Route: MOUTH

The evaluation takes place as follows: The number of entries specified by the OCCURRENCE COUNT are searched for and then for each one that is found the status is compared with the STATUS LIST and only the entries with a status that is on the list are true. In your example you are searching for an active entry but with OCCURRENCE COUNT=1 the only entry found is discontinued so it is never true. It would find the active entry with OCCURRENCE COUNT=2 and USE START DATE=NO or OCCURRENCE COUNT=5 and USE START DATE=YES.

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.

Reminder Exchange Tip

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

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

     Select one of the following:
          C         Create a new entry by copying to a new name
          I         Install
          Q         Quit the install
          S         Skip, do not install this entry
Enter response: i  Install
Name associated with AMIS stop code does not match the one in the
packed reminder:
 AMIS=560
 Site Name=ZZSUBSTANCE ABUSE - GROUP
 Name in packed reminder=SUBSTANCE ABUSE - GROUP
The update failed, UPDATE^DIE returned the following error message:
MSG("DIERR")=1^1
```

```
MSG("DIERR",1)=701
MSG("DIERR",1,"PARAM",0)=3
MSG("DIERR",1,"PARAM",3)=GYNECOLOGY
MSG("DIERR",1,"PARAM","FIELD")=.01
MSG("DIERR",1,"PARAM","FILE")=810.90011
MSG("DIERR",1,"TEXT",1)=The value 'GYNECOLOGY' for field CREDIT STOP TO
EXCLUDE
in CREDIT STOPS TO EXCLUDE SUB-FIELD in CLINIC STOP LIST SUB-FIELD in
file REMIN
DER LOCATION LIST is not valid.
MSG("DIERR","E",701,1)=

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

Reminder Exchange Error Message

Q: When trying to load a packed reminder through exchange, I get the following error message (Remedy ticket: HD#114340):

```
Packing the reminder ...
GETS^DIQ failed for TIU TEMPLATE FIELD, ien=0;
it returned the following error:
MSG("DIERR")=1^1
MSG("DIERR",1)=202
MSG("DIERR",1,"TEXT",1)=The input parameter that identifies the RECORD is missing
or invalid.
MSG("DIERR","E",202,1)=
```

A: You have a reminder dialog that is using a templated field that does not exist. Here is how we found it.

1. Set break point in GDIQF+13^PXRMEXPU

VAH>ZB GDIQF+13^PXRMEXPU:"BTL" <----------Set the breakpoint in the routine

2. Then we tried to pack the reminder again.

```
Select Action: Next Screen// CFE   Create Exchange File Entry

 Select Reminder Definition to pack: VAMHCS VANA ITEM 14       LOCAL
 Enter a description of the reminder you are packing.

 ==[ WRAP ]==[ INSERT ]==================<  >=================[
 <=======T=======T=======T=======T=======T=======T=======T=======T=======T>======

 Enter keywords or phrases to help index the reminder you are packing.
 Separate the keywords or phrases on each line with commas.

 ==[ WRAP ]==[ INSERT ]==================<  >=================[ <PF1>H=Help ]====
 <
=======T=======T=======T=======T=======T=======T=======T=======T=======T>======

 Packing the reminder ...
  . D GETS^DIQ(FILENUM,IEN,FIELD,"","DIQOUT","MSG")  <-----------Code breaks here
   ^
 <BREAK>GDIQF+13^PXRMEXPU  <-------------Where I set the breakpoint
```

3. Then stepped into routine by using "G"

```
 VAH 14d3>G

    . I $D(MSG) D  Q
      ^
   <BREAK>GDIQF+14^PXRMEXPU
   VAH 14d3>ZW  <-----------List variables and arrays (this is only a part of the
variables and arrays)

   LIST(45)="TIU TEMPLATE FIELD^8927.1^278"
   LIST(46)="TIU TEMPLATE FIELD^8927.1^279"
   LIST(47)="TIU TEMPLATE FIELD^8927.1^280"
   LIST(48)="TIU TEMPLATE FIELD^8927.1^0"  <--------------The bad entry, IEN of 0
   LIST(49)="TIU TEMPLATE FIELD^8927.1^295"
   LIST(50)="TIU TEMPLATE FIELD^8927.1^296"
```

4. Next (part of the variables and arrays from ZW command), showed the TIU template field names of the above entries

```
  TEMLIST(27)="PVC VANA EXTREMITY GRIPS"
    TEMLIST(28)="PVC VANA EXTREMITIES"
    TEMLIST(29)="PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST"
    TEMLIST(30)="PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTALASSIST"<-----------The
bad Tiu Template field
    TEMLIST(31)="PVC VANA NSG GI ASSESSMENT"
    TEMLIST(32)="PVC VANA GI TUBES PRESENT"
```

5. Next, we did a FileMan search to find the reminder dialog that contained this templated field.

```
Select OPTION: SEARCH FILE ENTRIES

OUTPUT FROM WHAT FILE: TIU TEMPLATE FIELD// REMINDER DIA
     1   REMINDER DIALOG                  (4171 entries)
     2   REMINDER DIALOG PATIENT ASSOCIATION    (10 entries)
CHOOSE 1-2: 1  REMINDER DIALOG            (4171 entries)

  -A- SEARCH FOR REMINDER DIALOG FIELD: ?
 Answer with FIELD NUMBER, or LABEL
 Do you want the entire FIELD List? Y  (Yes)
   Choose from:

   25           DIALOG/PROGRESS NOTE TEXT   (word-processing)
   35           ALTERNATE PROGRESS NOTE TEXT   (word-processing)


  -A- SEARCH FOR REMINDER DIALOG FIELD: 25  DIALOG/PROGRESS NOTE TEXT   (word-
processing)
    -A- CONDITION: CONTAINS
    -A- CONTAINS: PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTALASSIST<--------The bad
tiu templated field

  -B- SEARCH FOR REMINDER DIALOG FIELD: 35  ALTERNATE PROGRESS NOTE TEXT   (word
-processing)
    -B- CONDITION: CONTAINS
    -B- CONTAINS: PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTALASSIST<--------The bad
tiu templated field
```

```
  -C- SEARCH FOR REMINDER DIALOG FIELD:


IF: A
              REMINDER DIALOG DIALOG/PROGRESS NOTE TEXT CONTAINS (case-insensitive)
"PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTALASSIST"
OR: B
               Or REMINDER DIALOG ALTERNATE PROGRESS NOTE TEXT CONTAINS (case-
insensitive) "PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTALASSIST"
OR:

STORE RESULTS OF SEARCH IN TEMPLATE:

SORT BY: NAME//
START WITH NAME: FIRST//
FIRST PRINT FIELD: NUMBER
THEN PRINT FIELD: NAME
THEN PRINT FIELD:
Heading (S/C): REMINDER DIALOG SEARCH  Replace
DEVICE:   VIRTUAL TERMINAL    Right Margin: 80//
REMINDER DIALOG SEARCH                        OCT  4,2005  11:11    PAGE 1
NUMBER        NAME
-------------------------------------------------------------------------------

4093          APAT NAD ROS MUSCULOSKELETAL TEXT <------------This is the reminder dialog that
contains the bad template field
```

