Clinical Reminders

Manager Manual

Setup & Maintenance

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Office of Information
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Revision History

Date	Page	Change
August 2000	4, 150	Description of patch PXRM*1.5*1, Hep C Initiative, EPI Initiative, and Hepatitis Extract build. New report options with PXRM*1.5*1 for EPI
August 2000	45	New Reminder Term Descriptions
Oct – March 2001	3	Numerous fixes and enhancements with patch PXRM*1.5*2 are documented throughout; see the list of fixes and enhancements starting on page 3.
May 2001	8, 64	New options on CPRS Configuration menu – Patch PXRM*1.5*4
June 2001		New Menu, Reminder Sponsor Management
May-July 2001	Chapter 6	Patch 5 changes – Exchange Utility options

NOTE: Changes in the software for PXRM*1.5*5 are highlighted with a vertical bar and blue font, *except for Chapter 6, which is all new.*

Section I – Introduction

Overview

Version 1.5 of Clinical Reminders contains many new useful features for clinicians, as well as improved management tools for Clinical Reminders managers.

What are Clinical Reminders and what do they do for the Clinician?

- Inform clinicians when a patient is due to receive clinical activity.
- Target the location/provider that best manages the resolution clinical activity.
- Identify patients a reminder "applies" to, based on **V***IST***A** patient data.
- Identify what clinical activities "resolve or satisfy" the reminder.
- Summarize pertinent patient information to aid the clinician in deciding follow-up activity.
- Allow clinicians to resolve reminders through CPRS.

This manual describes how to set up clinical reminders to provide better patient care.

Related Documentation

Clinical Reminders Installation Guide
Clinical Reminders Clinician Guide
Clinical Reminders Exchange Utility Quick Reference Card
CPRS Online Help
Reminders help is included within the CPRS Help files, available from the Help menu on the CPRS GUI. Help can also be accessed on specific Reminders screens with the F1 key.

Related Web Sites

Clinical Reminders Page	http://VistA.med.va.gov/reminders
VISN 1 PCE Forum	http://vawww.med.va.gov/visn1
Pain Management Assessment Notebook	http://tspr.vista.med.va.gov/warboard/anotebk
VISN 12 Reminders	http://vaww.visn12.med.va.gov/cprs/Clin_Reminders_Index.htm
VISN 15 Reminders	http://152.131.71.182/CPRSPage/VISN15REMINDERS/VISN15 REMINDERS.htm
Mental Health Strategic Health Care Group- Clinical Reminders	http://vaww.mentalhealth.med.va.gov/clinical_reminders.htm
VISTA University CPRS Training	http://vaww.vistau.med.va.gov/VistaU/CPRS/

New Features in Clinical Reminders V. 1.5

- Streamlines the reminder definition and the tools used to create definitions
- Includes orderable items, medications, and mental health tests as patient findings
- Includes the use of result values
- Handles complex patient cohort logic and resolution logic
- Enhances patient data displayed in the reminder Health Summary components
- Provides "Point and click" reminder resolution processing through the Notes and Consults tabs in CPRS
- Provides new tools to define dialogs for reminders that are used in "point and click" resolution processing

Clinical Reminders Patches

PXRM*1.5*1 – Hepatitis C Extract

Patch PXRM*1.5*1 was released in September 2000 as part of the Hepatitis C Extract combined build. It added new data to existing files in the Clinical Reminders V. 1.5 package. It also added one new file that temporarily stores data extracted from reminder evaluation processing. This temporary data can be used for review and data validation of data extracted to update the EPI database, based on three reminder definitions:

VA-HEP C RISK ASSESSMENT
VA-NATIONAL EPI LAB EXTRACT
VA-NATIONAL EPI RX EXTRACT

The data extracted for risk assessment is based on the VA-HEP C RISK ASSESSMENT reminder definition. The data extracted from laboratory is based on the VA-NATIONAL EPI LAB EXTRACT reminder, previously distributed as VA-NATIONAL EPI DB UPDATE. Both of these reminders were first released in the Clinical Reminders V.1.5 package. A new reminder definition, VA-NATIONAL EPI RX EXTRACT, is distributed in this patch for extracting pharmacy data. These three reminder definitions provide the criteria for extracting the lab, pharmacy, and risk assessment data.

This patch also added 18 new reminder terms to the REMINDER TERM file (#811.5) and two new report options for reporting extract data.

PXRM*1.5*2 – Clinical Reminder Fixes and Enhancements

Patch 2 provides many fixes in response to NOIS, as well as several enhancements to reminder and dialog definitions. Many related changes have also been made in CPRS patch 85 that affect reminder dialog resolution through CPRS. These are described below.

1. Inquiry Option changes

- All inquiry functions were consolidated into a standard set of print templates and routines. Previously all fields in the FINDINGS multiple of the REMINDER DEFINITION (#811.9) and REMINDER TERM (#811.5) files were printed, even if they were null. Now only non-null fields will be printed. This will provide considerably shorter output.

- A bug in the taxonomy inquiry caused the ICD Operation/Procedure to be displayed incorrectly. This problem is corrected. NOIS: CIN-0900-42457, FAR-0800-40686, HUN-1000-20744, LAH-0101-60194, PHI-0101-20893, V01-0201-N0005.

- If display of the FINDINGS multiple required more than one page, there was no page breaking. Proper page breaking is now done.

2. Data dictionary changes

- A number of fields in the REMINDER TAXONOMY (#811.2) and REMINDER DEFINITION (#811.9) files were made obsolete when Clinical Reminders version 1.5 was released. These fields are deleted by this patch, as well as the associated AC and C cross references in file 811.9.

- Due to the way KIDS works, security codes were not properly set on the previously existing Clinical Reminders' files when Clinical Reminders version 1.5 was installed. The security codes are set to their proper values during the post-install.

- A VERSION field was added to CLINICAL REMINDER PARAMETERS file (#800) to store the current version number of the package. This patch will initially set the VERSION field to "1.5."

- The CONDITION field in the REMINDER TERM (#811.5) and REMINDER DEFINITION (#811.9) files was moved to a separate node. It now has a maximum length of 225 characters instead of 52. Also the new field CONDITION CASE SENSITIVE was added to the FINDINGS multiple in the same two files. When this has a value of "NO," the condition evaluation will not be case-sensitive. The default is "YES."

- The new field EFFECTIVE DATE was added to the FINDINGS multiple in the REMINDER TERM (#811.5) and REMINDER DEFINITION (#811.9) files. A finding with a date older than the EFFECTIVE DATE will be treated as false. An updated version of the VA-HEP C RISK ASSESSMENT reminder definition is included. In this definition the EFFECTIVE PERIOD of 2Y is replaced by an EFFECTIVE DATE of October 1, 1998.

3. Reminder Evaluation/Clinical Maintenance changes

- The Computed Finding VA-RACE was not returning the patient's race correctly. This was fixed. NOIS: CTX-0900-70341, WPB-0700-30774.

- Inpatient medications were not being found for drug findings. This was fixed. Drug finding evaluations were made more efficient. This also requires Outpatient Pharmacy patch PSO*7*54. NOIS: BRX-0900-12529.

- The code that calls the TIU object expansion was passing a pointer to the INSTITUTION file (#4) instead of the required HOSPITAL LOCATION file (#44). It was fixed. NOIS: FGH-0700-32788.

- When there was no match between any of the baseline age ranges and the patient's age, making the reminder N/A due to age, the output was still appearing in the Clinical Maintenance component even if IGNORE ON N/A was set. This was fixed.

- Locking of expanded taxonomies was made more robust. It no longer generates an error when it fails to get a lock. It now produces a "no lock" message. NOIS: CHA-0900-30869.

- A display of Problem List priorities (acute or chronic) was added in the Clinical Maintenance output. NOIS: UNY-0900-12325

- The wildcard form of IGNORE ON N/A was not working correctly when the reminder was N/A because the PATIENT COHORT LOGIC evaluated to false. This was fixed. NOIS: HOU-1100-72053

- A term with more than one drug finding was not always working correctly. This was fixed. NOIS: SAG-1200-40405

- A change was made in the calculation of the resolution date for complex resolutions. Previously, the most recent date was used. Now, if two findings are ANDed, the oldest date is used. If two findings are ORed, the most recent date is used. If the logic is complex, then the date is determined by using the above rules. NOIS: HIN-0900-40246, WRJ-0101-11399.

- When a health factor without a category, which is a required field, was encountered during the reminder evaluation, it caused a null subscript error. Now when a health factor without a category is encountered, a warning message will be sent to the user and the reminders mailgroup (if the mailgroup is defined). The health factor will be ignored in the reminder evaluation and the null subscript errors will be eliminated. NOIS: UNY-0900-10369

- When set, the IGNORE ON N/A field was suppressing the Summary component output in addition to the Maintenance component. It should suppress only the Maintenance component output. It now works correctly.

- The CONDITION field can now be used with all finding types. Previously, all drug findings, radiology procedures, and taxonomies would not allow the use of CONDITION because there is no value for these findings. These findings still do not return a value to test against, but there is now a standard set of variables that can be used in all CONDITIONS. These variables are:

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

- When there was no reminder frequency, the error message "Patient does not meet any age criteria" was displayed instead of "There is no reminder frequency." NOIS: MAC-0201-61450

- For a historical encounter, the internal entry number of the Institution file was displayed instead of the station number. A change was made to display the station number. NOIS: BUT-0201-22423.

- The format of the "Applicable" header, which groups together patients found in the patient cohort logic, was changed because it was causing some confusion. An example of how it now reads is:

  Applicable: Due every 1 year of 50 and older within cohort.

  The words "within cohort" were added to emphasize that this age range only applies to those patients in the cohort. If the reminder is N/A, the header is suppressed.

4. Reminder List Option changes

- When doing a Reminder List, typing a ^ at a prompt caused an undefined error instead of taking the user to the previous prompt. This was fixed. NOIS: HUN-0700-21914, HUN-1100-22185, SFC-1100-60475.

5. Reminder Dialog changes

- Dialog elements with sequence numbers >100 created by generating dialogs for reminders with >20 findings could not be edited unless the sequence number was first changed to <100. This is corrected and additional validation is also included to prevent duplicate sequence numbers being entered. NOIS: MIA-1100-32057, WPB-0800-30571.

- A dialog group could be entered as a dialog element within itself. The result was that stack errors were generated when running the reminder dialog containing the group multiple. The REMINDER DIALOG file (#801.41) is corrected so that a dialog group may no longer be entered as a dialog element within itself. NOIS: SLC-0800-52045 and WAS-0700-21656

- Autogenerated dialog elements for contraindicated immunizations included an additional prompt - PXRM VISIT DATE - that was not displayed in the reminder dialog. This is corrected so that the PXRM VISIT DATE prompt displays in the reminder dialog. NOIS: HUN-1000-21282

- Dialog elements for exams occasionally displayed a code value instead of the exam name in the encounter window of the reminder dialog. This is corrected to show the exam name. NOIS: SPO-1000-52529

- Editing dialog groups within the CV option of reminder dialogs now uses the same editor as is used for reminder dialogs. Dialog group elements may be edited, copied/renamed, or deleted. It is no longer necessary to build component dialog elements before building the dialog group. Elements may be created from within the dialog group screen. NOIS: WIC-1000-42229

- A problem was reported where the reminder categories in CPRS GUI display the wrong reminders. This is corrected. NOIS: SDC-1000-61815

- If a reminder taxonomy was created after the installation of the Clinical Reminders package, selectable codes were not generated for the taxonomy dialog. This is changed so that taxonomy dialog edit will auto-create the selectable codes if none exist. NOIS: CHA-1100-30888

- If multiple web sites were entered for a reminder and the first 30 characters of the URLs were the same, only the first of the web sites would display in the “reference information” section of the GUI. This is corrected. NOIS: MAC-1100-60409

- The GROUP ENTRY field of the REMINDER DIALOG file (#801.41) used for dialog groups is extended to allow a new code:

  3 None or One Selection

- The forced value "PXRM REPEAT CONTRAINDICATED" released with the reminder package had the default value incorrectly set to "yes." As a result, the contraindicated field in PCE was not being updated. This is corrected by setting the default value to 1.

- Dialog copy of additional prompts now allows the prompt to be changed into a forced value if the prompt updates PCE or Vitals data. NOIS HVH-1200-11111.

- Dialog edit screens now return to the selection screen from which the edit was initiated. NOIS: PUG-1200-52077

- CPRS Lookup Categories now display sub-categories in display order and show the display sequence number. NOIS: PUG-0101-50004

- The edit template for dialog groups (PXRM EDIT GROUP) now allows additional prompts for a group level finding to be excluded from progress note text. NOIS: WAS-0700-21999

6. Reminder Reports:
   - The Reminders Due Report displays "See below" if future appointments exist outside of the selected location and the "Display All Future Appointments" option is being used. NOIS: FAR-1000-42813

Related NOIS

```
BRX-0900-12529
BUT-0201-22423
CHA-0900-30869
CHA-1100-30888
CIN-0900-42457
CTX-0900-70341
EKH-1000-42980
FAR-0800-40686
FAR-1000-42813
FGH-0700-32788
HIN-0900-40246
HOU-1100-72053
HUN-0700-21914
HUN-1000-20744
HUN-1000-21282
HUN-1000-22185
```

```
HVH-1200-11111
LAH-0101-60194
MAC-1100-60338
MAC-1100-60409
MAC-0201-61450
MIA-1100-32057
PHI-0101-20893
PUG-1200-52077
PUG-0101-50004
SAG-1200-40405
SDC-1000-61815
SFC-1100-60475
SLC-0800-52045
SPO-1000-52529
UNY-0900-10369
UNY-0900-12325
V01-0201-N0005
WAS-0700-21656
WAS-0700-21999
WIC-1000-42229
WPB-0700-30744
WPB-0800-30571
WRJ-0101-11399
```

PXRM*1.5*3 – Reminder Expanded Taxonomy Delete

The EXPANDED TAXONOMIES file (#811.3) may have been rebuilt incorrectly during installation of the DRG Grouper Version 18.0 software, because the install of the ICD package deleted the globals for ICD Operation/Procedure (#80) and ICD Diagnosis (#80.1). If a reminder evaluation using a taxonomy was performed at that time, the EXPANDED TAXONOMY list for that taxonomy would be rebuilt with no codes or with an incomplete set. The impact of this is that reminders that include the taxonomy as a finding item don't evaluate correctly.

This patch must be loaded if the DRG Grouper Version 18.0 software has already been loaded. If the DRG Grouper Version 18.0 software has not yet been loaded, this patch should be loaded *immediately* after the DRG Grouper globals have been loaded.

The EXPANDED TAXONOMIES file is rebuilt whenever a taxonomy is edited or one of the source files has changed since the expansion was last done. The source files are ICD0, ICD9, and ICPT.

The post-install routine in this patch deletes the entries in the EXPANDED TAXONOMIES file (811.3). The entries in the EXPANDED TAXONOMIES file will be added as reminders using the codes are evaluated, either through the use of health summaries or on the CPRS coversheet.

Related NOIS

```
HUN-1200-20319
PAL-1200-60270
WAS-1200-20463
WIM-1200-20088
```

PXRM*1.5*4 – Reminder Dialog changes for V15 CPRS

This patch works in conjunction with many changes that have been made to reminder dialog resolution in CPRS v15 to make it easier for clinicians to resolve reminders in Notes or Summaries. *See the section, CPRS Reminder Configuration, later in this manual for descriptions of the changes listed below.*

Three new options have been added to the CPRS Reminder Configuration Menu [PXRM CPRS CONFIGURATION]:

- New Reminder Parameters [PXRM NEW REMINDER PARAMETERS] allows a user to modify the ORQQPX NEW REMINDER PARAMS parameter, which controls the parameters used to store cover sheet reminders.
- Default Outside Location [PXRM DEFAULT LOCATION] allows the default outside location for reminder dialogs to be specified at user, service, division or system level.
- 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 levels.

The patch includes three new RPCs for CPRS GUI V15 and also deletes 16 obsolete RPCs that are no longer required.

This patch also allows PXRM MENTAL HEALTH ACTIVE and PXRM GUI REMINDERS ACTIVE parameters to be selected by service.

NOIS Messages:
PUG-1000-51088

CPRS GUI v15 Reminders Enhancements

See the section, CPRS Reminder Configuration, later in this manual for descriptions of the changes listed below.

New Cover Sheet Reminder List Option

Users who are allowed access to the PXRM CPRS CONFIGURATION menu are allowed to modify the new reminder cover sheet parameters from within the CPRS GUI. This feature is available from the Edit Cover Sheet Reminder List menu option, under the Action menu of the Reminder Tree dialog. This dialog can be accessed even when the New Reminder Parameters setting is No, allowing for the setup of reminders before actually turning them on.

Reminders entered through this dialog are stored in the ORQQPX COVER SHEET REMINDERS and ORQQPX COVER SHEET REM CLASSES parameters. Since these parameters contain coded data, it is important that these parameters are not edited directly (they should only be

modified through this dialog). Note that the cover sheet reminders entered through this dialog will only be active on the cover sheet if the ORQQPX NEW REMINDER PARAMS parameter is set.

Templates

The new templating features give Reminders managers more power and flexibility for setting up different kinds of dialog screens for resolving reminders.

Reminder dialogs (not reminders) can be linked to templates, so that a reminder dialog can be selected from the templates drawer (reminder-specific text will not be inserted into the note when the Finish button is pressed). This enables templates to create orders, enter encounter data, vitals, and do everything else that a reminder dialog can do. When a template is defined as a reminder dialog type, a list of reminder dialogs contained in the TIU TEMPLATE REMINDER DIALOGS parameter is then available in the template editor that can be linked to that reminder dialog. This multiple-valued parameter can be set at the User, Service, Division, and System levels. Unlike most other parameters, this parameter is cumulative, in that reminder dialogs specified at any level can be linked to a template.

For more information about template functionality, see the demonstration on the Software Development & Design (SD&D) Clinician Desktop Project Notebook page:
http://tspr.vista.med.va.gov/warboard/ProjectDocs/ClinD_Maint/CPRSTemplating.zip

Other Changes

- Two new reminders categories are available: Not Applicable & All Evaluated
- You can specify which Categories will be displayed in the reminder tree view
- You can enter Vitals Date/Time and Service Connected information with a Dialog Visit Info button
- Required prompts in dialogs are now marked with an *
- You can use Default Outside Locations (defined in a new parameter – see previous page on patch 4 options)
- A non-proportional font is now used in reminder dialogs
- Reminder dialog-generated text can be inserted at the current cursor location rather than at the bottom of the note, if a new parameter is set (see previous page on patch 4 options)
- Visit Date Reminder Dialog Additional Prompts with a default value of 0 (zero) will not default to the current year (the year will be blank).

  0 - no year is initially set (forces required dates to be entered)
  M - Month is required
  M0 - Month is required, no year initially set

- Icon Legend – a non-modal dialog box that shows icons and their meanings can be opened and retained during a working session

PXRM*1.5*5 – Exchange Utility

The Clinical Reminders Exchange Utility provides a mechanism for exchanging reminder definitions and dialogs among sites within a VISN or throughout the VA. This exchange helps to support national and VISN-wide guidelines by standardizing the reminder definitions used. It also simplifies the process for creating reminder definitions and dialogs.

Patch 5 provides a new and improved version of the exchange utility that was distributed with Clinical Reminders through PCE. The original reminder exchange allowed reminder definitions to be packed directly into host files or MailMan messages and passed to other sites. At the receiving site, the components in the packed reminder could be installed by processing the entire list.

In the new version, reminder definitions are first packed into the Exchange File (#811.8) in XML format. A packed reminder or Exchange File entry contains reminder definitions, reminder findings, and reminder dialogs. Everything that is needed by the reminder to function is included. Whenever an installation is done, a history of the installation details is retained in the Exchange File.

Host file and MailMan messages are used to exchange packed reminders. Each host file or MailMan message may contain multiple packed reminders. At the receiving site, the incoming host file or MailMan message is loaded into the Exchange File. Each packed reminder in the host file or MailMan message creates a new entry in the Exchange File.

Exchange File entries may be selected for installation. Furthermore, components of the packed reminder may be selected individually for installation (for example, a dialog group within the reminder dialog). 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." Computed findings and the associated M routines are also included in the packed reminder, but may only be installed by users with programmer access.

Order dialogs (quick orders) will be treated like findings that are not transportable, for example lab tests. You will see them in the list so you will know they are used by the dialog but 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 delete it from the dialog.

Reminder File and Option Changes

1. The following fields have been added to reminder files 801.41, 811.2, 811.4, 811.5, and 811.9:

- *Class:* The class of the entry. Entries whose class is National can't be edited.
  N NATIONAL
  V VISN
  L LOCAL
- *Sponsor:* The name of a group or organization that sponsors the entry. This is a pointer to a new file, 811.6, Reminder Sponsor, introduced by this patch. Sponsor also has a Class, which must match the Class of the entry that points to the Sponsor.
  - *Review date:* Determines when the entry should be reviewed to verify that it is current with the latest standards and guidelines.
  - *Edit history:* At the end of a reminder entry edit, the edit history will be prompted if the entry has changed.

2. A new field, Usage, has been added to file 811.9, Reminder Definition. Its purpose is to allow the reminder creator to specify how the reminder can be used. This is a free-text field that can contain any of the following characters:

   C - CPRS (the reminder can be used in the CPRS GUI)
   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

   NOTE: Complete implementation of this functionality will require a future CPRS patch that changes the way the reminder selection tools work. You can enter these codes now, and they won't cause any problems, but they also won't have any effect until the CPRS patches are implemented.

3. A new menu, Reminder Sponsor Management, has been added that allows you to enter, edit, or list sponsors for reminder definitions.

4. Three new options have been added to the Reminder Information Only menu:
   TRL List Reminder Terms
   TRI Inquire about Reminder Term
   SL List Reminder Sponsors

Reminder Dialog Changes

1. The following obsolete fields are removed:

    - Exchange date
    - Last edit date
    - Autogenerate date

    This affects inquiry screens for reminder dialogs, dialog groups, dialog elements, additional prompts, forced values, result elements, and result groups.

2. The dialog edit option has been modified to allow dialog elements to be renamed even if they are used elsewhere (NOIS: PUG-0101-50058).

3. The dialog edit process now allows optional entry of 'ORDERABLE ITEM' on dialog elements (NOIS; ASH-0501-30504).

4. The processing of “EXCLUDE FROM P/N” field on dialog groups has been modified so that this only applies to the group header text. Individual elements in the group must now be marked “EXCLUDE FROM P/N” individually using the ED option in the group edit. All existing dialogs are automatically converted by the patch install.

Other Fixes

This patch also contains fixes for some problems reported by NOIS and discovered during testing.

1. The cross-reference on the URL field of the WEB multiple of the Reminder Definition file, data element 811.9002,.01, was only 30 characters long, even though the field has a maximum length of 128. Whenever two or more entries matched through the first 30 characters, selecting the correct entry was very difficult. The cross-reference has been changed to have the full 128-character length. Now when the user is doing a selection, the full URL is seen. NOIS: PUG-0201-50190

2. A new field, CHECKBOX SEQUENCE, has been added to dialog prompts. Previously, comment fields were created by adding prompt PXRM COMMENT to the dialog element. Each checkbox for the comment field then had to be created as an individual prompt and added to the dialog element. This process generated a large number of dialog components. Because it is desirable to minimize the number of dialog components being transferred in dialog exchange, a new simpler method has been created.

The PXRM COMMENT prompt is copied to a new prompt (e.g. INJECTION SITE) and multiple checkboxes can be added to the prompt using the new field's CHECKBOX SEQUENCE.

Example:

CHECKBOX SEQUENCE	TEXT
1	Right Deltoid
2	Left Deltoid

The new prompt (e.g. INJECTION SITE) is then added to the dialog element. PXRM COMMENT is not required on the element.

This does not affect dialogs created by the previous method.

3. The option "Do you want to edit now" after copying a reminder dialog is removed. Instead the list of dialogs for the reminder is displayed.

4. Dialogs beginning with VA- or having a national class can no longer be edited.

5. When the patient's age did not fall in any of the age ranges specified in the definition, the incorrect error message "There is no reminder frequency" was displayed in the Clinical Maintenance output. Also IGNORE ON N/A set to "A" would not suppress the Clinical Maintenance output. This has been corrected. NOIS: HUN-0401-22538.

6. If a cancelled lab result came after a completed result, the cancelled result was used, making the finding false. Now lab results will be scanned and the most recent result that is not cancelled or pending will be used. NOIS: WAS-0501-20895.

7. A bug was discovered that could cause omission of some inpatient medications for drug findings. A new field, RXTYPE, has been added to the finding multiple of file 811.5, Reminder Term, and file 811.9, Reminder Definition. This field applies only to drug findings. It allows you to choose whether the medication is inpatient, outpatient, or both. The default is both, which is consistent with the current behavior.

8. If a hard error occurred during reminder evaluation, the patient cache may have been left locked. Code was added to PXRMERRH to make sure that the patient cache gets unlocked.

Clinical Reminders and CPRS

See the *Clinical Reminders Clinician Guide* for more detailed descriptions of processing reminders in CPRS.

Clinicians now have many more interactive capabilities in using Clinical Reminders through the CPRS GUI. They first view reminders on the Cover Sheet. A snapshot view of procedures or actions that are due can be seen. Clinicians can take action on reminders from the Notes and Consults tabs. They can easily record information that "resolves" the reminder by checking off one of many resolution choices.

New Clinical Reminder Files Supporting GUI Processing

To enable the above capabilities, the Clinical Reminders package has been redesigned and enhanced with new files and parameters. These require setup by coordinators and technical staff at the medical centers, to allow maximum flexibility and local applicability.

Reminder Categories

- Allows flexible grouping of reminders
- Provides lists of reminders for selection based on a new Reminder Category parameter
- Useful for reporting

Reminder Finding Parameters

- Used to autogenerate reminder dialog for finding items in a reminder definition
- Allows sites to define which default parameters to use for each finding type and resolution status, such as prefix and suffix text to use to create sentences for the progress note
- Additional prompts to ask when the sentence is checked off

Reminder Dialog

- Stores the reminder dialog set that is used by the CPRS GUI to process a reminder
- Stores dialog sentences for finding items from the reminder definition, and their additional prompts
- Populated by autogeneration tools for a reminder
- Allows coordinators to define their own dialogs and modify autogenerated dialog entries for reminder resolution.

Clinical Reminder Statuses

When you look at the reminder output in CPRS and in Health Summaries, you will see a reminder status. The status is determined by evaluation of the PATIENT COHORT LOGIC and/or RESOLUTION LOGIC. These logic strings in turn depend on the other fields in the reminder definition, which are stored in the REMINDER DEFINITION file #811.9. The descriptions in the table below explain what each of the possible statuses mean.

Status	**Description**
DONE	When the final frequency for a reminder is 99Y (99 years), it is done once in a lifetime. When reminders with this frequency are resolved, they have the special status of DONE.
DUE NOW	There are two conditions that can make a reminder DUE NOW. The first is when the reminder has never been resolved in the past. The second is when the reminder has been resolved in the past but the amount of time specified by the final REMINDER FREQUENCY has been met or exceeded. For example, if the reminder was last resolved 18 months ago and the frequency is one year, the reminder is DUE NOW. If the frequency was 2 years, the status would be RESOLVED.
DUE SOON	The field DO IN ADVANCE TIME FRAME 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 beginning 11 months after it was last resolved. After one year has passed, the status would be DUE.
ERROR	This status is returned when there is an error that prevents the reminder from being properly evaluated. Depending upon how a site chooses to set things up, a MailMan message containing details of the error will be sent either to a mailgroup or the user. The error will also be put into the error trap.
N/A	A reminder is N/A (non-applicable) if the patient is not in the cohort or group of patients to which this reminder applies. The PATIENT COHORT LOGIC provides a precise description of the cohort. Examples of Findings that can be used to determine the cohort include sex, age, and diagnosis. The remaining resolution statuses apply only to reminders that are applicable.
NEVER	This status applies only to reminders that are resolved by an immunization. Immunizations can be marked as contraindicated in the V IMMUNIZATION file. When this is the case, the reminder will have the status of NEVER.
RESOLVED	A reminder is given a status of RESOLVED when all the criteria in the RESOLUTION LOGIC have been met and the amount of time specified by the reminder frequency has not passed. The criteria can be simple, such as having an immunization, or complex, such as an order for an inhaler and inhaler use education.

Section II – Implementing Clinical Reminders

Introduction

Implementing Clinical Reminders at your site is an ongoing process. Clinical and management groups need to evaluate the needs of your site. They should review and prioritize the clinical guidelines that need to be implemented at your site. The clinical reminders your site uses will probably change over time. For example, a new clinical guideline may require one or more new clinical reminders. When a reminder becomes outdated, it may be inactivated.

- Clinical Reminders Version 1.5 must be installed at your site.

- The basic **V***IST***A** infrastructure needs to be in place. Clinical Reminders searches for information relevant to the patient in data created by other **V***IST***A** packages. These packages include Mental Health, Lab, Order Entry, Patient Care Encounter (PCE), Pharmacy, PIMS, Radiology, and Vitals. The reminders can be displayed using the **V***IST***A** packages Health Summary, AICS, or CPRS.

- Determine the needs of your site – review and prioritize the clinical guidelines that need to be implemented at your site

- Once you have determined there is a need for a particular clinical reminder, create and test a reminder definition.

- To use a reminder, you must set it up to be available in the appropriate application. You may want it on a health summary for a specific clinic or on the CPRS GUI cover sheet for particular users. Several parameters must be set for those applications.

- If reminders will be resolved through Progress or Consults Notes in CPRS, you will need to create dialogs and link them to reminders.

Chapter 1: Defining Clinical Reminders

Overview

The Reminder Definition file has been simplified in Clinical Reminders V. 1.5, so that the target finding, health factor, computed findings and taxonomies are now all grouped together under a single "findings" multiple. Existing reminders are converted to the new format automatically when Version 1.5 is installed.

The reminder edit process has been modified to display all existing findings and then allow selection of findings by finding type. For existing reminders, it is no longer necessary to step through the entire reminder definition to make a change to an individual field. For the selected reminder, a sub-menu is displayed that allows selection of specific fields in the reminder definition for editing.

Defining a Working Clinical Reminder

There are two parts to creating a working clinical reminder.

- *Reminder definition:* This describes the patients the reminder applies to, how often it is given, and what resolves or satisfies the reminder.

- *Process Issues:* The process issues include who will use the reminder and how the data will be captured. The process issues are extremely important; if they are not worked out, the reminder will never function as intended, even if the definition is correct.

Steps to Define a Working Reminder

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

1. Write the reminder definition in a narrative form that clearly describes what you want the reminder to do.

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

   Reminders provide answers to the basic questions:
   - WHO (findings and patient cohort logic)
   - WHAT resolves the reminder (findings and resolution logic)
   - WHAT supporting information (findings that are not patient cohort and not resolution logic)
   - WHEN (frequency)
   - WHERE this reminder will likely be resolved (location/provider)

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

2. Review existing reminders to see if there is an existing reminder that is close to what you need.
   *List Reminder Definition*s, 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*, Reminder Definition Management Menu

5. Test your reminder definition by evaluating the reminder for test patients. You should have patients who are in the cohort and who are not in the cohort. For patients who are in the cohort, you should have some who have the reminder resolved and some who do not.
   Options: *Test Reminder* on the Reminder Management Menu, Health Summary Coordinator's Menu; Clinical Maintenance in 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:
    a. Add it to a health summary
    b. Add it to an encounter form
    c. Within CPRS :
        - Add it to the CPRS GUI Cover Sheet Reminders List
        - Add it to CPRS Lookup Categories

    Using Clinical Reminders and Clinical Reminder Dialogs in the CPRS GUI requires certain parameters to be set; for example: **CPRS Lookup Categories, GUI Resolution parameter, and Mental Health dialog resolution parameter.**

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

Steps 1 - 3 are described in this chapter. Steps 5 – 7 are described in succeeding chapters.

See Appendix A for a checklist and an example of defining a reminder and creating a dialog.

Detailed Steps To Define A Working Reminder

The following pages show examples of performing the steps for defining a reminder using the options on the Reminder Definition Manager menu.

Step 1. Write the definition in narrative format.

Diabetic patients should have a diabetic eye exam done yearly.

Step 2. Review existing reminders, using the List Reminder Definitions and Inquire About Reminder Item options.

List Reminder Definitions (RL)

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

Example: List Reminder Definitions by National Reminders

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

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

A reminder list will be created using the following criteria:
  List all reminders?  NO
  List all local reminders?  NO
  List only reminders starting with (prefix)?  VA-
  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>
```

List Reminder Definitions, cont'd

```
REMINDER DEFINITION LIST                        MAR  2,2000  10:21    PAGE 1
  -------------------------------------------------------------------------------
Name:        VA-*BREAST CANCER SCREEN
Print Name:  Breast Cancer Screen

Class:                        NATIONAL
Sponsor:
Review Date:
Usage:                        CPRS
Priority:

Reminder Description:
    Mammogram should be given every 2 years to female patients, ages 50-69.

    The "VA-*Breast Cancer Screen" reminder is based on the following "Breast
    Cancer Detection" guidelines specified in the VHA HANDBOOK 1101.8,
    APPENDIX A.

         Target Condition: Early detection of breast cancer.

         Target Group:     All women ages 50-69.

         Recommendation:   All women ages 50-69 should receive a mammogram
                           every two years.

         Goals for FY2000: At least 60% of women ages 50-69 have received a
                           mammogram within the preceding two years.

Findings:
  Finding Item:  VA-MAMMOGRAM/SCREEN (FI(1)=TX(16))
  Finding Item:  INACTIVATE BREAST CANCER SCREE (FI(2)=HF(42))
  Finding Item:  ACTIVATE BREAST CANCER SCREEN (FI(3)=HF(43))

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

Expanded Patient Cohort Logic:
     (SEX)&(AGE)&'FI(INACTIVATE BREAST CANCER SCREEN)

Default RESOLUTION LOGIC defines findings which can resolve the Reminder:
     FI(1)

Expanded Resolution Logic:
      FI(VA-MAMMOGRAM/SCREEN)
------------------------------------
.
.
.
-----------------------------------
Name:        VA-DIABETIC EYE EXAM
Print Name:  Diabetic Eye Exam
Priority:
```

```
Reminder Description:

   Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
    done yearly.

Findings:
  Finding Item:  DIABETIC EYE EXAM (FI(1)=EX(3))
  Finding Item:  VA-DIABETES (FI(2)=TX(28))

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

Expanded Patient Cohort Logic:
     (SEX)&(AGE)&FI(VA-DIABETES)

Default RESOLUTION LOGIC defines findings that resolve the Reminder:
     FI(1)

Expanded Resolution Logic:
     FI(DIABETIC EYE EXAM)
^
```

Inquire About Reminder Item (RI)

After reviewing reminder definitions with the List Reminder Definitions, you can select a specific reminder to see all the details.

NOTE: As a result of changes in Patch 2, only the fields in the findings multiple that have entries (non-null) will be printed.

```
Select Reminder Definition Management Option: RI  Inquire about Reminder Definition
Select Reminder Definition: VA-DIABETIC EYE EXAM
DEVICE: <Enter>  ANYWHERE    Right Margin: 80// <Enter>
```

```
REMINDER DEFINITION INQUIRY                  Jun 21, 2001 11:06:10 am  Page 1
-------------------------------------------------------------------------------

VA-DIABETIC EYE EXAM               No.  17
---------------------------------------------

Print Name:                    Diabetic Eye Exam
Class:                         NATIONAL
Sponsor:
Review Date:
Usage:                         CPRS
Related VA-* Reminder:
Reminder Dialog:
Priority:

Reminder Description:
    Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
    done yearly.

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

Edit History:

Baseline Frequency:
      Do In Advance Time Frame:  Do if DUE within 1 month
                  Sex Specific:
                 Ignore on N/A:
       Frequency for Age Range:  0Y - Not Indicated for all ages
                    Match Text:
                 No Match Text:

Findings:

                 Finding Item: DIABETIC EYE EXAM  (FI(1)=EX(3))
```

Inquire about Reminder Definition, cont'd

```
                Finding Type: EXAM
      Use in Resolution Logic: OR

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

General Patient Cohort Found Text:

General Patient Cohort Not Found Text:

General Resolution Found Text:

General Resolution Not Found Text:

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

Expanded Patient Cohort Logic:
     (SEX)&(AGE)&FI(VA-DIABETES)

Default RESOLUTION LOGIC defines findings that resolve the Reminder:
     FI(1)

Expanded Resolution Logic:
     FI(DIABETIC EYE EXAM)

Web Sites:
```

Step 3. Copy the reminder you wish to use as a basis for your local reminder, and edit it as necessary. Use either the Copy Reminder Definition or Add/Edit Reminder Definition option.

Copy Reminder Definition (RC)

This option allows you to copy an existing reminder definition into a new reminder definition in the REMINDER DEFINITION file (#811.9). The original reminder definition to be copied is selected first. You will then be prompted for a new unique name. Once a new name is defined for the new reminder definition, the new reminder definition can be edited.

Several predefined reminder definitions were distributed with the PCE package, based on the Ambulatory Care EP Preventative Health Maintenance Guidelines. 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.

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. Multiple findings can be entered.

NOTE: The reminder edit process has been modified so that all existing findings are displayed first and then you can select findings by finding type. For existing reminders, it is no longer necessary to step through the entire reminder definition to make a change to an individual field. For the selected reminder, a sub-menu is displayed that allows selection of specific fields in the reminder definition for edit.

Copy Reminder Definition Example

NOTE: See page 33 for descriptions of each of the prompts (fields).

```
Select Reminder Definition Management Option: RC  Copy Reminder Definition

Select the reminder item to copy:  VA-DIABETIC EYE EXAM
PLEASE ENTER A UNIQUE NAME: JG-DIABETIC EYE EXAM
The original reminder VA-DIABETIC EYE EXAM has been copied into JG-DIABETIC EYE
EXAM.
Do you want to edit it now? YES
     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: All reminder details
```

Copy Reminder Definition, cont'd

```
NAME: JG-DIABETIC EYE EXAM  Replace

PRINT NAME: Diabetic Eye Exam// <Enter>

Class:                          NATIONAL
Sponsor: <Enter>
Review Date: <Enter>
Usage: C//

RELATED REMINDER GUIDELINE: <Enter>
INACTIVE FLAG: <Enter>
REMINDER DESCRIPTION:
  1>Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
  2>done yearly.
EDIT Option: <Enter>
TECHNICAL DESCRIPTION:
  1>This reminder is based on the Diabetic Eye Exam reminder from the New
  2>York VAMC which was designed to meet the guidelines defined by the PACT
  3>panel.  Additional input came from the Saginaw VAMC.
EDIT Option: <Enter>
PRIORITY: 3

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

Baseline frequency age range set
Select REMINDER FREQUENCY: 0Y// <Enter>
  REMINDER FREQUENCY: 0Y// <Enter>
  MINIMUM AGE: <Enter>
  MAXIMUM AGE: <Enter>
  AGE MATCH TEXT:
  1><Enter>
  AGE NO MATCH TEXT:
  1><Enter>
Select REMINDER FREQUENCY: <Enter>
Findings
Choose from:
EX      DIABETIC EYE EXAM
TX      VA-DIABETES


Select FINDING: TX.VA-DIABETES

     Searching for a REMINDER TAXONOMY, (pc
  VA-DIABETES     Diabetic diagnosis codes
         ...OK? Yes// <Enter>  (Yes)
```

NOTE: 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, followed by a period, then the finding name. This tells FileMan exactly where to find it and avoids long searches. See page 36 for a list of abbreviations for findings types.

Copy Reminder Definition, cont'd

```
FINDING ITEM: VA-DIABETES// <Enter>
MINIMUM AGE: <Enter>
MAXIMUM AGE: <Enter>
REMINDER FREQUENCY: 1Y// <Enter>
RANK FREQUENCY: <Enter>
USE IN RESOLUTION LOGIC: <Enter>
USE IN PATIENT COHORT LOGIC: AND// <Enter>
EFFECTIVE PERIOD: <Enter>
EFFECTIVE DATE: <Enter>
USE INACTIVE PROBLEMS: <Enter>
CONDITION: <Enter>
CONDITION CASE SENSITIVE: <Enter>
FOUND TEXT:
  1>Diabetic eye exam required annually for all diabetic patients.
  2>with HTN.
EDIT Option: <Enter>
NOT FOUND TEXT:
  1>No history of diabetes on file.
EDIT Option: <Enter>
Select FINDING: <Enter>

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): <Enter>
GENERAL RESOLUTION FOUND TEXT:
  1><Enter>
GENERAL RESOLUTION NOT FOUND TEXT:
  1><Enter>

Reminder Dialog
LINKED REMINDER DIALOG: <Enter>

Web Addresses for Reminder Information
Select URL: <Enter>

     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: <Enter>
Select Reminder Management Option: <Enter>
```

Add/Edit Reminder Definition

You can define a reminder through this option or through the Copy Reminder Definition, as described on preceding pages.

The reminder edit process has been modified so that all existing findings are displayed first and then you can select findings by finding type. For existing reminders, it is no longer necessary to step through the entire reminder definition to make a change to an individual field. For the selected reminder, a sub-menu is displayed that allows selection of specific fields in the reminder definition for edit.

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
          L         Logic
          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>
```

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.
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.
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) 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 NOTE: To enter more than one code, type the codes with no spaces or punctuation between them.
RELATED REMINDER GUIDELINE	If this local reminder replaces an NCHP related reminder, then identify the related NCHP reminder here. The National Center for Health Promotion (NCHP) has identified reminders that must be tracked at local facilities and reported on to Congress. The reminders that address the NCHP reminders are prefixed with "VA-*". These reminders may be used in the Health Summary Components, or replaced by a local reminder that also satisfies the NCHP guideline.
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."

Reminder Definition Fields, cont'd

Name	Description
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.

