Clinical Case Registries (CCR)

Version 1.5

User Manual

Documentation Revised September 2011
For Patch ROR*1.5*15

Department of Veterans Affairs

Office of Enterprise Development

Health Data Systems – Registries

Revision History

Date	Description	Author	Role
September, 2011	Final release for Patch ROR*1.5*15. See Table 16 for Details. *Documentation Only change:* Reworked Section 10 – Local Reports to remove redundancy and reduce the size of the document.	John Sanders Connie Ray Linda Berry Geraldine Jones Edward Micyus Dan Zaudtke	Project Manager M Developer Software Quality Assurance Analyst Software Quality Assurance Analyst Delphi Developer Tech Writer
March, 2011	Patch ROR*1.5*14. See *User Manual* for details.	Vida Dunie Angela Saunders Linda Berry Ed Micyus	Tech Writer M Developer Software Quality Assurance Analyst Delphi Developer
December, 2010	Final release for Patch ROR*1.5*13. See Table 12 for Details. *Documentation Only change:* Moved Resource material formerly in Appendix A, Appendix B, CCR:HIV Registry Pending Patient Worksheet, Appendix C, and Appendix D to main body of text.	Kenneth Rikard Linda Berry Edward Micyus VJ McDonald Angela Saunders	Project Manager SQA Analyst Delphi Developer Technical Writer M Developer
April, 2010	Final release for Patch ROR*1.5*10: See Table 11 for details. The numerous footnotes concerning changes made by various patches were moved to the end of the document as endnotes, rather than footnotes.	Kenneth Rikard Linda Berry Edward Micyus VJ McDonald Angela Saunders	Project Manager SQA Analyst Delphi Developer Technical Writer M Developer
(unknown)	Patch ROR*1.5*9 was a maintenance bug fix, and is not documented in this manual.	(unknown)	
September, 2009	Patch ROR*1.5*8: See Table 10 for details.	Kenneth Rikard Edward Micyus Victor Carr Angela Saunders Linda Berry VJ McDonald	Project Manager Delphi Developer M Developer M Developer Software Quality Assurance Analyst Technical Writer
July, 2008	Patch ROR*1.5*7: See Table 9 for details.	(unknown)	
May, 2008	Patch ROR*1.5*6: See Table 8 for details.	(unknown)	
March, 2008	Patch ROR*1.5*5: See Table 7 for details.	(unknown)	

Date	Description	Author	Role
December, 2007	Patch ROR*1.5*4: See Table 6 for details.	(unknown)	
November, 2007	Patch ROR*1.5*3: See Table 5 for details.	(unknown)	
October, 2007	Patch ROR*1.5*2: See Table 4 for details.	(unknown)	
October 2006	Patch ROR*1.5*1: See Table 3 for details.	Christine Beynon	
February 2006	Completely updated for CCR Version 1.5	Christine Long	
June 2002	Initial release of CCR Version 1.0	(unknown)	

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

1. Orientation 1

1.1. Clinical Case Registries Software Application 1
1.2. Purpose of the Manual 1
1.3. Recommended Users 1
1.4. Typographical Conventions Used in the Manual 1
1.5. Related Documents 2
1.6. Disclaimer 3
1.7. Navigating Hyperlinks 3

2. Introduction 5

2.1. Overview 5
2.2. Software Features and Functions 6
2.3. About Clinical Case Registries 1.5 6
2.4. Decommissioned Software 7
2.4.1. Immunology Case Registry v2.1 7
2.4.1.1. Hepatitis C Case Registry v1.0 7
2.4.2. Automatic Pending Case Identification 7
2.4.3. 'Local Fields' For Customizing Local Registry Specific Data 7
2.4.4. CCR Procedures Report 8
2.4.5. Optional Entry of Risk Behavior 8
2.5. CCR Patches ROR*1.5*X 8
2.5.1. Patch ROR*1.5*1 8
2.5.2. Patch ROR*1.5*2 10
2.5.3. Patch ROR*1.5*3 11
2.5.4. Patch ROR*1.5*4 11
2.5.5. Patch ROR*1.5*5 11
2.5.6. Patch ROR*1.5*6 12
2.5.7. Patch ROR*1.5*7 12
2.5.8. Patch ROR*1.5*8 12
2.5.9. Patch ROR*1.5*10 13
2.5.10. Patch ROR*1.5*13 16
2.5.11. Patch ROR*1.5*14 20
2.5.12. Patch ROR*1.5*15 22
2.6. Obtaining Software and Documentation 24
2.7. Accessibility Features in Clinical Case Registries 1.5 25
2.8. VistA Documentation on the Intranet 25

3. About the CCR Interface 27

3.1. Remote Procedure Calls and the Broker 27
3.2. Graphical User Interface Conventions 27

3.2.1. Windows 28
3.2.2. Pop-up Windows 28
3.2.3. Windows GUI Elements 28
3.2.4. Text Box 28
3.2.5. Checkbox 28
3.2.6. Radio button 28
3.2.7. Command buttons and Command icons 29
3.2.8. Date field 29
3.2.9. Drop-Down List 29
3.2.10. List Box 29
3.2.11. Faded ("Grayed Out") Choices 29
3.2.12. Keyboard Commands 30
3.2.13. Fields with Non-White Background 30
3.2.14. Tab Key 30
3.2.15. Changing (Resizing) a Window 30
3.2.16. Cancel 31
3.2.17. Close 31
3.2.18. Edit 31
3.2.19. Find 31
3.2.20. Help 31
3.2.21. OK 31
3.2.22. Save 31
3.2.23. Save As 32
3.2.24. Search 32
3.2.25. Selecting Multiple Items from a List 32
3.2.26. Undo 32
3.2.27. Right-Click Menus 32
3.2.28. Pop-up Calendars 33
3.2.29. System Timeout 34
3.2.30. Security Keys 34
3.3. Assistive Technology 35
3.3.1. Using the < Alt > and < Esc > Keys 35
3.3.2. Resizing the Screen 35
3.3.3. Changing the Screen Colors and Options 36
3.3.4. Windows Accessibility Shortcuts 36
3.3.4.1. StickyKeys 36
3.3.4.2. FilterKeys 37
3.3.4.3. ToggleKeys 37
3.3.4.4. MouseKeys 37
3.3.4.5. HighContrast 38
3.3.5. Tab Order on Report Setup Screens 38
3.3.6. Activating Drop-Down Lists 40
3.3.7. Navigating the Date Picker Calendar Pop-ups 40
3.3.8. Dual-List Controls 41
3.3.9. Row and Header Information in Grids 41

3.3.10. Context-Sensitive Menus 42

4. Local Registry Population and Update 43

4.1. Initial Data Load 43
4.2. Population of the Local Registry 43
4.3. Deceased Check 43

5. Signing On and Opening a Clinical Case Registry 45

6. Registry Window Menus 49

6.1. File Menu 49
6.1.1. File | Open Registry menu option 49
6.1.2. File | Save As menu option 50
6.1.3. File | Close and Close All menu options 51
6.1.4. File | Page Setup, Print Preview, and Print menu options 51
6.1.5. File | Preferences menu option 52
6.1.6. File | Rejoin Clinical Context menu option 52
6.1.7. File | Break the Clinical Link menu option 53
6.1.8. File | Exit menu option 53
6.2. Registry Menu 53
6.2.1. Registry | Confirm/Edit menu option 54
6.2.2. Registry | CDC menu option (CCR:HIV only) 54
6.2.3. Registry | Show Registry Users menu option 54
6.2.4. Registry | Edit Site Parameters menu option 55
6.2.4.1. Lab Tests tab 55
6.2.4.2. Registry Meds tab 56
6.2.4.3. Notifications tab 57
6.2.4.4. Local Fields tab 57
6.3. Reports Menu 57
6.3.1. 58
6.4. Window Menu 59
6.5. Help Menu 59
6.5.1. Help | Help Topics menu option 60
6.5.2. Help | Registry Info menu option 61
6.5.3. Help | CCOW menu option 61
6.5.4. Help | About CCR menu option 62

7. Setting Up Site-Specific Parameters 63

7.1. Adding Lab Tests 63
7.2. Removing Laboratory Tests 65
7.3. Adding Registry Medications 66
7.4. Removing Registry Medications 67
7.5. Adding Notifications 68

7.6. Removing Notifications 69
7.7. Adding Local Fields 70
7.8. Inactivating or Deleting Local Fields 73
7.9. Reactivating Local Fields 75
7.10. Confirming Local Field Changes 76
7.11. Changing System Default Settings 77
7.11.1. Changing the Maximum Number of Patients to Retrieve 77
7.11.2. Changing the RPC Broker Timeout Parameter 78
7.11.3. Changing the Screen Colors and Options 79
7.11.4. Restoring Default GUI Settings 82

8. Registry Window Tabs 87

8.1. Task Manager tab 87
8.1.1. Task column 88
8.1.2. Type column 88
8.1.3. Description column 88
8.1.4. Scheduled column 88
8.1.5. Status column 88
8.1.6. Progress column 89
8.1.7. Completed column 89
8.1.8. Comment column 89
8.1.9. Refresh button 89
8.1.10. New Report button 89
8.1.11. Open Report button 89
8.1.12. View Log button 90
8.1.13. Delete button 90
8.1.14. Right-Click Menu options 90
8.2. Managing Reports from the Task Manager view 90
8.2.1. Viewing a Report 90
8.2.2. Copying Text from a Report 92
8.2.3. Changing the Text Size of a Report 93
8.2.4. Finding Text on a Report 94
8.2.5. Sorting/Ordering the Information on a Report 94
8.2.6. Saving a Report 95
8.2.7. Exporting a Report to Excel or Access 97
8.2.8. Printing a Report 98
8.2.9. Deleting a Report 99
8.2.10. Closing a Report 100
8.2.11. Technical Log tab 100
8.2.12. From: and To: Date fields 101
8.2.12.1. Refresh button 102
8.2.12.2. Types of Logged Activities 102
8.2.12.3. Managing Logged Activities from the Technical Log tab 102
8.3. Registry tab 104

8.3.1. Search button 105
8.3.2. Confirm/Edit button 106
8.3.3. CDC button 106
8.3.4. Delete button 106
8.3.5. Patient field 107
8.3.6. Pending only checkbox 107
8.3.7. Only Confirmed After checkbox 107
8.3.8. Patient List Display 107
8.3.8.1. Name column 108
8.3.8.2. Date of Birth column 109
8.3.8.3. SSN column 109
8.3.8.4. Confirmed column 109
8.3.8.5. Status column 109
8.3.8.6. Selection Site column 109
8.3.8.7. Selected column 109
8.3.8.8. Selection Rule column 110
8.3.8.9. Pending Comment column 110
8.4. Using the Registry tab 110
8.4.1. Searching for Patients 110
8.4.2. Deleting a Patient 112
8.4.3. Using the Patient Data Editor Window {xe "Patient Data Editor:window"}Window 112
8.4.4. Clinical Status tab 114
8.4.5. Optional Risk Factors tab 114
8.4.6. Local Fields tab 114
8.4.7. Confirming a Pending Patient Record 114
8.4.8. Editing a Patient Record 117
8.4.9. Deleting a Patient Record 121
8.5. CDC Window 121
8.5.1. Form tab 123
8.5.2. Preview tab 123
8.5.3. Preview (page 2) tab 123
8.5.4. Print icon 123
8.5.5. Print Blank icon 124
8.5.6. Save button 124
8.5.7. Cancel button 124
8.5.8. Zoom In and Zoom Out icons 124
8.5.9. Fit Width icon 124
8.5.10. Zoom 1:1 icon 124
8.5.11. AutoFit checkbox 124
8.5.12. Close the CDC form 124
8.6. Viewing a Patient's CDC Report 124
8.7. Printing a Patient's CDC Report 125