6. Next, we inquired in FileMan to that entry in the reminder dialog file

```
Select OPTION: INQUIRE TO FILE ENTRIES

OUTPUT FROM WHAT FILE: REMINDER DIALOG//
Select REMINDER DIALOG NAME: `4093  APAT NAD ROS MUSCULOSKELETAL TEXT     dialog
 element     LOCAL
         ...OK? Yes//   (Yes)

ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes//   (Yes)
Include COMPUTED fields:  (N/Y/R/B): NO//  - No record number (IEN), no Computed
 Fields

NAME: APAT NAD ROS MUSCULOSKELETAL TEXT
  TYPE: dialog element                  SUPPRESS CHECKBOX: SUPPRESS
 DIALOG/PROGRESS NOTE TEXT:
      Ambulation: {FLD:PVC VANA AMBULATION ABILITY}.

      Right upper extremity grip is {FLD:PVC VANA EXTREMITY GRIPS}.
      Left upper extremity grip is {FLD:PVC VANA EXTREMITY GRIPS}.
      Right lower extremity strength is {FLD:PVC VANA EXTREMITY GRIPS}.
      Left lower extremity strength is {FLD:PVC VANA EXTREMITY GRIPS}.

      Deformity: {FLD:PVC VANA EXTREMITIES}
      Atrophy: {FLD:PVC VANA EXTREMITIES}
      Stiffness: {FLD:PVC VANA EXTREMITIES}
      Fracture: {FLD:PVC VANA EXTREMITIES}
      Contracture: {FLD:PVC VANA EXTREMITIES}
      Paralysis: {FLD:PVC VANA EXTREMITIES}:
      Amputation: {FLD:PVC VANA EXTREMITIES} {FLD:WORD PROCESSING BOX}
   ____________________________________________________________________________\\

 ACTIVITIES OF DAILY LIVING ASSESSMENT:
```

```
   Tube Feeding: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Eating: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}

Enter RETURN to continue or '^' to exit:
   Oral Hygiene: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Bathing: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Dressing: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Grooming: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Nail care: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Mobility: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Ambulation: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Transfer: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Wheelchair: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Turning in bed: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Toileting: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Use of telephone: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Shopping: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Food preparation: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Housekeeping: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Laundry: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Taking medication: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTAL ASSIST}
   Managing money: {FLD:PVC VANA INDEPENDENT/PARTIAL ASSIST/TOTALASSIST}<---------here
is the bad templated field.
```

7. This needs to be removed or edited from the reminder dialog - APAT NAD ROS MUSCULOSKELETAL TEXT

8. Then try to repack the reminder.

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.

Q: Our computed finding for future clinic appt. was working but now doesn't. The Reminder no longer recognizes the finding when future appt. exists.

One month ago the future appt. was recognized and resolved the reminder to no patients Due Now. Now all patients are Due Now as it does not recognize future appt. exists.

A The default value for ENDING DATE (EDT) in v2.0 is "today" unless otherwise specified, so without a relative range that includes future dates, the computed finding was failing at each step. If you go into the reminder definition and set ENDING DATE to be "T+nX" where you put nX to be 2D or 6M or 1Y or whatever maximum possibility of how far to look ahead you might want to go, then I think it will restore function to the finding.

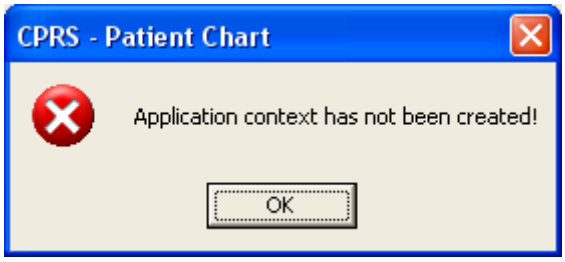
Problem with using CPT codes to find radiology procedures

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.

CPRS 27 Access Violation Error



Solution: Assign YS BROKER1 option as a secondary menu (on the Systems Manager Menu/ User Management/ Edit User Characteristics option).

Boolean Logic Primer for Clinical Reminders

Thanks to Terri Murphy, Durham VAMC

The following Mumps/Boolean operators can be used in Clinical Reminders Function Findings.

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

1. Findings are either found/present/true for a given patient at a given time, or not (0=not found, 1=found).
2. Logic statements join a series of findings together to form an equation that is *overall* either true or not.
3. There are four ways to join findings in this logic statement:
   a. AND (&): FI(1)&FI(2) means that both findings 1 and 2 must be found for this overall logic statement to be true.
   b. OR (!): FI(1)!FI(2) means that if either finding 1 or finding 2 is found, then the overall logic statement is true.
   c. AND NOT (&'): FI(1)&'FI(2) means that finding 1 must be found and also finding 2 is not found. Both of these must occur for this overall statement to be true.
   d. OR NOT (!'): FI(1)!'FI(2) means that finding 1 must be found or finding 2 is not found. If either of these occur, the overall logic statement is true.
4. There is a default way that these logic statements are formed, done by the computer, with the findings loaded into the logic statement in the order in which they are entered into the reminder definition. The computer works from left to right to work out the logic statement. This can have unintended consequences. For example, it is not always enough to give a finding an AND to be sure that this finding has to be present for the overall logic statement to be true. For example, let's say FI(1) is not found (=0), FI(2) is found (=1) and FI(3) is found (=1).
   a. FI(1)&FI(2)!FI(3) would be evaluated as overall true, even though FI(1) which was given an AND in the logic field is not found
5. The way around this is to do customized logic, by either changing the order of the findings in the logic statement OR by adding parentheses. The computer calculates the results of things within parentheses first, then goes back and moves from left to right; so, in the example above the outcome is changed with the addition of parentheses:
   a. FI(1)&(FI(2)!FI(3)) would be evaluated as not true because finding 1 is not found. The steps the computer takes are first: FI(2)!FI(3)= true, then FI(1)&(true)=not true, because finding 1 is not found. In this case, giving FI(1) in the logic field worked as intended.