Name	Description
CUSTOMIZED PATIENT COHORT LOGIC	(Optional) This field may be used to define a customized Boolean logic string that defines how and what findings in a reminder should be used to determine if the reminder applies to the patient. The customized logic is used when the USE IN PATIENT COHORT LOGIC fields associated with each finding do not provide the ability to create the required logic string. (e.g., grouping various findings within parenthesis) 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	(Previously USE IN DATE DUE CALC) This field may be used to define a customized Boolean logic string that defines how and what reminder findings should be used to determine if the reminder has been resolved. The customized logic is used when the USE IN RESOLUTION LOGIC fields associated with each finding do not provide the ability to create the required logic string. (e.g., grouping various findings within parenthesis) Tip: Before defining the Boolean string, review the default logic defined in the DEFAULT RESOLUTION LOGIC field using the reminder inquiry option. Boolean Operators AND (&), AND NOT (&'), OR (!), OR NOT (!') The package uses these to build the logic strings Example FI(1)&(FI(3)!FI(7))
GENERAL RESOLUTION FOUND TEXT	This text will be displayed in the Clinical Maintenance component if the reminder has been resolved.
GENERAL RESOLUTION NOT FOUND TEXT	This text will be displayed in the Clinical Maintenance component if the reminder has not been resolved.
LINKED REMINDER DIALOG	This is the Reminder Dialog that will be used when the reminder is processed in the 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 the heart of the reminder definition. Findings have three functions in reminder definitions:

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

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	UI
Radiology Procedure	71	RP
Reminder Computed Finding	811.4	CF
Reminder Taxonomy	811.2	TX
Reminder Term	811.5	RT
Skin Test	9999999.28	ST
VA Drug Class	50.605	DC
VA Generic	50.6	DG
Vital Measurement	120.51	VM

☞ **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

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

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

- If you want to know if the patient had the drug within the last 45 days, you would use an EFFECTIVE PERIOD of "45D."
- If you want to know if the patient had taken the drug on or since October 1, 1998, use an EFFECTIVE DATE of October 1, 1998.
- If you want to know if the patient is on the drug today, use an EFFECTIVE PERIOD of "0D."
- If you want to know if the patient has ever taken the drug, then you would leave both the EFFECTIVE PERIOD and EFFECTIVE DATE blank.

STATUS is not used in evaluating drug findings, since it does not accurately reflect when the patient was actually taking the drug. For informational purposes, STATUS will be displayed on the Clinical Maintenance output for drug findings.

Education Topic – Education topics are found in the EDUCATION TOPICS file #9999999.09. Results for individual patients are found in the V PATIENT ED file #9000010.16. The 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 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 value used for the CONDITION is LEVEL/SEVERITY. Possible values are:
'M' FOR MINIMAL
'MO' FOR MODERATE
'H' FOR HEAVY/SEVERE

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

Health Factors have a field called ENTRY TYPE. There are two possible values for this field: CATEGORY and FACTOR. Each factor health factor must belong to a category. This provides a way to group health factors. Examples of categories are alcohol 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 has several uses. One is to activate and inactive a reminder for a patient. You can use the inactivate health factor in the PATIENT COHORT LOGIC with a value of AND NOT. This will make it so any patient who has the inactivate health factor will be excluded from the cohort. When you need to reactivate the reminder for the patient, give the patient the activate health factor. Since it is more recent than the inactivate health factor and they are in the same category, it will take precedence and the inactivate health factor will be treated as false. Smoking is another example. If the patient is currently a smoker, the patient can be given a current smoker health factor. Reminders that apply only to smokers would use the current smoker health factor in the PATIENT COHORT LOGIC with a value of AND. If the patient quits smoking, he can be given a health factor of non-smoker. Since smoker and non-smoker are in the same category, the reminders for smokers will no longer apply to the patient.

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

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

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

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

```
'P' FOR PARTIALLY COMPLETE
'C' FOR COMPLETE
'B' FOR BOOSTER
'1' FOR SERIES 1
'2' FOR SERIES 2
'3' FOR SERIES 3
'4' FOR SERIES 4
'5' FOR SERIES 5
'6' FOR SERIES 6
'7' FOR SERIES 7
'8' FOR SERIES 8
```

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

Mental Health Instrument – Mental Health Instruments are found in the MENTAL HEALTH INSTRUMENT file #601. Data for a test in the MENTAL HEALTH INSTRUMENT file and a selected patient is found using a Mental Health API. The 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. 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 Elements to the MH Instrument tests Dialog Element RESULT GROUP/ELEMENT field. This result dialog may define further processing to conditionally generate progress note text based on the SCORE.

Orderable Item – Orderable Items are found in the ORDERABLE ITEMS file #101.43. Data for an orderable item and a selected patient are found using an OE/RR API. If there are orders for the orderable item with a status of ACTIVE or PENDING, the finding will be true unless it has expired due to the EFFECTIVE PERIOD or EFFECTIVE DATE. The date used is the START DATE. If no ACTIVE or PENDING orders are found, then the one with the most recent date is used; however, by default, the finding will be false. You will need to use the CONDITION field to make findings that do not have a status of ACTIVE or PENDING true.
The value for the CONDITION is the order status.

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

discontinued	complete	hold
flagged	pending	active
expired	scheduled	partial results
delayed	unreleased	renewed
discontinued/edit	cancelled	lapsed
no status		

OE/RR displays these as lower-case and that is how the API returns them; *t**herefore the** CONDITION **field must use lower-case***. For example if you want orders whose status is complete, then the CONDITION field should be I V="complete." Note: You can set the field CONDITION CASE SENSITIVE to NO to make the CONDITION not case-sensitive.

Radiology Procedure – Radiology procedures are found in the RAD/NUC MED PROCEDURES file #71. Data for a radiology procedure and a selected patient is found using a Radiology API. The status can be one of the following: CANCELLED, COMPLETED, IN PROGRESS, or NONE. Procedures with a status of CANCELLED or NONE are not used. Only COMPLETED procedures can cause the finding to be true. If there is an IN PROGRESS procedure that is more recent than a COMPLETED one, or there is no COMPLETED procedure, information about the IN PROGRESS procedure is displayed in the Clinical Maintenance component.

Reminder Findings, cont'd

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 section on Computed Findings later in this chapter for more details.

Exported computed findings

COMPUTED FINDING	VALUE	CONDITION Examples
VA-BMI	Patient's body mass index	I V>26
VA-DATE OF BIRTH	Patient's date of birth in FileMan format: 1/1/45 is represented as 2450101	I V>2450000 represents patients born 1945 and later.
VA-DATE OF DEATH	Patient's date of death in FileMan format. This will have a value only if the patient is deceased.	I V>2450101
VA-PRIMARY CARE PROVIDER	Patient's primary care provider. This is the name field from file #200, the NEW PERSON file. If no primary care provider has been assigned this will be null.	I V="" Note: This would check for no primary care provider.
VA-PRIMARY CARE TEAM	Patient's primary care team. This is the name field from file #404.51, the TEAM file. If no primary care team has been assigned this will be null.	I V="" Note: This would check for no primary care team.
VA-RACE	Patient's race. This will correspond to one of the entries in the name field of file #10, the RACE file. These will be in the form RACE.	I V["BLACK" Note: this would find all entries in the RACE file containing "BLACK."

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.

Reminder Findings, cont'd

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

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

USE INACTIVE PROBLEMS – Normally, Problem List problems that are marked as inactive are ignored during the reminder evaluation. If you want them to be used, give this field a value of "YES."

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

KEYWORD	MEANING
IN	Search in the inpatient data file PTF
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 section later in this chapter that describes Reminder Taxonomy options.

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

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

See the section later in this chapter that describes Reminder Term options.

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

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

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

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 entries are found in the GMRV VITAL MEASUREMENT file #120.5. A Vitals API is used to obtain the information for a selected measurement and patient. The value for the CONDITION is RATE, which is the value of the measurement. If you are going to use a CONDITION with this finding, you need to be familiar with how the Vitals package returns the Rate data. For example, if the vital sign is weight, the Rate will be a number that is the weight in pounds. If the vital sign is blood pressure, the rate will have the form systolic/diastolic. If you want the finding to be true only for systolic pressures greater than 140, then the CONDITION would be I $P(V,"/",1)>140. If you want it to be true for diastolic pressures greater than 90, the CONDITION would be I $P(V,"/",2)>90. Finally, if you want it to be true for systolic pressures greater than 140 and diastolic pressures greater than 90, the CONDITION would be I ($P(V,"/",1)>140)&($P(V,"/",2)>90).

Findings Fields

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

MINIMUM AGE, MAXIMUM AGE, and FREQUENCY – These are treated as a set that we can call a frequency age range set. If a finding is true then the frequency age range set will override the baseline frequency age range set. This is used when a finding should override the baseline. For example, a patient with a particular health factor needs to get the reminder at an earlier age than normal and it should be done more frequently.

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.

EFFECTIVE PERIOD – This field lets you give a finding a finite lifetime. It is input in the standard time format of nD, nM, nY, where n is a number and D stands for days, M for months, and Y for years. Thus, to give a finding a lifetime of two years, you would input 2Y. If today's date is greater than the date of the finding plus the EFFECTIVE period, then the finding will be false. When this field is left blank, the finding will never expire.

EFFECTIVE DATE – The function of this field is similar to EFFECTIVE PERIOD only instead of specifying an amount of time a specific date is given. If the date of the finding is older than the EFFECTIVE DATE the finding will be false.

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. If you are not clear about this, see the Health Factor section. The default is to use only the most recent Health factor within a category. A problem can arise if there are two or more Health factors within a category and they both have the same date. (This can happen if both Health factors are given during the same encounter.) When the dates are the same, the Health factor with the highest WITHIN CATEGORY RANK will be used. This is a numerical value like RANK FREQUENCY with 1 being the highest rank.

Reminder Findings, cont'd

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

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

PXRM*1.5*2: The CONDITION field now has a maximum length of 225.

CONDITION CASE SENSITIVE. When this field is set to "NO" then the CONDITION will not be case-sensitive. The default is case-sensitive.

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

Reminder Findings, cont'd

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

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

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

When using PXMRSEX in a CONDITION, you can use it a number of ways.
Examples:
I $P(PXRMSEX,"^",1)="M" I $P(PXRMSEX,"^",2)="MALE" I PXRMSEX['["FE"
I $P(PXRMSEX,"^",1)="F" I $P(PXRMSEX,"^",2)="FEMALE" I PXRMSEX["FE"
The first set selects male patients while the second set selects female patients.

Reminder Findings Condition Table

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

Finding Type	Results File	Result Fields that can be used in CONDITION	Data example	CONDITION field example
Drug (50)		NONE – but you can use EFFECTIVE PERIOD of 0D, 0M, OR 0Y in the reminder definition to restrict view to current medications only		
Education Topic (9999999.09)	V PATIENT ED (9000010.06)	LEVEL OF UNDERSTANDING	1 for Poor 2 for Fair 3 for Good 4 for Group-no Assessment 5 for Refused	I V=1 I V=2 I V=3 I V=4 I V=5
Exam (9999999.15)	V EXAM (9000010.13)	RESULT	A for Abnormal N for Normal	I V="A" I V="N"
Health Factor (9999999.64)	V HEALTH FACTOR (9000010.23)	LEVEL/SEVERITY	M for Minimal MO for Moderate H for Heavy/Severe	I V="M" I V="MO" I V="H"
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
Mental health Instrument (601)		RAW SCORE from API based on a scale	3 (CAGE)	I V>2
Orderable Item (101.43)				

MH Scale – This is applicable only to Mental Health Instrument findings. The scale can be selected by scale number or scale name.

Reminder Findings, cont'd

RXTYPE - This field is a set of codes that applies only to drug findings. It can be used to make the finding so it will use only inpatient or only outpatient drugs. If this field is empty, it will use both. The possible values are:

B BOTH
I INPATIENT
O OUTPATIENT

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.

Exported Reminders

A set of reminder definitions is distributed with the package. You can use them as examples and templates for creating your own reminders to meet local needs. As described earlier in this chapter, this is done by first copying the VA- reminder definition to a local definition and then editing the local definition. If the VA- reminder *does* meet your local needs, you can use it directly.

NOTE: The VA-* prefix indicates that the reminder was approved by the National Center for Health Promotion (NCHP). The VA- prefixed reminders were approved by the Ambulatory Care Expert Panel (now defunct).

```
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-*HYPERTENSION SCREEN
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-BLOOD PRESSURE CHECK
VA-BREAST EXAM
VA-BREAST SELF EXAM EDUCATION
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-HEP C RISK ASSESSMENT
VA-INFLUENZA VACCINE
VA-MAMMOGRAM
VA-NATIONAL EPI LAB EXTRACT
VA-NATIONAL EPI RX EXTRACT
VA-NUTRITION/OBESITY EDUCATION
VA-PAP SMEAR
VA-PNEUMOVAX
VA-PPD
VA-PSA
VA-SEATBELT EDUCATION
VA-TOBACCO EDUCATION
VA-WEIGHT
```

Reminder Taxonomies

Taxonomies are coded data that use 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. Options on the Taxonomy Management Menu let you view and edit taxonomy definitions.

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	Edit Taxonomy Item	PXRM TAXONOMY EDIT	This option is used to edit Reminder Taxonomy Item definitions.
TC	Copy Taxonomy Item	PXRM TAXONOMY COPY	This option allows the user to copy an existing taxonomy definition into a new taxonomy entry in the REMINDER TAXONOMY file (#811.2).

Taxonomy Fields

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.
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.
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. If a taxonomy is inactive, it cannot be selected as a finding in a reminder definition.
ICD0 Range of Coded Values (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 Coded Values (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 Coded Values	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.

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.

List Taxonomy Definitions (TL)

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

```
Select 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 (TI)

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

```
Select 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                Apr 05, 2000 12:04:15 pm  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

      Code      ICD Diagnosis
      ----      -------------
      V06.6     PROPHY VACC STREP PNEU&FLU


ICD0 Codes:

    Range  99.55-99.55

      Code      ICD Operation/Procedure
      ----      -----------------------
      99.55     VACCINATION NEC

    Range  99.59-99.59

      Code      ICD Operation/Procedure
      ----      -----------------------
      99.59     VACCINATION/INNOCULA NEC
```

Inquire about Taxonomy Item, cont'd

```
CPT Codes:

    Range  G0009-G0009

      Code      CPT Short Name
      ----      --------------
      G0009     Admin pneumococcal vaccine

    Range  90732-90732

      Code      CPT Short Name
      ----      --------------
      90732     PNEUMOCOCCAL VACCINE, ADULT

Select Reminder Taxonomy: <Enter>
```

Edit Taxonomy Item (TE)

Use this option to edit a single taxonomy definition.

```
Select Taxonomy Management Option: TE Edit Taxonomy Item

Select Reminder Taxonomy Item:  SLC DIABETES     SLC DIABETES CODES

General Taxonomy Data
NAME: SLC DIABETES// <Enter>
BRIEF DESCRIPTION: SLC DIABETES CODES// <Enter>

CLASS:   LOCAL
SOURCE:
REVIEW DATE:

PATIENT DATA SOURCE: ?
     Answer must be 1-40 characters in length.

This is a list of comma separated patient data sources.
You may use any combination of valid entries.
Valid entries are:
  IN - inpatient from PTF
  INDXLS - inpatient DXLS diagnosis only
  INPR - inpatient primary diagnosis only
  EN - encounter PCE data
  ENPR - encounter PCE data primary diagnosis only
  PL - Problem List
  RA - radiology CPT only

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 (TC)

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

```
Select 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.

Reminder Terms

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

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

A term's Class can be:

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

These options will be useful in the future for national guidelines/reporting. The Reminder Term functionality will allow you to map local or VISN-level findings to national terms.

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	Reminder Term Edit	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 (TL)

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

```
Select Reminder Term Management Option: TL  List Reminder Terms
DEVICE: <Enter>  ANYWHERE    Right Margin: 80// <Enter>
REMINDER TERM LIST                            MAY  8,2001  12:33    PAGE 1
-----------------------------------------------------------------------------
DECLINED HEP C RISK ASSESSMENT
    Class:        National
    Date Created: APR 24,2000
    Sponsor:      INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Review Date:
    Description:  This term represents patient declined or refused to have
                  the Hepatitis C Risk Assessment.  Add any health factors or
                  other finding items that your local site uses to represent
                  this term.
    Findings:     DECLINED HEP C RISK ASSESSMENT

HEP C VIRUS ANTIBODY NEGATIVE
    Class:        National
    Date Created: MAY  4,2000
    Sponsor:      INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Description:  This term represents positive test results on laboratory
                  tests for Hepatitis C virus antibody.  Add the local
                  hepatitis C virus antibody laboratory tests as findings for
                  this term. Include the CONDITION field to check for the
                  negative result value.
    Findings:

HEP C VIRUS ANTIBODY POSITIVE
    Class:        National
    Date Created: MAY 4,2000
    Sponsor:      INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Description:  This term represents positive test results on laboratory
                  tests for Hepatitis C virus antibody. Add the local
                  hepatitis C virus antibody laboratory tests as findings for
                  this term. Include the CONDITION field to check for the
                  positive result value.
    Findings:

HEPATITIS C INFECTION
    Class:        National
    Date Created: MAY 4,2000
    Sponsor:      INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Description:  This term represents patient diagnosed with Hepatitis C
                  infection.
    Findings:     VA-HEPATITIS C INFECTION
```

List Reminder Terms, cont'd

```
NO RISK FACTORS FOR HEP C
    Class:        National
    Date Created: APR 24,2000
    Sponsor:      INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Description:  This term represents patient findings that indicate the
                  patient has no risk factors related to Hepatitis C. Add any
                  health factors or other finding items that your local site
                  uses to represent this term.
    Findings:     NO RISK FACTORS FOR HEP C
PREVIOUSLY ASSESSED HEP C RISK
    Class:        National
    Date Created: APR 24,2000
    Sponsor:      INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Description:  This term is available for patients who have previously had
                  an assessment completed at an institution outside the VA
                  system, at another VA site, or from historic records on
                  site that may be unavailable in the current VistA/CPRS
                  system (i.e. archived electronic information, or
                  information contained within a paper chart not in the
                  computer system).

                  This term is primarily used to resolve the National
                  Hepatitis C Risk Assessment Clinical Reminder.  However, if
                  the patient has had a previous positive test, previous
                  positive diagnosis for hepatitis C disease that has been
                  verified, but that the computer algorithm did not capture,
                  use one of this terms findings (health factor, education
                  topic,...) to resolve the Clinical Reminder. Further, you
                  will be given the opportunity to place a Free text comment
                  on where and when this previous assessment occurred and
                  what criteria (i.e. lab test, diagnosis) were used.  For
                  example, if you choose this option, you could then type
                  into the free text section ("Previous positive Hepatitis C
                  antibody test at St. X hospital in Local City, State on
                  March 2000").
  Findings:     PREV POSITIVE TEST FOR HEP C

RISK FACTOR FOR HEPATITIS C
    Class:        National
    Date Created: APR 24,2000
    Sponsor:      INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
    Description:  This term represents findings that indicate the patient has
                  risk factors for Hepatitis C. Add any health factors or
                  other finding items that your local site uses to represent
                  this term.
    Findings:     RISK FACTOR FOR HEPATITIS C
```

Inquire about Reminder Term (TI)

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

```
Select Reminder Term Management Option: TI  Inquire about Reminder Term
Select Reminder Term: HBs Ab positive    NATIONAL
         ...OK? Yes// <Enter>  (Yes)

DEVICE: <Enter>  ANYWHERE    Right Margin: 80// <Enter>
```

```
REMINDER TERM INQUIRY                           Jun 22, 2001 8:56:32 am  Page 1
-------------------------------------------------------------------------------

HBs Ab positive                                                    No.24
-----------------------------------------------------------------------------
Class:                  NATIONAL
Sponsor:                INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ
Date Created:           MAY 31,2000
Review Date:

Description:
    This term represents reminder tests for Hepatitis B surface antibody
    positive.

    Enter findings from the laboratory test file that are used locally to
    represent this term. Use the condition field to clearly identify the
    positive results. e.g., I (V["positive")!(V="+")

    In order for the VHA to do surveillance for Hepatitis B, the Infectious
    Disease Program Office is looking for laboratory evidence of infection
    with hepatitis B.  This laboratory evidence of infection includes the
    standard serological marker of the presence of Hepatitis B surface
    antibody.

Edit History:

    Edit Date: SEP  1,2000              Edit By:
    Edit Comments:

Findings:



Select Reminder Term:
```

Reminder Term Edit (TE)

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

Reminder Term Edit Example

Mapping the local term, HEP B SURFACE Ag, to the National term, HBs

```
Select Reminder Term Management Option: TE Reminder Term Edit
Select Reminder Term: HBs
         ...OK? Yes// <Enter>  (Yes)

Select FINDING ITEM: HEP B SURFACE Ag
  FINDING ITEM: HEP B SURFACE Ag// <Enter>
  EFFECTIVE PERIOD: <Enter>
  USE INACTIVE PROBLEMS: YES
  WITHIN CATEGORY RANK: <Enter>
  CONDITION: I (V["POS")!(V="+")
  MH SCALE: <Enter>
Select FINDING ITEM: <Enter>
Select Reminder Term: <Enter>
```

This is the local finding that is mapped to the national term, HBs

Copy Reminder Term (TC)

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

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

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

Exported Reminder Terms

```
   ALANINE AMINO (ALT) (SGPT)           NATIONAL
   BILIRUBIN                            NATIONAL
   DECLINED HEP C RISK ASSESSMENT       NATIONAL
   HAV Ab positive                      NATIONAL
   HAV IgG positive                     NATIONAL
   HAV IgM Ab positive                  NATIONAL
   HBc Ab IgM positive                  NATIONAL
   HBe Ag positive                      NATIONAL
   HBs Ab positive                      NATIONAL
   HBs Ag positive                      NATIONAL
   HEP C VIRUS ANTIBODY NEGATIVE        NATIONAL
   HEP C VIRUS ANTIBODY POSITIVE        NATIONAL
   HEPATITIS C INFECTION                NATIONAL
   INTERFERON ALFA-2A                   NATIONAL
   INTERFERON ALFA-2B                   NATIONAL
   INTERFERON ALFA-2B/RIBAVIRIN         NATIONAL
   INTERFERON ALFA-3N                   NATIONAL
   INTERFERON ALFACON-1                 NATIONAL
   INTERFERON BETA-1A                   NATIONAL
   INTERFERON BETA-1B                   NATIONAL
   NO RISK FACTORS FOR HEP C            NATIONAL
   PREVIOUSLY ASSESSED HEP C RISK       NATIONAL
   RIBAVIRIN                            NATIONAL
   RISK FACTOR FOR HEPATITIS C          NATIONAL
   TRANSFERASE (AST) (SGOT)             NATIONAL
```

Computed Findings

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

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

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

Steps to Create a Computed finding

1. Write an M routine.

The routine takes the following arguments: (DFN, TEST,DATE,VALUE,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.
- DATE is the date of the finding in FileMan format. Set it to null if the finding is false.
- VALUE is a value for the finding to be used by the CONDITION field. Setting this is optional.
- TEXT is text to be displayed in the Clinical Maintenance output. Setting this is optional.

Whenever you create a computed finding, make sure that you “new” all the variables you use, to avoid strange side effects.

Computed Findings, cont'd

2. Enter your computed finding into the Reminders package.

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

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

Complete each of these four 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.

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: AJEYRM01
ENTRY POINT: TEST
PRINT NAME: Test Computed Finding
DESCRIPTION:
  1>
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
```

3. Placing the finding into your reminder

Now that the finding is created and entered/registered, you may use it just like any other finding would be used. The prefix for adding it to the list of findings is CF. and you can choose whether it belongs to the patient cohort logic or the resolution logic. Simply keep in mind what it means to have your finding TRUE or FALSE. Here is an example of using the GMRA finding to identify patients that have no allergy assessment data on their electronic chart. This method uses the scenario that it is DUE for all patients (no specific cohort logic), and RESOLVED by a TRUE computed finding (patient *has* data in ART package).
The (short) version of setting it up is captured here.

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

Example: Test for whether patient is an inpatient

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

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

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

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.

Reminder Computed Findings Menu

The options on this menu provide tools for managing computed findings used in clinical reminders.

Synonym	Option	Option Name	Description
CFL	Reminder Computed Finding List	PXRM COMPUTED FINDING LIST	This option lists the computed findings that are defined at a site.
CFE	Reminder Computed Finding Edit	PXRM COMPUTED FINDING EDIT	This option provides for editing of computed finding entries in the REMINDER COMPUTED FINDINGS file. To use this option, you must have programmer access.

Reminder Computed Finding List (CFL)

```
Select Reminder Computed Finding Management Option: CFL  Reminder Computed Finding
List
DEVICE: <Enter>  ANYWHERE    Right Margin: 80// <Enter>
     Computed Finding List                          JUN 19,2001  14:42    PAGE 1
   -------------------------------------------------------------------------------
Name: Calculate BMI>27                 Print Name: Calculate BMI>27
Entry Point: OBESE                     Routine: PXRMOBES
Class: LOCAL                           Sponsor:
Review Date:
Name: FIRST CF ENTRY TEST              Print Name: FIRST CF ENTRY
Entry Point: TAG                       Routine: ROUTINE
Class: LOCAL                           Sponsor:
Review Date: JUN 19,2001

Name: NCG MST                          Print Name: MST
Entry Point: MST                       Routine: AFRREM
Class: LOCAL                           Sponsor:
Review Date:

Name: SECOND CF DESCRIPTION            Print Name: SECOND CF DESCRIPTION
Entry Point: TAG                       Routine: ROUTINE1
Class: LOCAL                           Sponsor:
Review Date:
```

Computed Findings, cont'd

```
Name: VA-BMI                          Print Name: BMI
Entry Point: BMI                      Routine: PXRMBMI
Class: NATIONAL                       Sponsor:
Review Date:

Name: VA-DATE OF BIRTH                Print Name: Date of Birth
Entry Point: DOB                      Routine: PXRMPDEM
Class: NATIONAL                       Sponsor:
Review Date:

Name: VA-DATE OF DEATH                Print Name: Date of Death
Entry Point: DOD                      Routine: PXRMPDEM
Class: NATIONAL                       Sponsor:
Review Date:

Name: VA-PRIMARY CARE PROVIDER        Print Name: PCMM Primary Care Provider
Entry Point: PROVIDER                 Routine: PXRMPCIN
Class: NATIONAL                       Sponsor:
Review Date:

Name: VA-PRIMARY CARE TEAM            Print Name: PCMM Primary Care Team
Entry Point: TEAM                     Routine: PXRMPCIN
Class: NATIONAL                       Sponsor:
Review Date:

Name: VA-RACE                         Print Name: Race
Entry Point: RACE                     Routine: PXRMPDEM
Class: NATIONAL                       Sponsor:
Review Date:

Press RETURN to continue...

   CFL    Reminder Computed Finding List
   CFE    Reminder Computed Finding Edit

Select Reminder Computed Finding Management Option:
```

Reminder Computed Finding Edit (CFE)

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

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

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

NAME: Calculate BMI>27// <Enter>
ROUTINE: PXRMOBES// <Enter>
ENTRY POINT: OBESE// <Enter>
PRINT NAME: Calculate BMI>27// <Enter>
DESCRIPTION:
  1>
CLASS: LOCAL// <Enter>
SPONSOR: Guidelines Committee
REVIEW DATE: T+90

Select Reminder Computed Finding:<Enter>
```

Reminder Sponsor Management

Your site can designate a group or organization as a sponsor of reminders and reminder components that you use in your VISN or site. This allows clinicians and coordinators to be aware of the derivation and basis for any reminder definition being used at your site. The Reminder Sponsor Management menu contains two options to let you add, edit, or display reminder sponsors.

List Reminder Sponsors (LS)

This option is used to get a list of the Reminder Sponsors at your site.

```
Select Reminder Sponsor Management Option: SL  List Reminder Sponsors
DEVICE:   ANYWHERE    Right Margin: 80//
REMINDER SPONSOR LIST                          JUN  8,2001  10:41    PAGE 1
NAME                                                                CLASS
---------------------------------------------------------------------------
A NEW SPONSOR                                                       VISN
Performance Measures Committee                                      VISN
Guidelines committee                                                LOCAL
INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ                            NATIONAL
NEW REMIND                                                          LOCAL
PJH                                                                 NATIONAL
SLC OIFO DEVELOPMENT                                                NATIONAL
```

Edit Reminder Sponsor

This option lets you edit existing reminder sponsors for your site or VISN or to enter a new reminder sponsor. This is the name of a group or organization that sponsors reminder components.

NOTE: Once a Sponsor is in use, it cannot be edited.

```
Select Reminder Sponsor Management Option: se  Edit Reminder Sponsor

Select Reminder Sponsor: ?
    Answer with REMINDER SPONSOR NAME
   Choose from:
   A NEW SPONSOR         VISN
   INFECTIOUS DISEASES PROGRAM OFFICE, VAHQ         NATIONAL
   NEW         LOCAL
   PJH         NATIONAL
   SLC OIFO DEVELOPMENT         NATIONAL

        You may enter a new REMINDER SPONSOR, if you wish
        Enter the sponsor, up to 64 characters.

Select Reminder Sponsor: HOSPITAL COMMITTEE
  Are you adding 'HOSPITAL COMMITTEE' as
    a new REMINDER SPONSOR (the 9TH)? No// Y  (Yes)
   REMINDER SPONSOR CLASS: L  LOCAL
Checking usage ...
NAME: HOSPITAL COMMITTEE// <Enter>
CLASS: LOCAL// <Enter>

Select Reminder Sponsor:  <Enter>
```

The Class of the Sponsor must match the Class of the entry that points to the Sponsor.

Chapter 2: Testing Reminder Definitions

Reminder Test Option

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

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

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

```
REMINDER DEFINITION INQUIRY                    Feb 22, 2001 11:18:56 am  Page 1

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

VA-DIABETIC EYE EXAM               No.  17
---------------------------------------------

Print Name:                    Diabetic Eye Exam

Class:                         NATIONAL
Sponsor:
Review Date:
Usage:                         CPRS

Related VA-* Reminder:

Reminder Dialog:

Priority:

Reminder Description:
    Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
    done yearly.
```

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

Baseline Frequency:

      Do In Advance Time Frame:  Do if DUE within 1 month
                  Sex Specific:
                 Ignore on N/A:
       Frequency for Age Range:  0Y - Not Indicated for all ages
                    Match Text:
                 No Match Text:

Findings:
                 Finding Item: DIABETIC EYE EXAM  (FI(1)=EX(3))
                 Finding Type: EXAM
      Use in Resolution Logic: OR

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

General Patient Cohort Found Text:

General Patient Cohort Not Found Text:

General Resolution Found Text:

General Resolution Not Found Text:

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

Expanded Patient Cohort Logic:
     (SEX)&(AGE)&FI(VA-DIABETES)

Default RESOLUTION LOGIC defines findings that resolve the Reminder:
     FI(1)

Expanded Resolution Logic:
     FI(DIABETIC EYE EXAM)

Web Sites:
```

Test option output for this reminder

```
Select Reminder Managers Menu Option: RT  Reminder Test
Select Patient: BABBITT,THEODORE        5-19-46    448668832     YES     SC V
ETERAN
 Enrollment Priority:            Category: IN PROCESS    End Date:

Select Reminder: VA-DIABETIC EYE EXAM
The elements of the FIEV array are:
FIEV(1)=1
FIEV(1,"DATE")=3010110E
FIEV(1,"FINDING")=3;AUTTEXAM(
FIEV(1,"RESULT")=
FIEV(1,"SOURCE")=129;AUPNVXAM(
FIEV(1,"VALUE")=
FIEV(1,"VIEN")=4647
FIEV(2)=1
FIEV(2,"CODEP")=851
FIEV(2,"DATE")=3000317.08
FIEV(2,"FINDING")=28;PXD(811.2,
FIEV(2,"SOURCE")=2082;AUPNVPOV
FIEV(2,"VIEN")=3787
FIEV("DFN")=54
FIEV("PATIENT AGE")=48

The elements of the ^TMP(PXRMID,$J) array are:
^TMP(PXRMID,$J,17,"EXAM DIABETIC EYE EXAM")=01/10/2001 (E) Exam: DIABETIC EYE EX
AM
^TMP(PXRMID,$J,17,"FINDING 2_FOUNDB")=Diabetic eye exam required annually for al
l diabetic patients.  with
^TMP(PXRMID,$J,17,"FINDING 2_FOUNDC")=HTN.
^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","CODE")=250.01
^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","DATE")=3000317.08
^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","DIAG")=DIABETES MELLI W/0 COMP TYP I
^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","PN")=DIABETES MELLITUS WITHOUT MENTION OF C
OMPLICATION; TYPE 1 (IDDM) (JUVENILE TYPE), NOT STATED AS UNCONTROLLED
^TMP(PXRMID,$J,17,"PATIENT COHORT LOGIC")=1^(SEX)&(AGE)&FI(2)^(1)&(1)&1
^TMP(PXRMID,$J,17,"REMINDER NAME")=Diabetic Eye Exam
^TMP(PXRMID,$J,17,"RESOLUTION LOGIC")=1^(0)!FI(1)^(0)!1
^TMP(PXRMID,$J,17,"zFREQARNG")=Due every 1 year for all ages

The elements of the ^TMP("PXRHM",$J) array are:
^TMP("PXRHM",$J,17,"Diabetic Eye Exam")=RESOLVED^3020110^3010110
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",1)=
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",2)=Applicable: Due every 1 year for
 all ages within cohort.
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",3)=03/17/2000 Encounter Diagnosis:
250.01 DIABETES MELLI W/0 COMP TYP I
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",4)=  Prov. Narr. - DIABETES MELLITU
S WITHOUT MENTION OF COMPLICATION;
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",5)=TYPE 1 (IDDM) (JUVENILE TYPE), N
OT STATED AS UNCONTROLLED
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",6)=Diabetic eye exam required
```

```
annually for all diabetic patients.  with
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",7)=HTN.
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",8)=
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",9)=Resolution: Last done 01/10/2001
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",10)=01/10/2001 (E) Exam: DIABETIC EYE
EXAM
```

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

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

1. the exam DIABETIC EYE EXAM
2. the taxonomy VA-DIABETES.

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

```
The elements of the FIEV array are:

FIEV(1)=1

FIEV(1,"DATE")=3010110E

FIEV(1,"FINDING")=3;AUTTEXAM(

FIEV(1,"RESULT")=

FIEV(1,"SOURCE")=129;AUPNVXAM(

FIEV(1,"VALUE")=

FIEV(1,"VIEN")=4647
```

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

The date of the finding in FileMan format. The E means it's historical.

The finding is entry 3 in the Exam File.

The patient data came from the V Exam file and is entry 129.

The entry in the Visit File is 4647.

The entries in FIEV(2) show us what was found for the taxonomy:

```
FIEV(2)=1

FIEV(2,"CODEP")=851

FIEV(2,"DATE")=3000317.08

FIEV(2,"FINDING")=28;PXD(811.2,

FIEV(2,"SOURCE")=2082;AUPNVPOV

FIEV(2,"VIEN")=3787

FIEV("DFN")=54

FIEV("PATIENT AGE")=48
```

The ICD9 code is entry 851 in the ICD9 File.

The taxonomy is entry 28.

The patient data is entry 2082 in the V POV file.

The patient's DFN is 54.

The patient's age is 48.

The next section gives us additional information:

```
The elements of the ^TMP(PXRMID,$J) array are:

^TMP(PXRMID,$J,17,"EXAM DIABETIC EYE EXAM")=01/10/2001 (E) Exam: DIABETIC EYE EX

AM

^TMP(PXRMID,$J,17,"FINDING 2_FOUNDB")=Diabetic eye exam required annually for al

l diabetic patients.  with

^TMP(PXRMID,$J,17,"FINDING 2_FOUNDC")=HTN.

^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","CODE")=250.01

^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","DATE")=3000317.08

^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","DIAG")=DIABETES MELLI W/0 COMP TYP I



^TMP(PXRMID,$J,17,"ICD9VPOV 250.01","PN")=DIABETES MELLITUS WITHOUT MENTION OF C

OMPLICATION; TYPE 1 (IDDM) (JUVENILE TYPE), NOT STATED AS UNCONTROLLED

^TMP(PXRMID,$J,17,"PATIENT COHORT LOGIC")=1^(SEX)&(AGE)&FI(2)^(1)&(1)&1

,17,"REMINDER NAME")=Diabetic Eye Exam


^TMP(PXRMID,$J,17,"RESOLUTION LOGIC")=1^(0)!FI(1)^(0)!1

^TMP(PXRMID,$J,17,"zFREQARNG")=Due every 1 year for all ages
```

The date of the exam in a standard format.

Age range found text.

The ICD9 code 250.01 was found in the V POV File.

The diagnosis and provider narrative.

The patient cohort logic evaluated to true.

This is what each of the logic elements evaluated to. 1 is true and 0 is false,

The actual Patient Cohort Logic. It matches what you see in the inquiry.

Resolution Logic in the same format as the Patient Cohort Logic.

Final frequency and age range.

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

This is the status, the due date, and the last done date. The rest of the lines are in their final format.

```
The elements of the ^TMP("PXRHM",$J) array are:
^TMP("PXRHM",$J,17,"Diabetic Eye Exam")=RESOLVED^3020110^3010110
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",1)=
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",2)=Applicable: Due every 1 year for
 all ages within cohort.
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",3)=03/17/2000 Encounter Diagnosis:
250.01 DIABETES MELLI W/0 COMP TYP I
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",4)=  Prov. Narr. - DIABETES MELLITU
S WITHOUT MENTION OF COMPLICATION;
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",5)=TYPE 1 (IDDM) (JUVENILE TYPE), N
OT STATED AS UNCONTROLLED
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",6)=Diabetic eye exam required annua
lly for all diabetic patients.  with
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",7)=HTN.
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",8)=
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",9)=Resolution: Last done 01/10/2001
^TMP("PXRHM",$J,17,"Diabetic Eye Exam","TXT",10)=01/10/2001 (E) Exam: DIABETIC EYE
EXAM
```

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?
8. 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.

1. **Evaluate Reminder**

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

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

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

2. **Evaluate Processed Reminders**

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

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

   NOTE: 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.

Chapter 3: Activating Clinical Reminders in CPRS

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

1. Add it to a health summary
2. Add it to an encounter form
3. Activate CPRS parameters:
   - Add it to the CPRS GUI Cover Sheet Reminder List
   - Add it to CPRS Lookup Categories
   - Activate the GUI Resolution parameter
   - Activate the Mental Health dialog resolution parameter
   - Activate the New Reminders Parameters
   - Set Default Outside Location
   - Set Position Reminder Text at Cursor

Activate/Inactivate Reminders (RA)

Use this option to make individual reminders active or inactive in CPRS, Health Summary, and Encounter Forms.

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

CPRS Reminder Configuration Menu [PXRM CPRS CONFIGURATION]

The options to maintain reminder categories and to implement reminders within CPRS are on this menu.

Syno-nym	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.
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.
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.
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 a level, 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.
NP	New Reminder Parameters	PXRM NEW REMINDER PARAMETERS	This option allows a user to modify the ORQQPX NEW REMINDER PARAMS parameter, which controls which parameters are used to store cover sheet reminders.

Add/Edit Reminder Categories (CA)

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

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.

Add/Edit Reminder Categories cont'd

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 (CL)

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" 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:  GREEN,JON     jg

------- Setting Reminder Categories for Lookup  for User: GREEN,JON -------
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
   JEREMY'S REMINDER CATEGORY
   Pain Management
   SLC REMINDER CATEGORY
   SUBSTANCE ABUSE
   USH POLICY
   Usability Test Reminders
   WEIGHT AND NUTRITION

Reminder Category: JON'S REMINDER CATEGORY
         ...OK? Yes// <Enter>  (Yes)

Select Display Sequence: <Enter>
```

CPRS Cover Sheet Reminder List (CS)

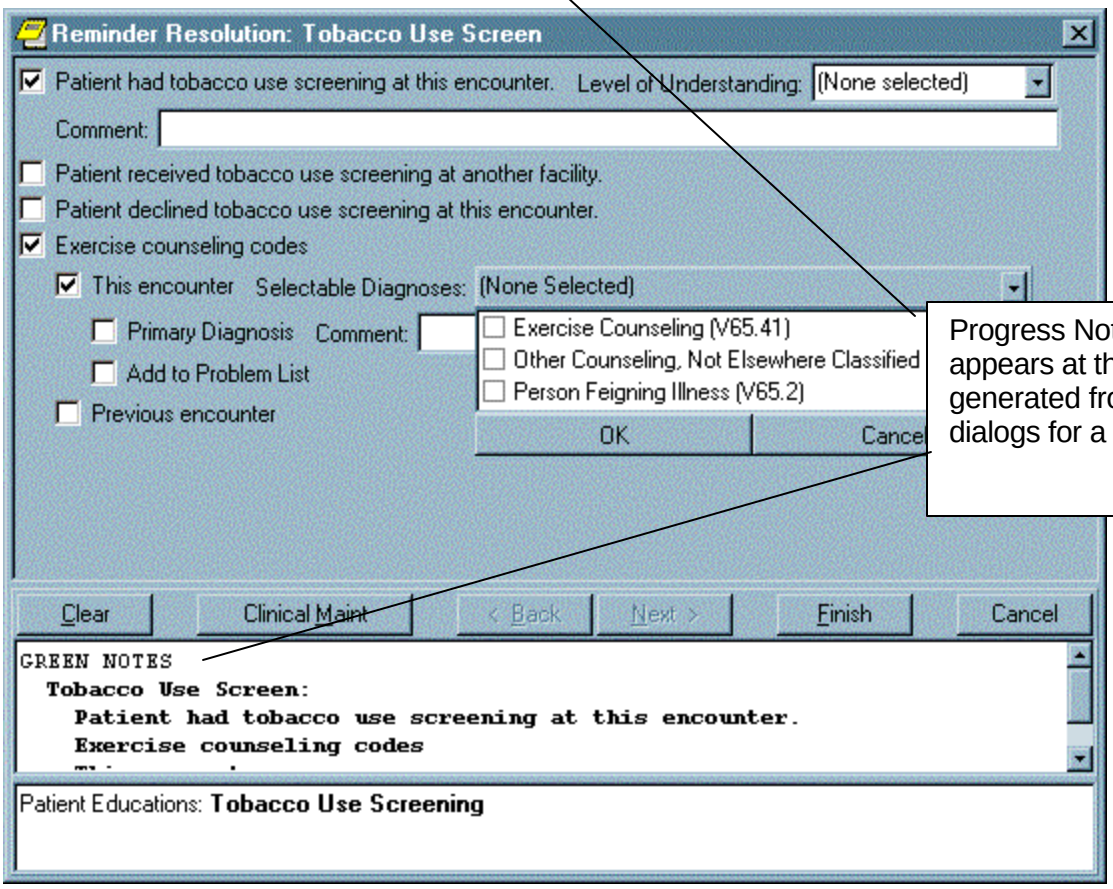
Use this option to enter reminders that will be displayed on the CPRS cover sheet if the New Reminder Parameter option is set to No.