8.8. Entering Information on a Patient's CDC Report 125
8.8.1. SECTION I – STATE AND LOCAL USE ONLY 127
8.8.2. SECTION II – DATE FORM WAS COMPLETED 127
8.8.3. SECTION III – DEMOGRAPHIC INFORMATION 127
8.8.4. SECTION IV – FACILITY OF DIAGNOSIS 128
8.8.5. SECTION V – PATIENT HISTORY 129
8.8.6. SECTION VI – LABORATORY DATA 129
8.8.6.1. 1. HIV ANTIBODY TESTS AT DIAGNOSIS (Indicate first test): 130
8.8.6.2. 2. POSITIVE HIV DETECTION TEST (Record earliest test) 130
8.8.6.3. 3. DETECTABLE VIRAL LOAD TEST (record most recent test) 130
8.8.6.4. 4. IMMUNOLOGIC LAB TESTS 131
8.8.7. SECTION VII – STATE AND LOCAL USE ONLY 131
8.8.8. SECTION VIII – CLINICAL STATUS 133
8.8.9. SECTION IX – TREATMENT/SERVICES REFERRALS (optional) 134
8.8.10. SECTION X – COMMENTS 135

9. Registry Reports 137

9.1. Registry Reports Window 137
9.1.1. Accessing the Registry Reports Window 139
9.1.1.1. Reports Menu 139
9.1.1.2. New Report button and right-click menu option 139
9.1.2. Date Range Parameters 140
9.1.3. Include Patients Confirmed in the Registry checkboxes 141
9.1.4. Other Registries modes 141
9.1.5. Load / Save / Default Parameters Buttons 141
9.2. Generating a Report 142
9.2.1. Scheduling a Report 145
9.2.2. Discontinuing a Scheduled Report 146

10. Local Reports 147

10.1. Report Title 161
10.2. Scheduled To Run On Pane 161
10.3. Include Patients Confirmed in the Registry 161
10.4. Date Range Pane(s) 161
10.5. Report Elements to Include 161
10.6. Utilization Date Range 162
10.7. Divisions 162
10.8. Clinics 162
10.9. Select Patient 163
10.10. Other Diagnoses 164
10.11. Report Type (Complete/Summary) 165
10.12. BMI Date Range 166
10.13. BMI Result Ranges 166
10.14. Other Registries 166

10.15. Local Fields 167
10.16. Load Parameters 167
10.17. Patients 168
10.17.1. Clinic Follow Up Report Patients Pane 168
10.17.2. Combined Med Labs Report Patients Pane 168
10.17.3. Procedures Report Patients Pane 169
10.18. Medications Date Range 170
10.19. Medications 170
10.20. Lab Tests Date Range 173
10.21. Lab Tests 173
10.22. ICD-9 174
10.23. Type of Utilization 175
10.24. Registry Status 175
10.25. Report-Specific Options 176
10.25.1. General Utilization and Demographic Report Options 176
10.25.2. List of Registry Patients Report Options 177
10.26. General Report Options 177
10.26.1. Lab Utilization and Radiology Utilization Report Options 178
10.27. Liver Score Date Range by Range Report 178
10.28. Liver Score Result Ranges 178
10.29. Activity 179
10.30. Refill Type 179
10.31. Procedures 180
10.32. CPT 180
10.33. Lab Test Group Result 182
10.34. Registry Medications – Investigational Drugs 182
10.35. Renal Function Date Range and Results 182
10.36. VERA Reimbursement Report Options 183

11. Resources 184

11.1. About CCR:HEPC 184
11.1.1. Overview 184
11.1.2. Treatment Recommendations 184
11.1.3. Registry Selection Rules 184
11.1.4. About Historic Hepatitis C Case Registry patients 186
11.2. About CCR:HIV 186
11.2.1. Overview 186
11.2.2. Treatment Recommendations 187
11.2.3. Registry Selection Rules 187
11.3. CCR:HIV Registry Pending Patient Worksheet 191
11.4. Clinical Case Registries Shortcut Keys 193
11.5. Command Line Switches 199

Glossary **201**

Index **217**

Endnotes **222**

Table of Figures

Figure 1 – Resizing the Screen 36
Figure 2 – Turning on StickyKeys 37
Figure 3 – Turning On FilterKeys 37
Figure 4 – Turning On ToggleKeys 37
Figure 5 – Turning On MouseKeys 38
Figure 6 – Turning on HighContrast 38
Figure 7 – Report Setup Screen Tab Order 40
Figure 8 – Windows Security Warning 45
Figure 9 – Connect To Pop-up 45
Figure 10 – VistA Sign-on Window 46
Figure 11 – Select a Registry Pop-up 47
Figure 12 – Sample Menu Drop-Down List 49
Figure 13 – File Menu Drop-Down List 49
Figure 14 – Select a Registry Pop-up 50
Figure 15 – File | Save As menu option 50
Figure 16 – File | Close & Close All menu options 51
Figure 17 – File | Page Setup & Print menu options 51
Figure 18– File | Preferences menu option 52
Figure 19– File | Rejoin Clinical Context menu option 52
Figure 20– File | Break the Clinical Link menu option 53
Figure 21– File | Exit menu option 53
Figure 22 – Registry Menu Drop-Down List 53
Figure 23 – Registry | Confirm/Edit menu option 54
Figure 24 – Registry | Show Registry Users menu option 54
Figure 25 – Registry Users List 55

Figure 26 – Registry | Edit Site Parameters menu option 55
Figure 27 – Reports Menu Drop-Down List 57
Figure 28 – Reports | Report List menu option 58
Figure 29 – Sample Report Setup Screen 58
Figure 30 – Window Menu Drop-Down List 59
Figure 31 – Window | Active Registry 59
Figure 32 – Help Menu Drop-Down List 59
Figure 33 – Sample Online Help Page 60
Figure 34 – Help | Registry Info pop-up 61
Figure 35 – Contextor Status pane 61
Figure 36 – Help | About pane 62
Figure 37 – Site Parameters panes 63
Figure 38 – Adding Tests to Site Parameters 64
Figure 39 – Site Parameters panes 65
Figure 40 – Edit Site Parameters | Selecting Local Fields tab 70
Figure 41 – Edit Site Parameters | Local Fields tab 71
Figure 42 – Edit Site Parameters | Local Fields tab (Add button) 72
Figure 43 – Edit Site Parameters | Adding a Local Field 73
Figure 44 – Edit Site Parameters | Local Fields tab (showing existing Local Fields) 74
Figure 45 – Delete Local Fields Confirmation pop-up 74
Figure 46 – Edit Site Parameters | Local Fields tab (showing Inactivated Field) 75
Figure 47 – Edit Site Parameters | Local Fields Context menu 76
Figure 48 – Edit Site Parameters | Local Fields Change confirmation 76
Figure 49 – File | Preferences menu option 77
Figure 50 – Preferences window 78
Figure 51 – Preferences window (Broker Timeout) 79
Figure 52 – Preferences window (General tab displayed) 80
Figure 53 – Preferences window (Appearance tab displayed) 80
Figure 54 – Preferences window (Appearance | Colors) 81
Figure 55 – Preferences window (Appearance | Colors | Foreground) 81

Figure 56 – Preferences window (Appearance | Colors | Background) 82
Figure 57 – File | Preferences menu option 83
Figure 58 – Preferences window (General tab displayed) 83
Figure 59 – Three Major Tabs 87
Figure 60 – Task Manager tab 87
Figure 61 – Task Manager Context Menu options 90
Figure 62 – Task Manager Context Menu options (some unavailable) 90
Figure 63 – Task Manager tab Showing Status Column 91
Figure 64 – Sample Report Output 91
Figure 65 – Sample Report Output (showing Context menu) 92
Figure 66 – Sample Report Output (showing all content selected) 93
Figure 67 – Report Output Find pop-up 94
Figure 68 – Sample Report Output (showing sort column) 95
Figure 69 – Sample Report Output ("Save As" to file) 96
Figure 70 – Sample Report Output ("Save As" dialog) 96
Figure 71 – File | Print menu option 99
Figure 72 – Task Manager tab (Report Task Selected for Deletion) 99
Figure 73 – Task Deletion Confirmation pop-up 100
Figure 74 – Close Window Confirmation pop-up 100
Figure 75 – Technical Log tab 103
Figure 76 – Technical Log tab (showing "tip" for one task folder) 103
Figure 77 – Technical Log tab (showing summary for selected folder) 104
Figure 78 – Technical Log tab (showing summary and detail for selected folder) 104
Figure 79 – Registry tab 105
Figure 80 – Registry tab (search results displayed) 106
Figure 81 – "No registry records" pop-up 107
Figure 82 – Registry tab (displaying search results) 108
Figure 83 – "No registry records" pop-up 111
Figure 84 – Patient Data Editor (Patient Confirmed) 112
Figure 85 – Patient Data Editor (Patient Pending) 112
Figure 86 – Registry tab (displaying only Pending Patients) 115

Figure 87 – Patient Data Editor (Record Selected for Confirmation) 116
Figure 88 – Comment for Pending Patients 116
Figure 89 – Patient Data Editor (Record Selected for Editing) 118
Figure 90 – Patient Data Editor (Risk Factors Tab) 120
Figure 91 – CDC Window 122
Figure 92 – CDC Window (Parameter Groups pane) 123
Figure 93 – CDC Window (Patient Data pane) 123
Figure 94 – Print dialog 125
Figure 95 – CDC Window 126
Figure 96 – Sections I, II, and III of the CDC Form 127
Figure 97– Sections IV and V of the CDC Form 128
Figure 98 – Section VI of the CDC Form 129
Figure 99 – Sections VII and VIII of the CDC Form 131
Figure 100 – VistA User Selector pop-up 132
Figure 101 – VistA User Selector (showing search results) 132
Figure 102 – Section VIII of the CDC Form 133
Figure 103 – Section IX of the CDC Form 134
Figure 104 – Section X of the CDC Form 135
Figure 105 – Sample Report Setup window, Double-Pane Model 138
Figure 106 – Sample Report Setup window, Single-Pane Mode (showing "Show Report List" option) 139
Figure 107 – Open Report Parameters pop-up (showing “Delete” command icon) 141
Figure 108 – Medications pane, showing "All Registry meds" button 143
Figure 109 – Group Name Reminder pop-up 143
Figure 110 – Entering and Adding the Group Name 143
Figure 111 – Group Name Displayed 144
Figure 112 – Selecting Medications 144
Figure 113 – Requested Report in Task Manager 144
Figure 114 – Report Selected (note Delete button available) 146
Figure 115 – Task Deletion Confirmation pop-up 146
Figure 116 – Divisions 162

Figure 117 – Clinic Follow Up Report Setup Screen (Clinics pane)..... 163
Figure 118 – Report Setup Screen (Clinics pane), showing Clinic Names being selected 163
Figure 119 – Select Patient 163
Figure 120 – Other Diagnoses pane..... 164
Figure 121 – Other Diagnoses pane (selecting individual Codes to be included)..... 164
Figure 122 – Other Diagnoses pane (selecting All Codes)..... 165
Figure 123 – Report Type..... 165
Figure 124 – BMI Date Range..... 166
Figure 125 – Result Ranges 166
Figure 126 –Other Registries..... 166
Figure 127 –Other Registries, Highlighted Choices 166
Figure 128 – Local Fields 167
Figure 129 – Open Report Parameters..... 167
Figure 130 -- Patient Pane -- Clinic Follow-Up Report..... 168
Figure 131 – Patients Pane – Combined Med Labs Report..... 169
Figure 132 – Patients Pane on the Procedures Report..... 169
Figure 133 – Medication Date Range 170
Figure 134 – Medication Date Range 170
Figure 135 – Combined Meds & Labs Report Setup Screen (showing Generic Medication Names) 171
Figure 136 – Combined Meds & Labs Report Setup Screen (showing Registry Medication and Investigational Drugs Names)..... 172
Figure 137 – Combined Meds & Labs Report Setup Screen (showing Group Name)..... 172
Figure 138 – Lab Test Date Range 173
Figure 139 – Lab Tests 173
Figure 140 -- ICD-9 174
Figure 141 – Type of Utilization 175
Figure 142 – Registry Status..... 175
Figure 143 – Report Options..... 176
Figure 144 – List of Registry Patients Report Options..... 177
Figure 145 – Pending Comments Report Option..... 177
Figure 146 – Inpatient Utilization Report Options 178