6. This may be overly simplistic, but the way I think of it is to have a series of AND or AND NOTs in the cohort logic (ORs or OR NOTS can be inside parentheses) and a series of ORs in the resolution logic (ANDs, AND NOTs can be inside parentheses). This works for me, but each logic statement needs to be evaluated individually.

Computed Finding Tip

- 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.

&' Problem

When you use an &' in your resolution logic it can cause a problem with the resolution date calculation. In this example, ((FI(2)&FI(6))!FI(3))&'FI(I) the resolution logic can only be true if finding 1 is false. When a finding is false there is no date so the resolution date calculation fails. A solution is to replace FI(I) with a function finding that uses the FI function. Function findings do not have a date and the resolution date calculation takes this into account.

Q: Reminder Operators
Does anyone have a cheat sheet with the list of operators that can be used in the function findings?
I know these:
! OR
& AND
> GREATER THAN
< LESS THAN
= EQUAL
' NOT

I'm getting confused by this operator in one of our reminders:
'< Is this NOT LESS THAN? Why not just use > instead?

A: 1) Because NOT LESS THAN could be GREATER than or EQUAL TO.

2) Check out the web link (it's an MS Word document) on the National Clinical Reminders web site:
Boolean Logic primer for clinical reminders (Durham) 2001
http://vista.med.va.gov/reminders/boolean.doc

3) The reason you would use '< instead of > -
The '< would grab those entries less than or equal to the variable.
The > would only grab those entries > the variable.

Clinical RemindersTesting Tips

(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.

Appendix C: Status Enhancements

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

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

RXTYPE controls the search for medications. The possible RXTYPEs are:

- A - All
- I - Inpatient
- N - Non-VA meds
- - Outpatient

You may use any combination of the above in a comma-separated list. For example I,N would search for inpatient medications and non-VA meds. The default is to search for all possible types of medications. So a blank RXTYPE is equivalent to A.

Default Statuses

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

Non-VA meds

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

Status List

Version 2 provides a Status List that 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.

Finding types that have a status:

- Inpatient pharmacy
- Outpatient pharmacy
- Orders
- Problem List
- Radiology

To be true, a finding has to have a status on the list, which is a change from V. 1.5, where status was not used for drugs. Your reminders that use these finding types may work differently in V. 2.0
Default View (This example is for a Radiology Procedure as the Finding Item).

```
Statuses already defined for this finding item:
COMPLETE

     Select one of the following:

          A         ADD STATUS
          D         DELETE A STATUS
          S         SAVE AND QUIT
          Q        QUIT WITHOUT SAVING CHANGES

Enter response: S// ?

Display when adding a status
Enter response: S// a  ADD STATUS
1 - * (WildCard)
2 - CANCELLED
3 - COM
4 - COMPLETE
5 - EXAMINED
6 - TRANSCRIBED
7 - WAITING FOR EXAM
Select a Radiology Procedure Status or enter '^' to Quit:  (1-7): 2,3,6

Statuses already defined for this finding item:
CANCELLED
COM
COMPLETE
TRANSCRIBED

     Select one of the following:

          A         ADD STATUS
          D         DELETE A STATUS
          S         SAVE AND QUIT
          Q         QUIT WITHOUT SAVING CHANGES

Enter response: S// ?
```

```
View when deleting a status
Enter response: S// d  DELETE A STATUS
1 - CANCELLED
2 - COM
3 - COMPLETE
4 - TRANSCRIBED
Select which status to be deleted:  (1-4): 2,4

Statuses already defined for this finding item:
CANCELLED
COMPLETE

     Select one of the following:

          A         ADD STATUS
          D         DELETE A STATUS
          S         SAVE AND QUIT
          Q         QUIT WITHOUT SAVING CHANGES

Enter response: S//
```

Pharmacy Statuses

#	Status	Description
*	Wildcard	A wildcard entry allows searches for all statuses
1	ACTIVE (NOI)	Rx is active – edit, renewal, D/C, copy, refill, partial etc., could be done
2	DATE OF DEATH ENTERED (N)	Rx discontinued because of death
3	DELETED (O)	Manual delete by the supervisor – same as Rx does not exist; never shown in the profile or reports
4	DISCONTINUED (NOI)	Any D/C via the backdoor –Manual D/C, D/C due to Renewal, D/C due to duplicate drug, D/C due to Drug-Drug interaction
5	DISCONTINUED (EDIT) (OI)	Any edit through the backdoor for an active Rx that results in a new Rx will have this set. This will be displayed in the patient profile with status 'DE'
6	DISCONTINUED (RENEWAL) (I)	Any edit through the backdoor for an active Rx that results in a renewal.
7	DISCONTINUED BY PROVIDER (O)	D/C via CPRS by the provider
8	DONE (O)	Not used
9	DRUG INTERACTIONS (O)	Pending due to Drug Interactions
10	EXPIRED (OI)	Expired Rx, copy, partials, D/C are allowed
11	HOLD (OI)	When a Rx is put on hold, no action is allowed except D/C until it is taken off hold
12	NON-VERIFIED (I)	CPRS orders completed by a pharmacy tech. (not holding PSORPH key), need verification by a Pharmacist (holder of PSORPH key); Inpatient
13	NON-VERIFIED (O)	CPRS orders completed by a pharmacy tech. (not holding PSORPH key), need verification by a Pharmacist (holder of PSORPH key); Outpatient
14	ON CALL (I)	On call via CPRS by the provider
15	PROVIDER HOLD (O)	On hold via CPRS by the provider

16	PURGE (I)	Purged Rx
17	REFILL (O)	Not used
18	REINSTATED (I)	An active Rx that has been reinstated
19	RENEWED (I)	An active Rx that has been renewed
20	SUSPENDED (O)	An active Rx that has a future fill date
N=Non-VA Meds; O=Outpatient; I=Inpatient		

Editing a Status List

You are prompted for a status only for those findings that have a status.