```
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: green,JON       jg

-------- Setting Clinical Reminders for Search  for User: GREEN,JON --------
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>
```

Progress Note Headers (PN)

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.

```
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: GREEN,JON     jg

------------ Setting Progress Note Header  for User: GREEN,JON -------
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.

Mental Health Mental Health Dialogs Active [PXRM MENTAL HEALTH 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:    GRIN,JO     jg

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

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


You have PENDING ALERTS
          Enter  "VA   VIEW ALERTS     to review alerts

Select CPRS Reminder Configuration Option: <Enter>
```

Reminder GUI Resolution Active (RA)

This option lets you activate GUI reminder resolution processing at a user, service, division, or system level. When activated, a reminders drawer is available on the notes tab for selecting and processing reminders.

```
Select CPRS Reminder Configuration Menus Option: RA  Reminder GUI Resolution Active

Reminders Active may be set for the following:

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

Enter selection: 1  User   NEW PERSON
Select NEW PERSON NAME:  GREEN,JON     jg

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

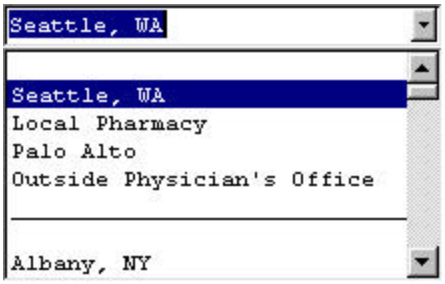
Default Outside Location

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: GRIN,JON     jg
---------- Setting Default Outside Locations  for User: GREEN,JOANN ----------
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>    GRIN,JON     jg

------ Setting Position Reminder Text at Cursor  for User: GREEN,JOANN ------
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
```

New Reminder Parameters

This option lets you activate a new parameter (ORQQPX NEW REMINDER PARAMS) for editing cover sheet reminders.

Cover Sheet Reminder List Edit

You can change the list of reminders that appears on the Cover Sheet from two places:

- Action Menu in Available Reminders window
- Options under Tools Menu

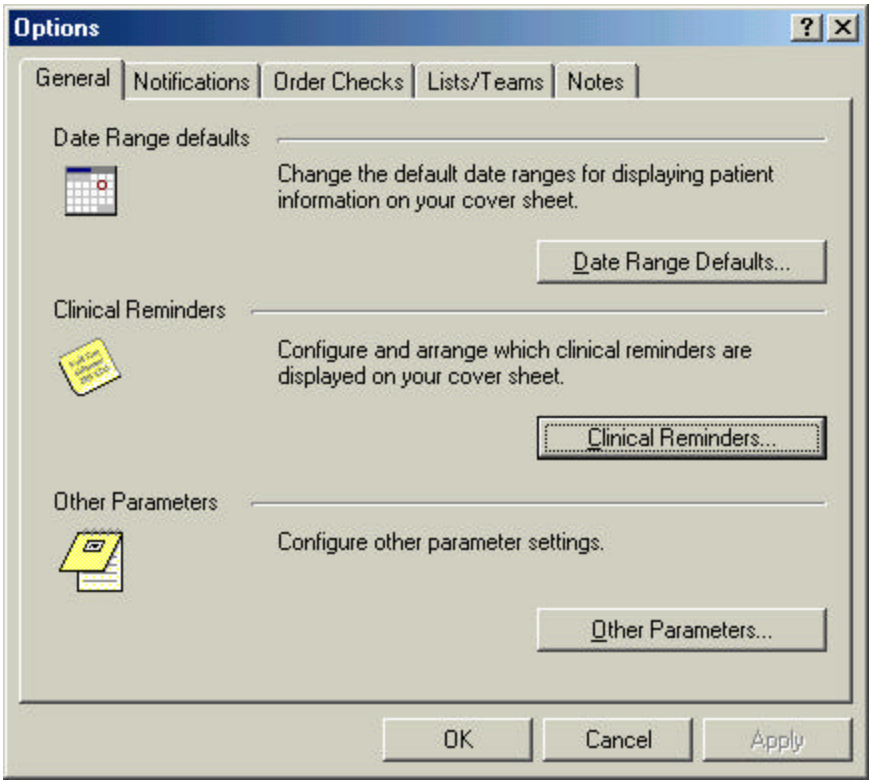
If you click on the Reminders button on the CPRS Cover Sheet, the Available Reminders window opens. You can select the Action menu, and then select Edit Cover Sheet Reminders List. You can also reach this same option from the Tools menu on the Cover Sheet, then selecting Options, and then Reminders.

Activating ORQQPX NEW REMINDER PARAMS) determines which of two dialogs you will see, *Clinical Reminders on Cover Sheet* or *Clinical Reminders and Reminder Categories Displayed on Cover Sheet*. Instructions for using these dialogs are given following a description of the New Reminder Parameters option.

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:    GREEN,JOANN     jg

--------- Setting Use New Reminder Parameters  for User: GREEN,JOANN ---------
USE NEW REMINDER PARAMS: ?

Use New Reminder Cover Sheet Parameters (0=No, 1=Yes).

     Select one of the following:

          0         NO
          1         YES

USE NEW REMINDER PARAMS: YES
```

Options under Tools Menu



Click on Clinical Reminders to configure reminders or to arrange which clinical reminders are displayed on the Cover Sheet.

A parameter setting determines which of two dialogs you will see:

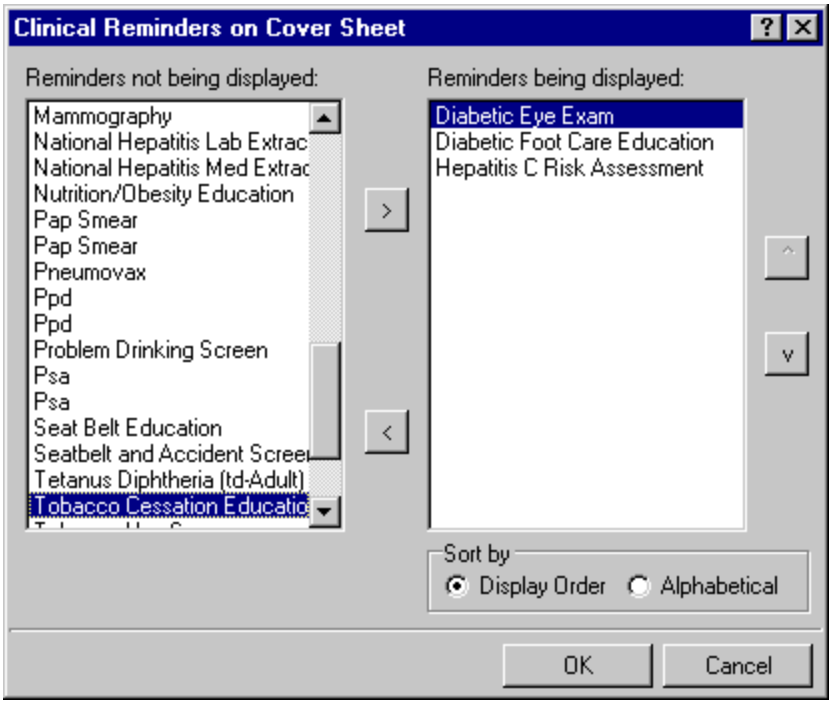
- Clinical Reminders on Cover Sheet
- Clinical Reminders and Reminder Categories Displayed on Cover Sheet

Your Clinical Coordinator sets the reminders parameter.

Clinical Reminders on Cover Sheet

From the dialog, 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.



Clinical Reminders and Reminder Categories Displayed on Cover Sheet

This advanced dialog provides more management capabilities than the first dialog. The dialog consists mainly of three large list areas.

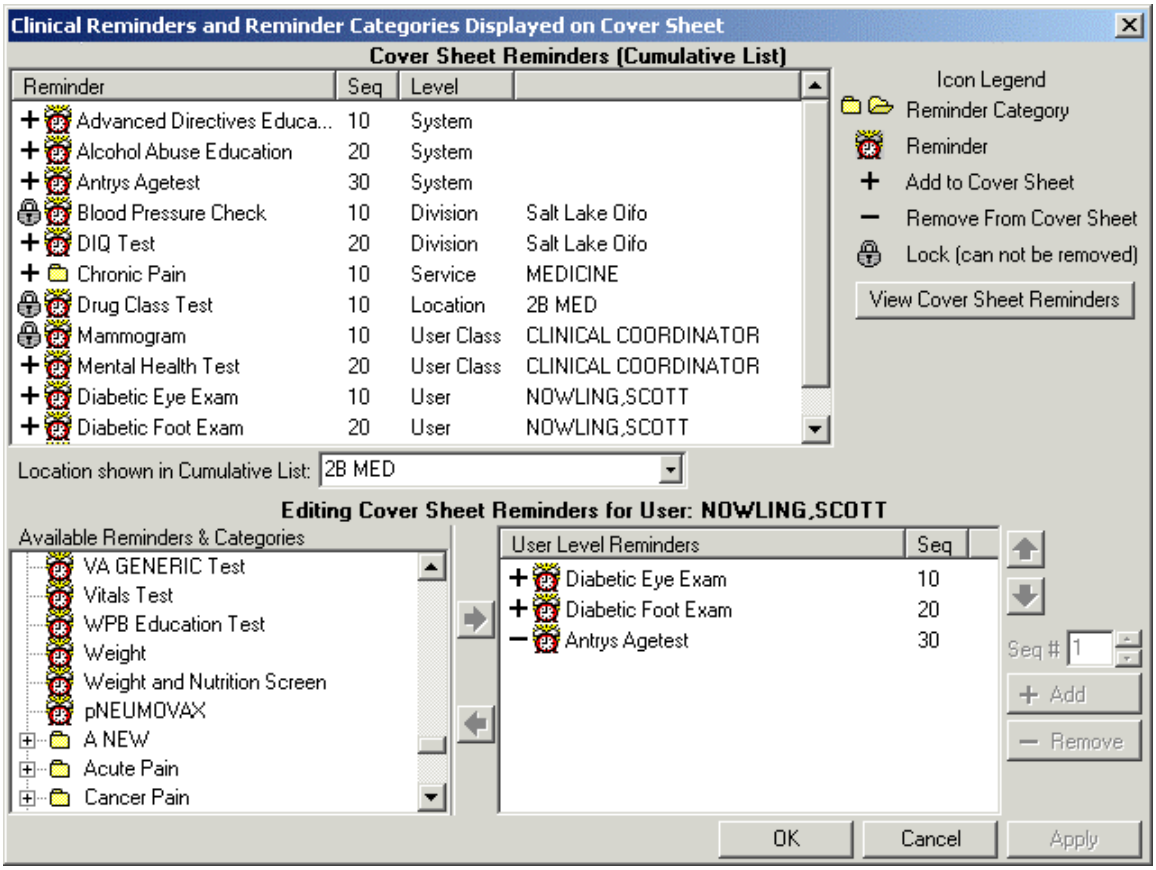
- *Cover Sheet Reminders (Cumulative List)* displays selected information on the Reminders that will be displayed on the Cover Sheet.
- *Available Reminders & Categories* lists all available Reminders and serves as a selection list.
- *User Level Reminders* displays the Reminders that you have added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

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

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 will be listed by level (System, Division, Service, Location, User class, User).

Location shown in Cumulative List
Click on this drop-down box and select a location. The Reminders assigned to that location appear on the Cumulative List.

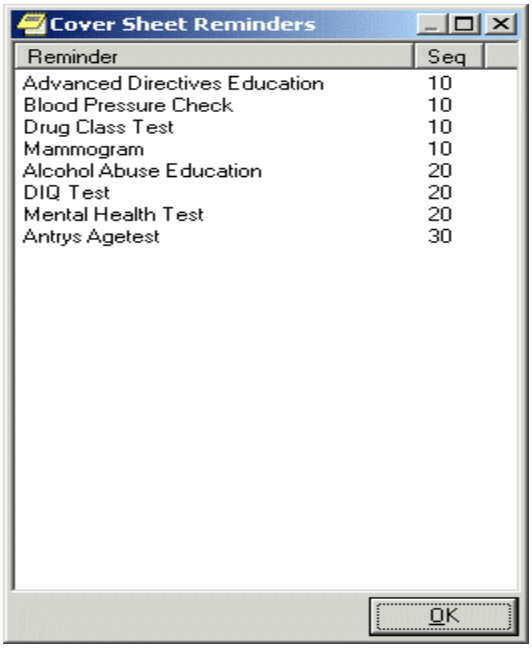
Available Reminders & Categories
This area displays all of the Reminders and Categories available to the user. Categories are groups of related Reminders that can be added as a group. Individual reminders within a category can be removed from the User Level Reminders field. Highlight a Reminder or Category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

User Level Reminders
This area displays all of the Reminders selected by the user.

- To add a Reminder to your User Level Reminders, highlight the desired Reminder in the Available Reminders & Categories field and click the right arrow button.
- To delete a Reminder from your User Level Reminders field, highlight the Reminder in the User Level Reminders field and click the left arrow.
- To determine the order in which the Reminders will be displayed on the Cover Sheet, change the Reminder's Sequence number. For example, to place a Reminder at the top of the Reminders list, assign it a number less than 10.
- To change the order of User Level Reminders, highlight Reminders and click the up arrow or down arrow until the desired order is achieved.
- To remove any or all non-mandatory Reminders assigned at any level, add the Reminder to your User Level and then click the Remove button.

Cover Sheet Reminders

Once you have the Cumulative List as you want it, click **View Cover Sheet Reminders** to view how the reminders will be displayed on your Cover Sheet for the specified locations.



After you have made all of the desired changes to the Reminders that will be displayed on the Cover Sheet, click OK.

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

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
```

Reminder 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
```

Reminder Maintenance: This component provides:

- Details about what was found from searching the VistA clinical data.
- Text related to the findings found or not found (as defined in the reminder). This includes taxonomies (ICD or CPT codes), health factors, and test results related to the reminder and computed findings (e.g., Body Mass Index).
- Final frequency and age range used for the reminder.

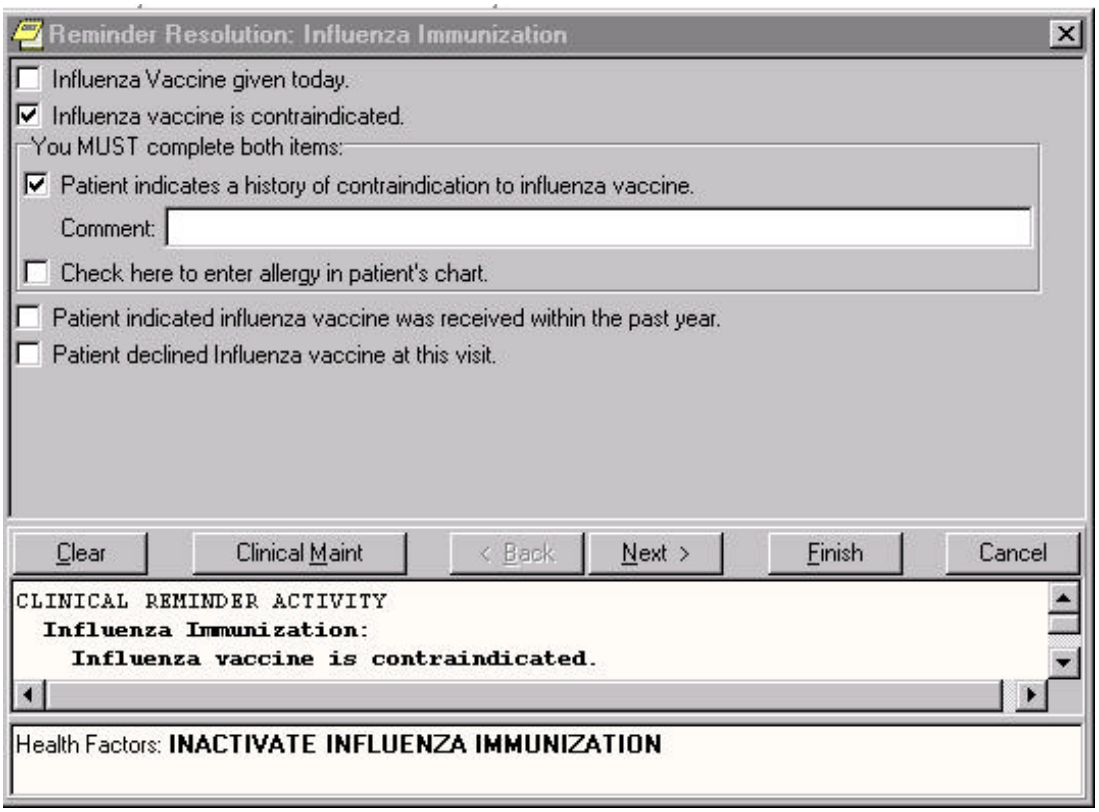
NOTE: Statuses include "DUE SOON," to allow you to process a reminder in advance, if convenient.

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.
```

Chapter 4: Creating Reminder Dialogs

Example: A Reminder Dialog in CPRS



A Reminder dialog is a list of statements and associated findings that appear in a dialog box in the CPRS GUI, used to resolve a reminder. Dialogs are generated from a reminder definition or created manually.

Reminder dialogs must be defined and linked to reminders before clinicians can resolve reminders through CPRS. Dialog boxes appear when specific reminders are selected, with a list of checkbox items that have been defined as potential actions to satisfy the reminder.

Dialog Creation Process

When you create your dialog, make a plan. Consider the following:

- What kinds of actions do you want to record
  (or in the terms of dialogs, what sentences do you want answered and how)?
- Do you want the dialog elements to satisfy the reminders?
- Do you want the dialog to trigger another reminder?

You can either autogenerate a dialog from a reminder definition or you can build the dialog manually. Each method has benefits and drawbacks.

The usual way is to autogenerate the reminder dialog from the reminder. Autogeneration creates dialog elements for all reminder findings using the dialog parameter files. Any unwanted autogenerated elements may be deleted and new elements/groups created manually.

Benefits of Autogeneration
The benefit of this is that the dialog is automatically linked to a reminder and has elements for all reminder findings. Dialog elements are created automatically with all the appropriate prompts.

Drawbacks of Autogeneration
The dialog includes all the dialog elements for all the reminder findings. Therefore you will need to review the elements and remove any of these that you do not want.

Benefits of Manual Generation
You won't have lots of unwanted autogenerated prompts to clean up.

Drawbacks of Manual Generation

- You need to link the dialog to the reminder in a separate step.
- You have to have a naming convention.
- You have to know what dialog prompts to associate with the finding item (by referring to the General Finding Type Parameters).

Descriptions of both methods are shown on the following pages.

For examples of dialogs created by sites, see the Clinical Reminders web page:
(http://vista.med.va.gov/reminders or http://vista.med.va.gov/softserv/clin_bro.ad/clinrem/)

Creating A Reminder Dialog Manually

Steps to Manually Create a Dialog

1. Create the Dialog and add Dialog Elements.
   - Use the Reminder Dialog (DI) option on the Reminder Dialog Management menu.
   - Select the Change View (CV) action and then select D for Dialog.

2. Link the Dialog to the Reminder
   - Use Add/Edit Reminder Definition on the Reminder Definition Management menu.
   - Select the reminder, then select Reminder Dialog (D), then enter the name of your dialog.

   Or
   - Use the Reminder Dialogs (DI) option on the Reminder Dialog Management menu
   - Select a reminder, then select the Linked Reminders action

3. Check the dialog in the CPRS GUI

4. Create a dialog group, if desired. See instructions later in this manual.

5. Add the dialog elements to the dialog group.

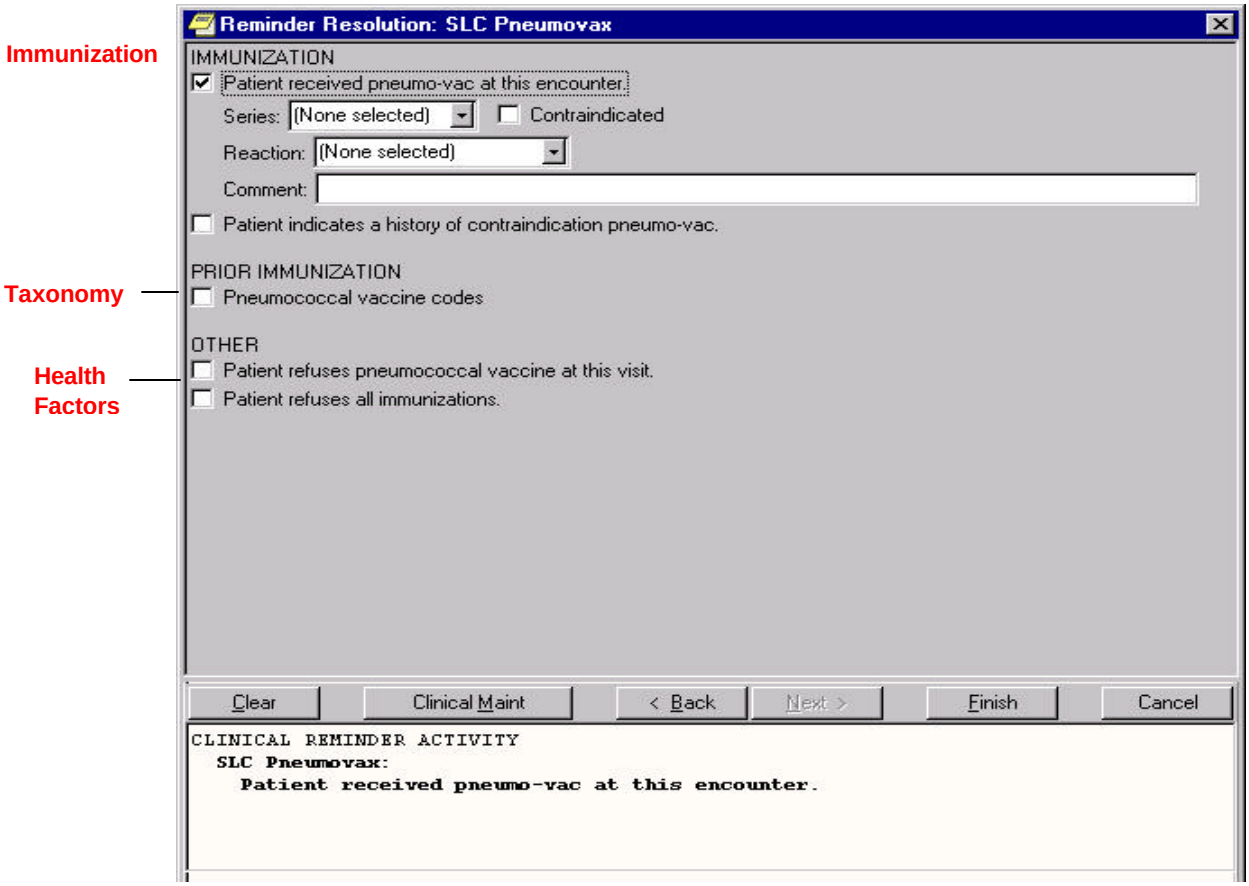
6. Add the dialog group to the reminder dialog, using the Reminder dialog (DI) option.

7. Check the dialog in the CPRS GUI

Creating a Dialog by Autogeneration

In the following pages, we describe how to create the dialog shown below.

Example: SLC Pneumococcal Vaccine dialog as it appears in CPRS



Steps to create the SLC Pneumococcal Vaccine Dialog by Autogeneration

The following description demonstrates how to create a dialog by autogenerating one from the reminder definition, using the dialog parameters distributed with the reminder package.

Autogeneration works as follows:

a. When you select the action Autogenerate Dialog in the Reminder Dialog option, you are prompted, "GENERATE DIALOG AUTOMATICALLY?"

b. If you respond yes, then for each finding item on the reminder, the REMINDER FINDING TYPE PARAMETER file #801.45 is checked to see if there are any "enabled" resolution statuses for the finding type.

c. If an enabled resolution status exists, a dialog element (sentence) is added to the reminder dialog with sentences generated from the finding name, concatenated with prefix and suffix text.
Example: *Patient received* Pneumo-vac *at this encounter*

Patient received and *at this encounter* are the prefix and suffix Resolution Status text that is already in the file.

Step 1.
Decide which elements will appear in the reminder dialog. For example:

- Patient received pneumo-vac at this encounter.
- Patient indicates a history of contraindication pneumo-vac.
- Pneumococcal vaccine codes
- Patient Refuses Pneumococcal Vaccine
- Patient Refuses All Immunizations

The first three Elements will satisfy the reminder. The last two will make the reminder not applicable.

Elements may be added that don't affect the reminder. Such elements may have findings or may be text-only elements for display on the dialog screen or inclusion in the progress note.

Step 2:
Use the following Dialog Parameters options on the Reminder Dialog Management Menu to make sure all the elements are present and appropriately enabled or disabled. These are described on the next page.

- Health Factor Resolutions
- Finding Type Parameters
- Taxonomy Dialog Parameters (optional)

Health Factor Resolutions

A set of national codes is distributed with the reminder package:

- Done
- Done Elsewhere
- Contraindicated
- Patient Refused
- Ordered
- Other

Health Factor Resolutions must be entered for all the health factors on the reminder that should be included in the dialog. The AD option includes an action to select a reminder and then pass through all health factors in the reminder, allocating resolution statuses if needed.

Health factors are normally given the resolution status of OTHER.

Finding Type Parameters

The finding type parameters are distributed with the reminder package. These are the rules used to generate dialog elements (sentences) from the reminder definition. Different rules apply to different finding types. Immunizations generate three sentences for each finding:

- Immunization done
- Immunization done elsewhere
- Immunization contraindicated

Disable the finding parameters for the elements not required (in this case DONE ELSEWHERE) so that the dialog autogeneration will not include these sentences in the reminder dialog.

Taxonomy Dialog Parameters

Taxonomy dialog parameters contain lists of selectable procedure and diagnosis codes for each taxonomy. Installation of the Clinical Reminders package puts all codes in the taxonomy into the selectable list. The selectable codes may be modified, if required.

A dialog element for a taxonomy finding automatically includes multiple prompts:

- Taxonomy header
- Current Diagnosis/Procedure
- Historical Diagnosis/Procedure

The taxonomy dialog parameters contain the text for these prompts, which can be modified, if required, for individual taxonomies. Taxonomy dialog parameters can also be modified when editing the reminder dialog after the autogeneration has been run.

Creating a reminder dialog by autogeneration, cont'd

Step 3:
Use the Reminder Dialog option to autogenerate the dialog.

a. Select DI from the Reminder Dialog Management Menu. A screen of reminders is displayed.
b. Select the VA-*Pneumococcal Vaccine reminder.
c. Use the AD action to autogenerate a reminder dialog with the same name as the reminder.
d. Make sure that the dialog is enabled (answer YES to the "ENABLE DIALOG" prompt).
e. Add, delete, change, or re-sequence dialog elements as required.
f. Modify progress note text, if required.

Step 4:
Add the reminder to CPRS and set parameters for using reminder dialogs in CPRS. On the CPRS Reminder Configuration Menu, do the following steps, as needed:

a. Add the reminder to the CPRS Cover Sheet List for the appropriate level. The reminder will appear on the cover sheet if due or in the reminder drawer if due or applicable.
b. **OR** create a reminder category containing the reminder and add the reminder category to the CPRS Lookup Categories at the appropriate level.
c. Activate dialogs with the Reminder GUI Resolution Active and Mental Health Dialogs Active options.
d. Set a Default Outside Location.
e. Turn on the parameter to position reminder text, using the Reminder Text at Cursor option.
f. Activate New Reminder Parameters
   Activating ORQQPX NEW REMINDER PARAMS determines which of two dialogs you will see, *Clinical Reminders on Cover Sheet* or *Clinical Reminders and Reminder Categories Displayed on Cover Sheet*.

Parameters can be set at the user, service, division, or system level. For testing purposes, it is probably best to set up reminders and categories at the user level.

These options are described in Chapter 3.

Example: Autogenerating Dialog For Pneumococcal Vaccine Reminder

1. Select the option DI Reminder Dialog from the Dialog Management menu:

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

   DP     Dialog Parameters ...
   DI     Reminder Dialogs
Select Reminder Dialog Management Option: DI  Reminder Dialogs
```

```
Dialog List                 Mar 22, 2001 09:56:23              Page:  1 of    7
REMINDER VIEW (ALL REMINDERS BY NAME)

 Item Reminder Name                        Linked Dialog Name & Dialog Status
   1  AGETEST                              AGETEST                       Disabled
   2  BLOOD PRESSURE CHECK
   3  DGENTEST
   4  EDUTEST                              EDUTEST
   5  HEPATITIS C ASSESSMENT               HEPATITIS C ASSESSMENT
   6  JG BREAST CANCER SCREEN              JG BREAST CANCER SCREEN
   7  MENTAL HEALTH TESTS                  MENTAL HEALTH TESTS           Disabled
   8  Pain Assessment PS>=4
   9  SLC PNEUMOCOCCAL VACCINE             SLC PNEUMOCOCCAL VACCINE
  10  VA-*BREAST CANCER SCREEN
  11  VA-*CERVICAL CANCER SCREEN
  12  VA-*CHOLESTEROL SCREEN (F)
  13  VA-*CHOLESTEROL SCREEN (M)
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
AR   All reminders        LR   Linked Reminders     QU   Quit
CV   Change View          RN   Name/Print Name
Select Item: Next Screen// 9
```

NOTE: You can also use the hidden action SL (Search List) to search for a reminder.

2. Select the Reminder Name, SLC PNEUMOCOCCAL VACCINE, then select the action AD, Autogenerate Dialog:

```
Dialog Selection List              Feb 10, 2001 12:22:20     Page:    1 of    1
REMINDER NAME: SLC PNEUMOCOCCAL VACCINE

Item Dialog Name                       Latest Update       Linked Reminders
    * NO DIALOGS DEFINED *



+         + Next Screen   - Prev Screen   ?? More Actions                >>>
AD   Autogenerate Dialog             QU   Quit
LR   Link Reminder
Select Item: Quit// AD   Create Reminder Dialog
```

Example: Autogenerating Dialog For Pneumococcal Vaccine Reminder, cont'd

```
REMINDER NAME: SLC PNEUMOVAX
GENERATE DIALOG AUTOMATICALLY: Y// <Enter> ES
ENTER A UNIQUE DIALOG NAME: SLC PNEUMOCOCCAL VACCINE// <Enter>
LINK DIALOG TO REMINDER: YES// <Enter>
ENABLE DIALOG: NO// YES REPLACE ANY EXISTING DIALOG ELEMENTS? NO// <Enter>
Building dialog  - SLC PNEUMOCOCCAL VACCINE

1    Patient received pneumo-vac at this encounter.
2    Patient indicates a history of contraindication pneumo-vac.
3    Pneumococcal vaccine codes
4    Patient refuses Pneumococcal vaccine.
5    Patient refuses all immunizations.
Updating Dialog Elements
Updating Reminder Dialog
Dialog build complete
```

3. Edit the generated dialog, if necessary.

```
Dialog Selection List          Feb 10, 2001 12:22:29          Page:    1 of    1
REMINDER NAME: SLC PNEUMOCOCCAL VACCINE

Item Dialog Name                      Latest Update     Linked Reminders
This reminder is linked to dialog:

  1  SLC PNEUMOCOCCAL VACCINE         Feb 10, 2000      SLC PNEUMOCOCCAL VACCINE

+         + Next Screen   - Prev Screen   ?? More Actions                >>>
AD   Autogenerate Dialog              QU   Quit
LR   Link Reminder
Select Item: Quit// 1
Dialog Edit List               Feb 10, 2000 12:22:31          Page:    1 of    4
REMINDER DIALOG NAME: SLC PNEUMOCOCCAL VACCINE
Sequence      Dialog Text
  5            Patient received pneumo-vac at this encounter.
                  Series:
                  Contraindicated
                  Reaction:
                  Comment:
  10           Patient indicates a history of contraindication pneumo-vac.
                  Series:
                  PXRM CONTRAINDICATED (forced value)
                  Reaction:
 15            Pneumococcal vaccine codes
 15.1          Prior Diagnosis for Pneumococcal Vaccine
               Selectable codes: V06.6 PROPHYLACTIC VACCINE AGAINST STREPTOCOCC
+         + Next Screen   - Prev Screen   ?? More Actions
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Next Screen// 1
```

Enter a new sequence number to add a new element, as described on the next page.

Editing Dialog For Pneumococcal Vaccine—Add a new element

4. To add a new element, enter a new sequence number:

```
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Next Screen// 1
```

5. Add the name of the new element, then respond to prompts about the element:

```
ARE YOU ADDING 1 AS A NEW SEQUENCE NUMBER: N// <Enter> YES
Select new DIALOG ELEMENT: SP IMM TEXT ONLY
  Are you adding 'SP IMM TEXT ONLY' as a new REMINDER DIALOG? No// Y  (Yes)
   REMINDER DIALOG TYPE: E  dialog element
CURRENT DIALOG ELEMENT/GROUP NAME: SP IMM TEXT ONLY
Used by:  SLC PNEUMOCOCCAL VACCINE (Current Reminder Dialog)
DISABLE: <Enter>
Class:                    NATIONAL
Sponsor:
Review Date:
Edit History:
RESOLUTION TYPE: <Enter>
FINDING ITEM: <Enter>
DIALOG/PROGRESS NOTE TEXT:
  No existing text
  Edit? NO// YES
[WRAP]=[ INSERT ]=<DIALOG WORD PROCESSING>=[<PF1>H=Help]=IMMUNIZATIONS
<======T=======T=======T=======T=======T=======T=======T=======T=======T>======
ALTERNATE PROGRESS NOTE TEXT:
  No existing text
  Edit? NO//<Enter>
EXCLUDE FROM PROGRESS NOTE: <Enter>
SUPPRESS CHECKBOX: 1  SUPPRESS
RESULT GROUP/ELEMENT: <Enter>
Select ADDITIONAL FINDINGS: <Enter>
ALTERNATE PROGRESS NOTE TEXT:
  No existing text
  Edit? NO// <Enter>
EXCLUDE FROM PROGRESS NOTE: <Enter>
SUPPRESS CHECKBOX: <Enter>
Select SEQUENCE: <Enter>
```

```
Dialog Edit List              Mar 15, 2000 13:10:23          Page:    1 of    4
REMINDER DIALOG NAME: SLC PNEUMOCOCCAL VACCINE

 Sequence      Dialog Text
  1            IMMUNIZATIONS

  5            Patient received pneumo-vac at this encounter.
                  Series:
                  Contraindicated
                  Reaction:
                  Comment:

 10            Patient indicated pneumo-vac was received outside the VA.
                  Contraindicated
                  Date:
                  Location:
                  Comment:
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Next Screen//
```

6. Use the Reminder Dialogs option to remove elements from the dialog:

```
Dialog Edit List              Mar 15, 2000 13:16:03          Page:    1 of    4
REMINDER DIALOG NAME: SLC PNEUMOCOCCAL VACCINE
Sequence      Dialog Text
  1            IMMUNIZATIONS
  5            Patient received pneumo-vac at this encounter.
                  Series:
                  Contraindicated
                  Reaction:
                  Comment:
 10            Patient indicated pneumo-vac was received outside the VA.
                  Contraindicated
                  Date:
                  Location:
                  Comment:
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Next Screen// 10
CURRENT DIALOG ELEMENT NAME: IM PNEUMO-VAC DONE ELSEWHERE
     Select one of the following:
          E         Edit
          C         Copy and Replace current element
          D         Delete element from this dialog
Select Dialog Element Action: E// d  Delete element from this dialog
```

SLC PNEUMOCOCCAL VACCINE Reminder

```
NUMBER: 660062

SLC PNEUMOCOCCAL VACCINE
------------------------
Print name:                    SLC Pneumovax
Class:                    NATIONAL
Sponsor:
Review Date:
Edit History:
Related VA-* Reminder:         VA-*PNEUMOCOCCAL VACCINE
Reminder Dialog:               SLC PNEUMOCOCCAL VACCINE
Priority:                      LOW
Reminder Description:
     This "VA-*PNEUMOCOCCAL VACCINE" reminder is defined based on the following
     "Pneumococcal Vaccine" guidelines specified in the VHA HANDBOOK 1101.8,
     APPENDIX A.

         Target Condition: Pneumococcal pneumonia.

         Target Group: Outpatients age 65 and older.

         Recommendation: All persons age 65 and older should receive one
         vaccination with pneumococcal vaccine in their lifetime.

         Goal for FY 2000: 80% of individuals 65 and older have received
         pneumococcal vaccine.

Technical Description:
     If this reminder is not going to be used at your facility, the INACTIVE
     FLAG should be set to inactive.

     This reminder represents the minimum criteria for checking if the
     pneumococcal vaccine has been given to the patient.

     The Ambulatory Care EP recommends a variation on this reminder represented
     in the "VA-PNEUMOVAX" reminder, which includes a check for diagnoses
     documented for the patient that would indicate the pneumococcal vaccine
     should be given to the patient regardless of the patients age.

     Please review both of these reminder definitions, choose one of them to
     use.  If local modifications need to be made, copy the preferred reminder
     to a new reminder and make your reminder modifications.


Baseline Frequency:
   Do In Advance Time Frame:  Do if DUE within 3 months
                 Sex Specific:
                Ignore on N/A:

    Frequency for Age Range:  99Y - Once for ages 65 and older
                   Match Text:  Pneumovax due once for patients 65 and over.
                No Match Text:
```

```
Findings:
               Finding Item:  PNEUMOCOCCAL (FI(1)=IM(19))
               Finding Type:  IMMUNIZATION
       Match Frequency/Age:  No change in frequency on match
    Use in Resolution Logic:  OR
             Finding Item:  VA-PNEUMOCOCCAL VACCINE (FI(2)=TX(25))
               Finding Type:  REMINDER TAXONOMY
        Match Frequency/Age:  No change in frequency on match
    Use in Resolution Logic:  OR
               Finding Item:  PATIENT REFUSES PNEUMOCOCCAL VACCINE
(FI(3)=HF(660022))
               Finding Type:  HEALTH FACTOR
        Match Frequency/Age:  No change in frequency on match
Use in Patient Cohort Logic:  AND NOT
               Finding Item:  PATIENT REFUSES ALL IMMUNIZATIONS (FI(4)=HF(660023))
               Finding Type:  HEALTH FACTOR
        Match Frequency/Age:  No change in frequency on match
Use in Patient Cohort Logic:  AND NOT
Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
     (SEX)&(AGE)&'FI(3)&'FI(4)
Expanded Patient Cohort Logic:
     (SEX)&(AGE)&'FI(PATIENT REFUSES PNEUMOCOCCAL VACCINE)&'
     FI(PATIENT REFUSES ALL IMMUNIZATIONS)
Default RESOLUTION LOGIC defines findings which can resolve the Reminder:
     FI(1)!FI(2)
Expanded Resolution Logic:
FI(PNEUMOCOCCAL)!FI(VA-PNEUMOCOCCAL VACCINE)
```

Example of a dialog element

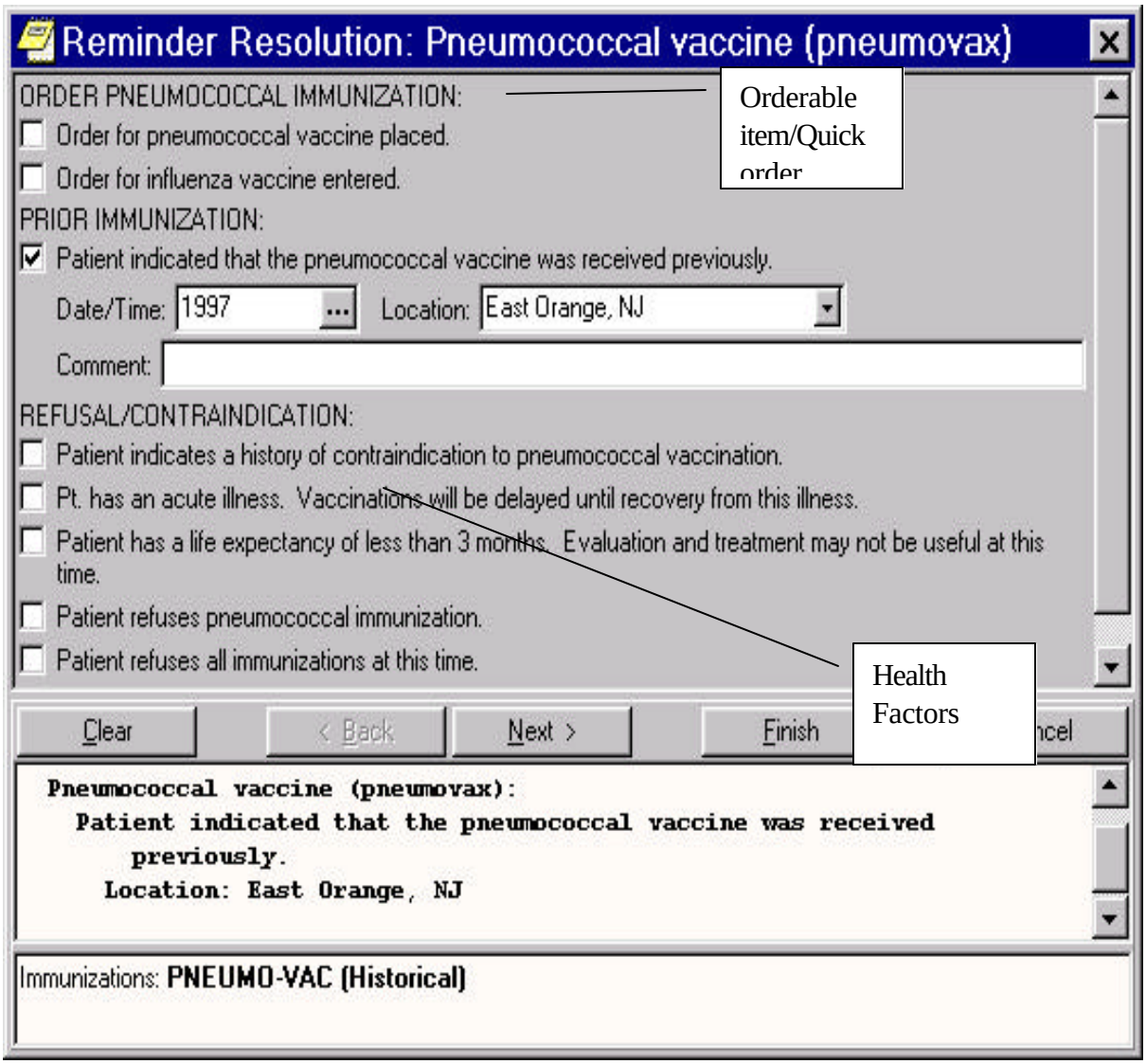
```
Dialog Name:  IM PNEUMO-VAC DONE
CURRENT DIALOG ELEMENT/GROUP NAME: IM PNEUMO-VAC DONE
Used by:  VA-*PNEUMOCOCCAL VACCINE (Reminder Dialog)
          SLC PNEUMOCOCCAL VACCINE (Reminder Dialog)
DISABLE: <Enter>
CLASS: L  LOCAL
SPONSOR: <Enter>
REVIEW DATE: <Enter>
RESOLUTION TYPE: DONE AT ENCOUNTER// <Enter>
ORDERABLE ITEM: <Enter>
FINDING ITEM: PNEUMOCOCCAL// <Enter>
DIALOG/PROGRESS NOTE TEXT:
Patient received pneumo-vac at this encounter.

  Edit? NO// <Enter>
ALTERNATE PROGRESS NOTE TEXT:
  No existing text
  Edit? NO// <Enter>
EXCLUDE FROM PROGRESS NOTE: <Enter>
SUPPRESS CHECKBOX: <Enter>
Select ADDITIONAL FINDINGS: <Enter>
RESULT GROUP/ELEMENT: <Enter>
Select SEQUENCE: 4// ?
 Answer with COMPONENTS SEQUENCE, or ITEM
```

```
Choose from:
   1      PXRM SERIES
   2      PXRM CONTRAINDICATED
   3      PXRM REACTION
   4      PXRM COMMENT

     You may enter a new COMPONENTS, if you wish
     Type a Number between .1 and 999.9, 1 Decimal Digit
Select SEQUENCE: 4// 1    PXRM SERIES
  SEQUENCE: 1// <Enter>
  PROMPT/FORCED VALUE: PXRM SERIES// <Enter>
  OVERRIDE PROMPT CAPTION: <Enter>
  START NEW LINE: YES//<Enter>
  EXCLUDE FROM PN TEXT: <Enter>
  REQUIRED: <Enter>
Select SEQUENCE: <Enter>
```

Example of Taxonomy Dialog

```
Dialog element: TX PNEUMOCOCCAL VACCINE CODES

Dialog Text Fields
DIALOG HEADER TEXT: <Enter>
CURRENT DIAGNOSIS DIALOG TEXT: Current Diagnosis for Pneumococcal Vaccine
           Replace <Enter>
PREVIOUS DIAGNOSIS DIALOG TEXT: Prior Diagnosis for Pneumococcal Vaccine
           Replace <Enter>
CURRENT PROCEDURE DIALOG TEXT: Current Procedure// <Enter>
PREVIOUS PROCEDURE DIALOG TEXT: Prior Procedure// <Enter>

Dialog Selectable codes
Select SELECTABLE DIAGNOSIS: V06.6//<Enter>
  SELECTABLE DIAGNOSIS: V06.6// <Enter>
  DISPLAY TEXT: <Enter>
  DISABLED: <Enter>
Select SELECTABLE DIAGNOSIS: <Enter>
Select SELECTABLE PROCEDURE: G0009//<Enter>
  SELECTABLE PROCEDURE: G0009//<Enter>
  DISPLAY TEXT: <Enter>
  DISABLED: <Enter>
Select SELECTABLE PROCEDURE: <Enter>

Dialog Generation Parameters
GENERATE DIALOG DX PARAMETER: <Enter>
GENERATE DIALOG PR PARAMETER: <Enter>
```

Alternate Dialog For Pneumococcal Vaccine



Dialog Groups

For more complicated dialogs, you may want to group several checkboxes (sentences) within a dialog element. To do this, a special dialog component is required called a dialog group.