Figure 147 – Lab Utilization Report Options 178
Figure 148 -- Liver Score Date Range 178
Figure 149 – Result Ranges 179
Figure 150 – Activity 179
Figure 151 – Refill Type 179
Figure 152 – Procedures 180
Figure 153 – CPT Codes 180
Figure 154 – Lab Test Group Result Range 182
Figure 155 -- Registry Medications -- Investigational Drugs 182
Figure 156 – Renal Function Date Range and Results 183
Figure 157 -- Vera Reimbursement Report Options 183

Table of Tables

Table 1 – Typographical Conventions 1
Table 2 – Graphic Icons 2
Table 3 – Patch ROR*1.5*1 8
Table 4 – Patch ROR*1.5*2 10
Table 5 – Patch ROR*1.5*3 11
Table 6 – Patch ROR*1.5*4 11
Table 7 – Patch ROR*1.5*5 11
Table 8 – Patch ROR*1.5*6 12
Table 9 – Patch ROR*1.5*7 12
Table 10 – Patch ROR*1.5*8 12
Table 11 – Changes for Patch ROR*1.5*10 13
Table 12 – Changes for Patch ROR*1.5*13 16
Table 13 – Global Updates for Patch ROR*1.5*13 17
Table 14 – Changes for Patch ROR*1.5*14 20
Table 15 – Global Updates for Patch ROR*1.5*14 21
Table 16 – Changes for Patch ROR*1.5*15 22
Table 17 – Global Updates for Patch ROR*1.5*15 24

Table 18 – Software and Documentation Download Sites 24
Table 19 – Software Distributives 25
Table 20 – Selecting and Changing Date Elements 33
Table 21 – Task Manager Status Column Entries 88
Table 22 – Report Files 97
Table 23 – Technical Tab Message Icons 101
Table 24 – Technical Log Activity Types 102
Table 25 – Date Range Parameters 140
Table 26 – Local Report Elements 147
Table 27 – HEPC Registry Selection via ICD-9 CM Diagnostic Codes 184
Table 28 – HEPC Registry Selection via LOINC Codes 185
Table 29 – HIV Registry Selection via ICD-9 CM Diagnostic Codes 187
Table 30 – HIV Registry Selection via LOINC Codes 188

THIS PAGE INTENTIONALLY LEFT BLANK

1. Orientation

1.1. Clinical Case Registries Software Application

The Clinical Case Registries (CCR) software application supports the maintenance of local and national registries for clinical and resource tracking of care for patients with certain clinical conditions. Registries for Hepatitis C (CCR:HEPC) and Human Immunodeficiency Virus (CCR:HIV) are available. This application allows access to important demographic and clinical data on all VHA patients with these conditions, and provides many capabilities to VA facilities that provide care and treatment to patients with these conditions, including clinical categorization of patients and automatic transmission of data to the VA's National Case Registry. It also provides clinical and administrative reports for local medical center use.

CCR accesses several other Veterans Health Information Systems and Technology Architecture (VistA) files that contain information regarding other diagnoses, prescriptions, surgical procedures, laboratory tests, radiology exams, patient demographics, hospital admissions, and clinical visits. This access allows identified clinical staff to take advantage of the wealth of data supported through VistA.

1.2. Purpose of the Manual

The *Clinical Case Registries User Manual* provides detailed instructions for using the CCR software and its graphical user interface (GUI). Throughout this document, the acronym CCR always refers to the application and its features, not to the individual registries. The HIV and Hepatitis C registries are referred to as CCR:HIV and CCR:HEPC, respectively.

RESOURCE See 11.1, About CCR:HEPC and 11.2, About CCR:HIV for registry-specific information.

1.3. Recommended Users

The CCR software is designed for use by designated Registry Coordinators, Managers, and Clinicians who are responsible for and provide care to VA patients with registry-specific conditions.

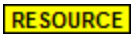
1.4. Typographical Conventions Used in the Manual

Throughout this document, the following fonts and other conventions are used:

Table 1 – Typographical Conventions

Font	Used for…	Examples:
Blue text, underlined	Hyperlink to another document or URL	ftp.fo-slc.med.va.gov
Green text, dotted underlining	Hyperlink within this document	See CCR Patches ROR*1.5*X for details.
Courier New	Patch names, VistA filenames	`ROR*1.5*2, XYZ file #798.1`
Franklin Gothic Demi	Keyboard keys, button and command icon names, panel, pane and tab names	**< F1 >, < Alt >, < L >, < Enter >, [OK], Other Registries**
Microsoft Sans Serif	Software Application names	Clinical Case Registries (CCR)
	Registry names	CCR:HIV
	Database field names	Mode field
	Report names	Procedures report
Times New Roman	Normal text	"… designed for use by designated Registry Coordinators, Managers, and Clinicians…."
Times New Roman Italic	Text emphasis	"It is *very* important…"
	National and International Standard names	*International Statistical Classification of Diseases and Related Health Problems*
	Document names	*Clinical Case Registries User Manual*

Table 2 – Graphic Icons

Graphic	Used for…
	Information of particular interest regarding the current subject matter
	A tip or additional information that may be helpful to the user
	A warning concerning the current subject matter
	Information about the history of a function or operation; provided for reference only.
	More information on a specific subject, either in this document or somewhere else.

1.5. Related Documents

These related documents are available at http://www.va.gov/vdl/application.asp?appid=126.

- *Clinical Case Registries 1.5 Installation & Implementation Guide*
- *Clinical Case Registries 1.5 Release Notes*
- *Clinical Case Registries 1.5 Technical Manual / Security Guide*

1.6. Disclaimer

Disclaimer: The appearance of external hyperlink references in this manual does not constitute endorsement by the Department of Veterans Affairs (VA) of this Web site or the information, products, or services contained therein. The VA does not exercise any editorial control over the information you may find at these locations. Such links are provided and are consistent with the stated purpose of the VA.

1.7. Navigating Hyperlinks

Throughout this document, you will find hyperlinks of various types like those indicated in Table 1, above. Some will be to other places in this document, while others will take you to websites or other documents stored online. If the hyperlink is to another place in this document, use the web toolbar "back" button () to return to the point in the document where you clicked the link. If the link is external and takes you to a website, use the back button in your browser to return.

If you do not see the back button in the program you are using to read this document, use your program's View menu to turn on the Web toolbar. For example, in Microsoft® Word® first click **View**, then **Toolbars**; make sure the Web toolbar is selected.

THIS PAGE INTENTIONALLY LEFT BLANK

2. Introduction

The Clinical Case Registries (CCR)) software application collects data on the population of Veterans with certain clinical conditions, namely Hepatitis C and Human Immunodeficiency Virus (HIV) infections.

Data from the registries is used for both clinical and administrative reporting on both a local and national level. Each facility can produce local reports (information related to patients seen in their system). Reports from the national database are used to monitor clinical and administrative trends, including issues related to patient safety, quality of care, and disease evolution across the national population of patients.

2.1. Overview

This version of the Clinical Case Registries (CCR) introduces a single software package to support both the Hepatitis C Registry and the Human Immunodeficiency Virus (HIV) Registry (former Immunology Case Registry or ICR). Previously, these two registries were created and maintained through two separate software packages. The functional requirements for these registries were substantially the same, so this software has been designed to support both.

The software uses pre-defined selection rules that identify patients with possible Hepatitis C and/or HIV (such as a disease related International Statistical Classification of Diseases and Related Health Problems, ninth edition (ICD-9) code or a positive result on an antibody test) and adds them to the registry in a pending state. Pending patients are reviewed by the local registry coordinator and if the data confirm the diagnosis, the local registry coordinator confirms the patient in the registry.

A nightly background process transmits a set of predefined data via HL7 to the national CCR database at Corporate Data Center Operations (CDCO).[1] Data from both registries is aggregated in the same message. The CCR software creates a limited set of database elements to be stored locally in the VistA system, and focuses on assuring that the local listing is complete and accurate, that the desired data elements are extracted, and that data elements are appropriately transmitted to the national database.

Note: Effective with CCR 1.5.10 (Patch `ROR*1.5*10`), patients who are on the Pending list *are* selected for this extract.

Note: Effective with CCR 1.5.13 (Patch `ROR*1.5*13`), the nightly and historical extracts are modified to include `ORC` and `RXE` segments for Non-VA medications for registry patients. Non-VA medication data will be pulled if the `DOCUMENTED DATE (#11)` or the

[1] CDCO was formerly known as the Austin Automation Center (AAC). CDCO is managed by the VHA Center for Quality Management in Public Health (CQMPH).

DISCONTINUED DATE (#6) in the NON-VA MEDS sub-file (#52.2) of the PHARMACY PATIENT file (#55) is within the extract range.

Note: Effective with Patch ROR*1.5*14, the extract code pulls Purchased Care Data. New ZIN/ZSV/ZRX segments were added to the HL7 message for this purpose. This change is transparent and seamless to users; no changes in process or method were made.

The registries at each facility will store selected HIV and Hepatitis C data from 1985 to the present.

2.2. Software Features and Functions

CCR provides these key features:

- Easy data access and navigation of the data files via the GUI.
- Semi-automatic sign-on to the VistA databases via the web-based GUI; a separate VistA log-in is not required, nor is emulation software such as !KEA or Attachmate Reflection.
- Automated development of local lists of patients with evidence of HIV or Hepatitis C infection.
- Automatic transmission of patient data from the local registry lists to a national database.
- Robust reporting capabilities.

CCR also provides the following functions:

- Tracking of patient outcomes relating to treatment.
- Identification and tracking of important trends in treatment response, adverse events, and time on therapy.
- Monitoring quality of care using both process and patient outcome measures.

2.3. About Clinical Case Registries 1.5

Version 1.5 of the CCR software (published via Patch ROR*1.5*1) introduced a single software package to support both the CCR:HEPC Registry and the CCR:HIV Registry (also called the Immunology Case Registry (ICR)). CCR provides access to both CCR:HIV and CCR:HEPC from a single interface; previously, these two registries were created and maintained through two separate software packages. Since the functional requirements for these registries were substantially the same, they were combined.

CCR 1.5 has also been enhanced by automation of the data collection system and transformed from an administrative database into a clinically relevant tool for patient management.

Each patch released since the original iteration of CCR 1.5 has added improvements and fixes; see CCR Patches ROR*1.5*X for details.

CCR consists of several parts:

- Data stored in VistA database files
- M Programs in the ROR namespace
- Data Dictionaries necessary to achieve the specified requirements
- A Delphi-based graphical user interface (GUI) "front-end" application
- Relevant Remote Procedure Call (RPC) protocols

2.4. Decommissioned Software

2.4.1. Immunology Case Registry v2.1

Patients from ICR version 2.1 were migrated to CCR:HIV during the installation of patch ROR*1*5 (March 2004). After a transitional period when the two packages were used concurrently, ICR 2.1 was removed from service by patch IMR*2.1*21 (October 2005).