Example: (under Reminder Definition Management Option/RE Add/Edit Reminder Definition)

```
Select section to edit: Findings

Reminder Definition Findings

Choose from:
DR   A AND D OINTMENT 2OZ                                          Finding #: 2
RT   AGP LDL                                                       Finding #: 1

Select FINDING: DR.A

     Searching for a DRUG, (pointed-to by FINDING ITEM)
    A AND D OINTMENT 2OZ         DE350         TUBE
        ...OK? Yes//   (Yes)
Editing Finding Number: 2
FINDING ITEM: A AND D OINTMENT 2OZ//
REMINDER FREQUENCY:
MINIMUM AGE:
MAXIMUM AGE:
RANK FREQUENCY:
USE IN RESOLUTION LOGIC:
USE IN PATIENT COHORT LOGIC:
BEGINNING DATE/TIME:
ENDING DATE/TIME:
OCCURRENCE COUNT:
RXTYPE: A//
CONDITION:
CONDITION CASE SENSITIVE:
USE STATUS/COND IN SEARCH:
FOUND TEXT:
  No existing text
  Edit? NO//
NOT FOUND TEXT:
  No existing text
  Edit? NO//

Statuses already defined for this finding item:
ACTIVE
DATE OF DEATH ENTERED
Select one of the following:

          *         WildCard
          1         ACTIVE (NOI)
          2         DATE OF DEATH ENTERED (N)
          3         DELETED (O)
          4         DISCONTINUED (NOI)
          5         DISCONTINUED (EDIT) (OI)
          6         DISCONTINUED (RENEWAL) (I)
```

```
          7         DISCONTINUED BY PROVIDER (O)
          8         DONE (O)
          9         DRUG INTERACTIONS (O)
          10        EXPIRED (OI)
          11        HOLD (OI)
          12        NON VERIFIED (I)
          13        NON-VERIFIED (O)
          14        ON CALL (I)
          15        PROVIDER HOLD (O)
          16        PURGE (I)
          17        REFILL (O)
          18        REINSTATED (I)
          19        RENEWED (I)
          20        SUSPENDED (O)

Select a Medication Status from the status list or enter '^' to Quit: 1  ACTIVE
(NOI)

Statuses already defined for this finding item: ACTIVE

     Select one of the following:

          A         ADD STATUS
          D         DELETE A STATUS
          DA        DELETE ALL STATUSES
          S         SAVE AND QUIT
          Q         QUIT WITHOUT SAVING CHANGES

Enter response: a  ADD STATUS

     Select one of the following:

          *         WildCard
          1         ACTIVE (NOI)
          2         DATE OF DEATH ENTERED (N)
          3         DELETED (O)
          4         DISCONTINUED (NOI)
          5         DISCONTINUED (EDIT) (OI)
          6         DISCONTINUED (RENEWAL) (I)
          7         DISCONTINUED BY PROVIDER (O)
          8         DONE (O)
          9         DRUG INTERACTIONS (O)
          10        EXPIRED (OI)
          11        HOLD (OI)
          12        NON VERIFIED (I)
          13        NON-VERIFIED (O)
          14        ON CALL (I)
          15        PROVIDER HOLD (O)
          16        PURGE (I)
          17        REFILL (O)
          18        REINSTATED (I)
          19        RENEWED (I)
          20        SUSPENDED (O)

Select a Medication Status from the status list or enter '^' to Quit: 2  DATE OF DEATH
ENTERED (N)

Statuses already defined for this finding item:
ACTIVE
DATE OF DEATH ENTERED

     Select one of the following:
```

```
          A         ADD STATUS
          D         DELETE A STATUS
          DA        DELETE ALL STATUSES
          S         SAVE AND QUIT
          Q         QUIT WITHOUT SAVING CHANGES

Enter response: S  SAVE AND QUIT
Removing old Statuses from the file
Adding current status list to the file

Statuses already defined for this finding item:
ACTIVE
DATE OF DEATH ENTERED

     Select one of the following:

          A         ADD STATUS
          D         DELETE A STATUS
          DA        DELETE ALL STATUSES
          S         SAVE AND QUIT
          Q         QUIT WITHOUT SAVING CHANGES

Enter response:
```

Appendix D: Setting up Clinical Reminders Components in Health Summary

Reminder items are added to health summary selection components for a given health summary type.

When the health summary type is run, the Clinical Reminders software evaluates the patient's data and returns the results to the health summary for display.

Use options on the Health Summary Coordinator's Menu (on the Other Supporting Menus on the Clinical Reminders Manager Menu) to add Reminders components.

Health Summary Reminder Components

Clinical Reminders Due: An **abbreviated** component indicating only **what is due now**.

Example of *Reminder Due* as displayed on a health summary:

```
                                --STATUS-- --DUE DATE--  --LAST DONE-
Advanced Directives Education     DUE NOW     DUE NOW       unknown
Alcohol Abuse Education           DUE NOW     DUE NOW       unknown
```

Clinical Reminders Summary

This component provides the status (Due Now, Due Soon, Resolved), next due date, and the last done date.

Example of *Reminder Summary* as displayed on a health summary:

```
                   --STATUS--   --DUE DATE--    --LAST DONE--
Mammogram              RESOLVED     03/01/2000  10/01/1998
Pap Smear              DUE NOW      DUE NOW             unknown
Diabetic Eye Exam      DUE NOW      DUE NOW  10/01/1999
```

Clinical Reminders Maintenance

This component provides:

- Details about what was found from searching the VistA clinical data.
- Text related to the findings found or not found (as defined in the reminder). This includes taxonomies (ICD or CPT codes), health factors, and test results related to the reminder and computed findings (e.g., Body Mass Index).
- Final frequency and age range used for the reminder.

NOTE: Statuses include "DUE SOON," to allow you to process a reminder in advance, if convenient.

Example of Reminder Maintenance as displayed on a health summary:

```
------------------------- CM - Reminder Maintenance -----------------------
                                  --STATUS-- --DUE DATE--  --LAST DONE--
Fecal Occult Blood Test            DUE NOW     DUE NOW       unknown

     Applicable: Due every 1 year for ages 50 and older.
     No HX of colorectal cancer on file - presumed no HX.
```

```
Health Factor Test                    DUE NOW     DUE NOW       unknown

     Applicable: Due every 1 year for ages 40 to 60.
     Baseline set to 1Y for 40-60.
```

This is also what you see in the CPRS GUI if you right-click on a reminder, then click on Clinical Maintenance.

My HealtheVet Health Summary Components

My HealtheVet is a new online environment where veterans, family members, and clinicians may come together to optimize veterans' healthcare. Web technology combines essential health record information with online health resources to enable and encourage veteran/clinician collaboration.

Clinical Reminders V.2.0 contains new health summary components to support the My HealtheVet project. These components will allow display of clinical reminder information to patients. These components eliminate much of the technical text and code information that is contained in the Clinical Reminders Maintenance component and will be used to display summary and detailed information on individual patient reminders to the patients from within My HealtheVet.

New MHV components:

- MHVD Reminders Detail Display
- MHVS Reminders Summary Display.

New MHV types:

- REMOTE MHV REMINDERS DETAIL
- REMOTE MHV REMINDERS SUMMARY

These two new national Health Summary types were created to include the new health summary components. These will also be available in health summaries on the reports tab in CPRS, and will be available to clinicians at any site where a patient is seen.