Steps to build a dialog group

When editing dialogs from the Change View action of reminder dialogs, you now use the same editor as the one used for reminder dialogs. Dialog group elements may be edited, copied/renamed, or deleted. It is no longer necessary to build component dialog elements before building the dialog group. Elements may be created from within the dialog group screen.

To build a reminder dialog containing a group, first build the dialog group, and then add it to the reminder dialog.

1. Decide the dialog elements to appear in the dialog group.

2. Create the dialog group as follows:

   a. Select the Change View (CV) action.
   b. Choose G for Groups,
   c. Enter AD to add a new dialog group.
   d. Use a prefix in the group name that distinguishes it from other dialog elements (e.g. GP).
   e. Enter the parameters for the group (text, caption text, box, hide etc). If the group has a finding item, enter any additional prompts or forced values.
   f. For each dialog element in the group, enter a sequence number and the dialog element name. If the dialog element is new, it may be created within this screen.

Adding a Dialog Group to a Reminder Dialog

1. To include the dialog group in a reminder dialog, use the option DI Reminder Dialog and enter the dialog group in the same manner as a dialog element.

2. Dialog and Progress note text and group parameters for the dialog group are displayed and can be edited from the DI Reminder Dialog option.

3. Test the reminder dialog within the GUI.

4. If individual dialog elements within the dialog group need modifying, use the CV Change View action and select E for Element to list and edit dialog elements.

Including a Dialog Group in Reminder Dialog Autogeneration

For a single finding item on the reminder definition, a number of standard dialog elements are created by the autogeneration, depending on the finding type parameters within the DP Dialog Parameters menu.

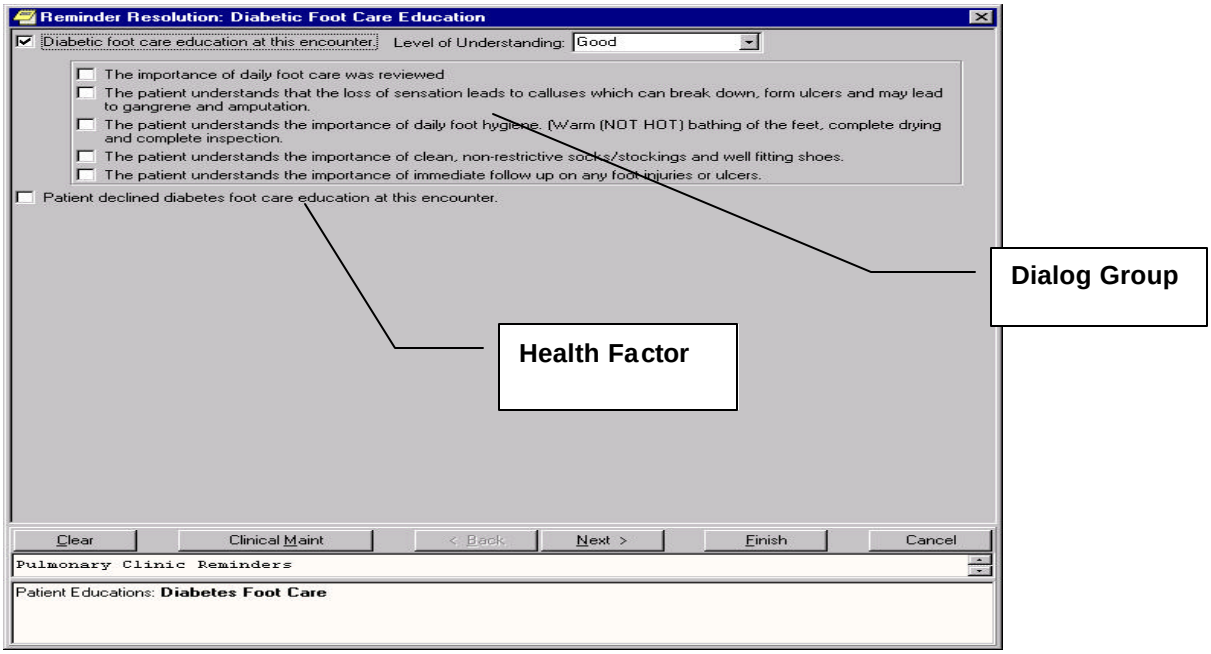
For example, generating a reminder dialog for a reminder with diabetic foot care education as a finding would create three standard dialog elements:

ED DIABETES FOOT CARE DONE
ED DIABETES FOOT CARE DONE ELSEWHERE
ED DIABETES FOOT CARE REFUSED

When reminder dialogs are generated for other reminders with this finding item, the reminder dialog created will use these same standard elements.

If a dialog group should always be used for a reminder finding item in dialog autogeneration (instead of the standard dialog elements), then the dialog group can be entered in the option Finding Item Parameters for the finding item. The dialog group will then be inserted into the generated reminder dialog instead of the standard dialog elements.

Example of a Dialog Group as seen within CPRS



Reminder Dialog Management Options

Reminder Dialogs are in the REMINDER DIALOG file (#801.41). This file is used to define a reminder dialog to represent a reminder. 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). The main difference is use of a sequence field as the .01 field

The options on the Reminder Dialog Management menu allow you to create and edit dialogs and to maintain the parameters used by CPRS for reminder dialog processing.

Synonyn	Option	Option Name	Description
DP	Dialog Parameters	PXRM DIALOG PARAMETERS	This menu allows maintenance of parameters used in dialog generation.
DI	Reminder Dialogs	PXRM DIALOG/ COMPONENT EDIT	Dialog file entries may be created or amended with this option.

Dialog Parameters (DP)

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.

Synonym	Option	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 here.
FP	General Finding Type Parameters	PXRM PARAMETER EDIT/INQUIRE	This option lists the finding parameters used by the Create Dialog from Reminder Definition option.
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 (applicable to the findings on the reminder) instead of generating a dialog using the FINDING TYPE PARAMETERS file.
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 (RS)

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  OTHER - DUE TO CONTRAINDICATION   LOCAL
  12  OTHER - DUE TO LIFE EXPECTANCY    LOCAL
  13  OTHER - DUE TO MEDICAL CONDITION  LOCAL
  14  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
```

Reminder Resolution Statuses, cont'd

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

     You may enter a new REMINDER 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>
```

Reminder Resolution Statuses, cont'd

```
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 (HR)

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//
```

Health Factor Resolutions, cont'd

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. Reminder dialog generated 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*

General Finding Type Parameters, cont'd

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//
```

General Finding Type Parameters, cont'd

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.

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//
```

Taxonomy Dialog Edit, cont'd

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 (DI)

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

```
Select Reminder Dialog Management Option: DI  Reminder Dialogs
Dialog List                  May 22, 2000 09:56:23          Page:    1 of    7
REMINDER VIEW (ALL REMINDERS BY NAME)

 Item Reminder Name                        Linked Dialog Name & Dialog Status
   1  AGETEST                              AGETEST                       Disabled
   2  BLOOD PRESSURE CHECK
   3  DGENTEST
   4  EDUTEST                              EDUTEST
   5  HEPATITIS C ASSESSMENT               HEPATITIS C ASSESSMENT
   6  JG BREAST CANCER SCREEN              JG BREAST CANCER SCREEN
   7  MENTAL HEALTH TESTS                  MENTAL HEALTH TESTS           Disabled
   8  Pain Assessment PS>=4
   9  SLC PNEUMOCOCCAL VACCINE             SLC PNEUMOCOCCAL VACCINE
  10  VA-*BREAST CANCER SCREEN
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
AR   All reminders        LR   Linked Reminders     QU   Quit
CV   Change View          RN   Name/Print Name
Select Item: Next Screen// CV
```

Actions

AR All Reminders. All reminders are displayed.

CV Change view to see and select other reminder dialog types such as elements, forced values, and groups. Once a particular type has been selected, you can work with it..

LR Linked Reminders. Many dialogs may be generated from a reminder but the reminder may only be linked to one dialog for use in CPRS. This option allows that link to be changed. *LR displays **ONLY** reminders that are linked to dialogs*

RN Name/Print Name. Toggle reminder name and reminder print name.

QU Return to previous screen.

Enter the item number to be edited. Allows selection of a reminder dialog for editing.

Notes:

- Reminder dialogs are linked to reminders by a field (REMINDER DIALOG) on the reminder definition. The reminder dialog may be used in CPRS if the reminder is due, applicable, or contained within a reminder category.

- A reminder dialog contains sentences (dialog elements) and/or groups of sentences (dialog groups) that are related to the reminder findings.

- Dialog groups can contain one or more sentences (dialog elements).

- Each sentence (dialog element) may have a number of additional prompts (e.g. date, location) or forced values (values that are automatically stuffed into a field, such as TIU Objects).

- New reminder dialogs can be created using the action AD – Autogenerate Reminder Dialog. This action appears after you select a reminder.

- The reminder dialog may be created manually or autogenerated from the reminder definition.

- The edit options allow changes to the selected reminder dialog. Keep in mind that dialog elements and prompts may be used in more than one reminder dialog. Changing one reminder dialog may affect others.

Reminder Dialog Types

If you select Change View (CV), dialog types are displayed. Use the CV action to switch between dialog types. Possible dialog types are:

```
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 Dialog Fields

Prompt	Description
NAME	This is the name of the dialog entry. Reminder dialog entries will default to the name of the reminder for ease in identifying the reminder dialog entry. Dialog elements that are auto-generated use the following naming convention: Finding type prefix _Name from finding file_ _Resolution Status. Your site may want to create special namespacing for dialog entries that you create locally.
SOURCE REMINDER	This identifies which reminder definition is associated with this "Reminder Dialog" entry. "Reminder Dialog" type entries are the only entries that require this field.
DISABLE	This field disables use of this dialog when it contains text. The text should be a short message explaining why use of this dialog has been disabled, as it will be displayed if this dialog is selected.
TYPE	This field defines what type of dialog component this entry is. The type determines the processing that can occur with this entry.
CAPTION	The caption is used for prompt, dialog group, and reminder components. When a prompt has a caption defined, this is the text that should be used whenever the prompt is asked (e.g., Comment:). A dialog group can use the caption field to specify a header to use on a box around the group of dialog elements. The reminder dialog component can use the caption to specify a header to use on a box around the dialog elements for a reminder.
BOX	This flag will be used to determine whether the components will be presented to the user in a box. If the caption field is defined, it will appear as header text within in the top line of the box.
NUMBER OF INDENTS	This is the number of indents that should be made before presenting the group's components/elements. Indent is used only for dialog groups. (optional)
SHARE COMMON PROMPTS	This field is used only for a dialog group where different dialog elements have common prompts. Prompts will be shared for all dialog element unless otherwise selected.
GROUP ENTRY	Used for dialog groups only. 1 indicates that only one element in the dialog group may be selected. 2 indicates that one or more elements must be selected. 3 indicates that either none or one selection is required. 0 or null indicates no selection required.
COMPONENTS (Multiple) SEQUENCE	This field contains the components that are used to process a reminder. Generally the components relate to the TYPE of entry in the REMINDER DIALOG file: Reminder dialogs have dialog group or dialog element components. Dialog groups have a combination of dialog element components. Dialog elements have prompt and forced value components. This field specifies the order in which this item will be displayed or processed. (multiple field).

Dialog Fields, cont'd

Prompt	Description
ITEM	This field points to a dialog which is subordinate to this dialog. NOTE: The parent dialog menu or one of its ancestors may not be entered as an item.
OVERRIDE PROMPT CAPTION	This text will override the caption for this component in the reminder dialog, when the component is a prompt. When the text is blank, the caption from the prompt entry will be used.
START NEW LINE	This flag is used to allow the user to have some control of the display of prompts related to a dialog element.
EXCLUDE FROM PN TEXT	This flag is used to control whether or not a component will be excluded from the progress note text when the component is acted upon.
REQUIRED	Additional prompt must be checked (defaults to not required).
RESOLUTION TYPE	This field contains what type of resolution is represented by this dialog entry.
FINDING TYPE	If an additional prompt is restricted to use with only one type of finding item, this field contains the mnemonic of the finding type. The mnemonics allowed are: CPT Procedure ED Education Topic EX Exam HF Health Factor IM Immunization OI Orderable Item POV Diagnosis (ICD9) ST Skin Test VM Vital Measurement
FINDING ITEM	This field contains the finding item represented by this dialog entry.
ORDERABLE ITEM	Orderable item from the reminder definition.
ADDITIONAL FINDINGS	If additional finding items should be posted if the dialog is checked, then they should be entered in this field. The field is relevant to both dialog element and dialog group type records.
DEFAULT VALUE	This is the default value for an additional prompt.
FORCED VALUE	This is the value that will be used for a forced value type dialog.
EXCLUDE FROM PROGRESS NOTE	This field indicates that the question text of the dialog element will be excluded from the progress note. (optional).
PROMPT CAPTION	This is the caption that will be used for this prompt. This caption can be overridden by the OVERRIDE PROMPT CAPTION field in the ITEMS multiple, which can be more specific for the instance of the prompt.
DIALOG/PROGRESS NOTE TEXT	This field is only required if the text on the progress note differs from the dialog text.

Dialog Fields, cont'd

Prompt	Description
ALTERNATE PROGRESS NOTE TEXT	This field is used to define alternate text to add to the progress note when the progress note text needs to be different from the dialog text. (e.g., Dialog/ Progress Note Text displayed is "Place Influenza Order," but the Alternate Progress Note Text is "Ordered Influenza Vaccine at this encounter."). If there is no text in this field the dialog text will be added to the progress note.
CHECKBOX SEQUENCE	Comment prompts (with a GUI Process ID of COM) may have a number of checkboxes associated with the comment prompt.
GUI PROCESS ID	Additional prompts and forced values that update PCE should have a GUI Process ID. If an additional prompt or forced value is created by copying one of the PXRM prompts the GUI Process ID field will automatically be populated by the copy process.
HIDE/SHOWGROUP	Used for dialog groups. 1 indicates that the group will be hidden until checked; 0 indicates that the group will be displayed.
SUPPRESS CHECKBOX	If the field is set to SUPPRESS the dialog element or group header will be displayed without a checkbox. Otherwise the WP text will be presented with a checkbox.
INDENT PROGRESS NOTE TEXT	In a dialog group the dialog questions may be indented. This field allows the progress note text to be indented also.
RESULT CONDITION	CAN'T BE ALTERED EXCEPT BY PROGRAMMER.
EXCLUDE MH TEST FROM PN TEXT	This flag is used to control whether or not a mental health instrument questions will be excluded from the progress note text when the component is acted upon.
RESULT GROUP/ELEMENT	The result group or element is called on completion of a dialog and allows additional findings or progress note text to be added conditionally. Standard result groups for mental health tests are released with the package.
CLASS	This is the class of definition. National definitions cannot be edited. 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.
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.

Edit/Delete Dialog

NOTE: The dialog edit option has been modified to allow dialog elements to be renamed even if they are used elsewhere.

Select Reminder by Number

If you enter a number for a reminder listed above, all dialogs for the selected reminder are displayed:

```
Dialog Selection List            May 03, 2000 10:54:16          Page:    1 of    1
REMINDER NAME: EDUTEST

Item Dialog Name                        Latest Update       Linked Reminders

This reminder is linked to dialog:
   1  EDUTEST1                           Dec 30, 1999        EDUTEST

Other dialogs generated from this reminder:
   2  EDUTEST                            Dec 23, 1999        *NONE*
   3  EDUTEST2                           Dec 24, 1999        *NONE
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
AD   Autogenerate Dialog             QU   Quit
LR   Link Reminder
Select Item: Quit//
```

Actions

AD Autogenerate Dialog. Allows a new reminder dialog to be generated from the reminder definition or for an existing dialog to be re-created.

LR Link Reminders. Many dialogs may be generated from a reminder, but the reminder may only be linked to one dialog for use in CPRS. This option allows that link to be changed.

QU Return to previous screen.

Enter the item number to be edited. Allows selection of a reminder dialog for editing.

Selecting AD to Autogenerate Dialog gives the following prompts:

```
GENERATE DIALOG AUTOMATICALLY: Y//
ENTER A UNIQUE DIALOG NAME: EDUTEST//
LINK DIALOG TO REMINDER: YES//
ENABLE DIALOG: NO//
REPLACE ANY EXISTING DIALOG ELEMENTS? NO//
```

If the reminder is not linked to a dialog, the default is to create a reminder dialog with the same name as the reminder and link the reminder to the new reminder dialog. The default is to set the dialog status to disabled so that it will not be immediately active in CPRS. If an existing dialog name is chosen, the option is given to overwrite the existing reminder dialog.

Select Item

If you select a dialog item in the above screen, details of the dialog are displayed:

```
Dialog Edit List            May   12, 2000 10:02:07          Page:     1 of     5
REMINDER DIALOG NAME: SLC LIFE STYLE EDUCATION

 Sequence       Dialog Details                                          Disabled
  1             Dialog element: ED SUBSTANCE ABUSE DONE
                Resolution: DONE AT ENCOUNTER
                Finding type: EDUCATION TOPIC
                Finding item: VA-SUBSTANCE ABUSE [ED(1)]
                Additional prompts: PXRM LEVEL OF UNDERSTANDING
                                    PXRM COMMENT
                                    PXRM ADD TO PROBLEM LIST            PJH 1/26

  2             Dialog element: ED SUBSTANCE ABUSE DONE ELSEWHERE
                Resolution: DONE ELSEWHERE (HISTORICAL)
                Finding type: EDUCATION TOPIC
                Finding item: VA-SUBSTANCE ABUSE [ED(1)]
                Additional prompts: PXRM VISIT DATE
                                    PXRM COMMENT
                                    PXRM OUTSIDE LOCATION
+          + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Element: Next Screen// 1
```

Individual dialog elements may now be edited by selecting the sequence number of the element. If the dialog element is for a taxonomy finding, the taxonomy dialog can be modified from this screen.

If the dialog element is used in other reminder dialogs, these are listed before the element is edited. If the element is in use elsewhere, it cannot be deleted.

NOTE: The dialog edit option has been modified to allow dialog elements to be renamed even if they are used elsewhere.

Dialog Edit, cont'd

To customize a dialog element for the selected reminder dialog only, a copy of the selected dialog element can be made, as follows:

```
CURRENT DIALOG ELEMENT NAME: ED SUBSTANCE ABUSE DONE

     Select one of the following:
          E         Edit
          R         Copy and Replace current element
          D         Delete element from this dialog
Select Dialog Element Action: E// R Copy and Replace current element
REPLACE/COPY 'ED SUBSTANCE ABUSE DONE'  Y//<Enter> ES
ENTER A UNIQUE NAME: ED SUBSTANCE ABUSE DONE (1)  Replace
Completed copy of 'ED SUBSTANCE ABUSE DONE'
into 'ED SUBSTANCE ABUSE DONE (1)'
Replaced element'ED SUBSTANCE ABUSE DONE'
with 'ED SUBSTANCE ABUSE DONE (1)'
on this dialog.
Do you want to edit now Y// <Enter>
```

Deleting a dialog line by sequence number

```
Dialog Edit List             Feb 14, 2000 11:51:17          Page:    1 of    1
REMINDER DIALOG NAME: AGETEST (DISABLED - DISABLED AT AUTOGENERATE)

 Sequence      Dialog Text
 10            TEXT LINE
```

```
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Quit// 10
```

```
CURRENT DIALOG ELEMENT NAME: SPECIAL FOR ADDITION TEST

     Select one of the following:

          E         Edit
          R         Copy and Replace current element
          D         Delete element from this dialog

Select Dialog Element Action: E// D  Delete element from this dialog
```

Adding a sequence number and creating a new dialog element

If no elements exist, enter a sequence number to create a new element.

```
Dialog Selection List            Feb 14, 2000 11:51:25         Page:    1 of    1
REMINDER DIALOG NAME: AGETEST (DISABLED - DISABLED AT AUTOGENERATE)

 Sequence      Dialog Text
__________________________________________________________________________________
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Quit// 1
```

```
ARE YOU ADDING 1 AS A NEW SEQUENCE NUMBER: N// Y  YES

Select new DIALOG ELEMENT: INFO TOBACCO USER
  Are you adding 'INFO TOBACCO USER' as
    a new REMINDER DIALOG? No// Y  (Yes)
   REMINDER DIALOG TYPE: E  dialog element
CURRENT DIALOG ELEMENT NAME: INFO TOBACCO USER
Used by:  AGETEST (Current Reminder Dialog)

DISABLE:
CLASS: L  LOCAL
SPONSOR: <Enter>
REVIEW DATE: <Enter>
RESOLUTION TYPE:
ORDERABLE ITEM: <Enter>
FINDING ITEM:
DIALOG/PROGRESS NOTE TEXT:
  No existing text
  Edit? NO// YES

==[ WRAP ]==[ INSERT ]======< DIALOG WORD PROCESSING >======[ <PF1>H=Help ]====
TOBACCO USER LINE OF TEXT

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

ALTERNATE PROGRESS NOTE TEXT:
  No existing text
  Edit? NO// <Enter>
EXCLUDE FROM PROGRESS NOTE: <Enter>
SUPPRESS CHECKBOX: <Enter>
Select SEQUENCE: <Enter>
```

Adding a new sequence number with an existing dialog element

```
Dialog Selection List           Feb 14, 2000 11:52:26         Page:    1 of    0
REMINDER DIALOG NAME: AGETEST (DISABLED - DISABLED AT AUTOGENERATE)

Sequence      Dialog Text
  1            TOBACCO USER LINE OF TEXT

+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Quit// 10
```

```
ARE YOU ADDING 10 AS A NEW SEQUENCE NUMBER: N// YES

Select new DIALOG ELEMENT: SP
     1   SP EXERCISE COUNSELING       dialog element
     2   SP EXERCISE COUNSELING PRIOR       dialog element
     3   SPECIAL       dialog element
     4   SPECIAL ELEMANT FOR THIS DIALOG ONLY       dialog element
     5   SPECIAL FOR ADDITION TEST       dialog element
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1  SP EXERCISE COUNSELING     dialog element
```

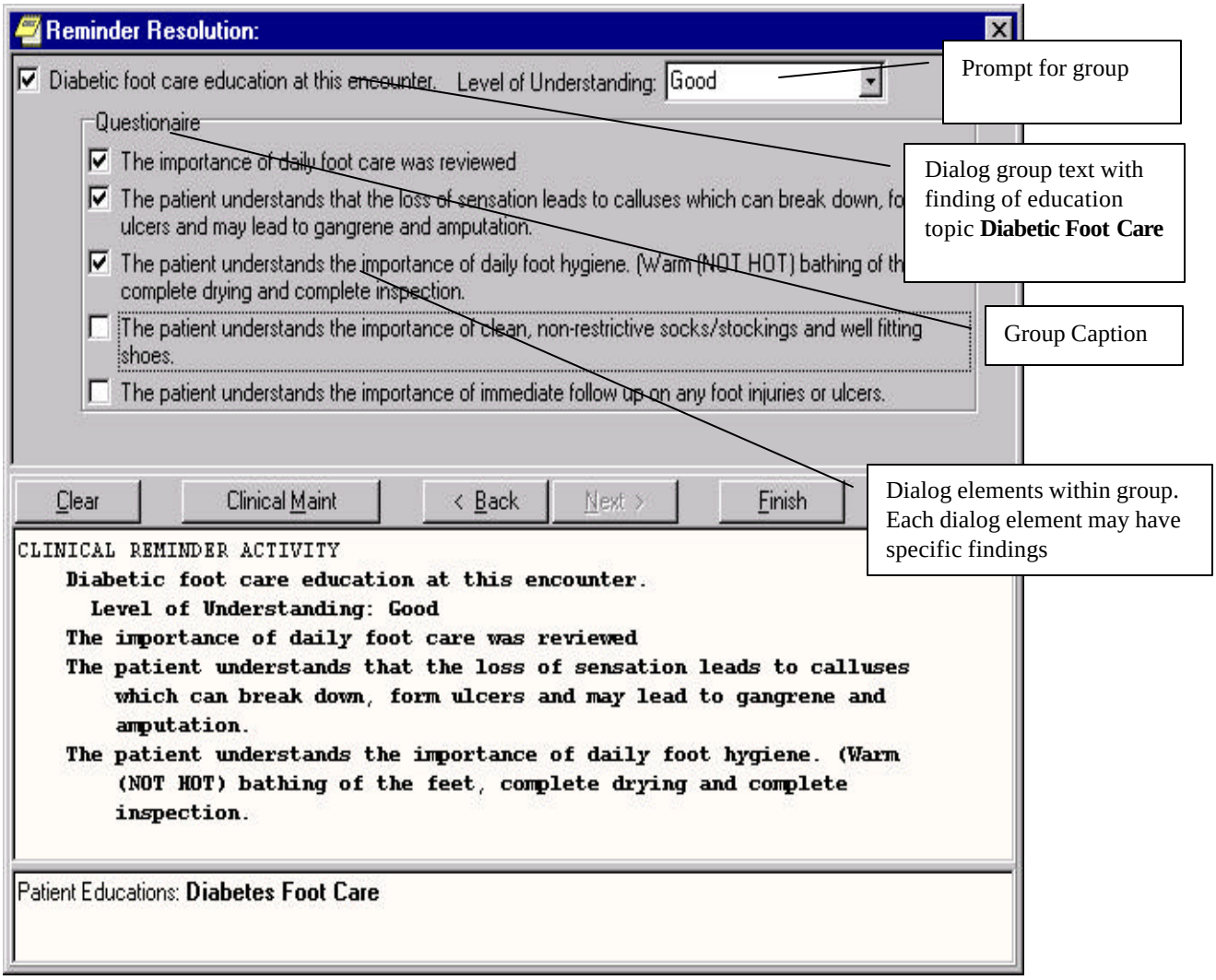
```
Dialog Selection List           Feb 14, 2000 11:52:42         Page:    1 of    1
REMINDER DIALOG NAME: AGETEST (DISABLED - DISABLED AT AUTOGENERATE)
Sequence      Dialog Text
  1            TOBACCO USER LINE OF TEXT

 10            Patient was given exercise counseling
                  Primary Diagnosis
                  Comment:
                  Add to Problem List

+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Quit//
```

NOTE: If you have the same CPT code entered from multiple reminders, they are all still being entered just once for the encounter, and that one entry can't have multiple values for its PCE comment field. The ability to add text only prompts should be coming in v15 of CPRS.

Dialog Groups

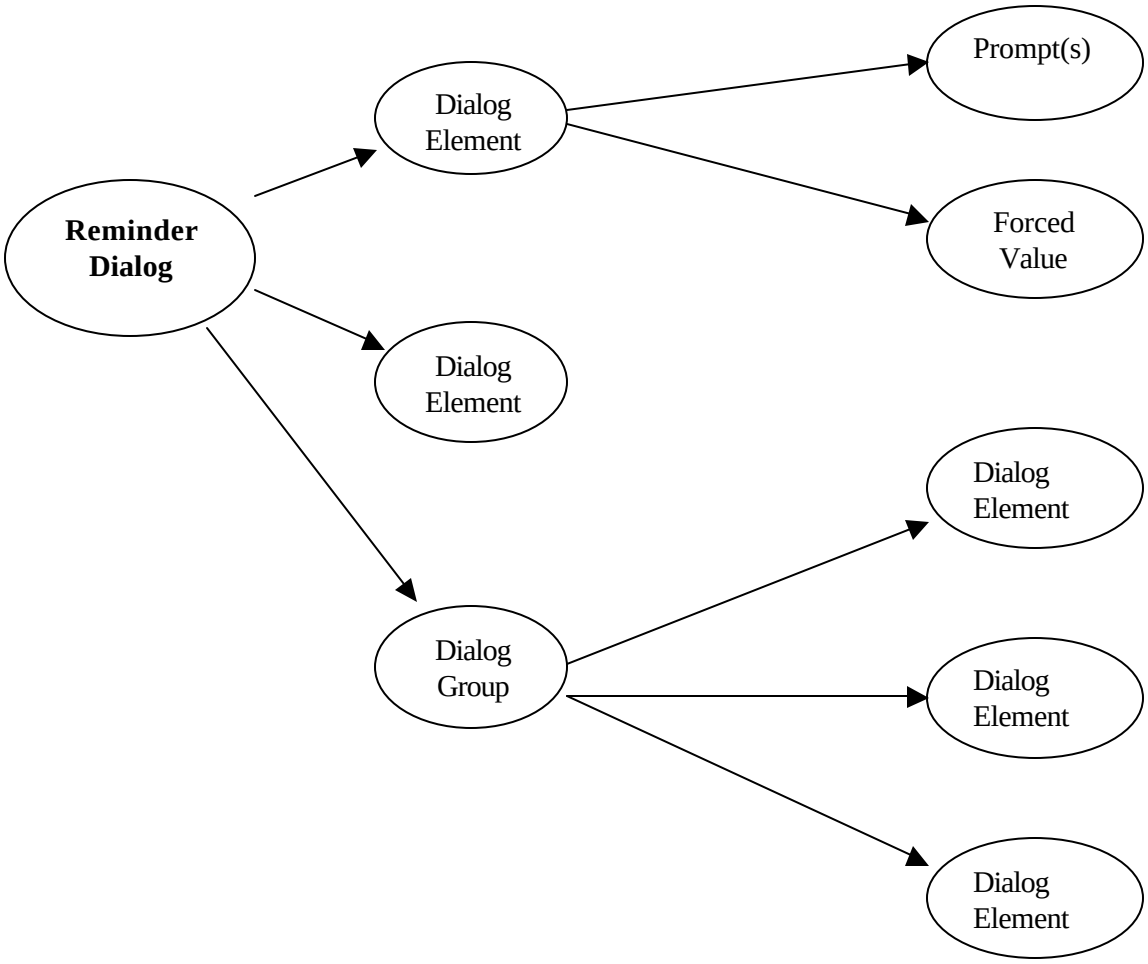
For more complicated dialogs, you can group sentences within a dialog element, using a dialog group. Dialog groups also enable you to prohibit the selection of more than one element. Dialog groups may also contain other dialog groups.

This is an example of a reminder dialog containing a single dialog group



Structure of a dialog group

A dialog group is similar to a dialog element, but may also contain a list of dialog elements or other dialog groups:



Dialog Group fields

Prompt	Description
DISABLE	Dialog will not be displayed in CPRS if there is anything in this field.
RESOLUTION TYPE	Used for future reporting.
FINDING ITEM	Finding item to be posted to PCE, orders, or mental health tests, if the group is checked (optional).
GROUP CAPTION	Text to appear as box caption if there is a box round the group (not included in P/N) (optional).
PUT A BOX AROUND THE GROUP	A box will be drawn around the elements in the group - defaults to no box.
SHARE COMMON PROMPTS	If elements in the group have a common additional prompt (e.g., comment) this will be displayed only once. (optional)
MULTIPLE SELECTION	Enter 1 for one selection only. Enter 2 for one or more. Enter 3 for none or one selection. Enter 0 for no. selection required. 1 ONE SELECTION ONLY 2 ONE OR MORE SELECTIONS 3 NONE OR ONE SELECTION 0 NO SELECTION REQUIRED
HIDE/SHOW GROUP	Hide the group elements until the group checkbox is checked - defaults to show.
GROUP HEADER DIALOG TEXT	Text for the group checkbox (this will be added to the Progress Note).
GROUP HEADER P/N TEXT	Text for the P/N if this differs from the field above. (optional)
EXCLUDE FROM PROGRESS NOTE	Exclude the group header text from the P/N. (optional) NOTE: This now only applies to the group header text. Individual elements in the group must now be marked EXCLUDE FROM P/N individually using the ED option in the group edit.
SUPPRESS CHECKBOX	Display group header with no checkbox - defaults to do not suppress.
NUMBER OF INDENTS	Number of indents for elements in the group. (optional)
INDENT PROGRESS NOTE TEXT	Indent P/N the same as the dialog - defaults to no indent. (optional)
ADDITIONAL FINDINGS	Additional finding items to be posted to PCE, orders, or mental health tests, when the dialog group checkbox is checked. (optional)
SEQUENCE	Display sequence number and dialog elements (multiple field).

Steps to build a dialog group

When editing dialog groups from the Change View action of reminder dialogs, you now use the same editor as that used for reminder dialogs. Dialog group elements may be edited, copied/renamed, or deleted. It is no longer necessary to build component dialog elements before building the dialog group. Elements may be created from within the dialog group screen.

To build a reminder dialog containing a group, first build the dialog group, and then add it to the reminder dialog.

1. Decide which dialog elements will appear in the dialog group.
2. In the Reminder Dialog (DI) option, select the Change View (CV) action.
3. Choose G for Groups,
4. Enter AD to add a new dialog group.
5. Enter G for Group dialog type.
6. Use a prefix in the group name that distinguishes it from other dialog elements (e.g. GP).
7. Enter the parameters for the group (text, caption text, box, hide etc). If the group has a finding item then enter any additional prompts or forced values.
8. For each dialog element in the group, enter a sequence number and the dialog element name. If the dialog element is new, it may be created within this screen.

Adding a Dialog Group to a Reminder Dialog

1. To include the dialog group in a reminder dialog, use the Reminder Dialog (DI) option and enter the dialog group in the same manner as a dialog element.

2. Dialog and Progress note text and group parameters for the dialog group are displayed and can be edited from the DI Reminder Dialog option.

3. Test the reminder dialog within the GUI.

4. If individual dialog elements within the dialog group need modifying, use the Change View (CV) action and select E for Element to list and edit dialog elements.

Example: HEP C RISK ASSESSMENT

The reminder VA-HEP C RISK ASSESSMENT has risk terms/health factors that are mutually exclusive. You can create a dialog group and determine the dialog elements for the health factors.

HF PREV POSITIVE TEST FOR HEP C OTHER
HF RISK FACTOR FOR HEPATITIS C OTHER
HF NO RISK FACTORS FOR HEP C OTHER
HF DECLINED HEP C RISK ASSESSMENT OTHER

1. Choose the Reminder Dialog (DI) option to manually create a dialog group.

2. Choose the Change View (CV) action.

3. Choose G for Groups.

4. Choose AD to add a new dialog group. Use some prefix in the group name to distinguish it from other dialog elements (e.g. GP HEP C RISKS).

5. Enter the following parameters for the group (leaving all other fields blank):

GROUP CAPTION:	**RISK FACTORS**
BOX ROUND GROUP:	**YES**
MULTIPLE SELECTION:	**ONE SELECTION ONLY**
SUPRESS CHECKBOX:	**SUPPRESS**

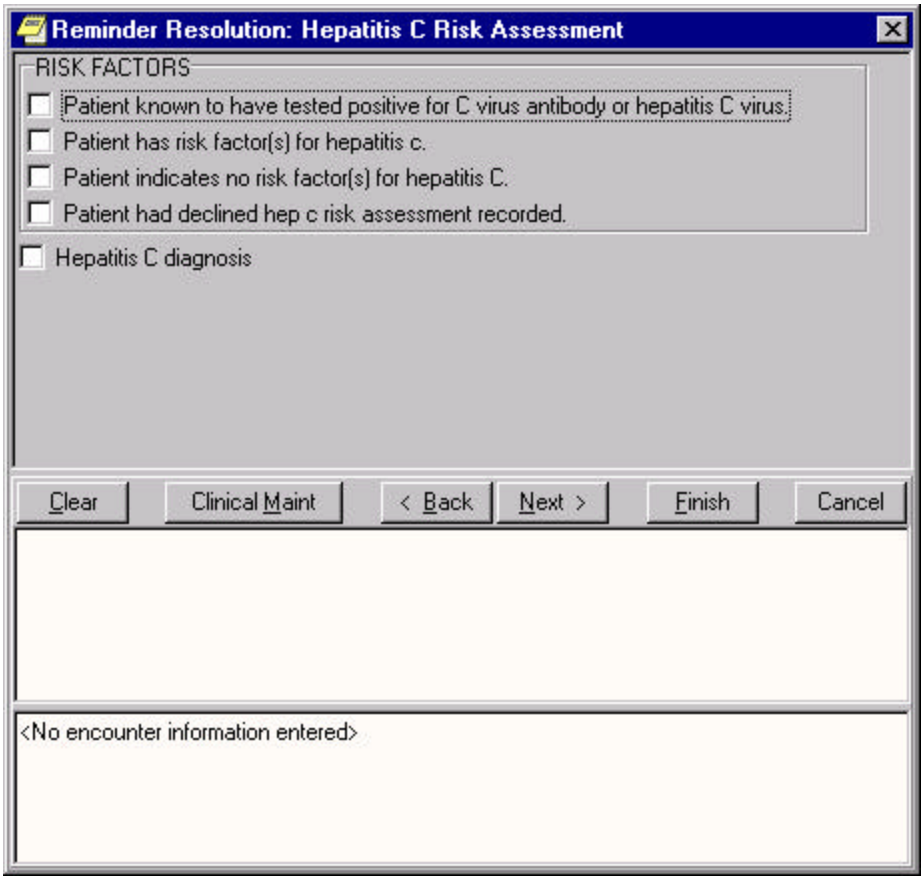
6. For each dialog element, enter a sequence number and the dialog element name.

Seq.	Element
1	HF PREV POSITIVE TEST FOR HEP C OTHER
2	HF RISK FACTOR FOR HEPATITIS C OTHER
3	HF NO RISK FACTORS FOR HEP C OTHER
4	HF DECLINED HEP C RISK ASSESSMENT OTHER

Dialog groups can be entered into a reminder dialog in the same way as a dialog element.

7. Using the DI Reminder Dialog option, remove the HF dialog elements from the VA-HEP C RISK ASSESSMENT dialog.

8. Then add group GP HEP C RISKS as a new sequence.


Reminder Resolution: Hepatitis C Risk Assessment
RISK FACTORS
Patient known to have tested positive for C virus antibody or hepatitis C virus.
Patient has risk factor(s) for hepatitis c.
Patient indicates no risk factor(s) for hepatitis C.
Patient had declined hep c risk assessment recorded.
Hepatitis C diagnosis
Clear
Clinical Maint
< Back
Next >
Finish
Cancel
<No encounter information entered>

Including a Dialog Group in Reminder Dialog Autogeneration

For a single finding item on the reminder definition, a number of standard dialog elements are created by the autogeneration, depending on the finding type parameters within the DP Dialog Parameters menu.

For example, generating a reminder dialog for a reminder with diabetic foot care education as a finding would create three standard dialog elements:

ED DIABETES FOOT CARE DONE
ED DIABETES FOOT CARE DONE ELSEWHERE
ED DIABETES FOOT CARE REFUSED

When reminder dialogs are generated for other reminders with this finding item, the reminder dialog created will use these same standard elements.

If a dialog group should always be used for a reminder finding item in dialog autogeneration (instead of the standard dialog elements), then the dialog group can be entered in the option Finding Item Parameters for the finding item. The dialog group will then be inserted into the generated reminder dialog instead of the standard dialog elements.

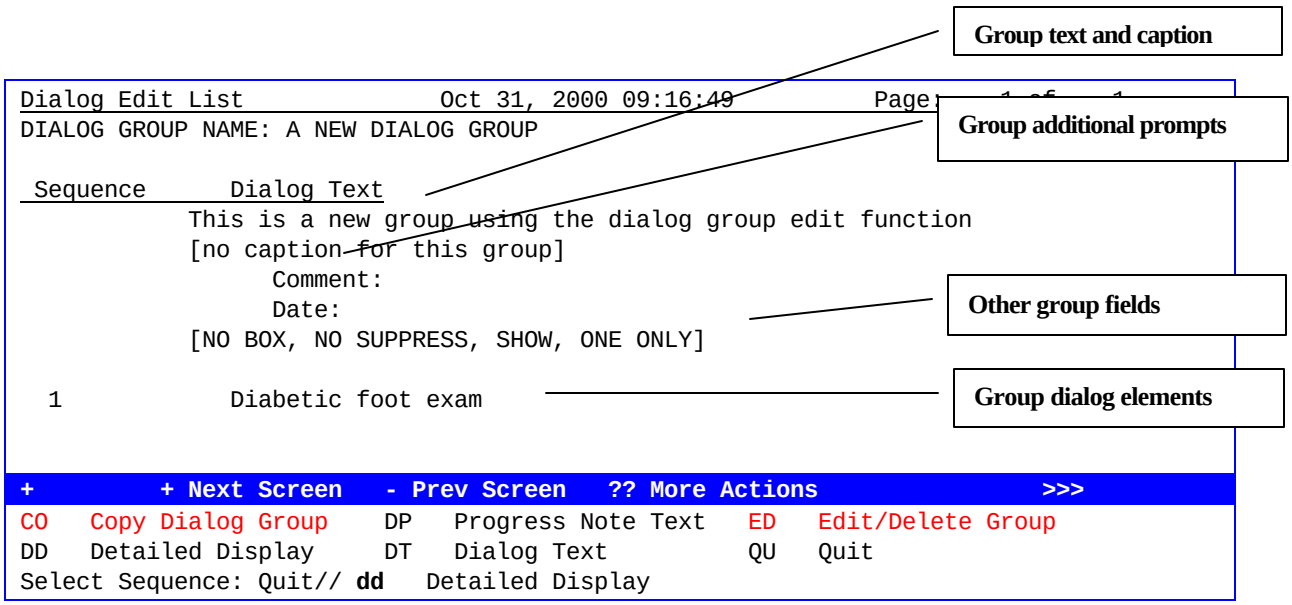
Editing Elements in the Group

This is a new method (with patch PXRM*1.5*2) that allows groups to be edited in the same manner as reminder dialogs, by sequence number. Note that this does not change the way dialog groups can be edited from the reminder dialog screen.

1. Select the CV action, and then select List dialog groups. The following screen appears (unchanged). Select a dialog group (#1).