2.4.1.1. Hepatitis C Case Registry v1.0

Hepatitis C Case Registry (HCCR) v1.0 was removed from service with the release of CCR 1.5. Historical patient data from the previous Hepatitis C Registry was migrated to CCR:HEPC.

2.4.2. Automatic Pending Case Identification

Patients with laboratory evidence or registry-related International Statistical Classification of Diseases and Related Health Problems, ninth edition (commonly abbreviated as "ICD-9") codes will be identified by the system and their records will be added to the registry with a status of 'pending.' The registry coordinator or designee will need to periodically review the list of pending patients and confirm any patients that have been verified to have a registry-related condition such as HIV or Hepatitis C.

CCR users are not permitted to manually enter patient information.

Patients confirmed into the registry can be completely deleted from the registry. For example, if a pending patient is determined to not actually have the condition (due to a false positive screening test result, etc.), the registry coordinator will delete that patient.

The official patient registry status codes are now 'pending' or 'confirmed.' 'Inactive' is no longer an option.

2.4.3. 'Local Fields' For Customizing Local Registry Specific Data

Using the CCR GUI for both the HIV and Hepatitis C registries, users with administrator keys will be able to define data collection attributes and assign names to them. These local fields will serve as manual toggles in the Patient Data Editor and as filters that can be used in the report

selection panels. Titles and descriptions of local fields can be edited as free text fields without deleting all associated information.

2.4.4. CCR Procedures Report

A Procedures report allows you to select multiple CPT codes to produce a report that will list all patients who had the selected CPT codes in a selected date range.

2.4.5. Optional Entry of Risk Behavior

OPTIONAL **HIV Risk Factors.** Effective with Patch 14, completion of the Risk Factors tab questions in the Patient Data Editor regarding HIV risk behavior is optional.

2.5. CCR Patches ROR*1.5*X

Changes provided by patches in the ROR*1.5 series are shown in the following tables. Under "**Type**," "E" indicates an enhancement, "F" indicates a fix, and "M" indicates a data modification. Click on the green links below to jump directly to a specific patch.

Patch ROR*1.5*1	Patch ROR*1.5*2	Patch ROR*1.5*3	Patch ROR*1.5*4	Patch ROR*1.5*5	Patch ROR*1.5*6	Patch ROR*1.5*7
Patch ROR*1.5*8	(Patch ROR*1*9: maintenance patch; not documented herein)	Patch ROR*1.5*10	Patch ROR*1.5*13	Patch ROR*1.5*14	Patch ROR*1.5*15	

2.5.1. Patch ROR*1.5*1

Table 3 – Patch ROR*1.5*1

#	Description	Type
1	Selected (Date) and Selection Rule columns added to the patient list on the Registry tab.	E
2	When a report is opened, the Task Manager tab is activated.	E
3	The Mode field is added to the Local Fields and Other Registries panels of the Report parameters to provide patient *include* and *exclude* filters.	E
4	A Delete button is added to the Patient Data Editor dialog box.	E
5	A Patients panel is added to the Procedures report to use selected procedures performed and selected procedures not performed within a date range.	E

#	Description	Type
6	A Procedures panel is added to the Procedures report to indicate whether a procedure is an inpatient or outpatient one	E
7	The ICD-9 panel of the Diagnoses report is modified to be able to define groups and add ICD-9 codes to the groups.	E
8	The Check if patient ever had an AIDS-OI checkbox is automatically selected and the Date of AIDS-OI field is populated if an indicator disease Def box is selected in Section VIII of the CDC form in the Clinical Status section.	E
9	A new patient search parameter is added for the Registry tab: # followed by the patient's 11-digit coded SSN.	E
10	The output format of the Combined Meds and Labs report is modified.	E
11	The Patient Medication History report is modified with the addition of two radio buttons, Consider All and Selected Only to the Select Patient panel.	E
12	The Date of Death column has been removed from the Current Inpatient List report (it was redundant).	E
13	Fixed Microsoft® Windows Server 2003® issue.	F
14	Fixed missing CDC bitmap error.	F
15	Fixed incorrect printing of the CDC form.	F
16	Increased the time out values.	F
17	The GUI code was amended to allow a maximum number of patients to retrieve to 65535.	F
18	The RORTSK10 and RORTSK11 routines have been amended to store original values and encode them on the fly when report is loaded by the GUI, to allow for storing special characters .	F
19	The RORLOCK routine has been amended to display the user name locking records.	F
20	Typographical errors in the comment lines have been fixed in the , RORLOCK, RORX003, RORX003A, and RORX007A routines.	F

#	Description	Type
21	Direct access to the PRESCRIPTION file (#52) has been replaced with the corresponding APIs. The following routines have been modified: RORHL03, RORHL031, and RORHL07.	M
22	Direct access to the PHARMACY PATIENT file (#55) has been replaced with the corresponding APIs. The following routines have been modified: RORHL03, RORHL07, RORHL071, and RORHL15.	M
23	Comments in the source code of the following routines (mostly, the lists of integration agreements) have been updated: RORHL01, RORHL05, RORHL06, RORHL07, RORHL08, RORHL09, RORHL10, RORHL11, RORHL12, RORRP015, RORUTL05,RORX005A, and RORXU006.	M
24	The 42600-7 LOINC code has been added to the VA HIV Lab search criteria in the ROR LAB SEARCH file.	M
25	DARUNAVIR, EFAVIRENZ/EMTRICITABINE/TENOFOVIR, and TIPRANAVIR have been added to the list of HIV generic drugs in the ROR GENERIC DRUG file (#799.51)	M
	Installation routines used by the ROR 1.5 KIDS build (RORP000, RORP000A and RORP00B) have been deleted.	

2.5.2. Patch ROR*1.5*2

Table 4 – Patch ROR*1.5*2

#	Description	Type
1	Fixed RPC Broker timeout issue.	F
2	Fixed issues with duplicates in patient list.	F
3	Fixed issues with lower-case characters in lab tests and medications data.	F
4	Fixed issue with Reporting date entry not accepting "-T."	F
5	Fixed issue with un-checking of local fields in the Patient Data Editor not being saved.	F
6	Fixed issues with run-time errors using $QUERY on non-Caché platforms.	F

7	Fixed issues with non-SSN patient identifier appearing on reports at non-VA sites.	F

2.5.3. Patch ROR*1.5*3

Table 5 – Patch ROR*1.5*3

#	Description	Type
1	Accommodated Patch RA*5*75 (Radiology), which introduced a Reason for Study data field.	E
2	Addition of Task Control flag ("M") which signals the system to disable HL7 messaging.	E

2.5.4. Patch ROR*1.5*4

Table 6 – Patch ROR*1.5*4

#	Description	Type
1	Added two additional ICD-9 codes needed for the nightly ROR registry update and data extraction.	E

2.5.5. Patch ROR*1.5*5

Table 7 – Patch ROR*1.5*5

#	Description	Type
1	Fixed issue with Procedures without a Provider not being sent to AAC.	F
2	Added drug identified as needed for nightly ROR registry update and data extraction.	E

2.5.6. Patch ROR*1.5*6

Table 8 – Patch ROR*1.5*6

#	Description	Type
1	Added generic drug RALTEGRAVIR to `VA GENERIC file #50.6`.	E

2.5.7. Patch ROR*1.5*7

Table 9 – Patch ROR*1.5*7

#	Description	Type
1	Added generic drug ETRAVIRINE to `VA GENERIC file #50.6`.	E

2.5.8. Patch ROR*1.5*8

Table 10 – Patch ROR*1.5*8

#	Description	Type
1	Fixed the "access violation" seen when selecting Diagnoses Report (Remedy Tickets HD0000000262208 and HD0000000262209).	F
2	Inserted a Comment Field in the Pending Patient File necessary for tracking special conditions for a patient.	E
3	Added the Comments panel to the Patient Data Editor screen (see 2 above).	E
4	Added the Comment field to Processing Pending Patient screen (see 2 above).	E
5	Added a refresh to the Processing Pending Patient screen when comment is added or deleted (see 2 above).	E
6	Added radio buttons "Include," "Exclude," or "Ignore" to provide a filter limiting reports to patients who have diagnoses based on International Classification of Diseases, 9th edition (ICD-9) codes in Common Templates or Your Templates. This filter applies to all reports except the Diagnoses Report.	E
7	Modified the Combined Meds and Labs report to require the user to assign a group name.	E
8	Modified the Combined Meds and Labs report to provide the option to limit lab results to most recent.	F

#	Description	Type
9	Modified the Combined Meds and Labs report to "Include All" or "Selected Only" for lab results (Remedy Ticket HD0000000232223).	E
10	Modified the Combined Meds and Labs report, Pharmacy Prescription Utilization report, and the Patient Medication History report to include a new method of handling Investigational Drugs and Registry Medications on the **Medications panel** drop-down list.	E
11	Technical Writer review included these updates: 1. Changes the sort order of entries in this table to show most recent changes at top. 2. To comply with National Documentation Standards, pagination of introductory material has been revised and minor format changes have been made to headings, table headings and footers. 3. Provides numbered section/paragraph headings. 4. Moves "what's new" information for all patches to new section: CCR Patches ROR*1.5*X. 5. Adopts use of green dotted-underline text for hyperlinks internal to this document. 6. Adds information about the Remote Procedure Call Broker. 7. Expands information on typographical conventions and notes/warnings icons. 8. Substitutes new pointer diagram for "fuzzy" image previously used. 9. Removes references to "other registries;" the HIV and HEPC registries are the only ones within the current scope of CCR. 10. Adopts use of the term "command icon" to denote dedicated areas on menu bars which can be clicked to perform functions similar to those performed by command buttons. 11. Changes the date associated with the FDA-approved list of generic medicines which are contained in the Generic Registry Medications list from November 2005 to June, 2008. 12. Substituted VistA logo for internal CCR logo on cover to meet OED Documentation Standards requirement.	