Example in VistA Health Summary

```
                                                                  08/04/2004 10:22
************************  CONFIDENTIAL AD HOC SUMMARY  *************************
CRPATIENT,ONE    666-04-2591P          1A(1&2)                  DOB: 04/25/1931

---------------------------- MHVD - Detail Display ----------------------------


                                    --STATUS-- --DUE DATE--  --LAST DONE--
Influenza Vaccine                    DUE NOW    08/18/2000    08/18/1999
       Immunization: INFLUENZA = BOOSTER (08/18/1999)

       Encounter Procedure = INFLUENZA IMMUNIZATION (03/11/1998)

       Flu shot due yearly in patients any age that have a high risk for
       flu or pneumonia.
```

```
        Problem Diagnosis = CONGEST HEART FAIL UNSPESIFIED (10/03/2001)


MENTAL TESTS ZZCOPYRIGHT             DUE NOW     DUE NOW       unknown
     Age match text for inquiry purposes
```

MHV Health Summary Types in CPRS GUI

Before viewing MHV health summary types in the CPRS GUI, you need to add them to a user's Health Summary.

This example shows the sequence for adding the MHV health summary types to the CPRS Reports tab for a user.

```
Select OPTION NAME: GMTS MANAGER       Health Summary Overall Menu

   1      Health Summary Coordinator's Menu ...
   2      Health Summary Enhanced Menu ...
   3      Health Summary Menu ...
   4      Health Summary Maintenance Menu ...
Select Health Summary Overall Menu Option: 4  Health Summary Maintenance Menu
   1      Disable/Enable Health Summary Component
   2      Create/Modify Health Summary Components
   3      Edit Ad Hoc Health Summary Type
   4      Rebuild Ad Hoc Health Summary Type
   5      Resequence a Health Summary Type
   6      Create/Modify Health Summary Type
   7      Edit Health Summary Site Parameters
   8      Health Summary Objects Menu ...
   9      CPRS Reports Tab 'Health Summary Types List' Menu ...
   10     CPRS Health Summary Display/Edit Site Defaults ...

Select Health Summary Maintenance Menu Option: 9  CPRS Reports Tab 'Health
Summary Types List' Menu
   1      Display 'Health Summary Types List' Defaults
   2      Precedence of 'Health Summary Types List'
   3      Method of compiling 'Health Summary Types List'
   4      Edit 'Health Summary Types List' Parameters

Select CPRS Reports Tab 'Health Summary Types List' Menu Option: 4  Edit
'Health Summary Types List' Parameters
Edit the CPRS Health Summary Types list on the reports tab
--- Setting GUI Health Summary Type List  for User: CRPROVIDER,TWO
Select Sequence: 1
Are you adding 1 as a new Sequence? Yes//   YES

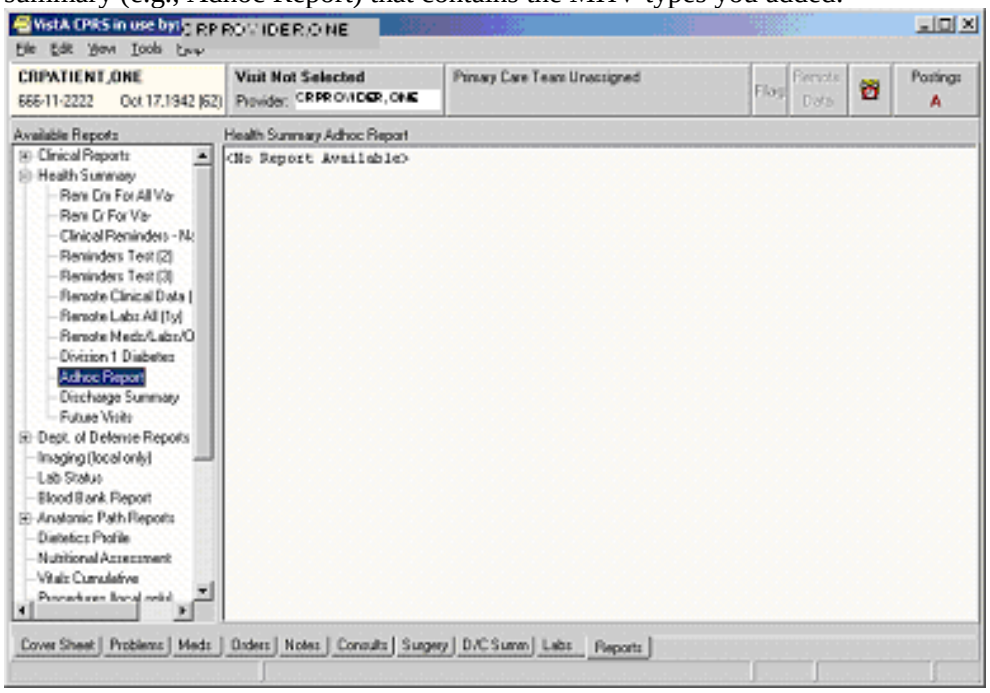
Sequence: 1//    1
Health Summary: Remote MHV
   1.  Remote Mhv Reminders Detail
   2.  Remote Mhv Reminders Summary
CHOOSE 1-2: 1  MHV REMINDERS DETAIL DISPLAY

Select Sequence: 2
Are you adding 2 as a new Sequence? Yes//   YES

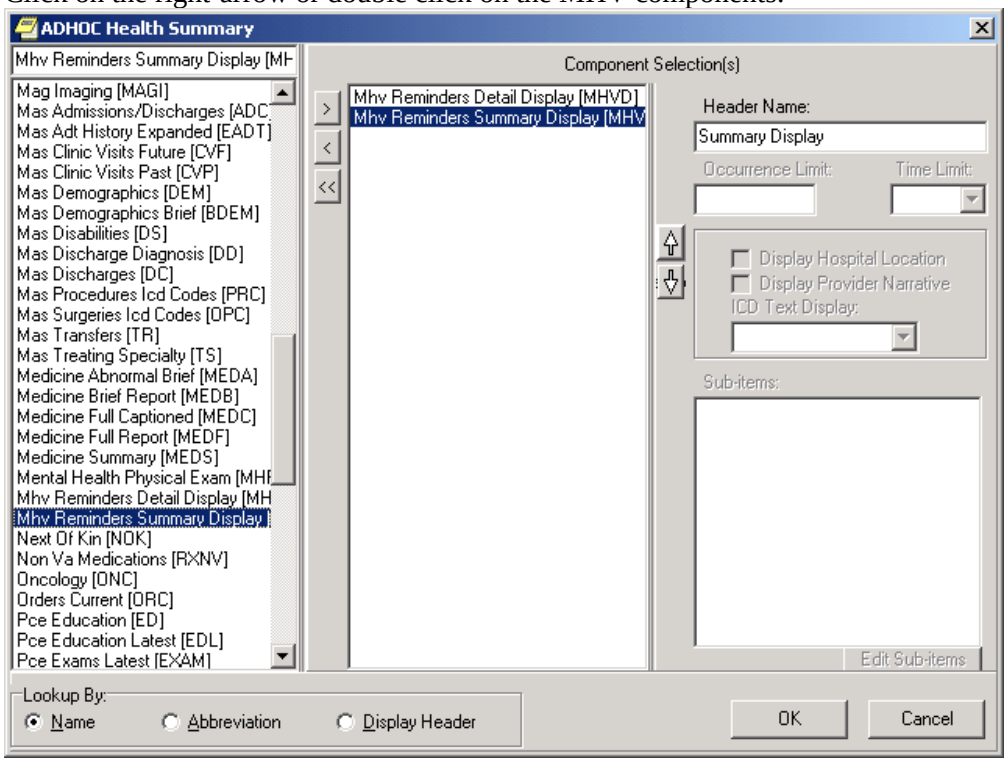
Sequence: 2//    2
Health Summary: Remote MHV
```

```
   1.  Remote Mhv Reminders Detail
   2.  Remote Mhv Reminders Summary
CHOOSE 1-2: 2  Remote MHV REMINDERS SUMMARY
Select Sequence:
```