```
Dialog List                    Oct 24, 2000 15:20:56          Page:    1 of    2
DIALOG VIEW (DIALOG GROUPS)

 Item Dialog Name                                Dialog type              Status
   1  A NEW DIALOG GROUP                       Dialog Group
   2  ATS ADVANCED                               Dialog Group
   3  ATS GROUP                                  Dialog Group
   4  ATS TOBACCO                                Dialog Group
   5  Antry's Diabetic Exam Group                Dialog Group
   6  EC PNEUMO DONE                             Dialog Group
   7  ED ADVANCED DIRECTIVES DONE                Dialog Group
   8  GP DEMO GROUP                              Dialog Group
   9  GP DIABETIC FOOT                           Dialog 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// 1
```

2. Select DT display to see group information at the top and group element information below:



3. The Detailed Display shows group findings and group additional prompts at the top and dialog elements below:

```
Dialog Edit List              Oct 31, 2000 09:17:02          Page:    1 of    1
DIALOG GROUP NAME: A NEW DIALOG GROUP

 Sequence       Dialog Details                                          Disabled
                Finding type: HEALTH FACTOR
                Finding item: HEAVY DRINKER (3 OR MORE/DAY) [HF(17)]
                Additional prompts: PXRM COMMENT
                                    PXRM VISIT DATE
  1             Dialog element: SP DIABETIC FOOT
                Resolution: DONE AT ENCOUNTER
                Finding type: EXAM
                Finding item: DIABETIC FOOT CHECK [EX(27)]

+          + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog Group    DP   Progress Note Text   ED   Edit/Delete Group
DD   Detailed Display     DT   Dialog Text          QU   Quit
Select Sequence: Quit// ed   Edit/Delete Group
```

4. Edit/Delete Group allows the group fields to be edited:

```
Not used by any other dialog
NAME: A NEW DIALOG GROUP// <Enter>
DISABLE: <Enter>
CLASS: L  LOCAL
SPONSOR: <Enter>
REVIEW DATE: <Enter>
RESOLUTION TYPE: <Enter>
FINDING ITEM: HEAVY DRINKER (3 OR MORE/DAY)// <Enter>
GROUP CAPTION: <Enter>
PUT A BOX AROUND THE GROUP: NO// <Enter>
SHARE COMMON PROMPTS: <Enter>
MULTIPLE SELECTION: ONE SELECTION ONLY// <Enter>
HIDE/SHOW GROUP: SHOW// <Enter>
GROUP HEADER DIALOG TEXT: <Enter>
This is a new group using the dialog group edit function

  Edit? NO// <Enter>
GROUP HEADER ALTERNATE P/N TEXT: <Enter>
  No existing text
  Edit? NO// <Enter>
EXCLUDE FROM PROGRESS NOTE: <Enter>
SUPPRESS CHECKBOX: <Enter>
NUMBER OF INDENTS: <Enter>
INDENT PROGRESS NOTE TEXT: <Enter>
Select ADDITIONAL FINDINGS: <Enter>
Select SEQUENCE: 3//<Enter>
  SEQUENCE: 3// <Enter>
  DIALOG ELEMENT: PXRM VISIT DATE//<Enter>
```

5. New elements may be added to the group by entering a new sequence number, just as with reminder dialogs. Existing elements may be selected by sequence number and edited, copied, or deleted from the dialog:

```
Dialog Edit List              Oct 31, 2000 09:27:52          Page:    1 of    1
DIALOG GROUP NAME: A NEW DIALOG GROUP

 Sequence      Dialog Details                                          Disabled
               Finding type: HEALTH FACTOR
               Finding item: HEAVY DRINKER (3 OR MORE/DAY) [HF(17)]
               Additional prompts: PXRM COMMENT
                                   PXRM VISIT DATE

  1            Dialog element: SP DIABETIC FOOT
               Resolution: DONE AT ENCOUNTER
               Finding type: EXAM
               Finding item: DIABETIC FOOT CHECK [EX(27)]

+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog Group    DP   Progress Note Text   ED   Edit/Delete Group
DD   Detailed Display     DT   Dialog Text          QU   Quit
Select Sequence: Quit// 10
ARE YOU ADDING 10 AS A NEW SEQUENCE NUMBER: N// y  YES

Select new DIALOG ELEMENT:    ED DIABETES FOOT CARE REFUSED     dialog element
         ...OK? Yes// <Enter>  (Yes)
```

```
Dialog Edit List              Oct 31, 2000 09:27:57          Page:    1 of    2
DIALOG GROUP NAME: A NEW DIALOG GROUP

 Sequence      Dialog Details                                          Disabled
               Finding type: HEALTH FACTOR
               Finding item: HEAVY DRINKER (3 OR MORE/DAY) [HF(17)]
               Additional prompts: PXRM COMMENT
                                   PXRM VISIT DATE

  1            Dialog element: SP DIABETIC FOOT
               Resolution: DONE AT ENCOUNTER
               Finding type: EXAM
               Finding item: DIABETIC FOOT CHECK [EX(27)]

 10            Dialog element: ED DIABETES FOOT CARE REFUSED
               Resolution: PATIENT REFUSED
               Finding type: EDUCATION TOPIC
               Finding item: VA-DIABETES FOOT CARE [ED(359)]
               Additional prompts: PXRM REFUSED (forced value)
                                   PXRM COMMENT
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog Group    DP   Progress Note Text   ED   Edit/Delete Group
DD   Detailed Display     DT   Dialog Text          QU   Quit
Select Sequence: Next Screen// 1
```

```
CURRENT DIALOG ELEMENT NAME: SP DIABETIC FOOT

     Select one of the following:

          E         Edit
          C         Copy and Replace current element
          D         Delete element from this dialog

Select Dialog Element Action: E//
```

NOTE: If a dialog group has findings at the group level (as in the above example), the additional prompts/forced values for the group are entered via ED Edit/Delete Group. *Only dialog elements and dialog groups may be entered by sequence number*.

The dialog edit process now allows optional entry of 'ORDERABLE ITEM' on dialog elements.

Different Dialog and Progress Note Text

If you wish to have the progress note text different from the dialog text, you can use the action DD, Progress Note Text to create separate text. This is useful when the dialog text doesn't make sense in the context of a Progress Note. For example, if you would like the display to the user to have a prompt for "Enter Order for PPD," but would like the text that appears in the progress note to say "PPD Ordered," this feature will allow you to do that.

An optional field, ALTERNATEPROGRESS NOTE TEXT, should be entered if you wish to have the progress note text different from the dialog text. If this field is not entered, the dialog text will be entered into the progress note.

Text formatting

When the Result Dialog progress note text is entered into the word processing field, you have some control over the way the text is displayed in the CPRS GUI. To have the text appear in the GUI as it is in the word-processing lines, each line needs to start with a space. Lines that begin with text will be treated as if they can be wrapped or appended to the previous line, while the word processing lines will be treated as if they are "line mode" text (i.e., without word wrap) if there is a blank at the beginning of the line. Keep in mind the number of characters that will be available to print the line. Remember that CPRS uses indentations defined in the dialogs. If the line mode text ends up longer than the screen can display, the remaining text will be displayed on the next line by itself. The text will not be wrapped and concatenated with the next line's text as long as the next line starts with a space. Blank lines may be included to further format lines. A blank line will be treated as starting with a space.

```
Dialog Edit List              Feb 04, 2000 15:37:20         Page:    1 of    2
REMINDER DIALOG NAME: 571 SECOND TEST (DISABLED - DISABLED AT AUTOGENERATE)
 Sequence      Dialog Text
  2            Education done previously.
                  Date:
                  Comment:
  3            Declined.
                  PXRM REFUSED (forced value)
                  Comment:
  4            Advanced directives education done.
                  Level of Understanding:
                  Comment:
  5            Education outside the VA.
                  Date:
                  Comment:
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text            RI  Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog     QU  Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Next Screen//DP
```

Text formatting, cont'd

The DP action allows display of the progress note text:

```
Dialog Edit List              Feb 04, 2000 15:37:20         Page:    1 of    2
REMINDER DIALOG NAME: 571 SECOND TEST (DISABLED - DISABLED AT AUTOGENERATE)
 Sequence      Progress Note Text
  2          Patient received advanced directive screening education outside t
                  Date:
                  Comment:
  3          Patient declined advanced directive screening education at this e
                  PXRM REFUSED (forced value)
                  Comment:
  4          Patient had advanced directives education at this encounter.
                  Level of Understanding:
                  Comment:
  5          Patient received advanced directives education outside the VA.
                  Date:
                  Comment:
 +         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text            RI  Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog     QU  Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Next Screen//2
```

```
CURRENT DIALOG ELEMENT NAME: ED ADVANCED DIRECTIVE SCREENIN DONE ELSE

     Select one of the following:

          E         Edit
          R         Replace/Copy current element
          D         Delete element from this dialog

Select Dialog Element Action: E// <Enter> dit
Dialog Element Type: E//??

Enter G to change the current dialog element into a dialog group so
that additional elements can be added. Enter E to leave the type of
the dialog element unchanged.

Dialog Element Type: E// <Enter> lement
CURRENT DIALOG ELEMENT NAME: ED ADVANCED DIRECTIVE SCREENIN DONE ELSE
Used by:  571 SECOND TEST (Current Reminder Dialog)

DISABLE: <Enter>
CLASS: L  LOCAL
SPONSOR: <Enter>
REVIEW DATE: <Enter>
RESOLUTION TYPE: DONE ELSEWHERE (HISTORICAL)// <Enter>
ORDERABLE ITEM: <Enter>
FINDING ITEM: VA-ADVANCED DIRECTIVES SCREENING// <Enter>
```

Text formatting, cont'd

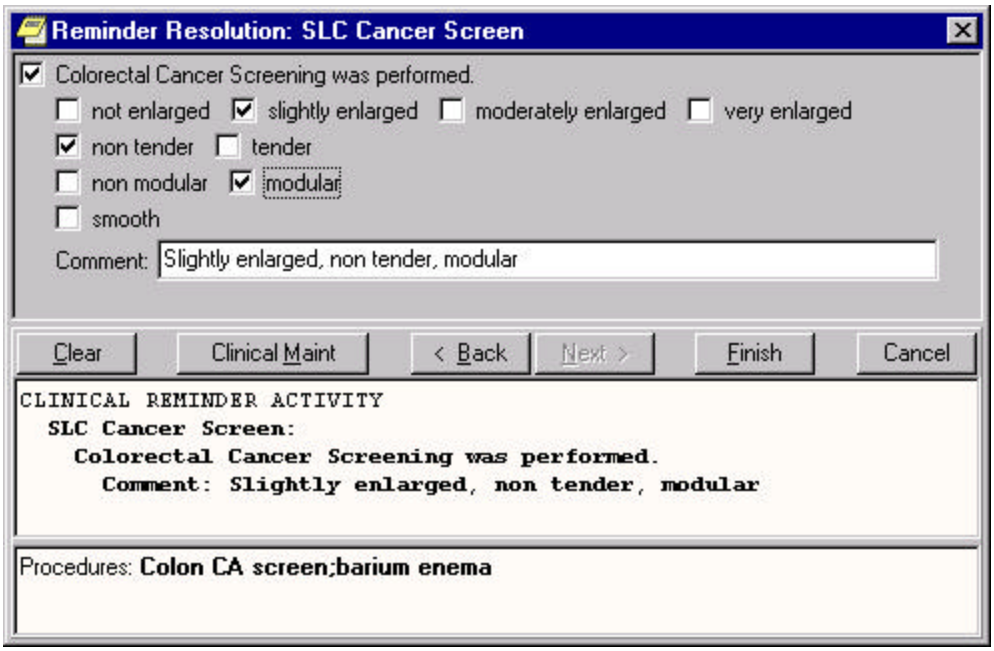
```
DIALOG/PROGRESS NOTE TEXT: <Enter>
Patient received advanced directive screening education outside the VA.

  Edit? NO// <Enter>
ALTERNATE PROGRESS NOTE TEXT:
Education done previously.
  Edit? NO// <Enter>

EXCLUDE FROM PROGRESS NOTE: <Enter>
SUPPRESS CHECKBOX: <Enter>
Select ADDITIONAL FINDINGS: ?
     You may enter a new ADDITIONAL FINDINGS, if you wish
     Enter additional finding items for this dialog element.
     Enter one of the following:
       ED.EntryName to select a EDUCATION TOPICS
       IM.EntryName to select a IMMUNIZATIONS
       ST.EntryName to select a SKIN TEST
       EX.EntryName to select a EXAM
       HF.EntryName to select a HEALTH FACTORS
       CPT.EntryName to select a PROCEDURE
       ICD9.EntryName to select a ICD9 DIAGNOSIS
       VM.EntryName to select a VITAL TYPE
       Q.EntryName to select a ORDER DIALOG

     To see the entries in any particular file type <Prefix.?>

Select ADDITIONAL FINDINGS: <Enter>
RESULT GROUP/ELEMENT: ??
     The result group or element is called on completion of a dialog and allows
     additional findings or progress note text to be added conditionally.
     Standard result groups for mental health tests are released with the
     package.

Choose from:
   AIMS RESULT ELEMENT 1        result element
   AIMS RESULT GROUP        result group
   AIMS RESULT GROUP        result group
   AUDC RESULT ELEMENT 1        result elementSelect SEQUENCE: 2// <Enter>
  SEQUENCE: 2// <Enter>
  ADDITIONAL PROMPT/FORCED VALUE: PXRM COMMENT// <Enter>
  OVERRIDE PROMPT CAPTION: <Enter>
  START NEW LINE: <Enter>
  EXCLUDE FROM PN TEXT: <Enter>
  REQUIRED
```

Creating Comments from dialog elements

You can use prompt elements to build a comment, as shown in the following example:

NOTE: This can also be done by the new method of copying PXRM COMMENT and adding checkbox sequences, as described on page 149.

The Colorectal Cancer element for this dialog has (site-specific) additional prompts. These are included in the comment box when checked.



Dialog element for colorectal cancer

```
Dialog Name:  JM COLORECTAL CANCER SCREENING
CURRENT DIALOG ELEMENT/GROUP NAME: JM COLORECTAL CANCER SCREENING
Used by:  JM DIALOG FOR DIABETIC EXAM (Reminder Dialog)
DISABLE: <Enter>
CLASS: L  LOCAL
SPONSOR: <Enter>
REVIEW DATE: <Enter>
RESOLUTION TYPE: <Enter>
ORDERABLE ITEM: <Enter>
FINDING ITEM: G0106// <Enter>
DIALOG/PROGRESS NOTE TEXT:
Colorectal Cancer Screening
  Edit? NO// <Enter>
ALTERNATE PROGRESS NOTE TEXT:
  No existing text
  Edit? NO// <Enter>
EXCLUDE FROM PROGRESS NOTE: <Enter>
SUPPRESS CHECKBOX: <Enter>
Select ADDITIONAL FINDINGS: <Enter>
RESULT GROUP/ELEMENT: <Enter>
Select SEQUENCE: 16// ?
 Answer with COMPONENTS SEQUENCE, or ITEM
Choose from:
   1      JM NOT ENLARGED
   2      JM SLIGHTLY ENLARGED
   4      JM MODERATELY ENLARGED
   5      JM VERY ENLARGED
   10     JM NON TENDER
   11     JM TENDER
   15     JM NON MODULAR
   16     JM MODULAR
   50     PXRM COMMENT
```

Note that the additional prompts for the element consist of a standard PXRM COMMENT prompt and several local prompts. The prompt caption is the text that is added to the comment box. Create the local prompts from the CV option:

```
Select Item: Next Screen// cv   Change View
     Select one of the following:
          D         Reminder Dialogs
          E         Dialog Elements
          F         Forced Values
          G         Dialog Groups
          P         Additional Prompts
          R         Reminders
          RG        Result Group (Mental Health)
          RE        Result Element (Mental Health)
TYPE OF VIEW: R// p  Additional Prompts
```

```
Selection List              Mar 15, 2000 11:50:40          Page:    1 of    2
DIALOG VIEW (ADDITIONAL PROMPTS)

 Item Dialog Name                              Dialog type              Status
   1  JM ADD TO PROBLEM LIST                   Additional Prompt        Disabled
   2  JM LEVEL OF SEVERITY                     Additional Prompt
   3  JM MODERATELY ENLARGED                   Additional Prompt
   4  JM MODULAR                               Additional Prompt
   5  JM NON MODULAR                           Additional Prompt
   6  JM NON TENDER                            Additional Prompt
   7  JM NOT ENLARGED                          Additional Prompt
   8  JM SLIGHTLY ENLARGED                     Additional Prompt
   9  JM TENDER                                Additional Prompt
  10  JM TEST PROMPT                           Additional Prompt
  11  JM VERY ENLARGED                         Additional Prompt
  12  PXRM ADD TO PROBLEM LIST                 Additional Prompt
  13  PXRM COMMENT                             Additional Prompt
  14  PXRM CONTRAINDICATED                     Additional Prompt
  15  PXRM LEVEL OF SEVERITY                   Additional Prompt
  16  PXRM LEVEL OF UNDERSTANDING              Additional Prompt
+         + 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// 4
```

```
Dialog Name:  JM MODULAR

CURRENT DIALOG ELEMENT/GROUP NAME: JM MODULAR
Used by:  JM COLORECTAL CANCER SCREENING (Dialog Element)

DISABLE Prompt: <Enter>
PROMPT CAPTION: modular// <Enter>
EXCLUDE FROM PROGRESS NOTE: <Enter>
DEFAULT VALUE: <Enter>
RESTRICTED TO FINDING TYPE: <Enter>
```

Comment Prompts

Reminder dialog with dialog group, dialog elements, and comment prompts:

```
Dialog Edit List              Nov 01, 2000 11:34:20          Page:    1 of    2
REMINDER DIALOG NAME: PJH TEST PATCH 2
Sequence      Dialog Details                                          Disabled
  5            Dialog element: LEARNING NEEDS ELEMENT
               Finding type: HEALTH FACTOR
               Finding item: LEARNING NEEDS ASSESSMENT [HF(4)]
               Additional prompts: PXRM COMMENT
                                   ABILITY GOOD PROMPT
                                   ABILITY FAIR PROMPT
                                   ABILITY POOR PROMPT     ***local prompts***
                                   READINESS GOOD PROMPT
                                   READINESS POOR PROMPT
 10            Dialog element: SP SPACER
 15            Dialog group: LEARNING NEEDS GROUP
               Dialog elements:    1  PXRM COMMENT
                                   5  ABILITY GOOD
                                   10 ABILITY FAIR     ***dialog elements***
                                   15 ABILITY POOR
                                   20 READINESS GOOD
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Next Screen//
```

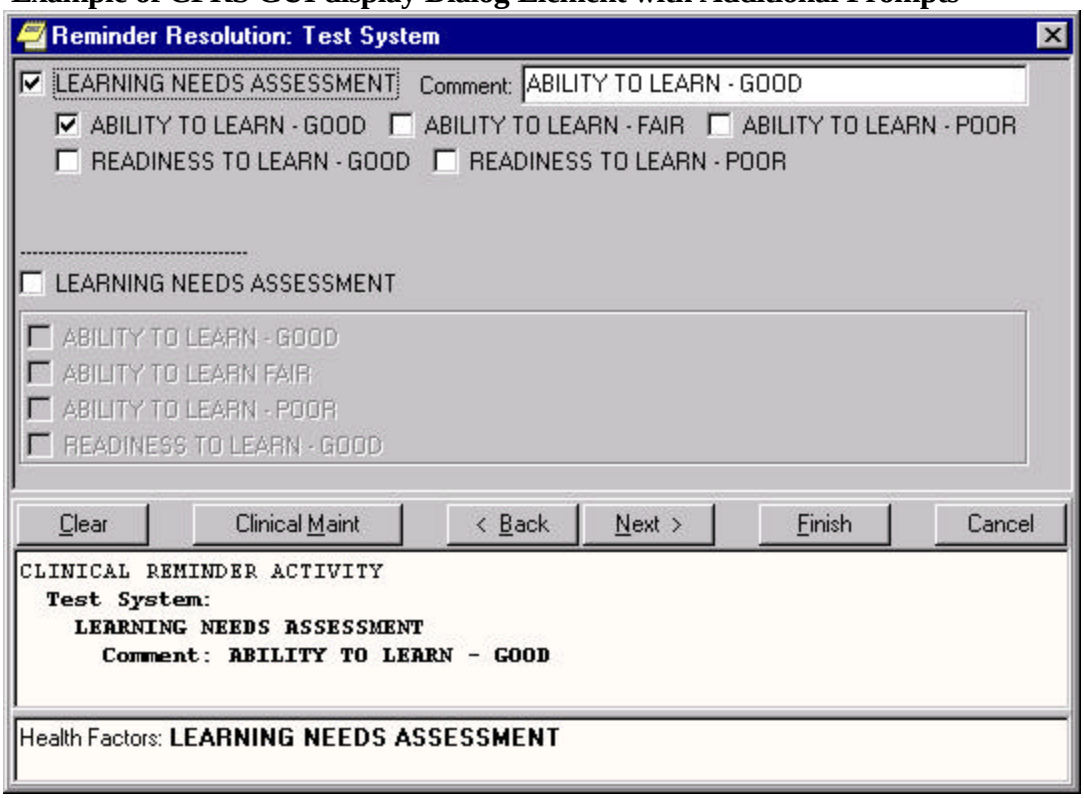
Details of the dialog group

```
CURRENT DIALOG ELEMENT/GROUP NAME: LEARNING NEEDS GROUP
Used by:  PJH TEST PATCH 2 (Current Reminder Dialog)
DISABLE:
CLASS: L  LOCAL
SPONSOR: <Enter>
REVIEW DATE: <Enter>
RESOLUTION TYPE: DONE AT ENCOUNTER//
ORDERABLE ITEM: <Enter>
FINDING ITEM: LEARNING NEEDS ASSESSMENT//
GROUP CAPTION:
PUT A BOX AROUND THE GROUP: YES//
SHARE COMMON PROMPTS:
MULTIPLE SELECTION:
HIDE/SHOW GROUP: SHOW//
GROUP HEADER DIALOG TEXT:
LEARNING NEEDS ASSESSMENT
  Edit? NO//
GROUP HEADER ALTERNATE P/N TEXT:
  No existing text
  Edit? NO//
```

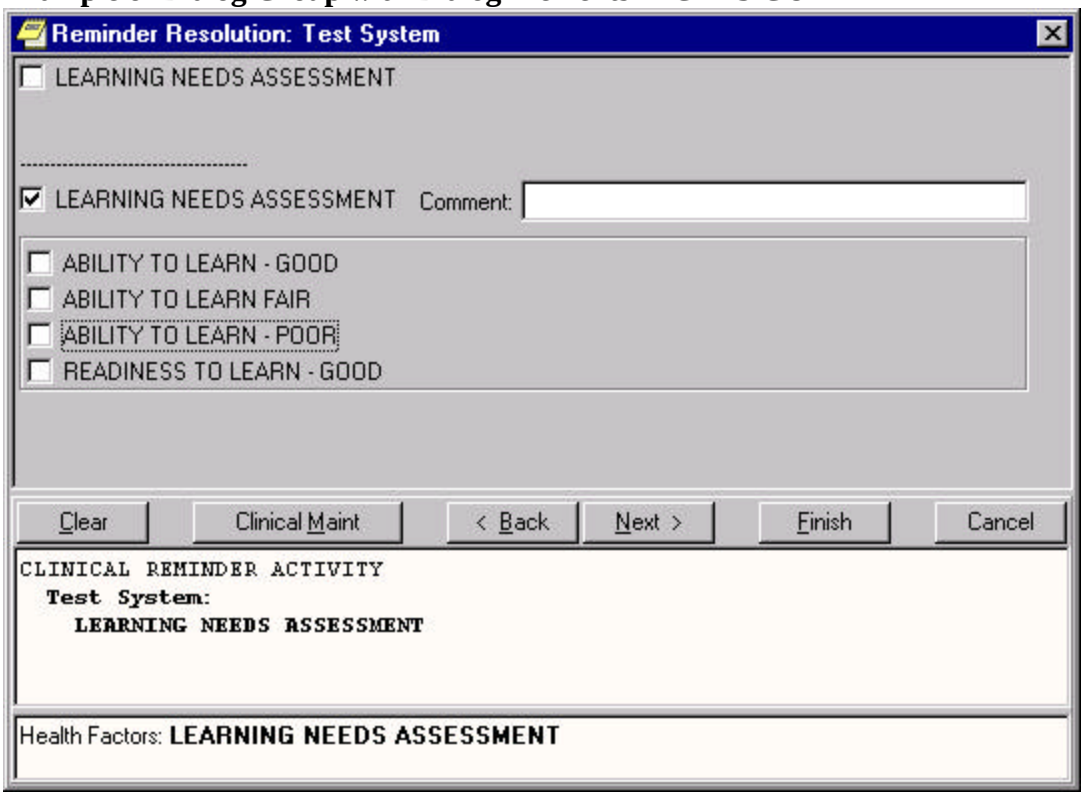
```
EXCLUDE FROM PROGRESS NOTE:
SUPPRESS CHECKBOX:
NUMBER OF INDENTS:
INDENT PROGRESS NOTE TEXT:
Select ADDITIONAL FINDINGS:
Select SEQUENCE: ?
    Answer with COMPONENTS SEQUENCE, or ITEM
   Choose from:
   1      PXRM COMMENT
   5      ABILITY GOOD
   10     ABILITY FAIR
   15     ABILITY POOR
   20     READINESS GOOD
```

NOTE: This can also be done by the new method of copying PXRM COMMENT and adding checkbox sequences, as described on page 149.

Example of CPRS GUI display Dialog Element with Additional Prompts



Example of Dialog Group with Dialog Elements in CPRS GUI



NOTE: If you have the same CPT code entered from multiple reminders, they are all still being entered just once for the encounter, and that one entry can't have multiple values for its PCE comment field. The ability to add text only prompts should be coming in v15 of CPRS.

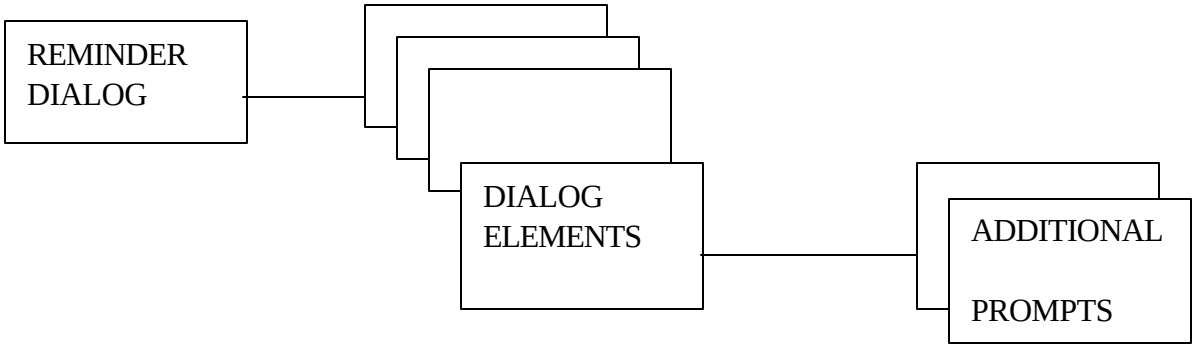
See NOIS "EKH-1000-42980, Additional Prompts Overwriting Each Other."

Changing a Dialog Element into a Dialog Group

Dialog elements can be changed into groups, using Edit/Delete Dialog (ED).

```
Dialog Selection List          Mar 03, 2000 10:02:04          Page:    1 of    2
REMINDER DIALOG NAME: 571 TEST
 Sequence     Dialog Text
  5           Patient had advanced directive screening education at this encoun
                  Level of Understanding:
                  Comment:
               [no caption for this group]


 10           Patient had tobacco use screening education at this encounter.
                  Level of Understanding:
                  Comment:
               Questionnaire [group caption]

 10.3          Barrier to learning.

+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print

Select Sequence: Next Screen// 15
-------------------------------------------------------------------------------
CURRENT DIALOG ELEMENT NAME: VM BP DONE

     Select one of the following:

          E         Edit
          C         Copy and Replace current element
          D         Delete element from this dialog

Select Dialog Element Action: E// e  Edit
Dialog Element Type: E// g  Group
Dialog element changed to a dialog group
CURRENT DIALOG ELEMENT/GROUP NAME: VM BP DONE
 etc...
```

DIALOG STRUCTURE



Result Dialogs

Result dialogs contain progress note text that is added to a progress note, based on the results of dialog processing. (In the first release of Clinical Reminders V. 1.5, only Mental Health Instrument results can be used.)

Some reminder definitions will 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.

```
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 Elements to the MH Instruments Dialog Element RESULT GROUP/ ELEMENT 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.

ALTERNATE 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>
ALTERNATE PROGRESS NOTE TEXT: <Enter>
An alcohol screening test (CAGE) was negative (score=|SCORE|).
```

Mental Health Test Dialogs

Dialogs for mental health tests can be set up in Clinical Reminders. A reminder definition can include any mental health instrument, but the reminder GUI resolution process will currently only work with the following instruments:
AIMS, AUDT, BDI, CAGE, DOM80, DOMG, MISS, and ZUNG

NOTE: YS*5.01*53 is required to use Mental Health reminders. Patch YS*5.01*62 is needed to do mental health tests in a reminder dialog. Patch YS*5.01*64 is required to be able to save GAF information, in either a reminder dialog or on the Encounter form.

A dialog element with a Mental Health Instrument finding may be created or autogenerated from the reminder definition as follows:

```
Dialog Selection List            Mar 10, 2000 10:47:11          Page:    1 of    0
REMINDER DIALOG NAME: MHTEST1
Sequence       Dialog Details                                          Disabled
  5             Dialog element: PXRM ZUNG
                Finding type: MENTAL HEALTH INSTRUMENT
                Finding item: ZUNG [MH(87)]
                Result name: ZUNG
+         + Next Screen   - Prev Screen   ?? More Actions                >>>
CO   Copy Dialog          DT   Dialog Text          RI   Reminder Inquiry
DD   Detailed Display     ED   Edit/Delete Dialog   QU   Quit
DP   Progress Note Text   INQ  Inquiry/Print
Select Sequence: Quit//
```

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 released with the package:

```
Dialog List                 Mar 10, 2000 10:59:26          Page:    1 of    1
DIALOG VIEW (RESULT GROUPS)
Item Dialog Name                              Dialog type              Status
   1  PXRM AIMS RESULT GROUP                   Result Group
   2  PXRM AUDC RESULT GROUP                   Result Group
   3  PXRM AUDIT RESULT GROUP                  Result Group
   4  PXRM BDI RESULT GROUP                    Result Group
   5  PXRM CAGE RESULT GROUP                   Result Group
   6  PXRM DOM80 RESULT GROUP                  Result Group
   7  PXRM DOMG RESULT GROUP                   Result Group
   8  PXRM MISS RESULT GROUP                   Result Group
   9  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 ZUNG:

```
Select Item: Quit// I   Inquiry/Print
Select Dialog Definition: PXRM ZUNG RESULT GROUP       result group
         ...OK? Yes// <Enter>   (Yes)

DEVICE: <Enter>  ANYWHERE    Right Margin: 80// <Enter>
REMINDER DIALOG INQUIRY                    Apr 14, 2000 10:17:35 am  Page 1
-------------------------------------------------------------------------------
        NUMBER: 207
                           Name:  PXRM ZUNG RESULT GROUP
                           Type:  result group
               Exclude from PN:

 GROUP COMPONENTS:

         Sequence:  1
   Result Element:  ZUNG RESULT ELEMENT 1
Element Condition:  I SCORE<33
    Element text:
     A mood disorder screening test (ZUNG) was in the low range (score =
     |SCORE|).

         Sequence:  2
   Result Element:   ZUNG RESULT ELEMENT 2
Element Condition:  I (SCORE>32)&(SCORE<51)
    Element text:
     A mood disorder screening test (ZUNG) was in the medium range (score =
     |SCORE|).

         Sequence:  3
   Result Element:   ZUNG RESULT ELEMENT 3
Element Condition:  I SCORE>50
    Element text:
     A mood disorder screening test (ZUNG) was in the high range (score =
     |SCORE|).
```

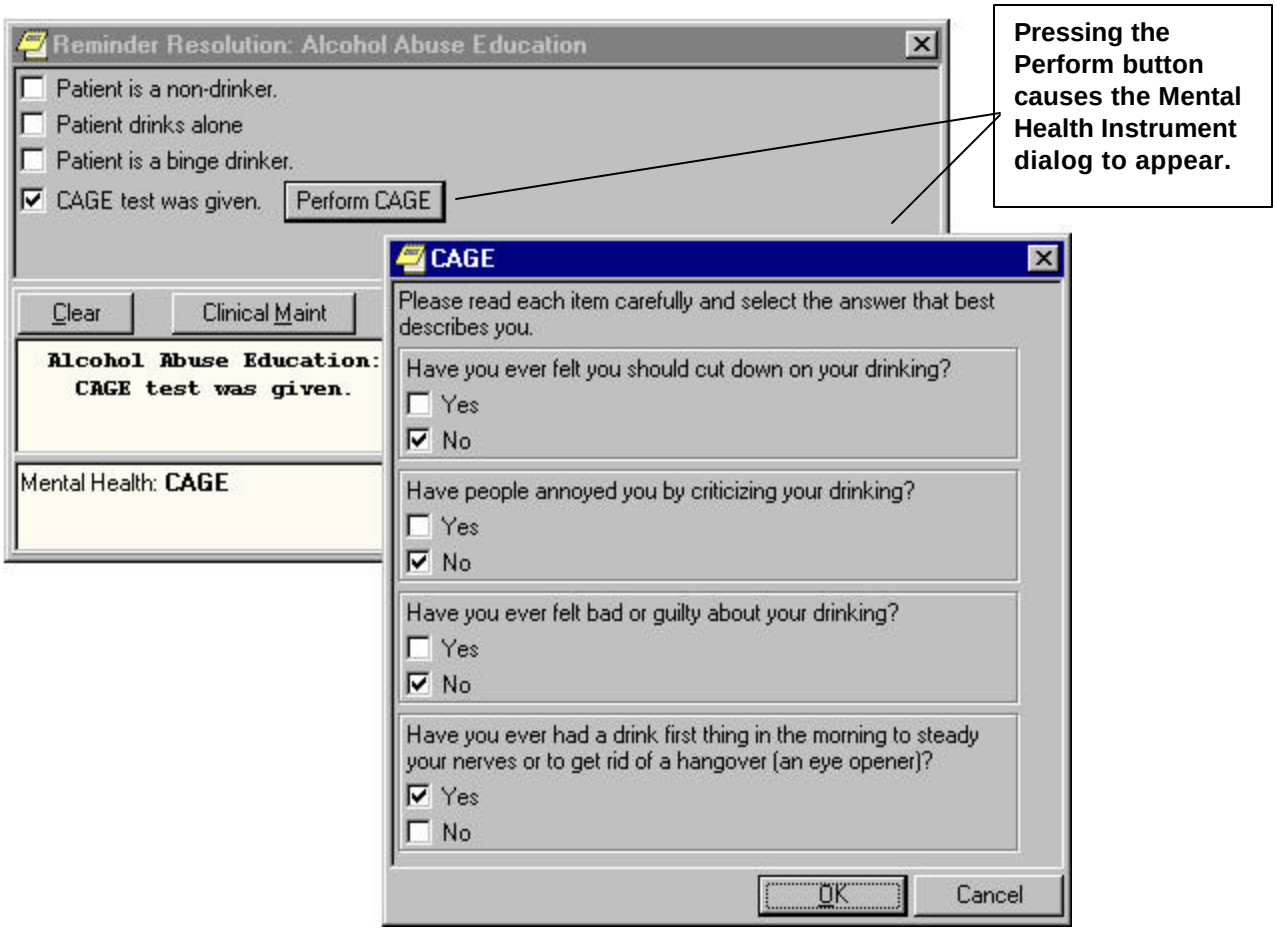
If the test results in a score of 66, then a progress note entry is created including the actual score: "A mood disorder screening test (ZUNG) was in the high range (score = 66)"

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.

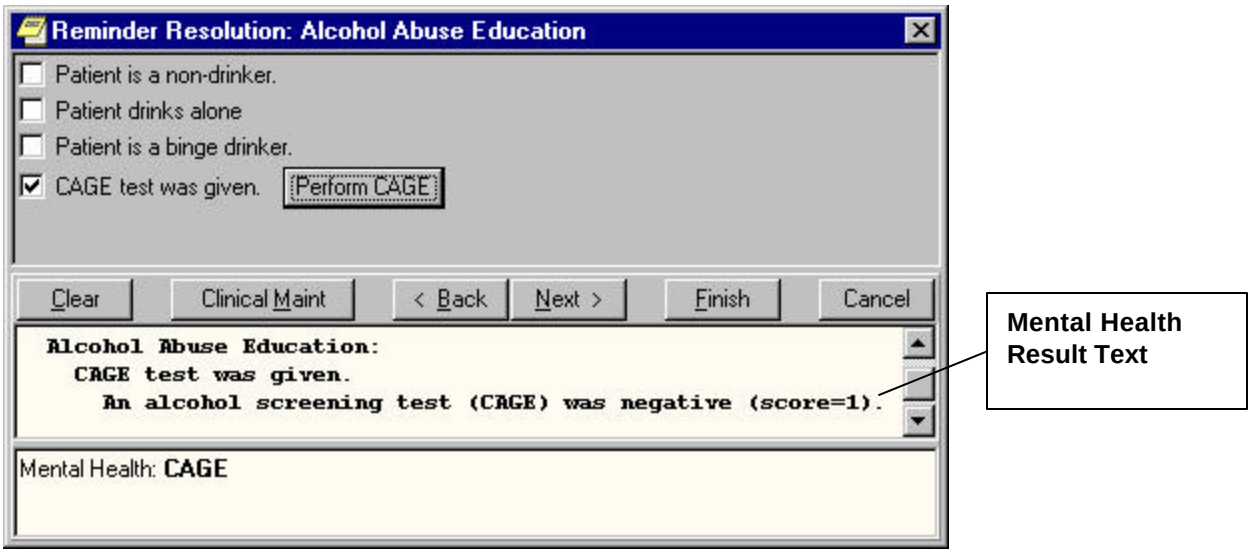
NOTE: |SCORE| works like TIU Objects, by retrieving and inserting the score in place of the marker.