2.5.9. Patch ROR*1.5*10

Table 11 – Changes for Patch ROR*1.5*10

#	Description			Type
1	Adds new ICD-9 diagnosis groups to the Common Templates:			M
	HCC	155.0	MAL NEO LIVER, PRIMARY	
	Esophageal Varices	456.0	ESOPHAG VARICES W BLEED	
		456.1	ESOPH VARICES W/O BLEED	
		456.20	BLEED ESOPH VAR OTH DIS	
		456.21	ESOPH VARICE OTH DIS NOS	

<table>
<tr><th>#</th><th>Description</th><th>Type</th></tr>
<tr><td>2a</td><td>Adds LOINC codes to CCR:HIV Patient ID:
<table>
<tr><th>LOINC_NUM</th><th>SHORTNAME</th><th>LONG_COMMON_NAME</th></tr>
<tr><td>34591-8</td><td>HIV1 Ab Fld Ql EIA</td><td>HIV 1 Ab [Presence] in Body fluid by Immunoassay</td></tr>
<tr><td>34592-6</td><td>HIV1 Ab Fld Ql IB</td><td>HIV 1 Ab [Presence] in Body fluid by Immunoblot (IB)</td></tr>
<tr><td>43009-0</td><td>HIV1+2 IgG Ser Ql</td><td>HIV 1+2 IgG Ab [Presence] in Serum</td></tr>
<tr><td>43010-8</td><td>HIV1+2 Ab XXX Ql</td><td>HIV 1+2 Ab [Presence] in Unspecified specimen</td></tr>
<tr><td>43185-8</td><td>HIV 1 & 2 Ab Patrn Ser IB-Imp</td><td>HIV 1 & 2 Ab band pattern [interpretation] in Serum by Immunoblot (IB)</td></tr>
<tr><td>43599-0</td><td>HIV1 Ab Ser IF-aCnc</td><td>HIV 1 Ab [Units/volume] in Serum by Immunofluorescence</td></tr>
<tr><td>44533-8</td><td>HIV1+2 Ab Ser Donr Ql</td><td>HIV 1+2 Ab [Presence] in Serum from donor</td></tr>
<tr><td>44607-0</td><td>HIV1 Ser EIA-Imp</td><td>HIV 1 [interpretation] in Serum by Immunoassay</td></tr>
<tr><td>44873-8</td><td>HIV1+2 Ab Ser Ql IB</td><td>HIV 1+2 Ab [Presence] in Serum by Immunoblot (IB)</td></tr>
<tr><td>49580-4</td><td>HIV1+2 Ab XXX Ql Rapid</td><td>HIV 1+2 Ab [Presence] in Unspecified specimen by Rapid test</td></tr>
<tr><td>49905-3</td><td>HIV1 Ab XXX Ql Rapid</td><td>HIV 1 Ab [Presence] in Unspecified specimen by Rapid test</td></tr>
<tr><td>5221-7</td><td>HIV1 Ab Ser Ql IB</td><td>HIV 1 Ab [Presence] in Serum by Immunoblot (IB)</td></tr>
<tr><td>53379-4</td><td>HIV1 Ab XXX Ql</td><td>HIV 1 Ab [Presence] in Unspecified specimen</td></tr>
<tr><td>54086-4</td><td>HIV1+2 IgG Bld.Dot Ql</td><td>HIV 1+2 IgG Ab [Presence] in Blood dot (filter paper)</td></tr>
</table></td><td>M</td></tr>
<tr><td>2b</td><td>Adds LOINC Codes to CCR:HEPC Patient ID:
<table>
<tr><th>LOINC NUM</th><th>SHORTNAME</th><th>LONG_COMMON_NAME</th></tr>
<tr><td>47365-2</td><td>HCV Ab Ser Donr Ql EIA</td><td>Hepatitis C virus Ab [Presence] in Serum from donor by Immunoassay</td></tr>
<tr><td>47441-1</td><td>HCV Ab Ser Donr Ql</td><td>Hepatitis C virus Ab [Presence] in Serum from donor</td></tr>
<tr><td>48576-3</td><td>HCV RNA XXX Ql bDNA</td><td>Hepatitis C virus RNA [Presence] in Unspecified specimen by Probe & signal amplification method</td></tr>
<tr><td>51655-9</td><td>HCV RNA Fld Ql PCR</td><td>Hepatitis C virus RNA [Presence] in Body fluid by Probe & target amplification method</td></tr>
<tr><td>51657-5</td><td>HCV Ab Fld Ql</td><td>Hepatitis C virus Ab [Presence] in Body fluid</td></tr>
</table></td><td>M</td></tr>
<tr><td>3</td><td>Updates (by changing date selection criteria) the Microbiology data extraction code to capture missing Microbiology data. Extract now uses “completion date” and/or “date collected.”
Prior to this patch, the Microbiology data extraction was pulling data based on the 'completion date' (DATE REPORT COMPLETED, #.03 in the MICROBIOLOGY sub-file #63.05 of the LAB DATA file #63) alone. It was found that many sites do not populate that field, causing microbiology data to be omitted from the nightly extract to the central registry. The extract will now pull data based on the 'date collected' (DATE/TIMESPECIMEN TAKEN, #.01) if the 'completion date' is null.</td><td>E</td></tr>
<tr><td>4</td><td>Corrects Problem List Extraction by using DATE RESOLVED versus DATE RECORDED.
Previously, the Problem List Extraction was pulling data from the wrong field (DATE RECORDED, #1.09) to populate the 'date resolved' field in the extract. Data is now correctly pulled from the DATE RESOLVED field (#1.07) of the PROBLEM file (#9000011).</td><td>F</td></tr>
</table>

#	Description	Type
5	Adds new OBR and OBX segments to the nightly extract to pull Immunization data and Skin Test data for Registry patients (see *CCR Technical Manual*). *The nightly and historical extracts have been enhanced to include OBR and OBX segments for Immunization data and Skin Test data for registry patients. Immunization data and Skin Test data will be pulled if the **DATE LAST MODIFIED** (#.13 in the VISIT file (#9000010) is within the extract range. For details of the data included in the segments, please refer to the CCR Technical Manual.*	E
6	Changes nightly data extract to include patients on the Pending list. *The CCR data extract (both nightly and historical) previously included data for 'confirmed' patients only. It will now include data for 'pending' patients as well. Previously, the **DON'T SEND** field (#11) in the ROR REGISTRY RECORD file (#798) was set to 'true' when a pending patient was added to the registry. With patch 10, the **DON'T SEND** field will be set to 'true' for test patients only.*	E
7	Adds three new reports: Model for End-Stage Liver Disease (MELD) Score by Range Body Mass Index (BMI) by Range Renal Function by Range *These reports can be executed from the GUI application. See the User Manual for additional report information.*	E
8	Modifies existing report headers to reflect the Other Diagnosis filter (added by ROR*1.5*8)	E
9	Adds ALL REGISTRY MEDICATIONS to the **Medications Selection panel** via a new **[All Registry Meds]** button. This is included in the Combined Meds and Labs, Patient Medication History, and Pharmacy Prescription Utilization reports.	E
10	Adds new checkbox to display Pending Comments on the List of Registry Patients report. *The "List of Registry Patients" report has been enhanced to include a "Pending Comments" column added to the Report Options. If this option is checked, an additional column called Pending Comments will be added as the right-most column of the report. If the Registry Status' Pending check box is not checked, the Pending Comments option will be disabled.*	E
11	Replaces Direct global and FileMan reads to the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) files with calls using supported Application Program Interfaces (APIs). *To support encapsulation of data in the ICD-9-CM package, direct global and FileMan reads previously used in the ROR namespace were replaced with calls using supported ICD-9-CM APIs. These supported APIs retrieve Diagnosis information needed by the CCR application for the extracts and reports.*	E

#	Description	Type
12	Modifies Other Diagnosis filter to allow the user to remove group header from the "selected" box when the user removes a group from the "selected" panel. *If the user highlights the header and presses the delete key, the header will be deleted. In addition, if the user highlights the header and hits the left arrow, the header will be deleted. Previously, the header was not being removed from the selected box.* *Reports with the 'Other Diagnoses' filter have been modified to display the selected diagnoses in the report header. One of the three formats shown below will be displayed on the report, depending on what the user selected.* *Diagnoses: All* *Diagnoses: Include abc, def, etc.* *Diagnoses: Exclude abc, def, etc.*	M
13	Modifies the "Help About" popup to conform to VA standards, including hyperlinks to reference documents.	E
14	Modifies the online help file to make it context-sensitive.	E
15	Updates the GUI application to work toward adherence to the Section 508 standards.	M
16	Reports XML code have been updated to address a bug introduced in Internet Explorer 7 that was causing page breaks to not work correctly.	F

2.5.10. Patch ROR*1.5*13

Table 12 – Changes for Patch ROR*1.5*13

#	Description	Type
1	Adds LOINC code 57006 to the VA HEPC entry of the Lab Search criteria in the ROR LAB SEARCH file (#798.9), sub-file LAB TEST (#2).	M
2	Enhances the nightly and historical HL7 extracts to include ORC and RXE segments for Non-VA medications for registry patients. Non-VA medication data will be pulled if the DOCUMENTED DATE (#11) or the DISCONTINUED DATE (#6) in the NON-VA MEDS sub-file (#52.2) of the PHARMACY PATIENT file (#55) is within the extract range.	E
3	Enhances the Patient Medication History report to allow users to select the most recent fill only, or all fills. The report output has been enhanced to include a column displaying the number of fills remaining.	E

#	Description	Type
4	Reports BMI by Range, MELD Score by Range, and Renal Function by Range have been enhanced to allow users to sort the report output by the calculations. The BMI by Range report can be sorted by the BMI score. The MELD Score by Range report can be sorted by the MELD or the MELD-Na score. The Renal Function by Range report can be sorted by the CrCL or the eGFR score.	E
5	All reports (except Outpatient Utilization, Inpatient Utilization, List of Registry Patients, and Current Inpatient List) will allow users to select specific clinics or divisions. All reports (except List of Registry Patients and Current Inpatient List) will allow users to select specific patients.	E
6	When users want to select specific medications in the Combined Meds And Labs report, the Patient Medication History report, or the Pharmacy Prescription Utilization report, the text in the search box will automatically convert to uppercase.	E
7	The CCR GUI application will now check VistA for the CCR server version, and it will display a message if the CCR GUI and the CCR server version are out of sync with each other.	E
8	The CCR GUI was updated to work towards becoming fully compliant with the Section 508 standards and initiatives.	F
9	An historical data extraction for Non-VA meds is added to the `ROR HISTORICAL DATA EXTRACTION` file (`#799.6`). It will automatically execute during the next nightly extract, and there is no manual intervention required by the sites. The extraction date range for this historical data extraction is 1/1/1985 through current date (installation date).	E
10	Global updates as indicated in Table 13.	E

Table 13 – Global Updates for Patch ROR*1.5*13

File Name and Number	Action
`ROR LAB SEARCH (#798.9)`	LOINC value `57006` is added to the VA HEPC Lab Search criteria in sub-file `LAB TEST (#2)`.
`ROR DATA AREA (#799.33)`	New entry "`Non-VA Meds`" is added to the file.
`ROR XML ITEM (#799.31)`	New entries "`REFILLS`", "`ALL_FILLS`", and

File Name and Number	Action
	"RECENT_FILLS" are added to the file.
ROR REPORT PARAMETERS (#799.34)	*Entries modified:* General Utilization and Demographics Clinic Follow Up Inpatient Utilization Lab Utilization Radiology Utilization Pharmacy Prescription Utilization Registry Lab Tests by Range Patient Medication History Combined Meds and Labs Diagnoses Registry Medications Procedures Outpatient Utilization VERA Reimbursement Report BMI by Range MELD Score by Range Renal Function by Range
DIALOG (#.84)	*Entries modified:* 7981011.001 Patient Medication History (HTML) 7981011.002 Patient Medication History (CSV) 7981018.001 BMI Report by Range (HTML) 7981018.002 BMI Report by Range (CSV) 7981019.001 MELD Report by Range (HTML) 7981019.002 MELD Report by Range (CSV) 7981020.001 Renal Function by Range (HTML) 7981020.002 Renal Function by Range (CSV) 7981999.001 Common XSL templates (HTML)
REMOTE PROCEDURE (#8994)	New entry "ROR GET M VERSION" is added to the file. This RPC is used to determine whether the CCR GUI application version is in sync with the last CCR M patch installed.

File Name and Number	Action
OPTION (#19)	The RPC "ROR GET M VERSION" is added to the RPC list for the existing ROR GUI entry.
ROR HISTORICAL DATA EXTRACTION (#799.6)	Entry "NON-VA MEDS" is added to the file.