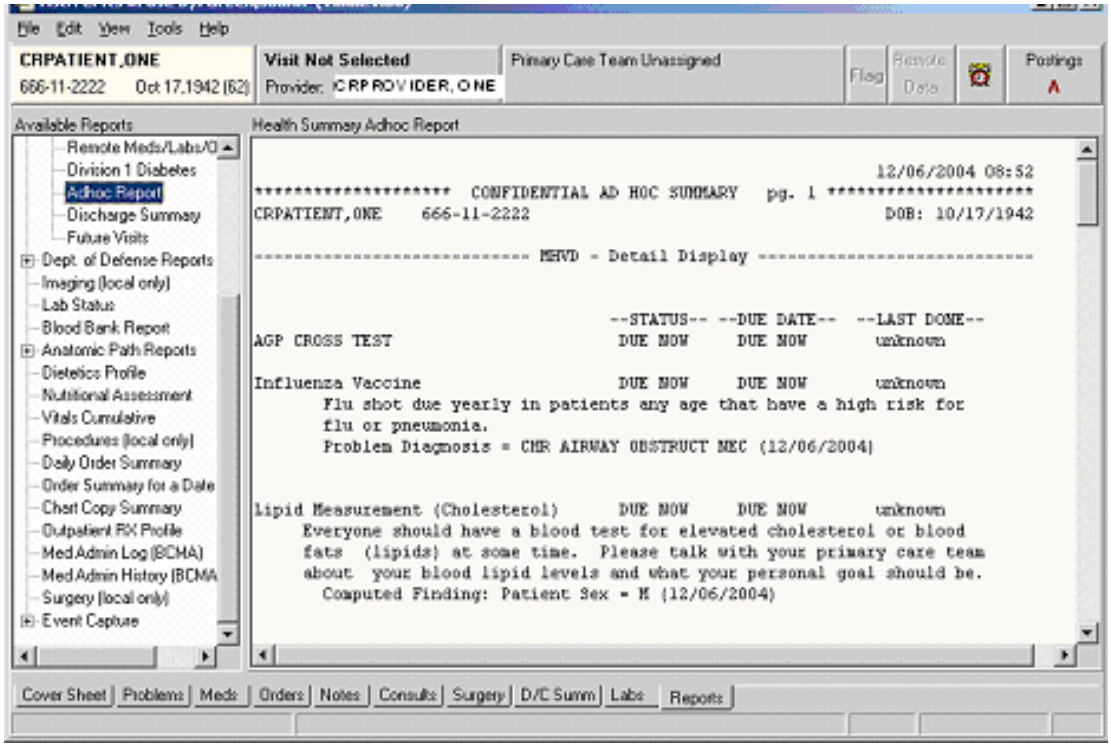
To view MHV Health Summary types in CPRS GUI, select the Reports tab, and then select a health summary (e.g., Adhoc Report) that contains the MHV types you added.



Click on the right-arrow or double click on the MHV components:



MHV – Detailed Display Example



Appendix E – Health Summary: Remote Clinical Reminders

In order to facilitate sharing of interventions related to performance measures, performance monitors, clinical guidelines and VA directives, it was agreed on the monthly National Clinical Reminder call, that it would be very helpful if all VA sites would create a health summary with the name "REMOTE CLINICAL REMINDERS". This health summary would then be available for viewing by other sites using Remote Data Views and would also soon be available in VistA Web.

Many VISNs already have a health summary for this purpose. However, it has a 'VISN' name and would not be recognized outside that VISN. Those VISNs are asked to either 1) change the name of their VISN health summary or 2) create a new one with the national name.

The health summary should contain the reminders that a site uses related to the performance measures and monitors, clinical guidelines and VA directives. It should have at least the following 3 components: Clinical Reminder Summary (CRS), Clinical Maintenance (CM) and Immunizations (IM).

The same list of reminders should be placed in both of the reminder components - the CRS and CM components - and those 2 components should include the national reminders (or the local equivalent) and any other local reminders that would provide useful information to other sites.

The national reminders to include (or include a local equivalent):
VA-DEPRESSION SCREENING
VA-POS DEPRESSION SCREEN FOLLOWUP
VA-WH MAMMOGRAM SCREENING
VA-WH PAP SMEAR SCREENING
VA-IRAQ & AFGHAN POST-DEPLOY SCREEN
VA-HTN ASSESSMENT BP >=140/90
VA-HTN ASSESSMENT BP >=160/100
VA-IHD ELEVATED LDL
VA-IHD LIPID PROFILE
VA-HEP C RISK ASSESSMENT

Other reminders that have been shared nationally to include:

ALCOHOL ABUSE SCREEN (AUDIT-C)
ALCOHOL USE SCREEN POS F/U
PTSD SCREEN
PTSD SCREEN POSITIVE
RPT PTSD SCORE 0
RPT PTSD SCORE 1
RPT PTSD SCORE 2
RPT PTSD SCORE 3
RPT PTSD SCORE 4
RPT PTSD SCREEN NEG OLD
RPT PTSD SCREEN POS OLD

Other local reminders to consider adding if any useful information might be displayed (even if you are not using some of these reminders consistently at your site, some information that would be displayed might still help others at another site):

INFLUENZA VACCINE
PNEUMOCOCCAL IMMUNIZATION
TOBACCO USE SCREENING
SMOKING CESSATION EDUCATION
DIABETES - HBA1C
DIABETES - MONOFILAMENT EXAM
DIABETES - RETINAL EXAM
DIABETES - PROTEINURIA & ACE-I
IHD - ASPIRIN
IHD - BETA BLOCKER
CHF - EJECTION FRACTION
CHF - WEIGHT EDUCATION
CHF - ACE INHIBITOR
PROSTATE CANCER SCREENING EDUCATION
HEP C SEROLOGY FOR AT RISK PATIENT
COLORECTAL CANCER SCREENING

Q: Do you want us to add the HS to the reports tab?