Mental Health Test Dialogs, cont'd

Example of giving a Mental Health Instrument:



After the test questions have been answered, result text for the test is entered into the progress note


Reminder Resolution: Alcohol Abuse Education
Patient is a non-drinker.
Patient drinks alone
Patient is a binge drinker.
CAGE test was given.
Perform CAGE
Clear
Clinical Maint
< Back
Next >
Finish
Cancel
Alcohol Abuse Education:
CAGE test was given.
An alcohol screening test (CAGE) was negative (score=1).
Mental Health: CAGE
Mental Health Result Text

TIU Objects

TIU objects may be embedded in the dialog sentence text, dialog progress note text, or the result progress note text (Mental Health).

The TIU object name should be included in the word processing text in the format |***object***|. For example, the dialog element sentence or progress note text would look like this:

Patient |PATIENT NAME| had smoking cessation education at this visit.

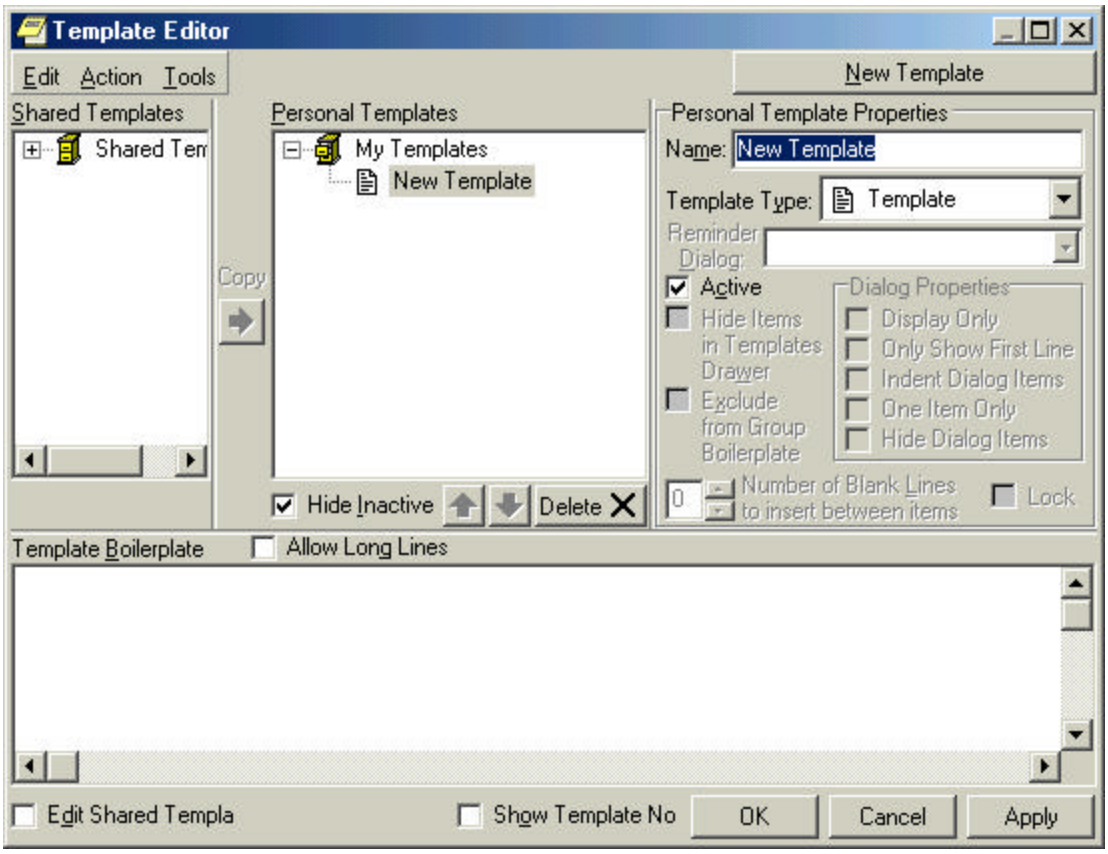
Note that the TIU object will not include any data input via the current dialog. This is not posted until the dialog processing is finished.

Creating Reminder Dialog Templates

Templates can be linked to Reminder dialogs. This allows you to use templates to place orders, enter PCE information, and enter vitals and mental health data.

Steps to create a Reminder Dialog:

1. On the Notes, Consults, or D/C Summ tab, bring up the Template Editor by selecting Options | Create New Template.



2. In the Name field under Personal Template Properties, type in a name for the new template. Follow the template name requirements*. You should also make the name descriptive of the content for ease of use.
3. Click on the drop-down button in the Template Type field and select Reminder Dialog.
4. Click on the drop-down button in the Dialog field and select the Reminder Dialog desired.

5. Place the template where you want it in the tree view.
a. Click the plus sign next to an item to see the objects under it.
b. Drag-and-drop the template to where you want it in the tree. (Or use arrows below the personal templates tree view.)

6. To save the template, click Apply. To save and exit the editor, click OK.

NOTE: You don't have to click Apply after each template, but it is recommended because if you click Cancel, you will lose all changes you have made since the last time you clicked Apply or OK.

Only Reminder Dialogs that are listed in the TIU Reminder Dialogs parameter can be linked to templates. If there are no Reminder Dialogs in this parameter, the Reminder Dialog template type will not be available.

***Template Name Requirements**

The template you are creating is automatically called "New Template," and you must rename it. Template names must begin with a letter or a number, be between 3 and 30 characters in length (including spaces), and can't be named "New Template." Give the template a meaningful name to help you remember its contents and to allow searching for the first word in the name.

Exported Reminder Dialogs

```
DISTRIBUTED REMINDER DIALOG LIST              APR 30,2000  10:58    PAGE 1
NUMBER
    NAME                              TYPE
-------------------------------------------------------------------------------
   1   PXRM AIMS RESULT GROUP                   Result Group
   2   PXRM AUDC RESULT GROUP                   Result Group
   3   PXRM AUDIT RESULT GROUP                  Result Group
   4   PXRM BDI RESULT GROUP                    Result Group
   5   PXRM CAGE RESULT GROUP                   Result Group
   6   PXRM DOM80 RESULT GROUP                  Result Group
   7   PXRM DOMG RESULT GROUP                   Result Group
   8   PXRM MISS RESULT GROUP                   Result Group
   9   PXRM ZUNG RESULT GROUP                   Result Group

   1   PXRM AIMS RESULT ELEMENT 1               Result Element
   2   PXRM AUDC RESULT ELEMENT 1               Result Element
   3   PXRM AUDC RESULT ELEMENT 2               Result Element
   4   PXRM AUDIT RESULT ELEMENT 1              Result Element
   5   PXRM AUDIT RESULT ELEMENT 2              Result Element
   6   PXRM BDI RESULT ELEMENT 1                Result Element
   7   PXRM BDI RESULT ELEMENT 2                Result Element
   8   PXRM BDI RESULT ELEMENT 3                Result Element
   9   PXRM BDI RESULT ELEMENT 4                Result Element
  10   PXRM CAGE RESULT ELEMENT 1               Result Element
  11   PXRM CAGE RESULT ELEMENT 2               Result Element
  12   PXRM DOM80 RESULT ELEMENT 1              Result Element
  13   PXRM DOM80 RESULT ELEMENT 2              Result Element
  14   PXRM DOMG RESULT ELEMENT 1               Result Element
  15   PXRM DOMG RESULT ELEMENT 2               Result Element
  16   PXRM MISS RESULT ELEMENT 1                Result Element

   1  PXRM ADD TO PROBLEM LIST                 Additional Prompt
   2  PXRM COMMENT                             Additional Prompt
   3  PXRM CONTRAINDICATED                     Additional Prompt
   4  PXRM LEVEL OF SEVERITY                   Additional Prompt
   5  PXRM LEVEL OF UNDERSTANDING              Additional Prompt
   6  PXRM OUTSIDE LOCATION                    Additional Prompt
   7  PXRM PRIMARY DIAGNOSIS                   Additional Prompt
   8  PXRM QUANTITY                            Additional Prompt
   9  PXRM REACTION                            Additional Prompt
  10  PXRM READING                             Additional Prompt
  11  PXRM RESULT (EXAM)                       Additional Prompt
  12  PXRM RESULT (SKIN TEST)                  Additional Prompt
  13  PXRM SERIES                              Additional Prompt
  14  PXRM TESTING                             Additional Prompt
  15  PXRM VISIT DATE                          Additional Prompt

   1  PXRM REFUSED                             Forced Value
   2  PXRM REPEAT CONTRAINDICATED              Forced Value
```

Findings Types for Dialogs

Resolution Status	STATUS Prefix // Suffix
Education Topic	Patient received // education at this encounter.
Done at Encounter	
Additional Fields:	
Comment	
Level of Understanding	
Done Elsewhere (Historical)	Patient indicated the // education was provided outside the VA.
Additional Fields:	
Historical Date (required):	
Outside Location:	
Comment:	
Patient Refused	Patient declined the // education.
Additional Fields:	
Level of Understanding (Don't ask but force to Refused value)	
Comment:	
Immunizations	
Done at Encounter	The patient received the // immunization at this encounter.
Additional Fields:	
Comment	
Contraindicated	
Reaction	
Series	
Done Elsewhere (Historical)	The patient indicated // was received outside the VA.
Additional Fields:	
Historical Date (required):	
Outside Location:	
Comment:	
Other	The patient indicates a history of contraindication for //.
Additional Fields:	
Historical Date:	
Comment:	
Contraindicated (Forced to YES)	

Exams

Done at Encounter — The patient was given the // exam at this encounter.

Additional Fields:
Comment:
Result:

Done Elsewhere (Historical) — The patient indicated the // exam was done elsewhere.

Additional Fields:
Historical Date (required):
Outside Location:
Result:
Comment:

Skin Tests

Done at Encounter — The patient was administered the // skin test at this encounter.

Additional Fields:
Results:
Reading: (Date Read?)
Comment:

Done Elsewhere (Historical) — Patient indicated the // skin test was administered outside the VA.

Additional Fields:
Historical Date (required):
Outside Location:
Result:
Reading:
Comment:

Health Factors (DEFAULTS TO DONE AT ENCOUNTER ONLY; UNLESS THE REMINDER HF RESOLUTIONS ARE DEFINED)

Done at Encounter — // documented for this patient at this encounter.

Additional Fields:
Severity Level: DISABLED
Comment:

Done Elsewhere (Historical) — (Historical) // documented for this patient at this encounter.

Additional Fields:
Historical Date:
Outside Location:
Severity Level: DISABLED
Comment:

Patient Refused — //

Additional Fields:
Comment:

Other — // documented at this encounter.

Additional Fields:
Comment:

CPT

Done at Encounter — Patient was given the // procedure at this encounter.

Additional Fields:
- Quantity:
- Primary Procedure:
- Comment:

Done Elsewhere (Historical) — Patient indicated the // procedure was received outside the VA.

Additional Fields:
- Quantity: DISABLED
- Historical Date:
- Outside Location:
- Comment:

ICD Diagnosis

Done at Encounter — Diagnosis recorded at encounter: //.

Additional Fields:
- Quantity:
- Comment:
- Add to Problem List:

Done Elsewhere (Historical) DISABLED? — History of Diagnosis // recorded at this encounter.

Additional Fields:
- Date of Onset: (Historical Date?)
- Comment:
- Add to Problem List: ??

Orderable Items

Done at Encounter — Order // placed for the patient at this encounter.

Vital Types

Done at Encounter ??

Chapter 5: Using Reminder Reports

Clinical Reminder reports can be used for summary and detailed level information about patients' reminders due and satisfied. Reminder Reports also provide reports that clinical coordinators can use to review data extracted based on reminder definitions.

The EPI extract finding reports 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.

Reminder Reports Menu

Syn.	Name	Option Name	Description
D	Reminders Due Report	PXRM REMINDERS DUE	For a selected reminder the report lists any reminders that are currently due.
T	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.
L	Extract EPI List by Finding and SSN	PXRM EXTRACT EPI FINDING LIST	This option allows you to print extract results stored in the Reminder Extract Summary file (810.3). Extracted data is listed by finding item and social security number. The finding items are loaded into the Reminder Extract Summary file when one of the following options is run: LREPI ENHANCE MANUAL RUN or LREPI NIGHTLY TASK

Reminders Due Report

For a selected reminder, the report lists any reminders that are *due on the evaluation date selected*. Note: this cannot be a past date. Reports can be created by the following criteria:

- Individual Patient
- 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 or applicable. The summary report may include several reminders.

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 also (optionally) lists all future appointments. Detailed reports for Location or Provider may also (optionally) be sorted by next appointment date.

The DETAILED report is for one reminder only.

Reports by Hospital Location, Provider or Team print a separate report for each Hospital Location, Provider or Team selected. Reports for ***all*** Hospital Locations are not separated by location.

The report by Hospital Location for inpatient ward locations allows reporting for either current inpatients or admissions within a selected date range.

Examples of Reminders Due Report

Summary Report by PCMM Provider

The total number of reminders due for patients allocated to a provider within PCMM can be reported. Note that the summary report may be run for several reminders, the detailed report only for one. *A future date may be entered if a report of reminders becoming due is required.* Today is the default date.

```
Select Reminder Reports Option: D  Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue: <Enter>
     Select one of the following:
          I         Individual Patient
          L         Location
          O         OE/RR Team
          P         PCMM Provider
          T         PCMM Team
PATIENT SAMPLE: L// PCMM Provider

Select PROVIDER: DEAN,TAN         TD
Select another PROVIDER:
     Select one of the following:
          P         Primary care assigned patients only
          A         All patients on list

PRIMARY CARE ONLY OR ALL: P// All patients on list
Enter EFFECTIVE DUE DATE: JAN 20, 2000//<Enter>   (JAN 20, 2000)
     Select one of the following:
          D         Detailed
          S         Summary
TYPE OF REPORT: S// Summary
Select REMINDER: MAMMOGRAM
```

Summary Report by PCMM Provider, cont'd

```
                                                    Select REMINDER: VA-WEIGHT
Select another REMINDER: VA-BLOOD PRESSURE CHECK
Select another REMINDER:  <Enter>
Create a new report template: N// <Enter>

DEVICE: HOME//   <Enter> ALPHA

Evaluating reminders done
```

```
                                        Jan 20, 2000 5:09:08 pm  Page 1

                 Clinical Reminders Due Report - Summary Report
  Report Criteria:
          Patient Sample:       PCMM Provider
          PCMM Provider:        DEAN,TAN
          All/Primary:          All patients on list
          Effective Due Date :  1/20/2000
          Date run:             1/20/2000 5:06:54 pm
_____________________________________________________________________________

Enter RETURN to continue or '^' to exit:

                                        Jan 20, 2000 5:09:11 pm  Page 2

                 Clinical Reminders Due Report - Summary Report for 1/20/2000
                                                  # Patients with Reminders
                                                Applicable           Due
                                                -----------          ----
1    Mammogram                                           0              0
2    Weight                                              8              6
3    Blood Pressure Check                                8              7

Report run on 8 patients.

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

The column Reminder Applicable excludes patients (e.g. dead or non-diabetic) for whom the selected reminders are not required. Excluded patients are included in the Report Run on total.

Detailed report by PCMM Provider (Next Appointment only)

This option reports details of patients with reminders due for patients allocated to a provider within PCMM. This example report displays only the next appointment for each patient. The option to display all future appointments for the patient is explained in the example report (c) Individual Patients.

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

Select an existing REPORT TEMPLATE or return to continue: <Enter>
     Select one of the following:
          I         Individual Patient
          L         Location
          O         OE/RR Team
          P         PCMM Provider
          T         PCMM Team
PATIENT SAMPLE: L// PCMM Provider

Select PROVIDER:    DEAN,TAN     TD
Select another PROVIDER:

     Select one of the following:
          P         Primary care assigned patients only
          A         All patients on list

PRIMARY CARE ONLY OR ALL: P// All patients on list
Enter EFFECTIVE DUE DATE: Jan 20, 2000// <Enter>  (JAN 20, 2000)

     Select one of the following:
          D         Detailed
          S         Summary
TYPE OF REPORT: S// Detailed

Display All Future Appointments: N//<Enter> O

Sort by Next Appointment date: N//<Enter> O

Select REMINDER:    VA-BLOOD PRESSURE CHECK

Create a new report template: N//<Enter> O

DEVICE: HOME// <Enter>  ANYWHERE    Right Margin: 80//

Evaluating reminders done
```

Detailed Report by Provider, cont'd

```
                                          Jan 20, 2000 5:17:29 pm  Page 1

                Clinical Reminders Due Report - Detailed Report
  Report Criteria:
          Patient Sample:       PCMM Provider
          PCMM Provider:        DEAN,TAN
          Reminder:             VA-BLOOD PRESSURE CHECK
          Appointments:         Next Appointment only
          All/Primary:          All patients on list
          Effective Due Date :  1/20/2000
          Date run:             1/20/2000 5:16:32 pm
_____________________________________________________________________________
Enter RETURN to continue or '^' to exit:

                                          Jan 20, 2000 5:17:32 pm  Page 2

                Clinical Reminders Due Report - Detailed Report for 1/20/2000

Blood Pressure Check:  7 patients have reminder due

                                        Date Due    Last Done   Next Appt
                                        --------    ---------   ---------
1    DINARO,MUCHO (3779)                8/28/1998   8/27/1998   None
2    ESSTEPON,GLORD (3234)              1/20/2000   N/A         None
3    HOLMES,SHERLOCK (5377)             1/20/2000   N/A         None
4    HOOD,ROBIN (2591P)                 8/19/1999   8/18/1999   None
5    MARLEY,JACOB (5678)                9/4/1998    9/3/1998    None
6    TEST,KEVIN (5734)                  2/3/1999    2/3/1997    None
7    TRAT,JACK (2342)                   1/20/2000   N/A         None

Report run on 8 patients.
Applicable to 8 patients.

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

Detailed Report by Individual Patient (All Future Appointments)

All future appointments for each patient can be reported on the detailed report. This example is of a detailed report for Individual Patients.

```
                                        Jan 20, 2000 5:00:40 pm  Page 2

                Clinical Reminders Due Report - Detailed Report for 1/20/2000

Weight:  2 patients have reminder due

                                        Date Due    Last Done   Next Appt
                                        --------    ---------   ---------
1    ESSTEPON,GLORD (3234)              1/20/2000   N/A         None
2    TEST,KEVIN (5734)                  2/3/1999    2/3/1997    None

Report run on 8 patients.
Applicable to 8 patients.

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

Summary Report by Location

The report by hospital Location evaluates reminders due for patients attending the selected hospital Location within a range of dates. If a prior date range is selected, then all patients with encounters are selected. If a future date range is selected, then patients with appointments for the location are selected.

The reports for selected hospital locations list reminders due for each location separately. The report for all locations reports reminders due for all locations combined.

Hospital Location, **Clinic Group** or **Clinic Stop** code can be selected.

Reminders *due on the effective due date* are reported.

```
Reminders Due Report

     Select one of the following:

          I         Individual Patient
          L         Location
          O         OE/RR Team
          P         PCMM Provider
          T         PCMM Team

PATIENT SAMPLE: L// Location

Select FACILITY: SALT LAKE CITY//<Enter>       UT                        660
```

```
Select another FACILITY:

     Select one of the following:

          HA        All Outpatient Locations (excluding wards)
          HAI       All Inpatient Locations (wards only)
          HS        Selected Hospital Locations
          CA        All Clinic Stops(with encounters)
          CS        Selected Clinic Stops
          GS        Selected Clinic Groups

Determine encounter counts for: HS// HS  Selected Hospital Locations

LOCATION: CARDIOLOGY          TEDD,DR
Select another LOCATION:

     Select one of the following:
          P         Previous Encounters
          F         Future Appointments

PREVIOUS ENCOUNTERS OR FUTURE APPOINTMENTS: P// Previous Encounters

Enter ENCOUNTER BEGINNING DATE:  080199  (AUG 01, 1999)
Enter ENCOUNTER ENDING DATE: 090196  (SEP 01, 1999)

Enter EFFECTIVE DUE DATE: Dec 9, 1999//<Enter>  (DEC 9, 1999)
Select SERVICE CATEGORIES: AI//<Enter>
     Select one of the following:
          D         Detailed
          S         Summary
TYPE OF REPORT: S// Summary

Select REMINDER: VA-D
     1   VA-DIABETIC EYE EXAM
     2   VA-DIABETIC FOOT CARE ED.
     3   VA-DIABETIC FOOT EXAM
     4   VA-DIGITAL RECTAL (PROSTATE) EXAM
CHOOSE 1-4: 1  VA-DIABETIC EYE EXAM
Select another REMINDER: VA-BLOOD PRESSURE CHECK
Select another REMINDER: VA-WEIGHT
Select another REMINDER: <Enter>
Create a new report template: N// <Enter>

DEVICE: HOME// <Enter>  ANYWHERE    RIGHT MARGIN: 80// <Enter>

Sorting Encounters /

Evaluating Reminders done
```

Summary Report by Location, cont'd

```
                                          Dec 09, 1999 10:16:49 am  Page 1

                   Clinical Reminders Due Report - Summary Report
  Report Criteria:
          Patient Sample:       Location
          Location:             Selected Hospital Locations (Prior Encounters)
                                CARDIOLOGY
          Date Range:           8/1/99 to 9/1/99
          Effective Due Date :  12/9/1999
          Date run:             12/9/99 10:15:34 am
          Service categories:   AI
             A - AMBULATORY
             I - IN HOSPITAL
```

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

                                          Dec 09, 1999 10:16:57 am  Page 2

                   Clinical Reminders Due Report - Summary Report
Facility: SALT LAKE CITY  660
Reminders Due for CARDIOLOGY for 8/1/99 to 9/1/99
                                                   # Patients with Reminders
                                                    Applicable         Due
                                                    ----------        -----
1    Diabetic Eye Exam                                   19             19
2    Blood Pressure Check                                32             32
3    Weight                                              32             32

Report run on 32 patients.
```

Reminder Report Templates

The selection criteria used for a Reminders Due report may be saved into a report template file (with a user-specified identifier) as the report is being run. When running the Reminders Due report, you may select from existing templates and run a new report using the parameters from the selected template. The prompts for date range and sort order are displayed, but all other parameters are taken from the previous report. If a print template is selected, you are prompted (before running the report) to edit the template and/or to copy to a new template.

Creating a new template

This is an example of creating a new template for the Reminders Due report:

```
Select one of the following:
          I         Individual Patient
          L         Location
          O         OE/RR Team
          P         PCMM Provider
          T         PCMM Team
PATIENT SAMPLE: L// PCMM Provider
Select PROVIDER:    DEAN,TAN       TD
Select another PROVIDER:
     Select one of the following:
          P         Primary care assigned patients only
          A         All patients on list
PRIMARY CARE ONLY OR ALL: P// All patients on list

Enter EFFECTIVE DUE DATE: Feb 18, 1999// T  (FEB 18, 1999)
     Select one of the following:
          D         Detailed
          S         Summary
TYPE OF REPORT: S//<Enter> ummary
Select REMINDER:    VA-SEAT BELT EDUCATION
Select another REMINDER:
Create a new report template: N// YES
STORE REPORT LOGIC IN TEMPLATE NAME: PROVDEAN
  Are you adding 'PROVDEAN' as
    a new REMINDER REPORT TEMPLATE (the 5TH)? No// Y  (Yes)
   REMINDER REPORT TEMPLATE TITLE: Due Patients for DEAN
DEVICE: HOME//  <Enter> ALPHA

Evaluating reminders done
```

Creating a new template, cont'd

```
                                        Feb 18, 1999 11:44:01 am  Page 1

                   PCE Reminders Due Report - Summary Report
  Report Criteria:
          Patient Sample:       PCMM Provider
          PCMM Provider:        DEAN,TAN
          All/Primary:          All patients on list
          Effective Due Date:   2/18/1999
          Date run:             2/18/1999 11:43:27 am
          Report Template:      PROVDEAN
_____________________________________________________________________________

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

```
                                        Feb 18, 1999 11:44:01 am  Page 2

                   PCE Reminders Due Report - Summary Report
Reminders Due for DEAN,TAN for 2/18/1999
                                                   # Patients with Reminders
                                                     Applicable        Due
                                                     ----------        ----
1    Seat Belt Education                                  8              4

Report run on 8 patients.

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

Using an Existing Template

This is an example of using an existing template for the Reminders Due report:

```
Reminders Due Report
Select an existing REPORT TEMPLATE or return to continue: pROV/DEAN Due Patients
for DEAN
          Report Title:         Due Patients for DEAN
          Report Type:          Detailed Report
          Patient Sample:       PCMM Provider
          PCMM Provider:        DEAB,TAN
          Reminder:             VA-SEAT BELT EDUCATION
          All/Primary:          All patients on list
          Template Name:        PROVDEAN
          Date last run:     MAR 22, 1999@11:44:01
WANT TO EDIT 'PROVDEAN' TEMPLATE: N//<Enter> O
Enter DUE EFFECTIVE DATE: Feb 1, 2001//  <Enter> (FEB 1, 2001)
DEVICE: HOME// <Enter>  ALPHA

Evaluating reminders done
```

```
                                        Feb 1, 2001 11:51:28 am  Page 1
                    Clinical Reminders Due Report - Summary Report
  Report Criteria:
          Patient Sample:       PCMM Provider
          PCMM Provider:        DEAN,TAN
          All/Primary:          All patients on list
          Effective Due Date:   2/1/2001
          Date run:             2/1/2001 11:50:52 am
          Report Template:      PROVDEAN
_____________________________________________________________________________
Enter RETURN to continue or '^' to exit:
                                        Feb 1, 2001 11:51:30 am  Page 2
                    Clinical Reminders Due Report - Summary Report
Reminders Due for DEAN,TAN for 2/1/2001
                                                 # Patients with Reminders
                                                   Applicable        Due
                                                   ----------        ----
1    Seat Belt Education                                8              4
Report run on 8 patients.
End of the report. Press ENTER/RETURN to continue...
```

Editing/Copying an Existing Template

This is an example of editing an existing template. Here an additional reminder is added to the report and the report is made into a summary report:

```
WANT TO EDIT 'PROVDEAN' TEMPLATE: N// YES
TEMPLATE NAME: PROVDEAN// <Enter>
TITLE: Due Patients for DEAN//<Enter>
PATIENT SAMPLE: Provider// <Enter>
REPORT TYPE: Detailed Report//Summary Report
Select PROVIDER: DEAN,TAN// <Enter>
PRIMARY CARE ONLY OR ALL: All patients// <Enter>
Select REMINDER: VA-SEAT BELT EDUCATION// VA-WEIGHT
  DISPLAY ORDER: 2
Select REMINDER:
          Report Title:         Due Patients for DEAN
          Report Type:          Summary Report
          Patient Sample:       PCMM Provider
          PCMM Provider:        DEAN,TAN
          Reminder:             VA-SEAT BELT EDUCATION
                                VA-WEIGHT
          All/Primary:          All patients on list
          Template Name:        PROVDEAN
          Date last run:        MAR 22, 1999@11:44:01

STORE REPORT LOGIC IN TEMPLATE NAME:   PROVDEAN// DEANSUM
A new template DEANSUM has been created
```

Note that when new reminders are added, it is possible to select the display order. Changes made are re-displayed before filing. The changes may be saved to the existing template (by pressing `<Enter>`) or copied to a new template name (with a new template title as above).

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. The Lab EPI extract name follows the convention: LREPI YY/MM MMDDYY, where the YY/MM is the year and month from the date range specified by the LREPI extract option that created the extract. MMDDYY is the month, day and year that the extract was run. The prefix of LREPI identifies the extract as the result of LREPI extract options (manual or automatic run for the LREPI Lab Search/Extract Protocol).

At the START WITH NAME prompt, enter "LREPI YY/MM", with the year and month's data to be reported. At the GO TO NAME prompt, enter LREPI YY/MMz. If there have been multiple runs for the target month, you can narrow the report criteria by adding the MMDDYY (month, day, year the report was run) to the START WITH NAME and GO TO NAME.

```
Select Reminder Reports Option: T  Extract EPI Totals
START WITH NAME: FIRST// LREPI 00/05
GO TO NAME: LAST// LREPI 00/05z
DEVICE:   ANYWHERE    Right Margin: 80//
```

```
REMINDER EPI EXTRACT TOTALS                    AUG  1,2000  00:31    PAGE 1
-------------------------------------------------------------------------------

LREPI 00/05 061600            Extract Date Range: MAY  1,2000-MAY  31,2000
                                     Extract Date: JUN 16,2000  01:34

    Total Patients Evaluated:         78
    Total Patients with Findings:     51

    Totals by Finding Item               Finding  Unique Patient
                                           Count       Count
         INTERFERON BETA-1A (AVONEX) 30        3           2
         RIBAVIRIN/INTERFERON 1200/3 PE        5           3
         RIBAVIRIN/INTERFERON 600/3 PEN        1           1
         RIBAVIRIN/INTERFERON 1000/3 PE        2           2
         RIBAVIRIN 200MG CAP (VA 44-4-0        1           1
         INTERFERON ALPHA-2B INJ (VA 44        1           1
         HEP C ANTIBODY                       30          30
         TOT. BILIRUBIN                       21          21
         AST                                  33          33
         ALT                                  33          33
         VA-HEPATITIS C INFECTION             18          18
```

Extract EPI List by Finding and SSN

This option allows you to print extract results stored in the Reminder Extract Summary file (810.3). Extracted data is listed by finding item and social security number. The finding items are loaded into the Reminder Extract Summary file when one of the following options is run:

LREPI ENHANCE MANUAL RUN Lab Search/Extract Manual Run (Enhanced)
LREPI NIGHTLY TASK Lab Search/Extract Nightly Task

```
Select Reminder Reports Option: L  Extract EPI List by Finding and SSN
START WITH NAME: FIRST// LREPI 00/05
GO TO NAME: LAST// LREPI 00/05z
DEVICE:   ANYWHERE    Right Margin: 80//
```

```
LREPI 00/05 062300           Date Range: MAY  1,2000 TO MAY 31,2000
                            Extract Date: JUL 23,2000  16:12

Total Patients Evaluated:   374
Patients with Findings  :   339

Finding      SSN        Patient            Enctr Type  Date
-------------------------------------------------------------

ALT      145-59-4281    HLUKXRU,LYSEXYN    Outpatient 5/12/00
         155-55-2063    HLNYHT,CLZHT JL    Outpatient 5/24/00
         182-39-1314    HLCIHUL,AHXYLUI    Outpatient 5/15/00
         184-68-9784    TEXZWTXY,AHTADH    Outpatient 5/13/00
         202-17-5419    HLAAHU,JELUAHT     Outpatient 5/22/00
         203-07-7909    LLJHN,HIPLUI       Outpatient 5/11/99
         203-27-2835    KLAHAA,TLZRHA C    Outpatient 5/23/00
         203-59-7487    YXRYF,FHYH L       Outpatient 5/30/00
         203-69-0200    WHLQHU,JHJDA       Outpatient 4/12/00
         204-37-2492    WHAJE,PLASHU       Outpatient 5/21/00
         204-68-3181    PUXWEHSS,TXA U     Outpatient 5/8/00
         204-68-4002    DDYBHALBHU,TRH     Outpatient 5/4/00
         204-86-6120    DXYLERH,SEXZLT     Outpatient 5/19/00
         204-87-2592    HHLSHU,ALYDH CX    Outpatient 5/31/00
         204-97-5515    MJFULP,PLASHU U    Outpatient 3/25/98
         205-28-3620    MLJB,LYSEXYN U     Outpatient 5/1/00
         205-28-4747    BRYFHU,UXKHUS C    Outpatient 1/28/00
         205-37-3844    LLBH,YLSELYDHA     Outpatient 5/4/00
         205-49-8892    DDQX,SEXZLT C      Outpatient 12/29/99
         205-57-8086    ITXZH,PDAADLZ G    Outpatient 5/26/00
         205-89-9389    DHQLRFEY,JALUHY    Outpatient 5/20/00
         205-89-9841    WLFYHU,UXKHUS      Outpatient 5/23/00

etc.
```

Chapter 6: Reminder Exchange Utility

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

Overview Of New Reminder Exchange

Reminder Exchange allows the exchange of clinical reminders and reminder dialogs

- From test account to production
- Between sites
- Within VISN's
- National Reminders

Terminology

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

- All Reminder information
- All Dialog information

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

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

VistA MailMan

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

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

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

Reminder dialogs are installed with the disabled field set to “DISABLED IN REMINDER EXCHANGE.”

Steps to Use Reminder Exchange

Summary of Steps

Detailed steps are provided in the following pages.

Export Steps

Step	Action
1. Decide which reminder to pack	LR – List Reminder Descriptions and RI – Reminder Inquiry
2. Put the reminder into the Exchange File – this packs it	CFE – Create File Entry
3. Export the reminder(s)	CHF – Create Host File or CMM – Create MailMan Message

Import Steps

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

Reminder Exchange Main Screen [PXRM REMINDER EXCHANGE]

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

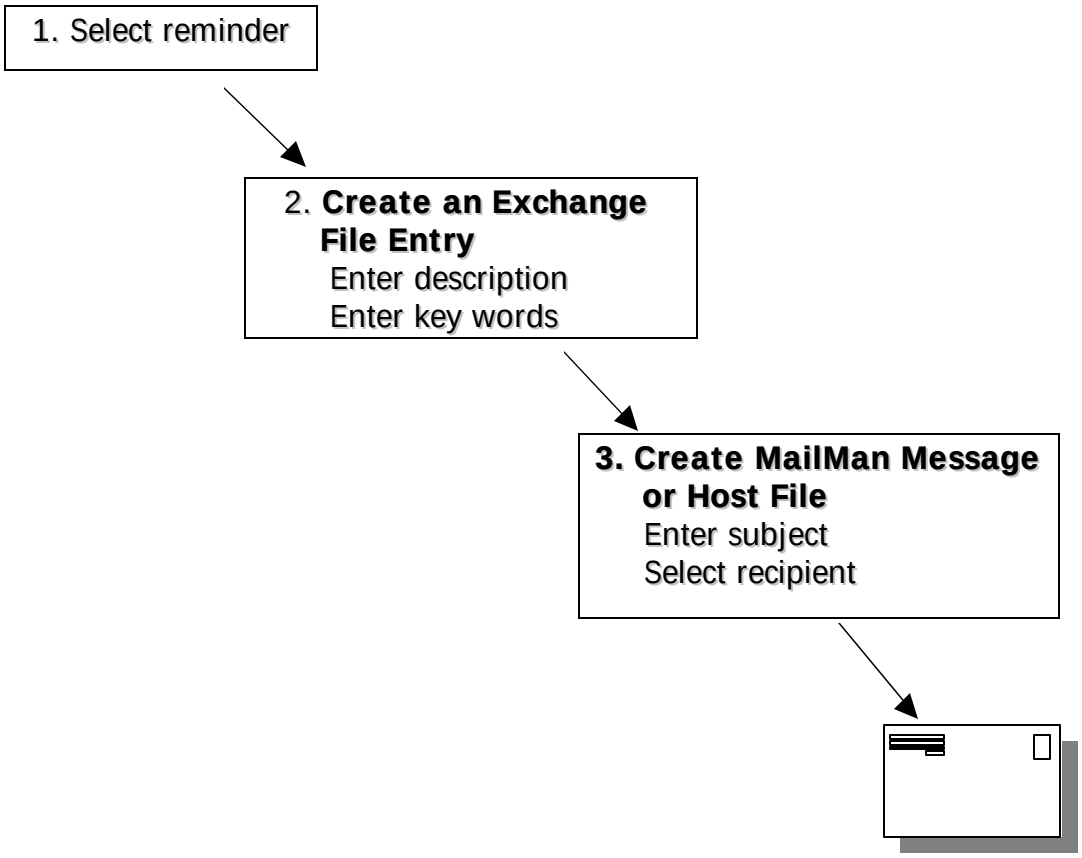
List Reminder Definitions and Reminder Definition Inquiry are also included so that you can review reminders before loading them into the Exchange File.

```
Reminder Managers Menu  [PXRM MANAGERS MENU]

   CF     Reminder Computed Finding Management ... [PXRM CF MANAGEMENT]
   RM     Reminder Definition Management ... [PXRM REMINDER MANAGEMENT]
   SM     Reminder Sponsor Management ... [PXRM SPONSOR MANAGEMENT]
   TXM    Reminder Taxonomy Management ... [PXRM TAXONOMY MANAGEMENT]
   TRM    Reminder Term Management ... [PXRM TERM MANAGEMENT]
   RX     Reminder Exchange [PXRM REMINDER EXCHANGE]
   RT     Reminder Test [PXRM REMINDER TEST]
   OS     Other Supporting Menus ... [PXRM OTHER SUPPORTING MENUS]
   INFO   Reminder Information Only Menu ... [PXRM INFO ONLY]
   DM     Reminder Dialog Management ... [PXRM DIALOG MANAGEMENT]
   CP     CPRS Reminder Configuration ... [PXRM CPRS CONFIGURATION]
   RP     Reminder Reports ... [PXRM REMINDER REPORTS]

Select Reminder Managers Menu Option: RX  Reminder Exchange
```

```
Clinical Reminder Exchange    Apr 02, 2001@11:21:47     Page: 1 of    1
Exchange File Entries.

           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
```

A: Steps to Export Reminders

Export Steps



Detailed Steps to Export Reminders

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

```
Clinical Reminder Exchange    Jul 23, 2001@10:33:26          Page:    1 of    2
Exchange File Entries.
           Entry                        Source                    Date Packed



+         + Next Screen   - Prev Screen   ?? More Actions
CHF  Create Host File                   LHF  Load Host File
CMM  Create MailMan Message             LMM  Load MailMan Message
DFE  Delete Exchange File Entry         LR   List Reminder Definitions
IFE  Install Exchange File Entry        RI   Reminder Definition Inquiry
Select Action: Next Screen// RI   Reminder Definition Inquiry
Select Reminder Definition: JG-DIABETIC EYE EXAM       LOCAL
```

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

                 Finding Item: VA-DIABETES  (FI(2)=TX(28))
                 Finding Type: REMINDER TAXONOMY
          Match Frequency/Age: 1 year for all ages
 Etc.
```

2. Create Exchange File Entry

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

```
Clinical Reminder Exchange    Apr 02, 2001@11:21:47          Page:    1 of    1
Exchange File Entries.
           Entry                        Source                    Date Packed
   1  BLOOD PRESSURE CHECK          HART@SALT LAKE            03/28/2001@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      BART@SALT LAKE            03/29/2001@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    MART@SALT LAKE            03/27/2001@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   WART@SALT LAKE            03/27/2001@14:54:24
   5  VA-HEP C RISK ASSESSMENT      START@SALT LAKE           03/27/2001@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 Reminder Definition to save: JG DIABETIC EYE EXAM       LOCAL
Enter a description of the reminder you are packing.
  1>Patients with the VA-DIABETES taxonomy should have a diabetic eye exam
  2>done yearly.
EDIT Option: <Enter>
Enter keywords or phrases to help index the reminder you are packing.
Separate the keywords or phrases on each line with commas.
Diabetes, Eye, Exam
  2><Enter>
EDIT Option: <Enter>
Packing the reminder ...
```

```
Clinical Reminder Exchange    May 03, 2001@11:21:51          Page:    1 of    1
Packed reminder for JG DIABETIC EYE EXAM
was saved in Exchange File.
           Entry                        Source                    Date Packed
   1  AGETEST                       HARTLEY@SALT LAKE OE     04/27/2001@13:16:19
   2  JG DIABETIC EYE EXAM          GREEN@SALT LAKE OE       05/03/2001@11:21:01
   3  TEST EXCHANGE CHANGES         HARTLEY@SALT LAKE OE     05/02/2001@15:45:55


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

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. You should contact your IRM to learn how host files work at your site.

Examples of valid paths:
VMS USER$:[SPOOL]
CACHE T:\TEMP

```
Clinical Reminder Exchange    Apr 02, 2001@11:21:47          Page:    1 of    1
Exchange File Entries.
           Entry                        Source                    Date Packed
   1  BLOOD PRESSURE CHECK          HART@SALT LAKE           03/28/2001@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      BART@SALT LAKE           03/29/2001@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    MART@SALT LAKE           03/27/2001@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   WART@SALT LAKE           03/27/2001@14:54:24
   5  VA-HEP C RISK ASSESSMENT      START@SALT LAKE          03/27/2001@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
```

Create Host File, cont'd

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

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

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

Enter a file name: ?

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

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

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, 2001@11:21:47          Page:    1 of    1
Exchange File Entries.

           Entry                          Source                    Date Packed
   1  BLOOD PRESSURE CHECK          HART@SALT LAKE            03/28/2001@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      BART@SALT LAKE            03/29/2001@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    MART@SALT LAKE            03/27/2001@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   WART@SALT LAKE            03/27/2001@14:54:24
   5  VA-HEP C RISK ASSESSMENT      START@SALT LAKE           03/27/2001@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
```

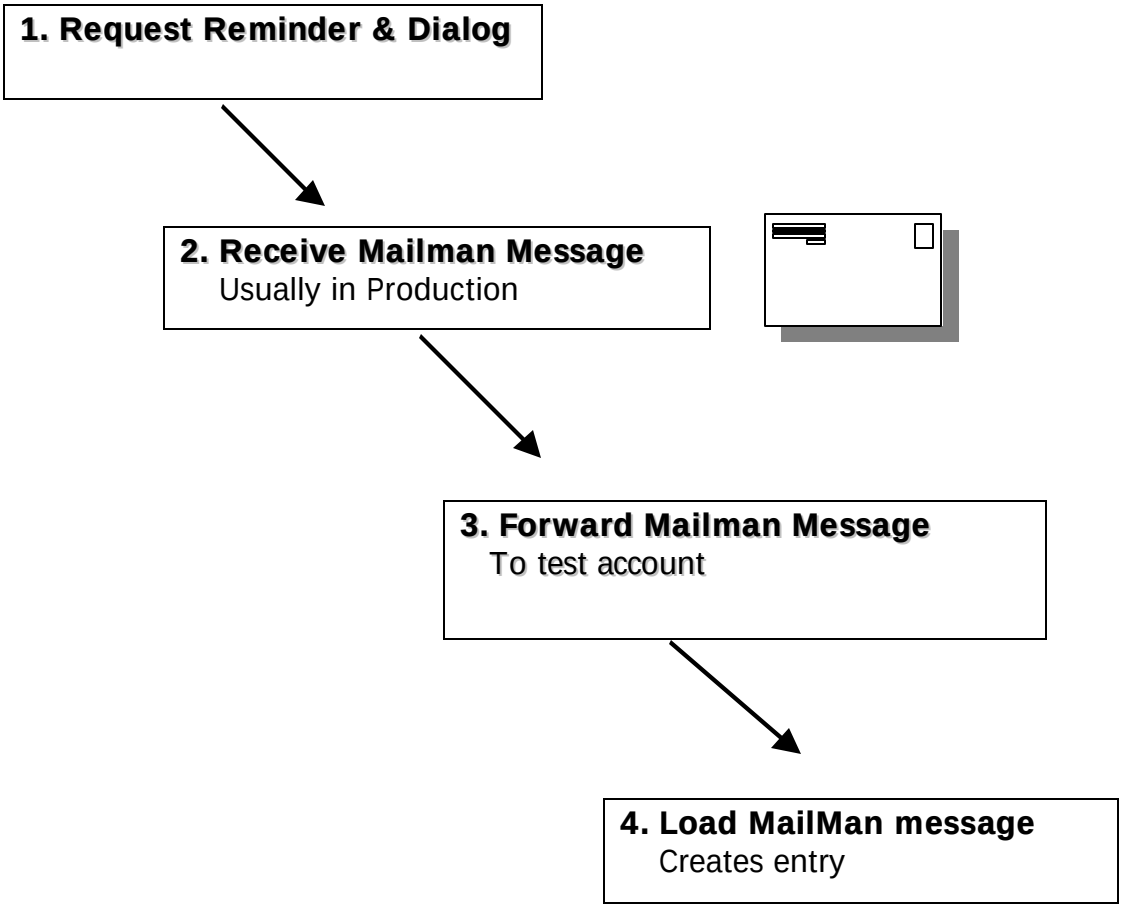
NOTE: The number of reminders you can send via a MailMan message is limited to the mailman parameters set locally for the number of lines in a message. Please check with your IRM for the number of lines allowed.