2.5.11. Patch ROR*1.5*14

Table 14 – Changes for Patch ROR*1.5*14

#	Description	Type
1	The 13 risk factors for the HIV registry have been changed from mandatory to optional.	E
2	Currently, within the Patient Data Editor in the HIV registry, the user is prompted to click a checkbox if the patient "ever had an AIDS OI." This prompt and checkbox has been replaced with the question "Did the patient ever have an AIDS OI?" and the option to select either Yes, No, or Unknown has been added to the checkbox.	E
3	The following mandatory question has been added to the Patient Data Editor: "Was your VHA facility/station the first health care setting (VA or non-VA) to diagnose HIV?" along with a checkbox to select either Yes, No or Unknown.	E
4	A new column has been added to the List of Registry Patients Report that allows the user to select "Diagnosed at this Facility". This column indicates whether this facility was the first health care setting (VA or Non-VA) to diagnose HIV.	E
5	The nightly extract has been enhanced to include Purchased Care data for registry patients.	E
6	The "MELD Score by Range" report has been renamed to "Liver Score By Range".	E
7	The "Liver Score by Range" report now includes the list of LOINC codes used in the report.	E
8	The "Renal Score by Range" report now includes the list of LOINC codes used in the report.	E
9	The "Liver Score by Range" report now includes APRI and FIB-4 calculations.	E
10	Patients will be automatically confirmed into the HEPC Registry if they have a positive Hepatitis C Virus (HCV) viral load test result.	E
11	This patch brings the Clinical Case Registries (CCR) application into 508 compliance in many areas.	E
12	An historical data extraction for Purchased Care is added to the ROR HISTORICAL DATA EXTRACTION file (#799.6) for automatic execution during the next nightly extract.	E
13	Global updates as indicated in Table 15.	

Table 15 – Global Updates for Patch ROR*1.5*14

File Name and Number	Action
ROR LAB SEARCH (#798.9)	HCV Viremic LOINC values are added to the VA HEPC Lab Search criteria in sub-file LAB TEST (#2): 11011 29609 34703 34704 10676 20416 20571 49758 50023
ROR XML ITEM (#799.31)	New entries "FIRSTDIAG" , "LOINC_CODES","APRI", and "FIB4" are added to the file.
ROR DATA AREA (#799.33)	New entry "Purchased Care" is added to the file.
DIALOG (#.84)	7981001.001 List of Registry Patients (HTML) 7981019.001 Liver Report by Range (HTML) 7981019.002 Liver Report by Range (CSV) 7981020.001 Renal Function by Range (HTML) 7981997.001 Patient data Templates (HTML)
ROR HIV Record (#799.4)	1. New field HIV DX: FIRST DIAGNOSED HERE (#12.08) is added to the file. 2. The CLINICAL AIDS field (#.02) is updated to include the value of "UNKNOWN" in the set of codes.
ROR HISTORICAL DATA EXTRACTION (#799.6)	Entry "PURCHASED CARE" is added to the file.

2.5.12. Patch ROR*1.5*15

Table 16 – Changes for Patch ROR*1.5*15

#	Description	Type
1	Three new HCV generic Drugs, Telaprevir, Boceprevir and Rilpivirine were approved by the FDA in May, 2011. These three medications have been added to the ROR GENERIC DRUG (#799.51) file and can now be selected on reports to provide information about the patients who are taking the new medications.	E
2	The Renal Function by Range Report has been enhanced to include a new option for calculating the eGFR called the CKD-EPI equation. The CKD-EPI GFR is an estimate of glomerular filtration (GFR) using serum creatinine and demographic factors. It is a relatively new equation that is believed to be superior to the MDRD GFR equation. If selected, the CKD-EPI scores are summarized on the report by chronic kidney disease stage	E
3	The result ranges panel on the Renal Function by Range report will include a note that reads, "Lab tests used to calculate renal function are identified by LOINC code. Your local lab ADPAC should be contacted regarding errors in LOINC codes."	M
4	The header on the Renal Function by Range report currently reads, "Lab tests used to calculate Cockcroft-Gault and/or eGFR by MDRD scores are identified by LOINC code." This text will be updated to read, "Lab tests used in calculations are identified by LOINC code."	M
5	The cover sheet text of the Renal Function by Range report will be amended to include the list of LOINC codes that are used. The new text on the Renal Function by Range report will read, "Lab tests used to calculate scores are identified by LOINC code. Your local lab ADPAC should be contacted regarding errors in LOINC codes."	E
6	The Liver Score by Range report has been modified to display only those tests used in the calculation of the liver scores selected by the user If the user selects the APRI and/or FIB4 tests, then the Bili, Cr, INR, and Na rows should not appear on the report. If the user selects the MELD and/or MELDNA tests, then the AST, Platelet, and ALT rows should not appear on the report.	M
7	The result ranges panel on the Liver Score by Range report will include a note that reads, "Lab tests used in calculations are identified by LOINC code. Your local lab ADPAC should be contacted regarding errors in LOINC codes."	M
8	Users may now use Diagnosed at this VA as a local field. This is a CCR:HIV only option.	E

#	Description	Type
9	Users may now type ?? or click the **All Divisions** button to display all Divisions in the left-hand pick box.	E
10	The CDC Form has been modified to correct the transposition of check box values for the Bisexual male and Intravenous/injection drug user questions.	F
11	The CDC Form has been modified to check the appropriate checkbox if the user selects 'yes' to the question Received Clotting Factor for Hemophilia/Coagulation disorder.	F
12	An invalid date check and error message have been added for the question, Received transfusion of blood/blood components (other than clotting factor) on the **Risk Factors** tab in the Patient Editor.	E
13	A future date check and error message have been added for the question, Received transfusion of blood/blood components (other than clotting factor) on the **Risk Factors** tab in the Patient Editor.	E
14	A future date check and error message have been added for the question, Did the patient ever have an AIDS OI? on the **Clinical Status** in the Patient Editor.	E
15	An historical data extraction for Non-VA Meds has been added to the `ROR HISTORICAL DATA EXTRACTION` file (`#799.6`) for automatic execution during the next nightly extract.	E
16	The Date Range panels (**Date Range**, **Medications Date Range**, **Lab Tests Date Range** and **Utilization Date Range**) were re-designed for easier use with Assistive Technology.	M

Table 17 – Global Updates for Patch ROR*1.5*15

File Name and Number	Action
ROR LIST ITEM (#799.1)	New entries "eGFR by CKD-EPI," "eGFR by CKD-EPI"
ROR XML ITEM (#799.31)	New entries "HIV_DX, " "MDRD," "CKD," "NPMDRD" and "NPCKD" are added to the file.
ROR GENERIC DRUG (#799.51)	New entries "Telaprevir," "Rilpivirine," "Boceprevir"
DIALOG (#.84)	7981020.001 Renal Function by Range (HTML) 7981020.002 Renal Function by Range (CSV) 7981998.001 CSS and Scripts
ROR HISTORICAL DATA EXTRACTION (#799.6)	Entry "NON-VA MEDS" is added to the file.

2.6. Obtaining Software and Documentation

The CCR 1.5 software distributives and documentation files are available for downloading from the following Office of Information Field Offices (OIFO) [ANONYMOUS SOFTWARE] directories.

Table 18 – Software and Documentation Download Sites

OIFO	FTP Address	Directory
Albany	ftp.fo-albany.med.va.gov	ANONYMOUS.SOFTWARE
Hines	ftp.fo-hines.med.va.gov	ANONYMOUS.SOFTWARE
Salt Lake City	ftp.fo-slc.med.va.gov	ANONYMOUS.SOFTWARE

Documentation is also available on the VistA Document Library (VDL) website. See http://www.va.gov/vdl/application.asp?appid=126. The documentation set includes:

- *Installation Guide*
- *Release Notes*

- *Technical Manual / Security Guide*
- *User Manual*
- *User Manual* revision for ROR*1.5*15 (this document)

The CCR software and accompanying guides and manuals are distributed as the following set of files:

Table 19 – Software Distributives

File Name	Contents	Retrieval Format
ROR1_5P15GUI.ZIP	Zipped GUI distributive: ► CCRSETUP.EXE	BINARY
ROR1_5P15DOC1.ZIP	Zipped DOC distributive, which includes both .PDF and .DOC formats: ► User Manual (ROR1_5_15UM)	BINARY
ROR1_5P15DOC2.ZIP	► Installation Guide (ROR1_5_15IG) ► Technical Manual / Security Guide (ROR1_5_15TM) ► Release Notes (ROR1_5_15RN)	BINARY

2.7. Accessibility Features in Clinical Case Registries 1.5

Keyboard shortcuts make the CCR GUI accessible to a wide range of users, including those with limited dexterity, low vision, or other disabilities.[A]

RESOURCE See 11.4 below for a complete list of keyboard shortcuts.

2.8. VistA Documentation on the Intranet

Documentation for this product, including all of the software manuals, is available in the VistA Document Library (VDL). The Clinical Case Registries documentation may be found at http://www.va.gov/vdl/application.asp?appid=126.

For additional information about the CCR, access the CCR Home Page at the following address: http://VistA.med.va.gov/ClinicalSpecialties/CCR/. Training links and information are also available at http://vaww.VistAu.med.va.gov/VistAu/CCR/.

THIS PAGE INTENTIONALLY LEFT BLANK

3. About the CCR Interface

CCR acts as a "front-end" application which allows users to access data stored in VistA. It runs on a computer workstation and provides a graphical user interface (GUI) which replaces the traditional "roll'n'scroll" interface used in VistA.

3.1. Remote Procedure Calls and the Broker

CCR uses a protocol known as a Remote Procedure Call (RPC). An RPC enables CCR to communicate directly with (*"call"*) VistA to find and display, on the user's workstation, data stored on another computer (the VistA server).

The RPC Broker is "helper" software that allows a computer program to make remote procedure calls from one computer to another, via a network. The Broker establishes a common and consistent foundation for client/server applications written under the VistA umbrella. The Broker acts as a bridge connecting the client application front-end on the workstation (in this case, CCR) to the M-based data and business rules on the server. It serves as the communications medium for messaging between VistA client/server applications. Upon receipt, the message is decoded, the requested remote procedure call is activated, and the results are returned to the calling application. Thus, the Broker helps bridge the gap between the traditionally proprietary VA software and other types of software.

In order to use CCR, the user must have a special kind of VistA option (called a B-type option) assigned on the primary or secondary VistA menu. This option is designed to be run only by the RPC Broker, and cannot be run from the menu system.

Use of CCR also requires that the list of RPC Broker servers which the user is authorized to access be maintained on the workstation. The RPC Broker server to be used is defined by executing the program `serverlist.exe`, which is described in the RPC Broker *Systems Manual* (revised 2005-02-28), which is also available on the VDL. Both `xwb1_1ws.exe` and `serverlist.exe`, which are mentioned in those manuals, are distributed as part of the Broker.

See also http://www.hardhats.org/cs/broker/docs/xwb1_1rn.html for more helpful information about installing and configuring `ServerList.exe`.

3.2. Graphical User Interface Conventions

CCR uses a graphical user interface (GUI) similar to those used in many Microsoft Windows® or Apple Macintosh® programs. If you have already used programs on these platforms, the CCR GUI will seem familiar to you. CCR is only implemented on the Microsoft Windows platform at this time.

If you have little or no familiarity with the Microsoft Windows GUI environment, information can be found by accessing the Microsoft Windows Help file. Additionally, brief descriptions of the GUI features used in the CCR application are provided in the following sections.

3.2.1. Windows

An "application window" is the area on your computer screen used by a program. If you have more than one program running at the same time, you can go from one program to another by clicking in each application window. You can also move, close, or minimize the application window to make room for another window. (See Help in Windows for further instructions on these functions.)

The CCR uses the Multiple Document Interface (MDI). Several "child" windows can be open inside the main "parent" application window at the same time. A child window either provides access to a registry (such as CCR:HIV or CCR:HEPC) or contains a document (such as a report). You can switch between these windows using the Windows menu or keyboard shortcuts.

3.2.2. Pop-up Windows

These are "miniature" windows that pop up within a window to provide or request information. Ordinarily, they require some action before they will disappear. Clicking on buttons with the words **[OK]**, **[Cancel]**, **[Exit]**, or something similar usually closes these windows. Sometimes, they can be closed by pressing the **< Esc >** key.