A: Yes. If you create this health summary and do not add it to your reports tab, then the rest of us will be able to pull remote data from your site, but your users will not have access to pull from our sites.

Appendix F – Demographic Report/Mail Merge Example

Demographic Report is an action on the Patient List screen.

The primary purpose of the Demographic Report action is to facilitate contacts with patients to make sure they receive the proper care. Examples of uses for the Demographic Report include producing a list of phone numbers for patients who need a certain intervention and creating a delimited list of patient information, which can be imported into another application to create personalized letters. The following example demonstrates the steps for creating personalized letters from the Demographic Report.

Summary of steps:

1. Run a demographic report against a patient list.
2. Run the report in a delimited output
3. Capture the output in Notepad
4. Clean up the report output
5. Import the Notepad document into MS Excel
6. Import the Excel document into MS Word

1. Run a demographic report against a patient list.

```
Demographic Report

Reminder Patient List          Feb 22, 2006@18:14:03          Page:    1 of    2
List Name: Diabetic Eye Exam (7 patients)
 Created: 08/11/2005@15:16:44           Creator: CRPROVIDER,ONE
 Class: Local                           Type: PUB
 Source: Reminder Due Report
       Patient Name                      DFN
    1  AWHPATIENT,THREE                  40
    2  CRPATIENT,EIGHT                   39
    3  CRPATIENT,FIVE                    24
    4  CRPATIENT,FOUR                    10
    5  CRPATIENT,ONE                  91290
    6  CRPATIENT,SEVEN                   54
    7  CRPATIENT,TEN           912345678906


+         + Next Screen   - Prev Screen   ?? More Actions                  >>>
CV   Change View          DEM  Demographic Report   QU   Quit
HSA  Health Summary All   ED   Edit Patient List
HSI  Health Summary Ind   USR  (View Users)
Select Item: Next Screen// DEM   Demographic Report

Select the items to include on the report.

Select from the following address items:
 1 - CURRENT ADDRESS
 2 - PHONE NUMBER
Enter your selection(s):  (1-2): 1

Select from the following future appointment items:
 1 - APPOINTMENT DATE
 2 - CLINIC
Enter your selection(s):  (1-2): 1-2

Maximum number of appointments to display:  (1-25): 1// 2
```

```
Select from the following demographic items:
 1 - SSN
 2 - DATE OF BIRTH
 3 - AGE
 4 - SEX
 5 - DATE OF DEATH
 6 - REMARKS
 7 - HISTORIC RACE
 8 - RELIGION
 9 - MARITAL STATUS
10 - ETHNICITY
11 - RACE
Enter your selection(s):  (1-11): 1-4

Print full SSN: N// O

Include the patient's preferred facility? N// O

Select from the following eligibility items:
 1 - PRIMARY ELGIBILITY CODE
 2 - PERIOD OF SERVICE
 3 - % SERVICE CONNECTED
 4 - VETERAN
 5 - TYPE
 6 - ELIGIBILITY STATUS
 7 - CURRENT MEANS TEST
Enter your selection(s):  (1-7):

Select from the following inpatient items:
 1 - WARD LOCATION
 2 - ROOM-BED
 3 - ADMISSION DATE/TIME
 4 - ATTENDING PHYSICIAN
Enter your selection(s):  (1-5): 4

Include due status information for the following reminder(s):
 1 - Breast Exam
 2 - Problem Drinking Screen
 3 - Weight and Nutrition Screen
 4 - Cholesterol Screen (Male)
 5 - Hepatitis C Risk Assessment
 6 - Pheumovax
 7 - Alcohol Abuse Education
 8 - Exercise Education
 9 - Advanced Directives Education
 10 - Weight
 11 - IHD Lipid Profile
 12 - MST Screening
 13 - Smoking Cessation Education
 14 - Diabetic Eye Exam
Enter your selection(s):  (1-14): 30

Delimited Report:? Y// ES

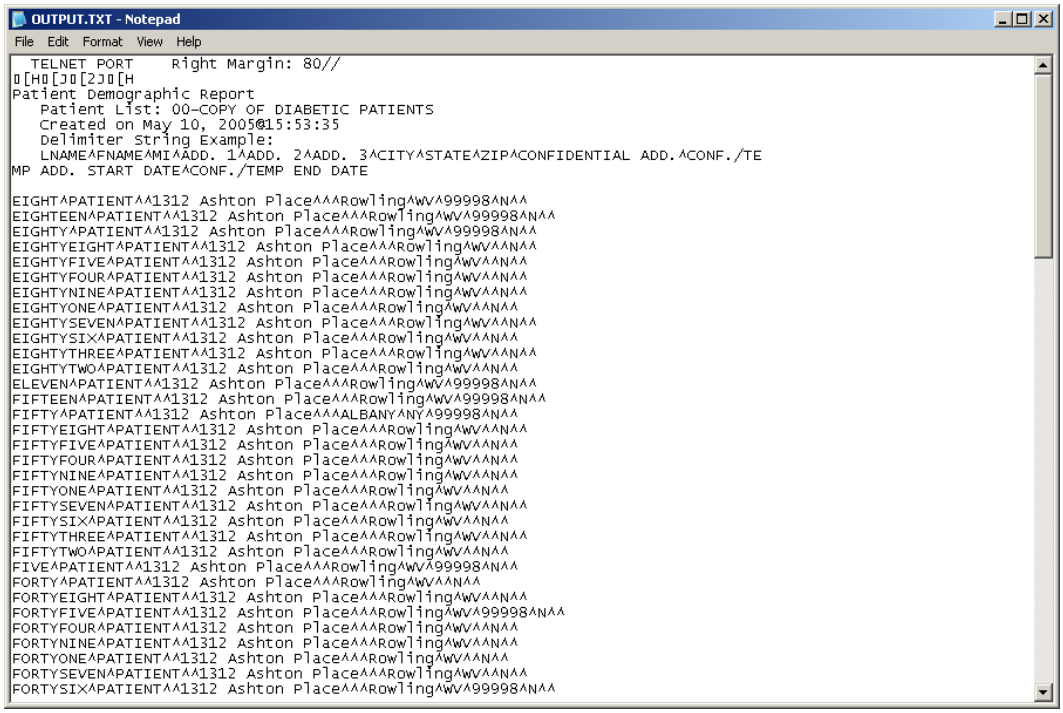
DEVICE: HOME// ;;999  HOME
```