Create MailMan Message, cont'd

```
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, 2001@11:27:25          Page:    1 of    1
Successfully stored entries in message 43035.

           Entry                        Source                    Date Packed
   1  AGETEST                      HARTLEY@SALT LAKE OE     04/27/2001@13:16:19
   2  JG DIABETIC EYE EXAM         GREEN@SALT LAKE OE       05/03/2001@11:21:01
   4  VA-BREAST EXAM               REDINGTON@SALT LAKE OE   04/19/2001@10:03:13

          + 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



1a. LHF – Load Host File

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

```
Clinical Reminder Exchange    Apr 02, 2001@11:21:47          Page:    1 of    1
Exchange File Entries.

           Entry                          Source                    Date Packed
   1  BLOOD PRESSURE CHECK          HART@SALT LAKE            03/28/2001@13:12:26
   2  SLC PNEUMOCOCCAL VACCINE      BART@SALT LAKE            03/29/2001@11:55:11
   3  VA-*CHOLESTEROL SCREEN (M)    MART@SALT LAKE            03/27/2001@14:59:42
   4  VA-ADVANCED DIRECTIVES EDUC   WART@SALT LAKE            03/27/2001@14:54:24
   5  VA-HEP C RISK ASSESSMENT      START@SALT LAKE           03/27/2001@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$:[SPOOL]//
The following PRD files were found in USER$:[SPOOL]
  DIABETICEYE.PRD;1
Enter a file name: DIABETICEYE.PRD
Loading host file USER$:[SPOOL]DIABETICEYE.PRD

Select Action: Quit// -   -
```

```
Clinical Reminder Exchange    Jul 23, 2001@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//
```

1b. LHF – Load MailMan Message

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

```
Clinical Reminder Exchange    Jul 23, 2001@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
         GREEN,JOANN JUL 23, 2001@11:39:51

     2   CREX: pain screening
         GREEN,JOANN JUL 23, 2001@11:37:59

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

Loading MailMan message number 44024
```

2. Installing Reminders from the Exchange File

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

```
Exchange Entry Components   Jan 26, 2001@12:21:39          Page:    1 of    3

      Component                                              Category     Exists

Reminder:    SMOKING CESSATION EDUCATION

Source:      HART,PETE at SALT LAKE OEX

Date Packed: 01/26/2001@09:38

Description:
FINAL VERSION FROM SALT LAKE
Keywords:
SMOKING
```

Install Exchange File Entries, cont'd

```
Components:
EDUCATION TOPICS
   1  VA-ADVANCED DIRECTIVES SCREENING                                  X
   2  VA-ADVANCED DIRECTIVES                                            X
GMRV VITAL TYPE
   3  BLOOD PRESSURE                                                    X
HEALTH FACTORS
   4  REMINDER FACTORS                                                  X
   5  HEPATITIS C                                                       X
   6  ACTIVATE PNEUMOCOCCAL VACCINE                                     X
   7  PREV POSITIVE TEST FOR HEP C                                      X
MH INSTRUMENT
   8  CAGE                                                              X
   9  DOM80                                                             X
  10  AIMS                                                              X
REMINDER TERM
  11  TERMTEST6                                                         X
REMINDER DIALOG
  12  SMOKING CESSATION EDUCATION                                       X
REMINDER DEFINITION
  13  SMOKING CESSATION EDUCATION                                       X

+         Enter ?? for more actions
IA   Install all Components            IS   Install Selected Component
Select Action: Next Screen//
```

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

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

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

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

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

     Select one of the following:
          C         Create a new entry by copying to a new name
          I         Install or Overwrite the current entry
          P          Replace with another existing 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
```

3a. Installing a Reminder Dialog

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

```
Dialog Components              Jan 26, 2001@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.

3b. 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, 2001@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, 2001@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 imported reminder.

```
Clinical Reminder Exchange    Jul 23, 2001@11:27:15          Page:    1 of    2
Exchange File Entries.

           Entry                        Source                    Date Packed
   1  A NEW REMINDER               HARTLEY@SALT LAKE OE     06/18/2001@11:50:40
   2  A**A SG PAIN SCREENING       GREEN@SALT LAKE OE       07/23/2001@10:55:23
   4  AIMS                         CORRIGAN@TAMPA, FL       06/04/2001@13:55:59

+         + 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, 2001@11:27:27          Page:    1 of    1

       Entry                          Source                    Date Packed
      A**A SG PAIN SCREENING       GREEN@SALT LAKE OE       07/23/2001@10:55:23
     Installation Date       Installed By
     -----------------       ------------
   1 07/23/2001@10:58:48   GREEN,JOANN

           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 SUSAN OLD/NEW                        S

Installation Detail           Jul 23, 2001@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 Exchange File (811.9).

```
Select Reminder Managers Menu Option: RX  Reminder Exchange

Clinical Reminder Exchange    Jun 21, 2001@12:09:19          Page:    1 of    3
Exchange File Entries.

           Entry                          Source                    Date Packed
   1  A NEW REMINDER                HARTLEY@SALT LAKE OE     06/18/2001@11:50:40
   2  AIMS                          CORRIGAN@TAMPA, FL       06/04/2001@13:55:59
   3  DRUGTEST                      REDINGTON@SALT LAKE OE   06/18/2001@10:25:32
   4  HIV HEPATITIS A SEROLOGIC T   SUNDARAM@VAMC PALO AL    06/19/2001@15:00:30
   5  ITC2000 MAMMOGRAM             HARTLEY@SALT LAKE OE     06/19/2001@15:25:03
   6  JG DIABETIC EYE EXAM          GREEN@SALT LAKE OE       06/08/2001@11:17:26
   7  MINI-MENTAL STATE EXAM (MMS   CORRIGAN@TAMPA, FL       05/16/2001@23:00:36
   8  OTC & NON-VA MEDICATION       CORRIGAN@TAMPA, FL       05/17/2001@22:46:37
          + Next Screen   - Prev Screen   ?? More Actions
CFE  Create Exchange File Entry          IH   Installation History
CHF  Create Host File                    LHF  Load Host File
CMM  Create MailMan Message              LMM  Load MailMan Message
DFE  Delete Exchange File Entry          LR   List Reminder Definitions
IFE  Install Exchange File Entry         RI   Reminder Definition Inquiry
Select Action: Next Screen// DFE   Delete Exchange File Entry
Select Entry(s):  (1-10): 6
```

```
Clinical Reminder Exchange    Jun 21, 2001@12:09:47          Page:    1 of    3
Deleted 1 Exchange File entry.

           Entry                          Source                    Date Packed
   1  A NEW REMINDER                HARTLEY@SALT LAKE OE     06/18/2001@11:50:40
   2  AIMS                          CORRIGAN@TAMPA, FL       06/04/2001@13:55:59
   3  DRUGTEST                      REDINGTON@SALT LAKE OE   06/18/2001@10:25:32
   4  HIV HEPATITIS A SEROLOGIC T   SUNDARAM@VAMC PALO AL    06/19/2001@15:00:30
   5  ITC2000 MAMMOGRAM             HARTLEY@SALT LAKE OE     06/19/2001@15:25:03
   6  MINI-MENTAL STATE EXAM (MMS   CORRIGAN@TAMPA, FL       05/16/2001@23:00:36
   7  OTC & NON-VA MEDICATION       CORRIGAN@TAMPA, FL       05/17/2001@22:46:37
   8  PJH CANCER SCREEN             HARTLEY@SALT LAKE OE     05/18/2001@11:08:39
          + 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!

Section III – Supplementary Material

Glossary
FAQs, Hints, and Troubleshooting
Appendix A: Checklist for defining Reminder Definition and Dialog
Appendix B: Clinical Reminder Menus
Appendix C: Reminder Definition Feedback Loop Diagram
Index

Glossary

Applicable

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*

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

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.

Dialog Element, contd — 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.

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.

.

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.

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)

Resolve, Reminders Resolution Recording or taking action that satisfies a reminder. For example, if a reminder exists for influenza immunization, giving a flu vaccine satisfies or resolves that reminder. Likewise, ordering lab tests or drugs or giving patient education can resolve a reminder.

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.

Icon Definitions

CPRS uses two parameter lists of reminders, one for evaluation (the ORQQPX SEARCH ITEMS parameter) and one for the "Other" section of the tree (the PXRM CPRS LOOKUP CATEGORIES parameter). The CPRS GUI combines these two lists into one tree view.

Icon	Description
	Red, ringing alarm clock means that a reminder is due. When present in the reminders button, reminders from the ORQQPX SEARCH ITEMS parameter have been evaluated, and there is at least one reminder due.
	Blue, non-ringing alarm clock means that a reminder is not due, but applicable. When present in the reminders button, reminders from the ORQQPX SEARCH ITEMS parameter have been evaluated, none of them evaluated to due, but at least one of them has been evaluated as applicable.
	Wall clock means that a reminder is not applicable. When present in the reminders button, reminders from the ORQQPX SEARCH ITEMS parameter have been evaluated, none of them evaluated to due or applicable, but reminders have been evaluated as not applicable that were found in the PXRM CPRS LOOKUP CATEGORIES parameter.
	Question mark means that a reminder's status of due, applicable or not applicable has yet to be evaluated. When present on the reminders button, no available reminders have been evaluated. This typically happens when reminders in the ORQQPX SEARCH ITEMS parameter are not defined or have not yet been evaluated.
	Present only on the reminders button, a grayed-out alarm clock means that reminders from the ORQQPX SEARCH ITEMS parameter have been evaluated, none of them evaluated to due or applicable, and no reminders were found in the PXRM CPRS LOOKUP CATEGORIES parameter.
	Present only in the reminders tree, a dialog icon is displayed in the lower right hand corner of a clock icon when there is a reminder dialog associated with that reminder.
	Present only in the reminders tree, a dialog icon, with a check mark over the dialog, is displayed in the lower right hand corner of a clock icon after the reminder dialog associated with that reminder has been processed. When these reminders are re-evaluated, the check mark is removed.

FAQs (Frequently Asked Questions)

General
Reminder Definition
Computed Findings
Reminder Dialogs
Mental Health Reminder Dialogs
Reminder Reports

General Questions

Q: What do we need to do to get started with the new Clinical Reminders application?

A: Some of the recommended steps:

1. Identify leaders; form a steering committee; get administrative support
2. Implement gradually
3. Use the report options to identify needs
4. Customize the list of reminders that are displayed for users in the CPRS GUI, making sure they see only reminders that are relevant for them.

Q: How can we avoid overwhelming clinicians with too many reminders?

A: As stated above, implement gradually. The following steps can help:

1. Prioritize reminders
2. Share responsibility
3. Use the report options to help balance the workload within a team

Q: What do clinicians need to learn to use the new Clinical Reminders functionality?

A: The most important things to learn will be related to a change in workflow. It will be important to coordinate orders that are placed through reminder dialogs with nurses and clerks. You can work with your CACs and teams to share the responsibility for reminders so that no individual is overwhelmed with reminders. Learning to use reports correctly, to produce meaningful data, will be essential.

FAQs, cont'd

Q: What is the difference between the exported Clinical Reminders that have an asterisk (*). e.g. VA-*SEAT BELT AND ACCIDENT SCREEN and those that only have VA-; e.g., VA-SEAT BELT EDUCATION

A: The asterisk (*) identifies the reminders related to the National Center for Health Promotion. They were created based on the 13 issues identified by the National Center for Health Promotion in Handbook 1101.8.

(Most of the other reminders beginning with VA- were created with input by the "Ambulatory Care Expert Panel" which no longer exists.)

However, that handbook has been replaced by Handbook 1120.2 ("HEALTH PROMOTION AND DISEASE PREVENTION PROGRAM"). You can retrieve a copy from: http://vaww.va.gov/publ/direc/health/handbook/1120-2hk.doc

Q: Are the reminders our site has already defined compatible with the new Clinical Reminders v.1.5 package?

A: Yes, a conversion utility is run when the package is installed that converts your reminders to the new file structure. Be sure to follow the instructions in the Installation Guide to set a few important parameters.

Q: Can you set up a user to have no reminders on the cover sheet?

A: Make sure ORQQPX NEW REMINDER PARAMS is set to NO for the specific user. Create a dummy reminder that always evaluates as Not Applicable. Then add just that reminder to the ORQQPX SEARCH ITEMS parameter, at the user level.

Q: I need confirmation on a question that arose in a meeting today.

From what I reviewed in the Women's Health (WV) technical manual, it appears that it does not interface with TIU or Clinical Reminders as far as exporting any entries made into the WV files. If anyone who knows definitively, can you respond with a yes or no that info could be extracted from the WV package to PXRM or TIU packages?

A: Several sites have created MST reminders and dialogs. Check the Reminders web site:
http://med.va.gov/reminders

FAQs, cont'd

Q: I have a user whose reminders are not showing. The due now shows, but when she goes into the dialog, she sees a blank screen. She is the only person this is happening to.

Before she went on leave two weeks ago, the program worked fine, but now she is back and it is not working. I tried to refresh her parameters, to no avail.

A: We just figured it out. Just in case any of you ever have the same problem, the user had moved her lower margin to the top of the screen.

A2: This is a Windows problem. We have providers who work on several PCs. If they are on a high-resolution screen and move one of the margins to the edge and log off, the setting remains. If they log onto a low-resolution screen, they won't even be able to see that margin. This is true with the GUI, Explorer, etc.

Reminder Definition Questions

Q: We are having a problem at our facility with diabetic reminders showing up on patients who do not have diabetes. A little research has shown that the reminder is working correctly, but an incorrect diagnosis had been entered into the patient's record in the past. I found one case where the patient had an elevated glucose level and the provider had diagnosed borderline diabetes. Either the provider checked diabetes on the encounter form or a coder had used a diabetes code incorrectly.

How are other facilities handling this problem?

A1: The fastest solution I've heard of is to create a Health Factor for "past diagnosis of diabetes not applicable", and then use it in the patient cohort logic to skip any patient for whom that HF has been recorded.

A 2: On a case-by-case basis. When the provider who marked the encounter form or problem list is contacted to determine if the diabetes designation was in error, the problem list or specific encounter is edited as appropriate. As billing may be involved, MCCF is also contacted.

A3: We send the problems to a coding mail group. They follow and make any need corrections to the encounter.

A4: We use a health factor, INACTIVATE DIABETIC REMINDERS, to get around this problem.

A5: Tampa uses:

1. Diabetes Taxonomy that only uses outpatient and problem list codes to define the cohort (to eliminate errors from Inpatient coding)

```
DIABETES CODES - OUTPT     Diabetes- Outpt codes

 General Taxonomy Data
 NAME: DIABETES CODES - OUTPT
 BRIEF DESCRIPTION: Diabetes- Outpt codes
 PATIENT DATA SOURCE: EN,PL//
 USE INACTIVE PROBLEMS:
 INACTIVE FLAG:

 ICD0 Range of Coded Values
 Select ICD0 LOW CODED VALUE:

 ICD9 Range of Coded Values
 Select ICD9 LOW CODED VALUE: 250.00//
   ICD9 LOW CODED VALUE: 250.00//
   ICD9 HIGH CODED VALUE: 250.93//
```

2. Health Factor: INACTIVATE DIABETES REMINDERS. (effective period set at 6M for this finding in the reminder)

3. Reminder Dialog with instructions to contact coder for database correction. If the database is not corrected, the 6M effective period for the finding item INACTIVATE DIABETES REMINDERS expires and the diabetes reminders will again appear.

A6: If you enter something into the effective date in the taxonomy finding field, it should correct this problem. We use 1 year or 6 months and it seems to be working fine.

A7: When we find problems with wrong diagnosis or codes entered either the CAC, one of the physicians or the RNP who assist with the Clinical Reminders will make the correction to the code. We are very fortunate here because the RNP that assist us has years of experience with the coding process. Her name is Vickie Ramsey, I'm sure she would be of great assistance to you if needed.

A8: Two ways to deal with it (in addition to improving quality of data capture):
1) Have identification of diabetics depend upon drugs and diagnoses in Problem List and Discharge Diagnoses (I distributed the example in a message in Forum (Subj: A1C reminder with edited cohort logic 12 Dec 00 12:48 207 lines).

Customized PATIENT COHORT LOGIC to see if the Reminder applies to a patient: (SEX)&(AGE)&'FI(7)&(FI(8)!FI(16)!FI(13)!FI(15)!FI(12))

2. Capture "NOT DIABETIC" Health Factor to ignore diagnoses and tweak effective periods.

I favor the first and getting clinicians to clean up Problem List.

We have the electronic problem lists on line (for almost two yrs) and I set the reminder to only look at problem lists and the ptf file. Usually the incorrect dx was being put in from the encounter form or by clerks during checkout

Q: Has anyone figured out a way to set up a clinical reminder so that it keeps coming up until it has been done 3x in a one-year period? This is the EPRP requirement for tobacco cessation counseling. We could set it for every 3-4 months but the patient could potentially come in 2x in a month and then not again for a year. Thanks in advance for any ideas.

A: I made four separate reminders. The reason for four was that the requirement is the next three visits. I feel it would be wrong to not counsel the patient with the screening, thus that is the first time and the next three would satisfy the requirement.

A2: We made three health factors: tobacco counseling 1, tobacco counseling 2, and tobacco counseling 3. Resolution logic is (1&2&3).

A3: Ours is set up so that it is always due for patients who continue to smoke or have recently quit. That way, the patient will be asked about tobacco use and offered enrollment in a cessation program if still using, or encouraged to remain abstinent if they have quit. Hopefully with more encouragement, we will be more successful.

Q: I have put together a reminder for CPAP/BIPAP -- they want to see the patients every year for evaluation of equipment, to see if the patient is using the equipment correctly and also to re-evaluate the patient need for the equipment.

Two problems:

1) My finding items: For CPAP is E0601 For BIPAP - I am being told to use VA123. The problem is that I cannot enter the VA123.
2) I had it set with just the E0601 and got everyone in the data base needing the assessment. I then placed the following:
   CUSTOMIZED PATIENT COHORT LOGIC (OPTIONAL): (SEX)&'(AGE)!FI(1)
   // (SEX)&'(AGE)!FI(1) ---- I got no reminders showing

then:

CUSTOMIZED PATIENT COHORT LOGIC (OPTIONAL): (SEX)&(AGE)!FI(1)
// (SEX)&(AGE)!FI(1) ---- I got everyone needing the assessment

Does anyone have any ideas?

A1: Looks like the cohort was trying to find patients who have a sex, and no age or FI. Seems like that is doomed to fail.

A2: And the second string looks like you are looking for a cohort that has a SEX and AGE OR FI(1) - seems like that would pick up EVERYone with the right sex and age.

Q2: How would you set it up? Keep in mind that if I do not include the sex and age part, it does not work.

A3: If the cohort can be defined by a specific code or finding, then the logic should be SEX & AGE & (FINDING).

Q: This education reminder will not load on the cover sheet; my other ones have. The cover sheet shows the ? mark, not evaluated. From previous NOIS reports, the cohort logic is a problem, but I don't know how to troubleshoot that.

```
PSA ED-ASH                          No.  637009
Print Name:                   Prostate Screening Education
Related VA-* Reminder:
Reminder Dialog:              PSA ED-ASH
_____________________________________________________________________________
Baseline Frequency:
Do In Advance Time Frame:  Do if DUE within 3 months
                  Sex Specific:  MALE
                 Ignore on N/A:  SA
       Frequency for Age Range:  1 year for ages 50 to 72
                    Match Text:
                 No Match Text:
Findings:
                  Finding Item:  LIFE EXPECTANCY < 6 MONTHS (FI(2)=HF(637121))
                  Finding Type:  HEALTH FACTOR
                    Found Text:  Documented life expectancy less than 6
 months, excludes patient from performance measures.
                Rank Frequency:  1
       Use in Resolution Logic:  OR
              Effective Period:  1Y
                  Finding Item:  VA-RACE (FI(3)=CF(6))
                  Finding Type:  REMINDER COMPUTED FINDING
           Match Frequency/Age:  1 year for ages 40 to 72
   Use in Patient Cohort Logic:  AND
                     Condition:  I V["BLACK"
                  Finding Item:  PROSTATE CA EDUCATION (FI(4)=ED(637012))
                  Finding Type:  EDUCATION TOPIC
                    Found Text:  Documentation, pros and cons (risks and
benefits) of screening for prostate cancer were discussed with the
patient.  The patient was given the opportunity to ask questions and
verbalized understanding of  this information.
       Use in Resolution Logic:  AND
                  Finding Item:  PROSTATE SPECIFIC AG(PSA)
(FI(5)=LT(1413))
                  Finding Type:  LABORATORY TEST
    Not Found Text:  Date of last PSA not on file.  Please order test or
document through an historical encounter.
       Use in Resolution Logic:  OR
                  Finding Item:  PROSTATE CA (FI(6)=TX(637035))
                  Finding Type:  REMINDER TAXONOMY
Use in Patient Cohort Logic:  AND NOT
                  Finding Item:  PREVENTION CARE INDEX (FI(7)=TX(637040))
                  Finding Type:  REMINDER TAXONOMY
```

```
Use in Patient Cohort Logic:  AND NOT
Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
     (SEX)&(AGE)&FI(3)&'FI(6)&'FI(7)
Expanded Patient Cohort Logic:
     (SEX)&(AGE)&FI(VA-RACE)&'FI(PROSTATE CA)&'FI(PREVENTION CARE INDEX)
Default RESOLUTION LOGIC defines findings which can resolve the Reminder:
     FI(2)&FI(4)!FI(5)
Expanded Resolution Logic:
     FI(LIFE EXPECTANCY < 6 MONTHS)&FI(PROSTATE CA EDUCATION)!
        FI(PROSTATE SPECIFIC AG(PSA))
```

A: Take the computed finding for race out of the cohort logic. Also, in the resolution logic, use OR instead of AND.

Replace `FI(2)&FI(4)!FI(5)`
With `FI(2)!FI(4)!FI(5)`

Q: I cannot tell from the manual what the correct syntax is for using PXRMSEX in the condition field.
I have tried:
I PXRMSEX=F^FEMALE
I PXRMSEXF^FEMALE
I PXRMSEX="F^FEMALE"
I PXRMSEX="FEMALE"
etc.
I can get it to work with I PXRMSEX["F" but this is not ideal and doing a male is not as easy.
What is the correct way to write the expression?

A: When using PXMRSEX in a CONDITION, you can use it a number of ways.
Examples:
I $P(PXRMSEX,"^",1)="M" I $P(PXRMSEX,"^",2)="MALE" I PXRMSEX'["FE"
I $P(PXRMSEX,"^",1)="F" I $P(PXRMSEX,"^",2)="FEMALE" I PXRMSEX["FE"
The first set selects male patients while the second set selects female patients.

Q: Before patch 5 was installed, we had the problem of using a dialog element with a prompt that is a copy of PXRM VISIT DATE, and neither the date or location prompt was displayed. After the fix in patch 5, setting the default to "M" works - the month is required. However, when setting the default to "0M" - the month is no longer required. The year is blanked out as expected with the "0" in the default field when it is there alone or with the "M".

```
Prompt NAME: DATE PROMPT FOR MONTH  Replace
DISABLE Prompt:
CLASS: LOCAL//
SPONSOR:
REVIEW DATE:
PROMPT CAPTION: Date://
EXCLUDE FROM PROGRESS NOTE:
DEFAULT VALUE: 0M// M
Select CHECKBOX SEQUENCE:
Input your edit comments.
Edit? NO//
```

A: Try M0 instead of 0M. With the default set to "M0", the month is required and the year is blank.

Computed Findings

Q: Has anyone developed a reminder that will search for a blank allergy field?

A: Hines uses one that requires this computed finding:

```
 GMRA(DFN,TEST,DATE,VALUE,TEXT)  ;;RETURN DATA ABOUT ENTRIES IN ART
PACKAGE
        N AJEY
        S AJEY=$$NKA^GMRANKA(DFN)
        S TEST=0,DATE=""
        I AJEY="" S TEST=1, DATE=DT
        Q
```

This finding will return TRUE if there is *any* data in the PATIENT ALLERGIES file. The way we use it is a reminder that is due for all patients, and satisfied if this returns true. That way, anyone DUE for the reminder has no data in the file at all.

A2: We took this one step further at Northern California. We used the computed finding from Cyndi McCracken at West Palm to create a reminder if there was no allergy info entered and we made a dialog for it that takes the user to the allergy/ADR entry dialog so that they can enter allergy information.

Q: Has anyone created a PPD reminder that picks up LTC patients and employees in the cohort logic? I'm guessing that I will need computed findings created for each category. Does anyone have these?

A: We have used a computed finding to identify the patients in long-term care. Note, however, that the way Hines has identified their long-term care patients, we are only able to reliably do this by specific ward names. This means that while the methods will work for you, the particulars of the computed finding will need to be re-programmed for your site's LTC ward names, or some other mechanism.

Techie section:
"ECC" and "RCF" are the names of our long term WARD LOCATIONS. Other sites may be able to use treating specialty or other designation to uniquely identify a LTC patient.

```
NHCU(DFN,TEST,DATE,VALUE,TEXT)  ;;LOCAL TO HINES - IS PATIENT IN NHCU?
        N VAIN
        D INP^VADPT
        S TEST=0,DATE=DT
        I $P(VAIN(4),"^",2)["ECC" S TEST=1
        I $P(VAIN(4),"^",2)["RCF" S TEST=1
        Q
```

A2: We have a computed finding to find employees, which starts out in the PATIENT file, then uses the SSN x-ref to jump over to the new person file and paid employee file. We exclude certain factors from the entries in the last two files until we have active employees who are not med students or contract employees. The reminders come due on these employees during their birth month and remain due until a PPD has been done.
Then we generate a mail message to a chief's mailgroup on the first of each month which lists, by service, the employees who have BD's that month. Additionally, we generate an individual bulletin to each employee on the list reminding them of PPD due.

Reminder Dialog Questions

Q: If I build a reminder dialog by autogeneration, can I also build additional dialogs to go along with that?

A: Once a reminder dialog is autogenerated, you can change or add dialog elements. The dialog elements don't need to be related to the reminder or exist as findings on the reminder.

So if you want an additional Health Factor on a dialog, you create a dialog element for the Health Factor (assuming one doesn't exist already) and then add it to the dialog

Q: If orders are included in dialogs and I check these (in the Notes tab in CPRS), are the orders actually placed, or is this just recording the intention to order something?

A: The order is actually placed, just as if you had ordered through the Orders tab. If the order is set up as a quick order, it will go through immediately (when you click the Finish button); if it's not a quick order, further questions will be asked to complete the order. The order will still need to be signed.

Q: Has anyone seen this? We have used ORQQX, the Clinical Reminders for Search parameter, to turn on the Depression and PTSD reminders at the User level for a particular user--actually a CAC. When she opens the Cover Sheet, she does not see the box with the big question mark and ringing alarm clock. When she selects a patient, she still does not get the clock box, but the GUI tells her that the reminder is being retrieved in the background. Then the reminder shows as DUE in the reminders box. She goes to the Notes Tab, starts a new note, but the Reminder Drawer is not there. The Template drawer and Encounter drawer are there, but no Reminder Drawer. All of these work fine for me. What have we missed? Is there another parameter that needs to be set? Many thanks.

A: Make sure the parameter, PXRM GUI REMINDERS ACTIVE is set to yes, by system.

Q: Help! I have two questions about Clinical Reminders.

1. We are trying to set up the Diabetic Foot Screen to require the clinician to answer with one element in each of 3 groups. I set up a group that includes three other groups. For example Foot Sensations group has 2 elements:

Sensations intact.
Sensations deficit.

Once the box for Foot Sensations has been opened, the reminder cannot be finished without one of the elements checked. The other two have been set up the same way.

```
5            You must select one item under each of the following:
               Foot Sensations, Skin Lesions or Pedal Pulses
             [no caption for this group]
5.1          Foot Sensations
              Sensations intact.
              Sensations deficit.
5.2          Skin Lesions
              Skin lesions present.
              No skin lesions.
5.3          Pedal Pulses
              Pedal pulse intact.
              Pedal pulse deficit.
```

What I want to do with the dialog is to have it so that the clinician cannot finish the reminder if he/she does not select one element in each of the 3. The only options I can find are :

```
      1        ONE SELECTION ONLY
      2        ONE OR MORE SELECTIONS
      0        NO SELECTION REQUIRED
```

Is there another way to do this?

Q2. When a number of reminders are finished at one clinical visit, by using the "NEXT" button, we have had some of them still show as active even though the note shows they were finished and even though the reminder shows a resolution date under Clinical Maintenance. We haven't been able to get a handle on this because it is inconsistent. Some patients will have their reminders resolved. Have any of you had this problem and if so, what did you do about?

FAQs, cont'd

A: Here are the steps you must take to force a response to each question/area:

*Two key things to set are SHOW group and SUPPRESS checkbox for each of the subgroups (i.e. the exam question groups) see example below

```
DISABLE:
RESOLUTION TYPE:
FINDING ITEM:
GROUP CAPTION:
PUT A BOX AROUND THE GROUP:
SHARE COMMON PROMPTS:
MULTIPLE SELECTION: ONE SELECTION ONLY//
HIDE/SHOW GROUP: SHOW//    <-----(this must be set to SHOW)
GROUP HEADER DIALOG TEXT:
PEDAL PULSES: (includes palpation of dorsalis and posterior tibial pulses
and signs/symptoms of vascular compromise like pain, pallor parathesia or
paralysis)

  Edit? NO//
GROUP HEADER ALTERNATE P/N TEXT:
  No existing text
  Edit? NO//
EXCLUDE FROM PROGRESS NOTE:
SUPPRESS CHECKBOX: SUPPRESS//    <----(this must be set to SUPPRESS)
NUMBER OF INDENTS: 2//
INDENT PROGRESS NOTE TEXT:
Select ADDITIONAL FINDINGS:
Select SEQUENCE: 2// ?
    Answer with COMPONENTS SEQUENCE, or ITEM
   Choose from:
   1      DAY PEDAL NORMAL
   2      DAY PEDAL ABNORMAL
```

A2: Try creating three different "groups" for that reminder. Each one can be set to require clicking one, or more boxes (per group).

FAQs, cont'd

Q: Has anyone created a Progress Note title to pull into a Health Summary record of outside medications and procedures? If so, what title do you suggest and how to make it work most effectively to include the data required by IM7.4?

A: Tampa is approaching this through Reminder Dialogs. I have been actively using these dialogs for about a month in my Primary care clinic. It is much easier to use the dialogs within my usual Ambulatory Care note title than it is to have to start a second note. Another advantage of using reminder dialogs: you will be capturing info that can be used to satisfy other reminders

1) Health factors for "S/P Total colectomy" and "S/P hysterectomy" can be used in the appropriate cancer screening reminders. (these are set up with resolution status "Other" since it is a condition: once you are S/P total colectomy you are always S/P Total colectomy. The date of the procedure indicated by typing date into comments rather than using a resolution status of "Done Elsewhere" and using drop down date.

2) Although HF for individual meds are not included in Outside Med dialog, the following HF were included: Outside ACE Inhibitor, Outside ASA and Outside Beta Blocker - for the IHD reminders.

NOTE: See Tampa's reminder dialog on the Reminders web page under Examples.

A2: We created a Progress Note Title "Outside Medications" under the DOCUMENT CLASS Clinical Warning. Clinician can then view on CWAD DISPLAY. Then created h/s called PHARMACY MEDS AND OUTSIDE MEDS and added it as a health summary on the reports tab. HS included the RXOP component and SPN COMPONENT with 3 occurrence limits. The dilemma is getting the clinician to enter a separate note, however, due to the benefits of this information for meds and herbs outside VA, clinicians are taking the time to add. Some are appending the original title instead of adding a new one. We probably need to look at that and ensure that this is okay, but it is better than what we had. Our second brainstorm was to add it as a problem to the problem list OUTSIDE MEDICATIONS (DEFAULTS TO 799.9 CODE) AND THE CLINICIAN CAN ADD comment each time med is changed or added.

Q: Can you include a reminder dialog as part of a group template or dialog template?

A: No. Reminder dialogs are stand-alone.

Q: When using the CV option of reminders dialog, we are finding that it indicates "elements may be created from within the dialog group screen" and we have been unable to enter a new element. We receive the following message and are not given the option to create a new element:

```
DIALOG ELEMENT: ??   ******
        This field points to a dialog which is subordinate to this dialog.
        NOTE:  The parent dialog menu or one of its ancestors may not be entered
        as an item.
```

A: Go into the CV option and select groups. Select the new group and use the ED option to edit. When you get to sequence prompt, type ?.
If there are sequence numbers with no element names, delete them.

Mental Health Reminder Dialogs

Q: Do users have to have a key to do a CAGE? The Primary Care physician who has been working with me tried to use my CAGE Reminder and got a warning message that he was not authorized to enter CAGE results.

A: You have to make mental health dialogs active for the user or Division or service under CPRS Reminder Configuration on the manager's menu:

```
Select Reminder Managers Menu Option: cp  CPRS Reminder Configuration

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   Division      DIV    [choose from INSTITUTION]
     3   System        SYS    [TAMPA.VA.GOV]
```

Q: Can anyone send me examples of their GAF and AIMS reminders and dialogs?

A: See the following web sites:

http://vaww.mentalhealth.med.va.gov/
http://vaww.visn1.med.va.gov/pce/
http://med.va.gov/reminders
http://152.131.71.182/CPRSPage/VISN15REMINDERS/screensofdialogs

Reminder Reports

Q: Can we use the reports functionality "out of the box" as soon as we install V. 1.5 (or patch 63) or do we have to define reminders first?

A: Reports can be run on the National reminders that are distributed "out of the box," but National reminders will not include local findings so the report counts will not be correct. Once local reminders are defined and tested, you will primarily run the reports based on site-specific reminders.

Q: We have the following two hypertension reminders -- one for pts with DX of HTN and one for diabetics. Our goal was to write a reminder that would only be resolved when the last BP measurement in VITALS was equal to or less than 130/85 for diabetics and 140/90 for patients with DX of HTN.

The problem is, now we're running reminder due reports on these and basically they're showing that NONE of the reminders was resolved. In other words, out 3150 pts, 3150 still have the reminder due--the # applicable and due are the same consistently. I find it hard to believe we haven't resolved any of them.

How do I need to change the way the reminder is written to make this not so? Is it because I make the frequency 1d?

```
REMINDER DEFINITION INQUIRY           Mar 07, 2001 8:45:39 am     Page 1
-------------------------------------------------------------------------------

CTX HYPERTENSION IN DIABETES       No.  674032
---------------------------------------------

Print Name:                    Hypertension in Diabetes (P)
Related VA-* Reminder:
Reminder Dialog:               CTX DIABETES-ELEVATED BP
Priority:
Reminder Description:
    Blood pressure should be measured at each office visit for all veterans
    who have diabetes mellitus.

    This reminder is based on guidelines outlined in the VHA Handbook 1120.2
    and VHA Clinical Guidelines for Management of Patients with Diabetes
    Mellitus.

         Target Condition:  Coronary Artery Disease and Stroke.

         Target Group:  All veterans with diabetes mellitus.

         Recommendation:  Measure blood pressure at each office visit
         for all veterans who have diabetes mellitus.

Technical Description:
    This reminder is triggered by a diagnosis of diabetes mellitus and a last
    recorded blood pressure measure in the Vitals package of >130/85.  The
    reminder continues to be active as long as the last blood pressure
    measurement is >130/85.  If the patient is not diabetic, the Health
    Factor PT NOT DIABETIC will resolve the reminder for one year.
```

```
Baseline Frequency:

      Do In Advance Time Frame:  Wait until actually DUE
                  Sex Specific:
                 Ignore on N/A:        Frequency for Age Range:

Findings:
                  Finding Item:  BLOOD PRESSURE  (FI(1)=VM(1))
                  Finding Type:  VITAL MEASUREMENT
           Match Frequency/Age:  1 day for all ages
                    Found Text:  BP check due every visit for diabetic
                                 patients with BP>130/85.
   Use in Patient Cohort Logic:  AND
                     Condition:  I ($P(V,"/",1)>130)!($P(V,"/",2)>85)

                  Finding Item:  DIABETES  (FI(2)=TX(674022))
                  Finding Type:  REMINDER TAXONOMY
                    Found Text:  History of diabetes on file.
   Use in Patient Cohort Logic:  AND
              Effective Period:  2Y

                  Finding Item:  PT NOT DIABETIC  (FI(3)=HF(674185))
                  Finding Type:  HEALTH FACTOR
       Use in Resolution Logic:  OR

General Patient Cohort Found Text:

General Patient Cohort Not Found Text:

General Resolution Found Text:

General Resolution Not Found Text:

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

Expanded Patient Cohort Logic:
     (SEX)&(AGE)&FI(BLOOD PRESSURE)&FI(DIABETES)

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

Expanded Resolution Logic:
     FI(PT NOT DIABETIC)

Web Sites:
```

```
REMINDER DEFINITION INQUIRY           Mar 07, 2001 8:52:14 am    Page 1
-------------------------------------------------------------------------------

CTX HYPERTENSION MANAGEMENT        No.  674008
---------------------------------------------

Print Name:                   Hypertension Management (P)
Related VA-* Reminder:        VA-*HYPERTENSION SCREEN
Reminder Dialog:              CTX BLOOD PRESSURE CHECK
Priority:
Reminder Description:
    This reminder is based on guidelines outlined in the VHA Handbook 1120.2
    and the VHA Pharmacologic Management of Hypertension 1996.

        Target Condition:  Cardiovascular disease and stroke.

        Target Group:  All veterans with hypertension.

        Recommendation:  Achieve blood pressure levels of less than 140/90 for
        all veterans with hypertension.

Technical Description:
    This reminder is triggered for all patients with a diagnosis of
    hypertension (see Taxonomy HYPERTENSION CODES) except those with an
    active diagnosis of diabetes (see reminder HYPERTENSION IN DIABETES
    MELLITUS) every visit when last recorded blood pressure in the Vitals
    Measurement Package is greater than 140/90.

    As long as the recorded BP remains greater than 140/90, the reminder
    remains due.  It will only be resolved when the last recorded BP is less
    than 140/90.