3.2.3. Windows GUI Elements

The following sections describe typical Windows GUI elements.

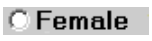
3.2.4. Text Box

Type the desired characters into the text (edit) box. The selected entry will not be effective until you tab away from or otherwise exit from the text box.

3.2.5. Checkbox

A checkbox toggles between a YES/NO, ON/OFF setting. It is usually a square box containing a check mark ☑ or X [X]. Clicking the box or pressing the spacebar toggles the checkbox setting. In some instances, checkboxes may be used to provide more than one choice; in such cases, more than one box can be selected. Sometimes, a pre-determined "default" entry will be made for you in a checkbox; you can change the default if needed.

3.2.6. Radio button



A radio button, also known as an option button, is a small, hollow circle adjacent to text. Radio buttons appear in sets. Each button represents a single choice and normally only one button may be selected at any one time. Clicking on the radio button places a solid dot in the circle, selecting the option. Clicking a selected radio button de-selects it, removing the dot. As one radio button is selected, others within the category switch off. For example, Male or Female may be offered as choices through two radio buttons, but you can only select one of the choices.

3.2.7. Command buttons and Command icons

A command button initiates an action. It is a rectangular "3-dimensional" shape with a label that specifies what action will be performed when the button is clicked. Common examples are shown at left. Command buttons that end with three dots indicate that selecting the command may evoke a subsidiary window.

In some cases, a command icon performs the same function, but appears on the menu bar and has a plain, flat appearance. One example is shown at left.

In the text of this document, both command button and command icon names appears inside square brackets. *Examples:* **[Search]**, **[Save]**.

3.2.8. Date field

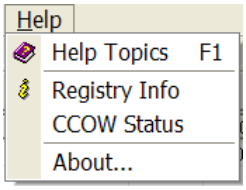
The date field is identified by "__/__/__" or a date format like "mm/dd/yyyy" and will usually have an associated popup calendar (see Pop-up Calendars). The month and day components of the date must consist of two digits and the year must consist of four digits (*e.g.*, 02/02/1996). The selected entry will not be effective until you tab away from or otherwise exit the date field.

3.2.9. Drop-Down List

A drop-down list is displayed as a box with an arrow button on the right side. Such boxes usually display one entry at a time. Choose from a vertical list of choices that display when you click the downward arrow. Select the entry you want by clicking the list entry.

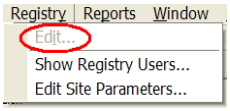
If None is the last entry, selecting it will clear the list entry. If More… is the last entry, selecting it will display additional options. The selected entry will not be effective until you tab away from or otherwise exit the drop-down list.

3.2.10. List Box



The list box shows a list of items. If more items exist than can be seen in the box, a scroll bar appears on the side of the box. Click the desired entry to select it from the list.

3.2.11. Faded ("Grayed Out") Choices



Fields or choices (as in list boxes) that appear with faded letters ("grayed out") are currently unavailable, meaning they cannot be selected.

3.2.12. Keyboard Commands

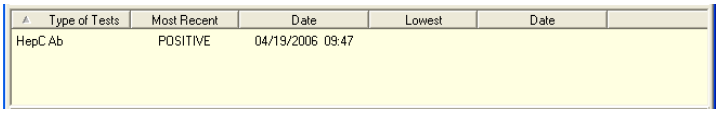
Keyboard commands can be used throughout the CCR application by pressing and holding the **< Alt >** key and then pressing the appropriate key to perform the command. The key to press in order to perform the command is identified by an underlined character on the screen. For example, the **Task Manager** tab can be displayed by pressing and holding the **< Alt >** key and then pressing the **< T >** key.

Keyboard keys and onscreen buttons are shown in different style brackets throughout this manual to differentiate them from on-screen buttons or menu options: **< Ctrl >** and **< Enter >** are on the keyboard, **[Close]** is a command button or icon on the screen.

RESOURCE See 11.4 below for a complete list of keyboard shortcuts.

3.2.13. Fields with Non-White Background

Items in fields that appear with a non-white background can be selected— but cannot be modified directly in that field.



3.2.14. Tab Key

Use the **< Tab >** key or the mouse to move between fields. Do *not* use the **< Enter >** or **< Return >** key, which is usually reserved for the default command button or action.

3.2.15. Changing (Resizing) a Window

Most windows and columns displayed in the CCR application can be resized. To change the size of a window, position the mouse pointer over the right edge of the column or the outside edge of the window, left click, and while holding the mouse button down, move the mouse and "drag" to change the size of the window or column. Position the mouse pointer over one corner and drag diagonally to increase the size of the entire window.

Note: In CCR, changes to the window and column sizes are maintained in subsequent sessions.

Note: Also see Figure 1 – Resizing the Screen for tips on how to maximize or minimize windows using the keyboard.

3.2.16. Cancel

When used in a prompt, **Cancel** allows you to cancel the action about to be taken. For example, when closing an application, you may be prompted to validate the action to close. If you click the **[Cancel]** button, the application will not close and you will resume from the point at which the close action was initiated.

3.2.17. Close

This command closes the active window. CCR uses a window-within-a-window display. The main application window is the Clinical Case Registries (CCR) window, and the CCR:HEPC or CCR:HIV window is displayed in the child window.

Close the active registry window:

- by selecting Close from the File menu
- by pressing and holding the **< Ctrl >** key and then pressing **< F4 >**
- by clicking on the ✘ in upper right corner of the child window
- in report setup windows and pop-ups, by pressing the **< Esc >** key

Close and exit the CCR application:

- by selecting Exit from the File menu
- by pressing and holding the **< Alt >** key and then pressing the **< F4 >** key
- by clicking on the ✘ in the upper right corner of the main application window

3.2.18. Edit

This command is used to edit information.

3.2.19. Find

This command is used to find an entry. Enter the search string and click [OK]**.** Note that many searches are case-sensitive and that most searches are "begins with" (rather than "contains") searches.

3.2.20. Help

Provides generalized help on the application, or specialized help for the area in which you are currently working. The CCR application has an online help file; while running the application, press the **< F1 >** key to access help.

3.2.21. OK

Confirms the input and initiates the action defined by the window.

3.2.22. Save

Saves all changes made since the last save action. If you attempt to save and all required fields have not yet been completed, you will receive notification that the required fields must be completed before saving.

3.2.23. Save As

This command is used to export to a file a report produced in CCR. With the report open, clicking on the Save As… menu option will produce a save dialog window labeled "Save the report as." Indicate the file location (folder) where you wish to store the report, name the file and choose the format in which it will be saved.

3.2.24. Search

When at least one character is typed in a lookup dialog box, clicking the **[Search]** button will bring up matching entries. In many cases, leaving the lookup box blank will find all such records.

3.2.25. Selecting Multiple Items from a List

Throughout the CCR application, a variety of lists are available from which you may select one or more items.

To select all items in a range between two separate entries, hold the **< Shift >** key and click on the first item in the range, and then click the last item in the range. The first and last item, as well as all of the items between, will be highlighted.

To select multiple separate entries from a list, hold the **< Ctrl >** key and click each of the items you want to select. In some cases, the number of such items that can be selected may be limited.

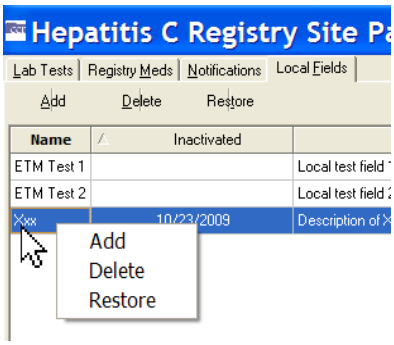
3.2.26. Undo

Undoes all changes made since the last save action and redisplays the original data.

3.2.27. Right-Click Menus

Most Windows-based applications provide some sort of pull-down menu (often called a "context menu") when you click the right mouse button over a GUI element.

Example:



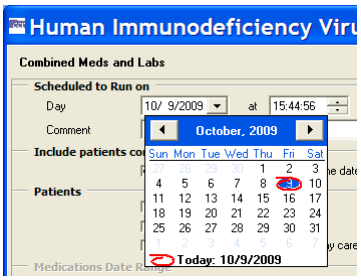
Depending upon which CCR window is open (which is where the term "context menu" comes from), the following right-click menu options will be available:

Window	Right-Click Menu Options
Task Manager tab	New Report, Open Report, View Report, Delete, Refresh
Registry tab	CDC… *(in* CCR*:HIV only)*, Confirm/Edit…, Delete
Reports window	Back, Forward, Cancel, Copy, Select All, Text Size, Find…

3.2.28. Pop-up Calendars

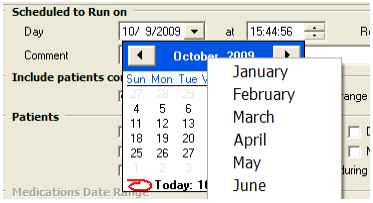
Pop-up calendars are used throughout the CCR application. The default date display is usually the current date. The default date is highlighted with a red circle.

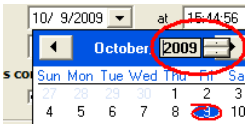
Example:



You can select or change the date displayed on the calendar using the methods described in the following table:

Table 20 – Selecting and Changing Date Elements

To Select/Change…	Do this:
Month	 Click on the month at the top of the calendar to display a list of all months, and then select one. Or, you can change one month at a time by clicking the left  and right  arrow buttons.
Day	Click the actual day of the week on the calendar.

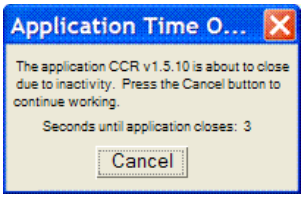
To Select/Change…	Do this:
	To select today's date, click the highlighted (circled) date on the calendar display.
Year	Click on the year. Up and down arrow buttons display for you to increase or decrease the year. 

Also see Navigating the Date Picker Calendar Pop-ups for information on how to use the keyboard for calendar controls.

3.2.29. System Timeout

After you connect to the database, the application extracts the timeout value assigned to you and applies it as the application timeout value. If no value is assigned, the default value of 60 minutes will be used.

If there is no keyboard or mouse activity during the timeout period, the "Application Time Out" message window (similar to the example screen below) displays for 15 seconds. If there is still no activity within 15 seconds, the application automatically closes; a countdown of seconds remaining is displayed.



3.2.30. Security Keys

To access CCR, you must have a valid VistA account and must be assigned at least one of the following VistA security keys:

- `ROR VA HIV USER` or `ROR VA HIV ADMIN`
- `ROR VA HEPC USER` or `ROR VA HEPC ADMIN`
- `ROR VA IRM`

USER: Users with the `ROR VA HIV/HEPC USER` key will be displayed on the Show Registry Users window as "User."

Users will be able to run reports.

ADMIN: Users with the ROR VA HIV/HEPC ADMIN key will be displayed on the Show Registry Users window as "Administrator."

Administrators will have full GUI access that will enable them to run reports, create local fields, and edit, confirm and delete patient records.

IRM: Users with the ROR VA IRM key will be displayed on the Show Registry Users window as "IRM."

IRM users will have access to all CCR files in VistA but no access to the GUI. This key should be assigned to the IRM personnel authorized to maintain and troubleshoot the CCR package.

If any unauthorized users access this system, a VA alert will be sent to persons identified to receive registry notifications stating the date and time of the violation and the name of the user who attempted to access the system; a record of the access violation will be written to the Access Violations folder of the Technical Log.

3.3. Assistive Technology

Some of the current features of the CCR navigation may not be intuitive if you are using assistive technology (for example, a screen reader like JAWS). In addition to using the mouse, each function may also be selected by using keystrokes; these keystrokes are identified in the discussions which follow. At this writing, we don't know if CCR meets all Section 508 standards. CCR 1.5.13 has, however, been redesigned to support Section 508 initiatives.