2. Run the report in a delimited output

```
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 Eye 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:
```

3. Paste the output into a Notepad document.

4. Clean up the Notepad Document.

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  TELNET PORT    Right Margin: 80//
0[H0[J0[2J0[H
Patient Demographic Report
   Patient List: 00-COPY OF DIABETIC PATIENTS
   Created on May 10, 2005@15:53:35
   Delimiter String Example:
   LNAME^FNAME^MI^ADD. 1^ADD. 2^ADD. 3^CITY^STATE^ZIP^CONFIDENTIAL ADD.^CONF./TE
MP ADD. START DATE^CONF./TEMP END DATE

EIGHT^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
EIGHTEEN^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
EIGHTY^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
EIGHTYEIGHT^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYFIVE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYFOUR^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYNINE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYONE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYSEVEN^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYSIX^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYTHREE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
EIGHTYTWO^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
ELEVEN^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
FIFTEEN^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
FIFTY^PATIENT^^1312 Ashton Place^^^ALBANY^NY^99998^N^^
FIFTYEIGHT^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYFIVE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYFOUR^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYNINE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYONE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYSEVEN^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYSIX^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYTHREE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIFTYTWO^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FIVE^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
FORTY^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FORTYEIGHT^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FORTYFIVE^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
FORTYFOUR^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FORTYNINE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FORTYONE^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FORTYSEVEN^PATIENT^^1312 Ashton Place^^^Rowling^WV^^N^^
FORTYSIX^PATIENT^^1312 Ashton Place^^^Rowling^WV^99998^N^^
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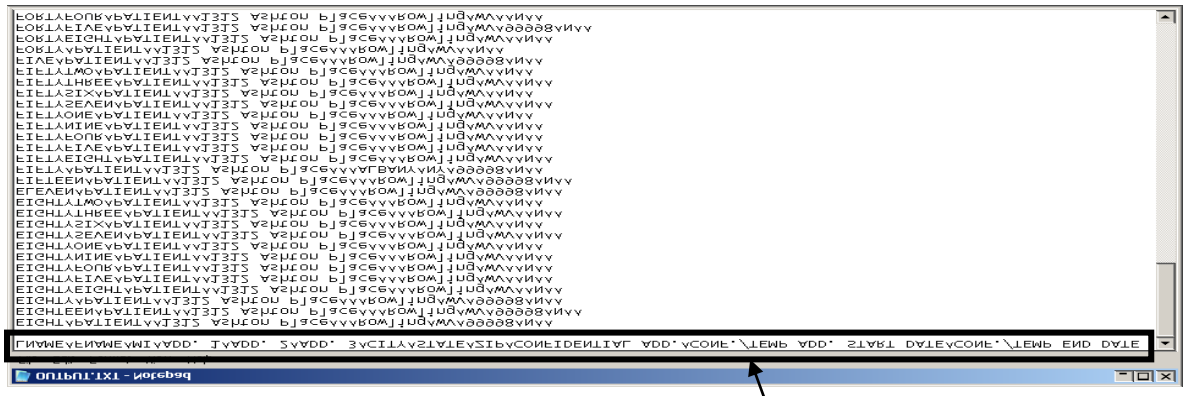
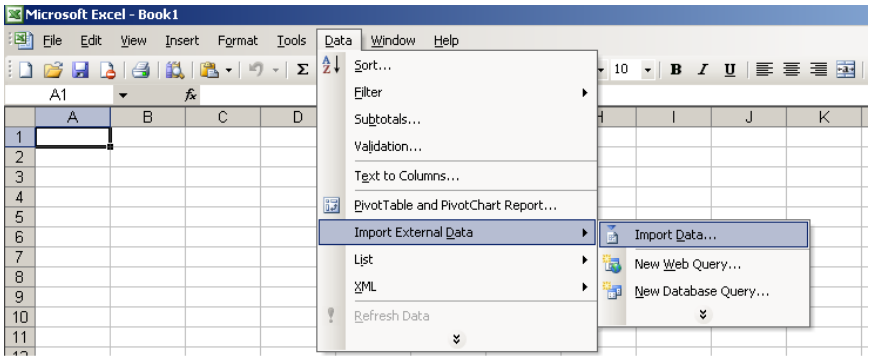


Header

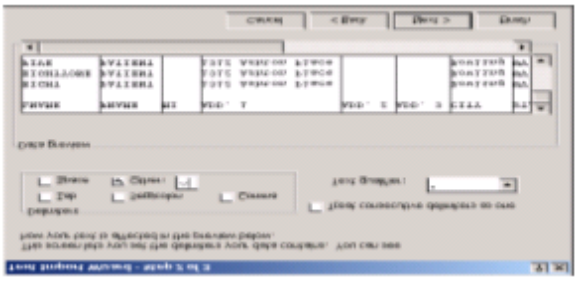
5. Import data into MS Excel 2003

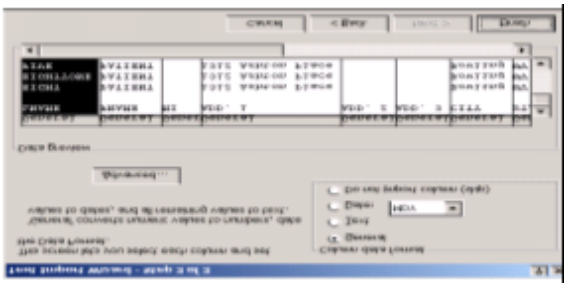
- Click on Data
- Select Import External Data
- Select Import Data



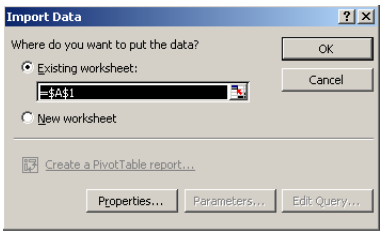
- Select the Notepad document
- Select delimited report and click Next

- Select other for the delimited
- Enter a "^" into the other box
- Click Next, then click Finish





i. Pick the spreadsheet



6. Import into MS Word 2003

Doing a mail merge with a letter that is already created.

- Click Next through Steps 1 and 2
- Select source document in Step 3
- Select Spreadsheet
- Insert Mail Merge Fields
- Align fields
- Type Letter Text

Steps to complete the merge.

- Merge to an email
- Merge to a printer
- Merge to a new document

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