Baseline Frequency:

      Do In Advance Time Frame:  Wait until actually DUE
                  Sex Specific:
                 Ignore on N/A:
       Frequency for Age Range:  0Y - Not Indicated for all ages
                    Match Text:
                 No Match Text:
Findings:
                  Finding Item:  BLOOD PRESSURE  (FI(3)=VM(1))
                  Finding Type:  VITAL MEASUREMENT
           Match Frequency/Age:  1 day for all ages
                    Found Text:  Patients with DX of hypertension with
                                 BP>140/90 require BP check each visit.
```

```
   Use in Patient Cohort Logic:  AND
                      Condition:  I ($P(V,"/",1)>140)!($P(V,"/",2)>90)

                  Finding Item:  DIABETES  (FI(4)=TX(674022))
                  Finding Type:  REMINDER TAXONOMY
   Use in Patient Cohort Logic:  AND NOT
             Effective Period:  2Y

                  Finding Item:  HYPERTENSION CODES  (FI(5)=TX(674043))
Finding Type:  REMINDER TAXONOMY
   Use in Patient Cohort Logic:  AND
              Effective Period:  2Y

General Patient Cohort Found Text:

General Patient Cohort Not Found Text:

General Resolution Found Text:

General Resolution Not Found Text:

Default PATIENT COHORT LOGIC to see if the Reminder applies to a patient:
     (SEX)&(AGE)&FI(3)&'FI(4)&FI(5)

Expanded Patient Cohort Logic:
     (SEX)&(AGE)&FI(BLOOD PRESSURE)&'FI(DIABETES)&FI(HYPERTENSION CODES)

Default RESOLUTION LOGIC defines findings that resolve the Reminder:


Expanded Resolution Logic:



Web Sites:
```

A: Your reminder looks good for display of the correct information to the provider, but you need to fix your problem for the reports.

Your first reminder is due for Diabetics whose last SBP >130 or DBP >85.
The entry in the resolution logic does not do anything - if the patient's last BP is less than 131/86 then the reminder is not applicable and the resolution is not used.

So, the real question is - what is it that you want to ask/answer with a reminder report?

I use almost exactly the same reminder that you have for my reminder reports (without the resolution logic). However, the output in the report shows the same number in the applicable and due column - so I use this reminder to get the number of patients whose last BP was >140/85 and who have diabetes. I use a different reminder to know how many diabetics there are in the group and what I report is the % of diabetics whose last BP was elevated.

So for lines 3 and 9, the applicable and due are the same. 38/82 diabetics had their last BP elevated and 31/82 had their last HbA1c >8.0

```
                                                # Patients with Reminders
                                                Applicable           Due
                                                ----------           ---
1    Diabetes - Serum Creatinine                      82              7
2    Diabetes - Hemoglobin A1c                        82             14
3    Diabetic with last BP>140/85                     38             38
4    Diabetes - Urine Protein                         82             23
5    Diabetes - Urine Microalbumin                    67             23
6    Diabetic Eye Exam                                82             78
7    Diabetic Foot Exams                              82             40
8    Proteinuria - Not on ACE                         20              6
9    Diabetic with last HbA1c >8.0                    31             31
10   Lipid Profile - High Risk Patient                82             17
11   DM LDL in past year >100                         57             33

Report run on 82 patients.
```

If you wanted the applicable column to be all diabetics and the due column to be those whose BP was high or not done, you could rewrite the reminder. cohort: sex and age and diabetes resolution: BP <130/85

Then the reminder is due for all patients who have no BP recorded or whose last value was >=130/85. (It is possible to exclude those who have no BP in the VS if you wanted to)

Troubleshooting

Health Factor Errors

You can identify health factor errors because the routine is PXRMHF. Generally there are four possible causes of errors with health factors:

1. A health factor that is a factor does not have a category.
Solution – put the factor in a category.

2. A health factor that is a category factor has been given to a patient.
Solution – remove this health factor from the patient's record.

3. There is a bad "AA" cross-reference in the V HEALTH FACTOR file.
Solution - remove the bad cross-reference.

4. There is an entry in the V HEALTH FACTOR file that points to a non-existent visit.
Solution – remove the entry.

By looking at the error trap, you can usually tell which one of these it is. If the variable CAT is null then the error is one of the first two. The variable HFIND tells you which health factor it is. By looking at this health factor you can see if it is a factor missing a category or a category health factor given to a patient. If the variable IEN is null then there is a bad "AA" cross-reference. It will be ^AUPNVPED(DFN,"AA",HFIND,INVDATE,IEN). If the variable VIEN is null then V Health Factors entry points to a non-existent visit. The entry is ^AUPNVPED(IEN).

Example:

```
$ZE= BLDPC+17^PXRMHF:1, %DSM-E-NULLSUBSCR, Null subscript
 .. S ^XTMP(PXRMDFN,"HF",CAT,INVDATE,HFIND)=IEN_U_VIEN_U_DATE
Process ID:  20603564  (543176036)
                                                    APR 17, 2000 13:51:59
Username: SCHWARTZ                      Process Name: SCHWARTZ
UCI/VOL: [VAH,TOU]                      :
$ZA:  83                                $ZB:  13
Current $IO: _TNA22:              Current $ZIO: Host: 10.136.245.219   Port: 1881
CPU time:   3.52                        Page Faults:        496
Direct I/O:        500                  Buffered I/O:       1008

$ZE= BLDPC+17^PXRMHF:1, %DSM-E-NULLSUBSCR, Null subscript
Last Global Ref: ^XTMP("PXRMDFN21542","HF","")

$ECODE=,ZNULLSUBSCR,
$ESTACK=9
$ETRAP=D ERRHDLR^PXRMERRH
$QUIT=0
etc.
```

Appendix A: Checklist for Defining a Reminder and Dialog

- ❑ 1. Write your reminder in a narrative format.
- ❑ 2. Review national exported reminders for a prototype that closely matches your narrative.
- ❑ 3. Select a national reminder, print, and review.
- ❑ 4. Review taxonomy findings (print screen captures).
- ❑ 5. Review existing Health Factors in your local system. If new ones are needed, create them.
- ❑ 6. If the reminder is an education reminder, create A "refused" Health Factor (to be used instead of the level of understanding field as "refused." This will ensure that reports of numbers of patients receiving an education reflect those who received education and are not received because refused.)
- ❑ 7. If new taxonomies, education topics, exams, orderable items are needed, create them.
- ❑ 8. Decide if Radiology, Lab, Mental Health, Vitals, or other findings need to be included in the reminder.
- ❑ 9. Decide which findings are to be used with Cohort logic, Resolution logic, or informational (outside exams, radiology, lab, immunization, skin tests).
    - o Will orders be generated if certain health factors are positive or negative?
    - o Will diagnoses or procedures be generated for Problem List or encounter capture from this dialog?
    - o Will other additional findings need to be captured from the dialog?
- ❑ 10. Copy the national reminder, adding in additional findings.
- ❑ 11. Add or edit Dialog Parameters, if needed.
    - o Example, Health Factor Resolution Statuses
- ❑ 12. Create the dialog, using the option Reminder Dialog (DI).

Checklist, cont'd

- ❑ 13. Add the reminder to your CPRS Cover Sheet Reminder List.

- ❑ 14. Turn on the CPRS GUI parameter, CPRS Reminder Resolution Active.

- ❑ 15. Turn on the CPRS GUI parameter, Mental Health Dialogs Active, if needed.

NOTE: Steps 14 and 15 only have to be turned on once, not every time a reminder definition and a dialog are created.

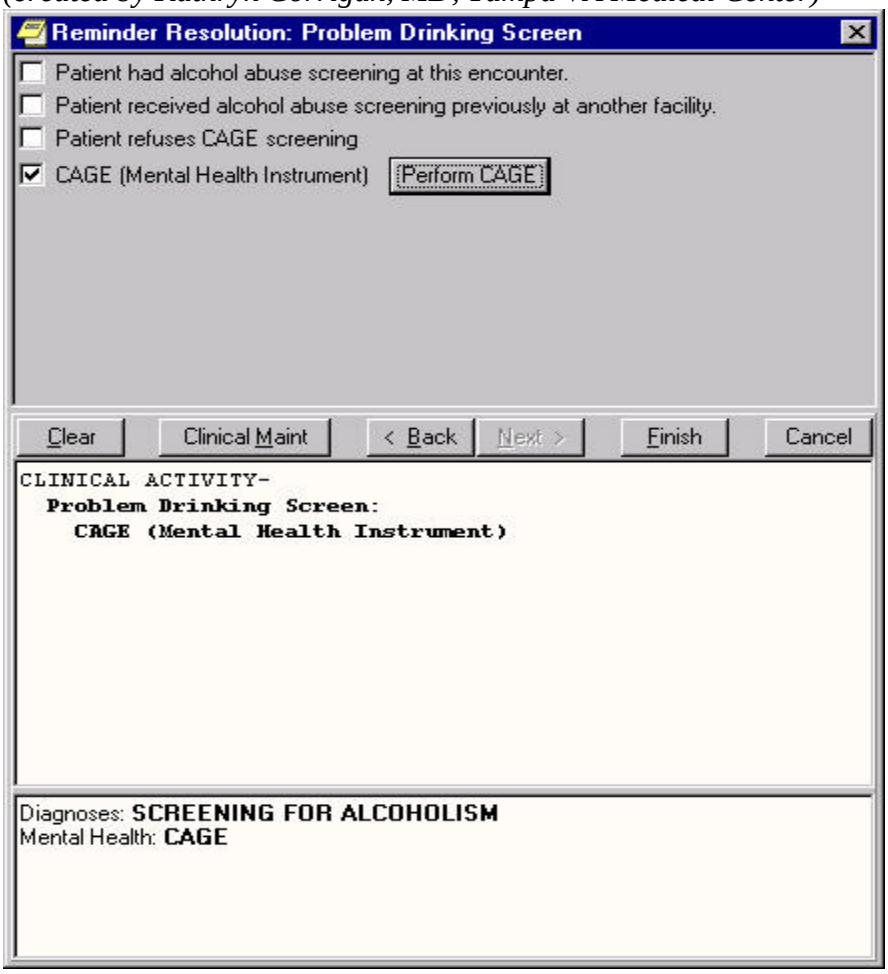
- ❑ 16. Test the reminder and dialog.
  - o Test in the CPRS GUI
    Does it look the way you want it to (headers, sequence, checkboxes, comments)?
  - o Check Resolution Evaluation to see if dialog elements resolve the reminder.
  - o Check Clinical Maintenance.
  - o Test in a health summary.
  - o Use the Reminders Test option to make sure there are no errors.

- ❑ 17. Fine-tune, as necessary.
  Examples:
  - o Delete the dialog element for refused Education Topic to be replaced by a Health Factor.
  - o Add the Health Factor-Refused dialog element.

- ❑ 18. Deploy the reminder; in other words, add it to the appropriate places:
  - o User's cover sheets
  - o Health Summaries
  - o Reminder Reports

Example: Creating a Reminder and Dialog incorporating the Cage Questionnaire

Example: Problem Drinking Screen Reminder Dialog
(created by Kathryn Corrigan, MD, Tampa VA Medical Center)



Setup Steps
Options for performing each step are listed. All options are on the Reminders Definition Managers Menu [PXRM MANAGEMENT MENU].

1. Review the national exported reminders to find a prototype.
   Option: List Reminder Definitions on Reminder Management Menu [PXRM REMINDER MANAGEMENT]

2. Select a national reminder, VA-*PROBLEM DRINKING SCREEN. Review and print it.
   Option: Inquire about Reminder Definition on Reminder Management Menu

4. Determine the list of findings required for the new reminder.

   a) Findings required to define the COHORT LOGIC including those than can change the age range and frequency.
   b) Findings required to define the RESOLUTION LOGIC.
   c) Informational findings.

5. Compare this list of findings with those that already exist on your system. If some of them do not exist, you will need to create them.

6. Review taxonomy findings (print screen captures).
   Option: Inquire about Taxonomy Item on Taxonomy Management Menu

7. Review existing Health Factors in local system. If new ones are needed, create them.
   Option: PCE Table Maintenance on Other Supporting Menus [PXRM OTHER SUPPORTING MENUS]

8. If the reminder is an education reminder, create "refused" Health Factors (to be used instead of the level of understanding field as "refused." This will ensure that reports of numbers of patients receiving an education reflect those who received education and not those who refused.)
   Option: Dialog Parameters on Dialog Management Menu [PXRM DIALOG MANAGEMENT]

9. If new taxonomies or findings (education topics, exams, orderable items) are needed, create them.
   Option: Dialog Parameters on Dialog Management Menu [PXRM DIALOG MANAGEMENT]

10. Decide if Radiology, Lab, Mental Health, Vitals, or other findings need to be included in the reminder.

11. Decide which findings are to be used with Cohort logic, Resolution logic, or informational (outside exams, radiology, lab, immunization, skin tests).
    a. Are there orders that would be generated if certain health factors are positive or negative?

b. Will diagnoses or procedures be generated for Problem List or encounter capture from this dialog?
c. Do other additional findings need to be captured from the dialog?

12. Copy the national reminder, adding in additional findings
Option: Copy Reminder Definition on Reminder Management Menu [PXRM REMINDER MANAGEMENT]

For this reminder, the following findings were added:
HF- NON DRINKER AT LEAST 1 YR (FI(6)=HF(673106)) Resolution
LIGHT DRINKER (FI(7)=HF(673003)) Informational
MODERATE DRINKER (FI(8)=HF(35)) Informational

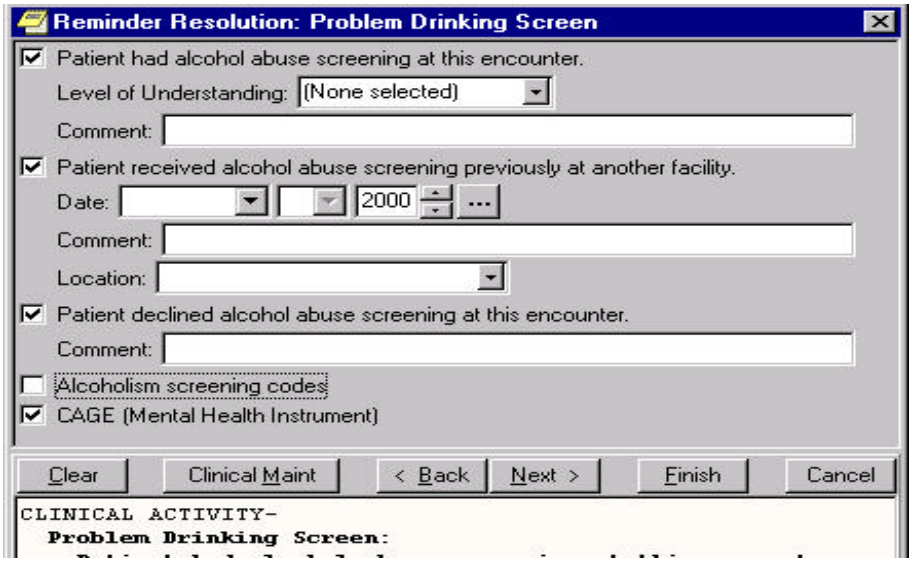
13. Set up Health Factor Resolution Statuses.
Option: Health Factors Resolutions on the Dialog Parameters menu on the Dialog Management Menu.

14. Autogenerate the dialog.
Option: Reminder Dialog on Dialog Management Menu

10. Add the reminder to the CPRS Cover Sheet Reminder List.
Option: CPRS Cover Sheet Reminder List CPRS Reminders Configuration Menu

11. Check the reminder dialog in CPRS.

Option: Open CPRS GUI, go to Notes tab, select New Note, and open Reminders Drawer. TPA CAGE test should appear in Due or Applicable Reminders folders. Click on the reminder. The following dialog screen opens up.



12. Turn on the GUI parameter for Mental Health Dialogs Active

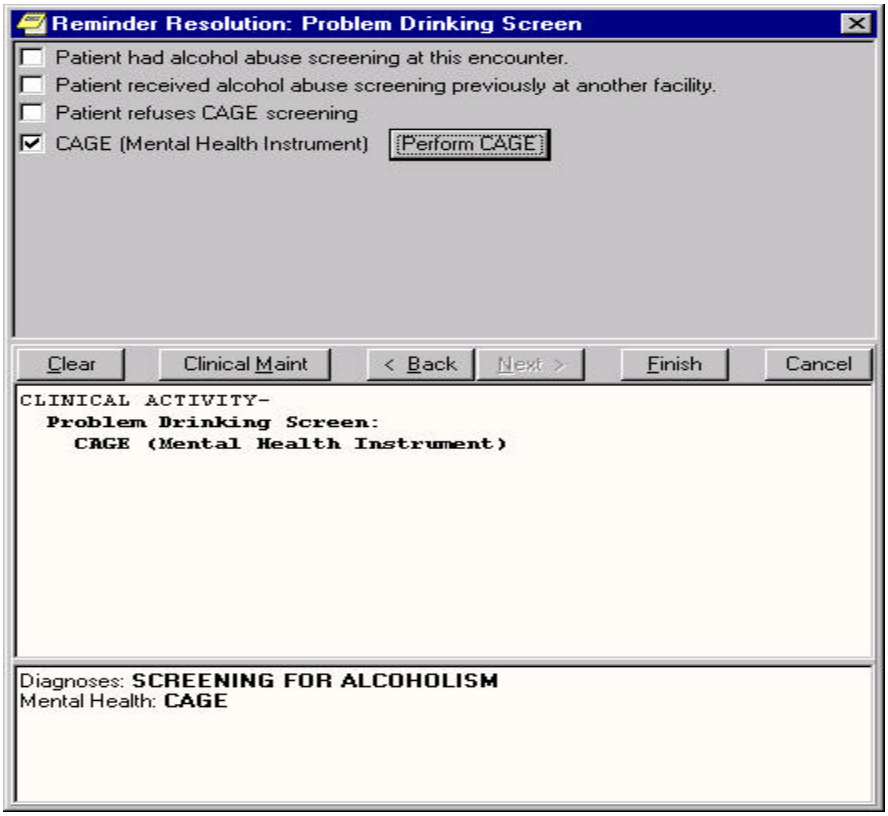
Option: Mental Health Dialogs Active on CPRS Reminders Configuration Menu

13. Fine-tuning
Option: Reminder Dialog

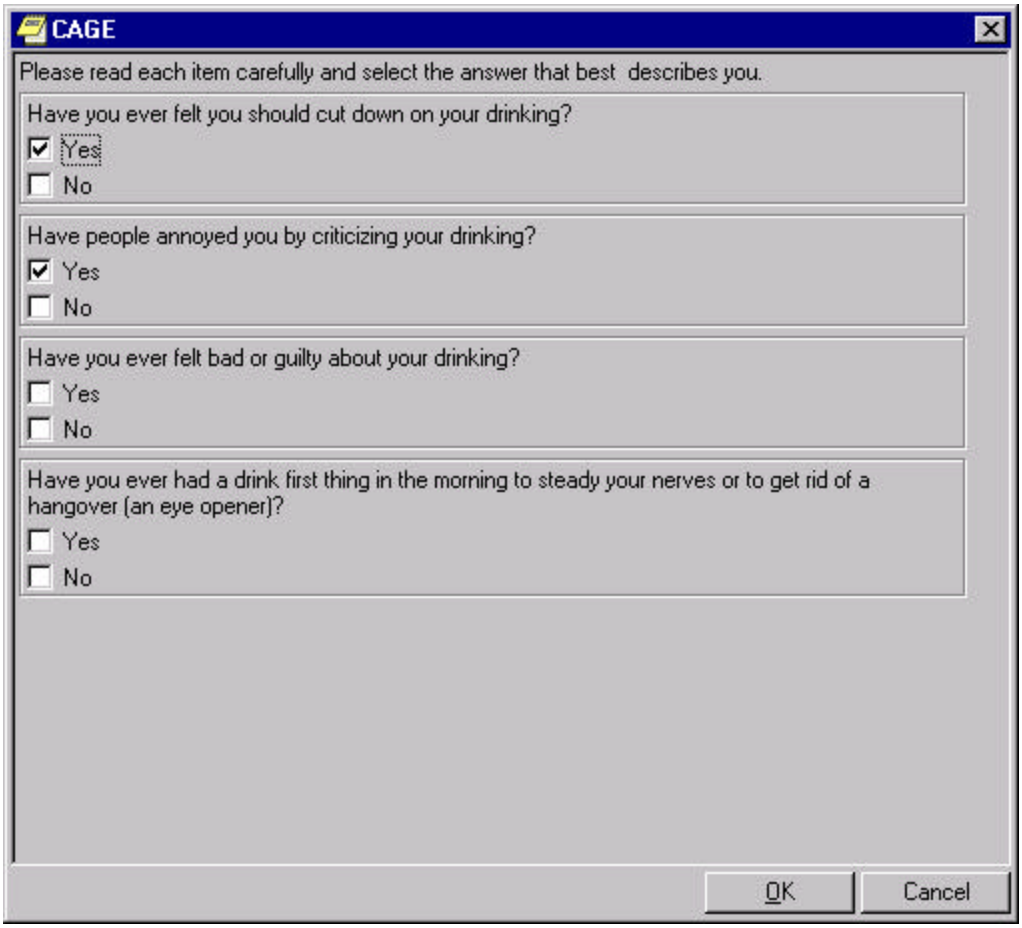
13a. Add the additional finding of "V" code to the CAGE dialog element.
Select CV Change View, then select Dialog Elements.
13b. Remove taxonomy, since V codes were added as additional findings to the education topic.
13c. Delete dialog for refused Education Topic, to be replaced by a Health Factor.
13d. Manually add Health Factor-Refused dialog element.

Examples: Problem Drinking Screens

Note the Perform CAGE button.



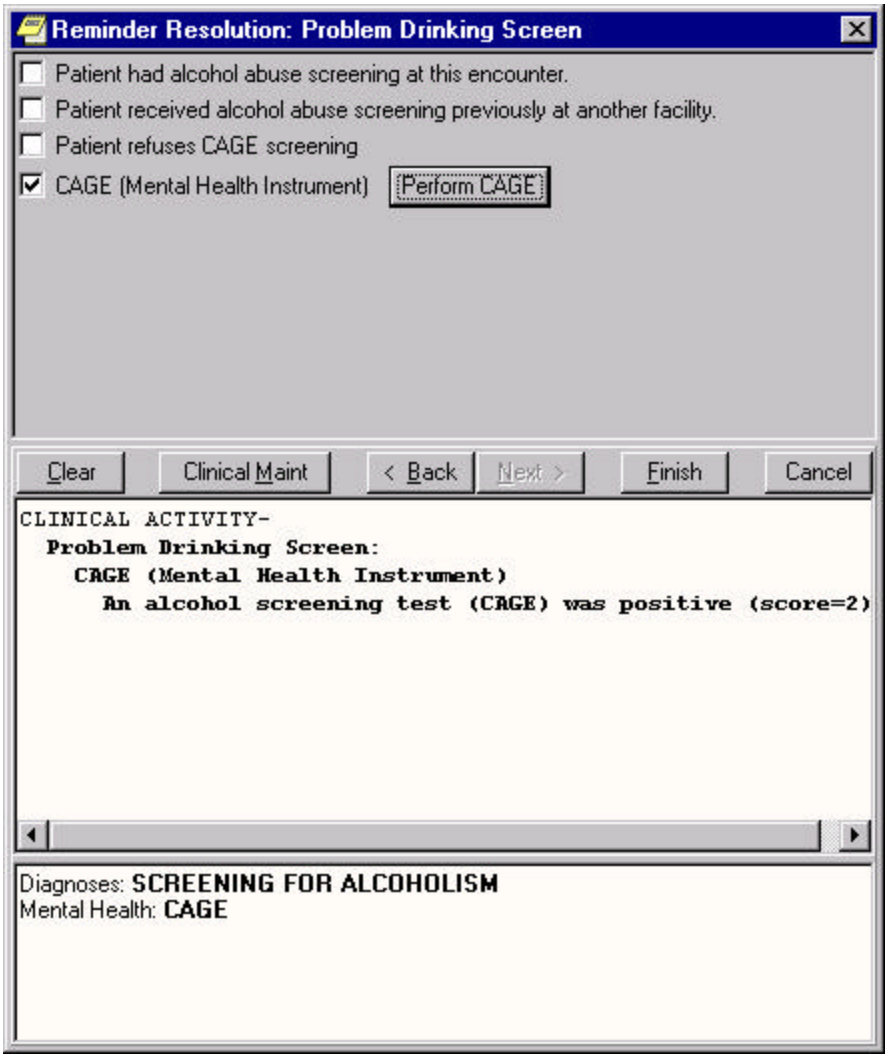
Example: Problem Drinking Screens – CAGE test



Local Reminder incorporating Cage Questionnaire, cont'd

Example: Problem Drinking Screens

CAGE Results added to Progress Note



Appendix B: Clinical Reminder Menu and Options

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

```
Clinical Reminders Management Menu [PXRM MANAGEMENT MEMU]
   CF     Reminder Computed Finding Management ... [PXRM CF MANAGEMENT]
          CRL    Computed Finding List
          CFE    Computed Finding Edit
   RM     Reminder Definition Management ... [PXRM REMINDER MANAGEMENT]
          RL     List Reminder Definitions
          RI     Inquire about Reminder Definition
          RE     Add/Edit Reminder Definition
          RC     Copy Reminder Definition
          RA     Activate/Inactivate Reminders
   SM     Reminder Sponsor Management [PXRM SPONSOR MANAGEMENT]
          SE     Enter/Edit Reminder Sponsor
          SL     List Reminder Sponsors
   TXM    Reminder Taxonomy Management ... [PXRM TAXONOMY MANAGEMENT]
          TL     List Taxonomy Definitions
          TI     Inquire about Taxonomy Item
          TE     Edit Taxonomy Item
          TC     Copy Taxonomy Item
   TRM    Reminder Term Management ... [PXRM TERM MANAGEMENT]
          TL     List Reminder Terms
          TI     Inquire about Reminder Term
          TE     Reminder Term Edit
          TC     Copy Reminder Term
   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]
          RL     List Reminder Definitions
          RI     Inquire about Reminder Definition
          TL     List Taxonomy Definitions
          TI     Inquire about Taxonomy Item
          TRL    List Reminder Terms
          TRI    Inquire about Reminder Term
          SL     List Reminder Sponsors
   DM     Reminder Dialog Management ... [PXRM DIALOG MANAGEMENT]
          DP     Dialog Parameters ...
          DI     Reminder Dialogs
```

Clinical Reminders Management Menu, cont'd

```
CP      CPRS Reminder Configuration [PXRM GUI MANAGEMENT]
        CA     Add/Edit Reminder Categories
        CL     CPRS Lookup Categories
        CS     CPRS Cover Sheet Reminder List
        MH     Mental Health Dialogs Active
        PN     Progress Note Headers
        RA     Reminder GUI Resolution Active
        DL     Default Outside Location
        PT     Position Reminder Text at Cursor
        NP     New Reminder Parameters
RP      Reminder Reports ... [PXRM REMINDER REPORTS]
        D     Reminders Due Report
        T     Extract EPI Totals
      E     Extract EPI List by Finding and SSN
```

Reminder Managers Menu Descriptions

Syno-nym	Option	Option Name	Description
CF	Reminder Computed Finding Management	PXRM CF MANAGEMENT	The options on this menu provide tools for management of reminder computed findings.
RM	Reminder Definition Management	PXRM REMINDER MANAGEMENT	The options on this menu are used for displaying, creating, editing, copying, and activating reminder definitions.
SM	Reminder Sponsor Management	PXRM SPONSOR MANAGEMENT	The options on this menu are used for displaying, creating, and editing sponsors for reminders
TXM	Taxonomy Management	PXRM TAXONOMY MANAGEMENT	The options on this menu are used for displaying, creating, editing, copying, and activating reminder taxonomies.
TRM	Reminder Term Management	PXRM TERM MANAGEMENT	Reminders can use terms as well as individual findings. The options on this menu allow you add, edit, and display reminder terms.
RX	Reminder Exchange	PXRM REMINDER EXCHANGE	This option allows sites to exchange reminder definitions via MailMan messages and host files.
RT	Reminder Test	PXRM TEST	This option lets you test your reminder definition before activating it, to ensure that it works correctly.
OS	Other Supporting Menus	PXRM OTHER SUPPORTING MENUS	The options to maintain reminder categories are in the menu Other Supporting Menus. This menu also contains menus from other packages that are related to clinical reminders, such as PCE Table Maintenance, Health Summary Coordinator's Menu, and Encounter Forms.
IN	Reminder Information Only Menu	PXRM INFO ONLY	Provides information only options for users who need information about reminders but do not need the ability to make changes.
DM	Dialog Management	PXRM DIALOG MANAGEMENT	This menu contains options for setting reminders and reminder dialogs up for the CPRS GUI.
CP	CPRS Reminder Configuration	PXRM CPRS CONFIGURA-TION	This menu allows for maintenance of the parameters used by CPRS for reminder processing
RP	Reminder Reports	PXRM REMINDER REPORTS	This is a menu of Clinical Reminder reports that clinicians can use for summary and detailed level information about patients' reminders that are due and satisfied.

Recommended Menu Assignment

Menu	Assignment	Purpose
Clinical Reminders Management Menu [PXRM MANAGEMENT MENU]	• Clinical Reminders Managers • Clinical Application Coordinators • IRM clinical reminder support staff	Anyone who needs to define or edit reminders and dialogs. NOTE: Users who were assigned the old reminder management menu will automatically be updated to the new menu.
Other Supporting Menus [PXRM OTHER SUPPORTING MENUS]	• Clinical Reminders Managers • Clinical Application Coordinators • IRM clinical reminder support staff	This menu contains menus and options from other **V***IST***A** packages, to provide easier access to related tools for setting up and maintaining clinical reminders. Use caution in assigning these menus, as they also contain options that should only be used by coordinators of those packages.
Information Only Menu [PXRM INFO]	• Clinicians • Quality Assurance personnel	Anyone who needs to look up (but not define or edit) reminder information

NOTE: the Clinical Reminder Management Menu contains Other Supporting Menus, which contains the Health Summary option GMTS COORDINATOR. When making the Clinical Reminder option assignment, 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.

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. The REMINDER TAXONOMY file is used to define a range of coded values from ICD Diagnosis codes, ICD Operation/ Procedures codes, and CPT codes that can be viewed as being part of a clinical category (taxonomy). Each entry has a low value and a high value. The software will search for matches on all the codes between the low and high values inclusive. If there is a match then the taxonomy finding will be true for the patient.
TXI	Inquire about Taxonomy Item	PXRM TAXONOMY INQUIRY	This option provides a detailed report of a Taxonomy item's definition, with a list of the actual ICD codes that will meet the taxonomy definition from the ICD DIAGNOSIS and ICD OPERATION/ PROCEDURE files
TRL	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.

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 Encounte 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.

Appendix C: Diagrams for Creating Reminders—Feedback Loop

Thanks to David Reagan, MD, ACOS/AC, Mountain Home VAMC, for the diagrams on the following pages.

Feedback Loop: Does the Reminder Dialog help to answer the Clinical Question.
(Reminder Reports, User Feedback, Performance Standards, Changes in Clinical Practice)

How can I identify my patients who need improved glycemic control?

Begin with the end in mind

What patient care issue/problem needs to be addressed? Example: Long term complications of diabetes are dependent on glycemic control, but it's hard to keep up with glycemic control for every patient.
What can be done about the issue? The best single measure of glycemic control is HgbA1c, which should be checked at least annually.
Who is at risk? Patients with diabetes of any age or any sex.
When should HgbA1c be ordered? If the patient is being seen within 3 months of the HgbA1c anniversary, ordering should be considered.
What is the role of each team member in delivering

Consider the tools at hand

What tools in VISTA/CPRS can help remind a provider to accomplish annual Hemoglobin A1c screening in diabetes?
- CPRS accesses medical information rapidly
- Types of readily available information include previous diagnoses, laboratory results, medications orderable items
- Ordering can be expedited by using quick orders for labs, consults and other items
- Information that is not usually captured can be retained using Health Factors (a type of user defined

Technical terms and features: key definitions

FINDINGS are used to determine the logic that is followed in - defining patients about whom we want to be reminded (**COHORT FINDINGS**)
- locating information which shows the reminder has been taken care of (**RESOLUTION FINDINGS**)
Examples of findings include: diagnoses (**TAXONOMIES**), lab tests, medications, vital signs, or

Clinical Reminder

HF 1-DIABETES HBA1C DONE AT THIS ENCOUNTER
HF 1-DIABETES HBA1C NON-APPLICABLE
HF 1-DIABETES HBA1C OUTSIDE RESULTS
HF 1-DIABETES HBA1C REFUSED
LT HEMOGLOBIN A1C
TX 01-Diabetes Codes

Select FINDING:
Select one of the following:
A All reminder details
G General
B Baseline Frequency
F Findings
L Logic

Define the RESOLUTION logic

Specify the FINDINGs which **RESOLVE** the reminder:
- include all medically reasonable means to resolve the reminder
- specify how long each FINDING will resolve the reminder
- specify the BOOLEAN LOGIC needed to allow the necessary FINDINGs to work together to RESOLVE the reminder
- **TEST** to be sure the reminder actually identifies patients

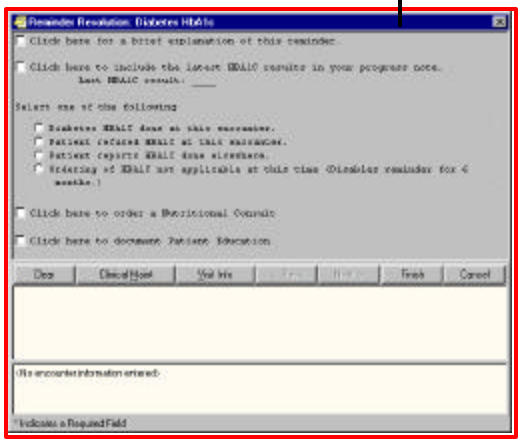
Define the COHORT logic

Specify the FINDING(s) which define the patient cohort:
- each FINDING which is needed to define the patient cohort (e.g. taxonomy, lab item, medication, or other) have alternate age and/or sex requirements (e.g. PSA or colon cancer screening, mammography)
- Specify the logic needed to allow the necessary FINDINGS to work together to select patients (age, sex and

Define the baseline parameters

In order to make a reminder, you must specify each of the following:
- how long prior to the time the reminder is really due do you want to be reminded that the patient is about to need the intervention (**DUE IN ADVANCE**, e.g. 3 months)
- is the care clinical issue in this reminder age and/or sex-specific?
- how often should the patient receive the interventi

Reminder Dialog



Begin with the end in mind, part II

Key features of a good dialog:
- Resolves the reminder comprehensively & efficiently
- Intuitive (user friendly)
- Expedites medical decision making
- Guides patient education
- Presents options such as access to orders, consults…
- Facilitates thorough documentation (PCE, notes,

Consider the formatting options

Dialog boxes have special features, including:
- **ELEMENTS** can appear in any specified order
- **RESOLUTION FINDINGS** can be grouped and tagged as required
- **OBJECTS** can pull relevant information to the dialog
- **HEADERS** can assist in navigation of the items
- Other formatting options (e.g. check boxes, radio buttons, hidden text, indentation of text, template fields…)

Create the components of the Dialog

- Build any needed **QUICK ORDERS** (for labs, consults, etc.), OBJECTS (e.g. for HgbA1c), ELEMENTS (e.g. patient refused) and template fields.
- Create each group needed for the Dialog by

Build the dialog

- Place each element and/or group in an intuitive sequence
- **LINK** the dialog to the reminder
- Confirm that the appearance is as desired

Thoroughly TEST, then implement

- **TEST** the dialog box to be sure each element and group works properly
- Implement the reminder for **PILOT USERS**; then evaluate reliability, validity and ease of use

Feedback Loop: Does the Reminder Dialog help to answer the Clinical Question?

How can I identify my patients who need improved glycemic control?

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What patient care issue/problem needs to be addressed? Example: Long-term complications of diabetes are dependent on glycemic control, but it's hard to keep up with glycemic control for every patient.

What can be done about the issue? The best single measure of glycemic control is HgbA1c, which should be checked at least annually.

Who is at risk? Patients with diabetes of any age or any sex.

When should HgbA1c be ordered? If the patient is being seen within 3 months of the HgbA1c anniversary, ordering should be considered.

What is the role of each team member in delivering the desired care? Consider documentation,

Consider the tools at hand

What tools in VISTA/CPRS can help remind a provider to accomplish annual Hemoglobin A1c screening in diabetes?

- CPRS accesses medical information rapidly
- Types of readily available information include previous diagnoses, laboratory results, medications orderable items
- Ordering can be expedited by using quick orders for labs, consults and other items
- Information that is not usually captured can be retained using Health Factors (a type of user defined information field)
- Reminder Reports provide aggregate data (e.g.workload)

Technical terms and features: key definitions

FINDINGS are used to determine the logic that is followed in - defining patients about whom we want to be reminded (**COHORT FINDINGS**)

- locating information which shows the reminder has been taken care of (**RESOLUTION FINDINGS**)

Examples of findings include: diagnoses (**TAXONOMIES**), lab tests, medications, vital signs, or

Define the baseline parameters

In order to make a reminder, you must specify each of the following:

- How long prior to the time the reminder is really due do you want to be reminded that the patient is about to need the intervention (**DUE IN ADVANCE**, e.g. 3 months)
- Is the core clinical issue in this reminder age and/or sex-specific?
- How often should the patient receive the intervention? (**REMINDER FREQUENCY**, e.g. HgbA1c at least annually)

Define the COHORT logic

Specify the FINDING(s) that define the patient cohort:

- Each FINDING that is needed to define the patient cohort (e.g. taxonomy, lab item, medication, or other) have alternate age and/or sex requirements (e.g. PSA or colon cancer screening, mammography)
- Specify the logic needed to allow the necessary FINDINGS to work together to select patients (age, sex and FINDINGS controlled by **BOOLEAN LOGIC**)

Define the RESOLUTION logic

Specify the FINDINGs which **RESOLVE** the reminder:

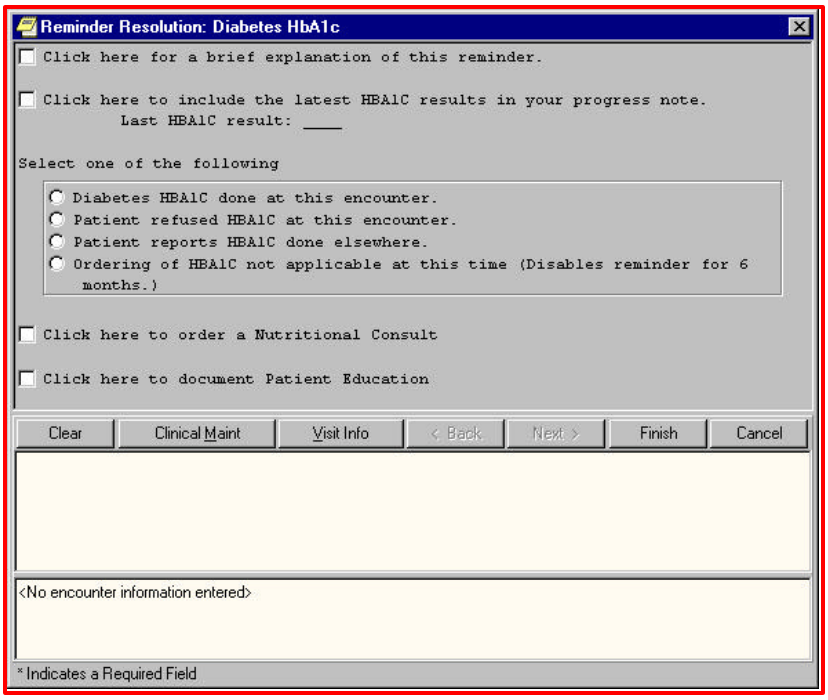
- Include all medically reasonable means to resolve the reminder
- Specify how long each FINDING will resolve the reminder
- Specify the BOOLEAN LOGIC needed to allow the necessary FINDINGs to work together to RESOLVE the reminder
- **TEST** to be sure the reminder actually identifies patients known to have diabetes and

```
HF     1-DIABETES HBA1C DONE AT THIS ENCOUNTER
HF     1-DIABETES HBA1C NON-APPLICABLE
HF     1-DIABETES HBA1C OUTSIDE RESULTS
HF     1-DIABETES HBA1C REFUSED
LT     HEMOGLOBIN A1C
TX     01-Diabetes Codes

Select FINDING:
   Select one of the following:
      A      All reminder details
      G      General
      B      Baseline Frequency
      F      Findings
      L      Logic
      D      Reminder Dialog
      W      Web Addresses
```

Reminder Dialog

Begin with the end in mind, part II



Key features of a good dialog

- Resolves the reminder comprehensively & efficiently
- Intuitive (user-friendly)
- Expedites medical decision-making
- Guides patient education
- Presents options such as access to orders, consults…
- Facilitates thorough documentation (PCE, notes, patient education)

Consider the formatting options

Dialog boxes have special features, including:
- **ELEMENTS** can appear in any specified order
- **RESOLUTION FINDINGS** can be grouped and tagged as required
- **OBJECTS** can pull relevant information to the dialog
- **HEADERS** can assist in navigation of the items

Other formatting options (e.g. check boxes, radio buttons, hidden text, indentation of text, template fields…)

Create the components of the Dialog

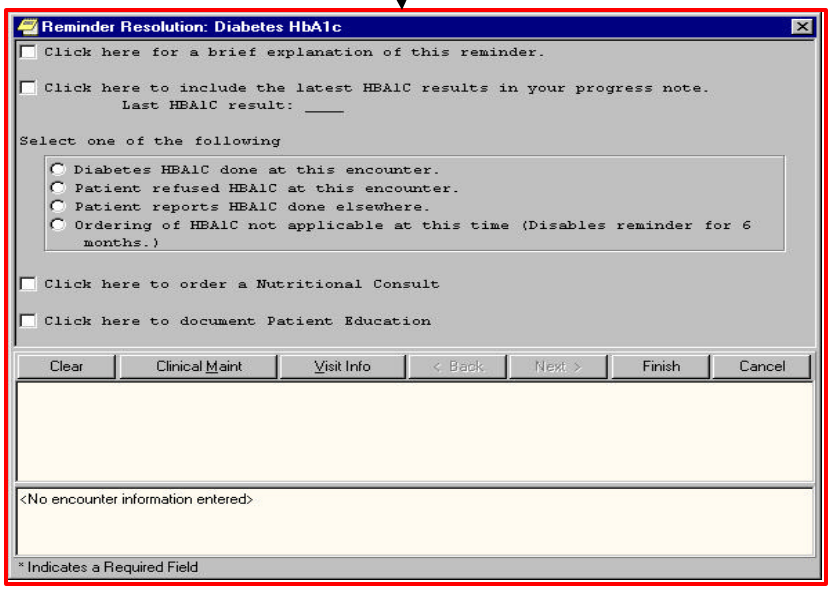
- Build any needed **QUICK ORDERS** (for labs, consults, etc.), OBJECTS (e.g. for HgbA1c), ELEMENTS (e.g. patient refused) and template fields.
- Create each group needed for the Dialog by associating any elements which are related

Build the dialog

- Place each element and/or group in an intuitive sequence
- **LINK** the dialog to the reminder
- Confirm that the appearance is as desired

Thoroughly TEST, then implement

- **TEST** the dialog box to be sure each element and group works properly
- Implement the reminder for **PILOT USERS**; then evaluate reliability, validity, and ease of use
- Implement the reminder for applicable users; then evaluate reliability,



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