3.3.1. Using the < Alt > and < Esc > Keys

In many situations, pressing **< Alt > +** a letter that represents the function will perform a function (for example, **< Alt >+< P >** activates the Reports menu).

< Alt >+< F4 > closes the screen (and, in most cases in CCR, closes the application as well).

< Esc > often may be used to close dialog boxes and pop-ups.

3.3.2. Resizing the Screen

Instead of clicking the Maximize button, you can press **< Alt >+< space >** and then select Maximize by pressing **< x >**. If you wish to minimize the screen, you may press **< Alt >+< space >** and then select Minimize by pressing **< n >**.

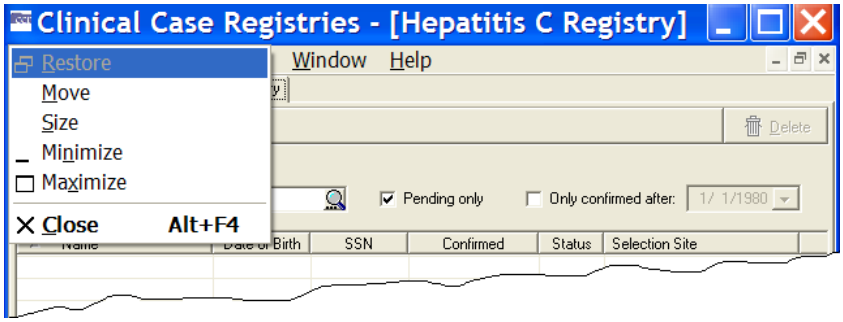


Figure 1 – Resizing the Screen

3.3.3. Changing the Screen Colors and Options

See 7.11.3 below for information on changing screen colors and options for improved accessibility.

3.3.4. Windows Accessibility Shortcuts

The Windows operating system offers a number of accessibility shortcuts which can be useful. These are "toggled" options, meaning that you perform the specified action once to turn the option on and then again to turn it off. You should be aware, however…

Warning: Using some of these options will drastically change the way your computer keyboard functions. If all else fails, reboot your computer to clear any such selections.

Each option will produce a popup confirmation window like those pictured below. Each of these confirmation pop-ups has the same three choice buttons, in this order left to right: **[OK]**, **[Cancel]**, and **[Settings]**. **[OK]** is always the default choice.

3.3.4.1. StickyKeys

StickyKeys lets you use the **< Shift >**, **< Ctrl >** or **< Alt >** keys by pressing one key at a time, rather than having to press these keys in conjunction with another key.

Press **< Shift >** five times to toggle StickyKeys on and off:

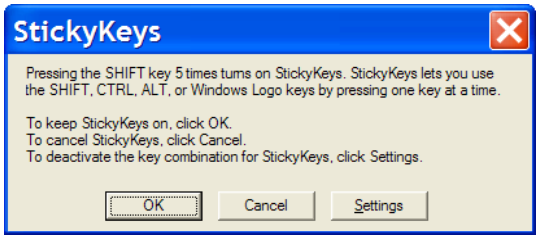


Figure 2 – Turning on StickyKeys

3.3.4.2. FilterKeys

FilterKeys causes Windows to ignore brief or repeated keystrokes and slows down the keyboard repeat rate.

Press down and hold the right-hand **< Shift >** key for eight seconds to toggle FilterKeys on and off:

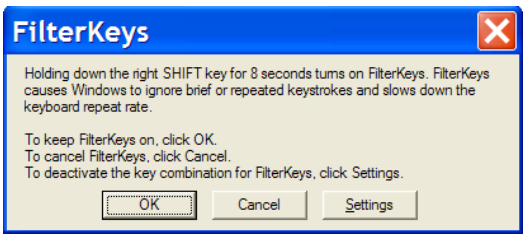


Figure 3 – Turning On FilterKeys

3.3.4.3. ToggleKeys

ToggleKeys causes a tone to sound when you press the **< Caps Lock >**, **< Num Lock >**, or **< Scroll Lock >** keys.

Press down and hold the **< Num Lock >** key for five seconds to turn ToggleKeys on and off:

Figure 4 – Turning On ToggleKeys

3.3.4.4. MouseKeys

MouseKeys lets you control the mouse pointer by using the numeric keypad on your keyboard.

Press the left-hand **< Alt >** key plus the left-hand **< Shift >** key plus the **< Num Lock >** key to toggle MouseKeys on and off:

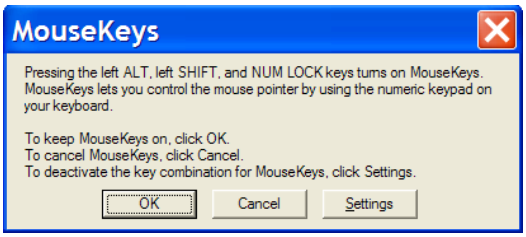


Figure 5 – Turning On MouseKeys

3.3.4.5. HighContrast

HighContrast improves readability for people with visual impairments by applying a special system color scheme and font size.

Press the left-hand **< Shift >** key plus the left-hand **< Alt >** key plus the **< Print Screen >** key to toggle HighContrast on and off:

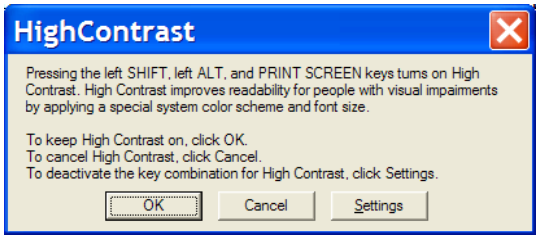


Figure 6 – Turning on HighContrast

3.3.5. Tab Order on Report Setup Screens

On the various report setup screens, the tab order, the order in which screen elements are selected when you press the **< Tab >** key, is as follows and as shown in Figure 7. The general flow is top-left of the screen to the bottom-right of the screen. The List of Registry Patients report setup screen is shown, as an example.

The tab position cycles through each option, beginning with:

1. **Scheduled to Run on** Pane:

   Day field | **Time** field | **Repeat** field

   Comment field

2. **Include Patients confirmed in the registry** Pane:

   Before the date range checkbox | **During the date range** checkbox | **After the date range** checkbox

3. **Report Type** Pane:

   Complete radio **button** | **Summary** radio button

4. **[Result Name] Date Range** Pane:

   Most recent radio button | **as of** radio button | **as of** date field

5. **Result Ranges** checkboxes (if more than one, in order from top to bottom):

   Utilization Date Range: The **Year** drop-down list is selected. The tab following that is the **Year** field, and then the **Fiscal** check box.

   Year drop-down list | **Year** field | **Fiscal** checkbox

   Quarter drop-down list | **Year** field | **Fiscal** checkbox | **Quarter** drop-down list (I, II, III, IV)

   Custom drop-down list | **Start Date** field (date picker) | **End Date** field (date picker)

   Cutoff drop-down list | **Cutoff Date** field

6. **Other Diagnoses** Pane:

   Ignore radio button

   Include Codes radio button

   Exclude Codes radio button

   Template Type selection field (only if **Include Codes** is selected)

   Template **names** (only if **Include Codes** is selected and a **Template Type** chosen)

7. **Other Registries Mode** selection field (must click or press **< Space >** and then click down arrow or press **< Down >** button to access drop-down list)

8. **Local Fields Mode** selection field (must click or press **< Space >** and then click down arrow or press down **< Down >** button to access drop-down list). Only available if the site has created **Local Fields**.

9. **[Load Parameters]** button

10. **[Save Parameters]** button

11. **[Default Parameters]** button

12. **[Run]** button

13. **[Cancel]** button

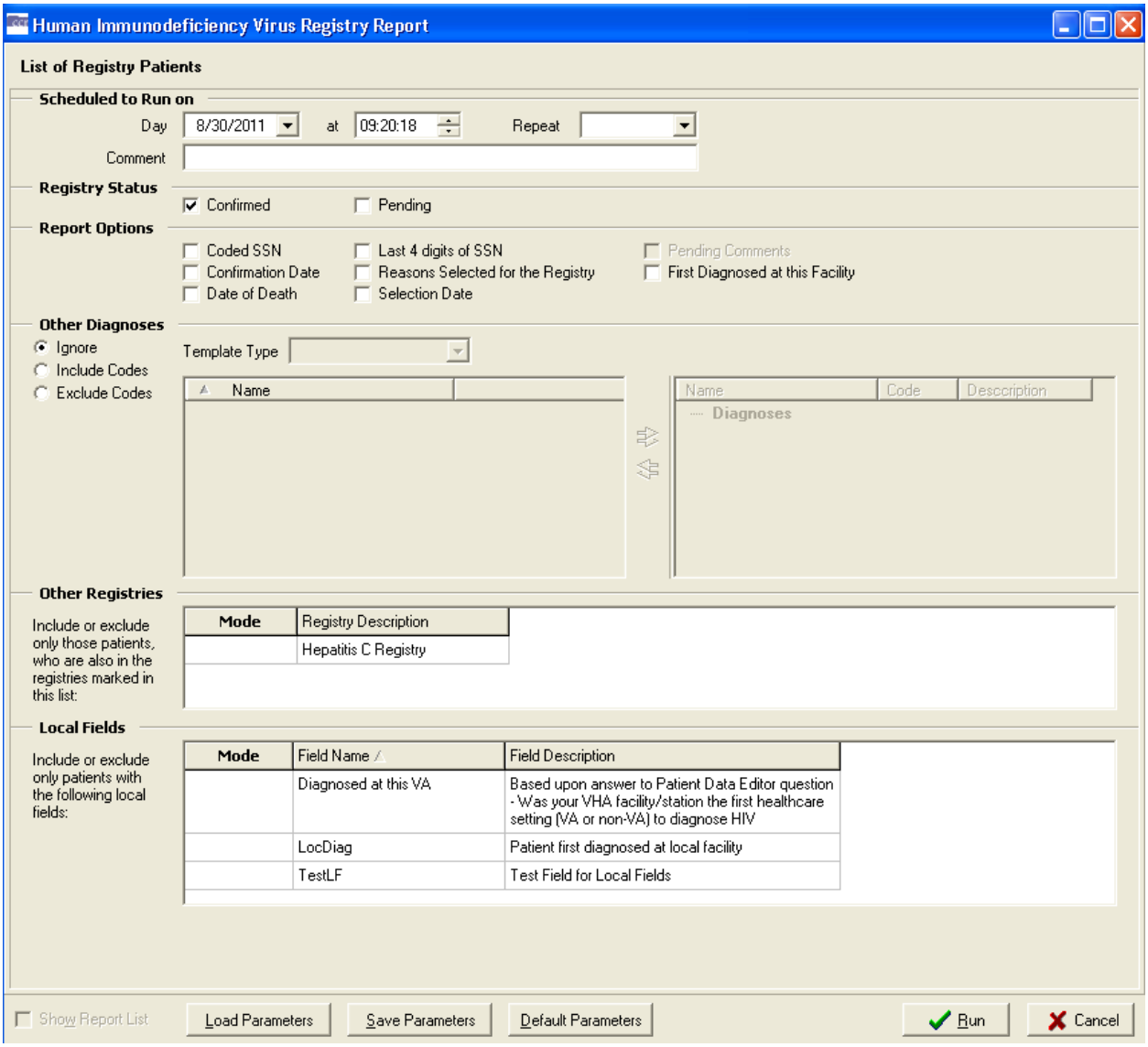


Figure 7 – Report Setup Screen Tab Order

3.3.6. Activating Drop-Down Lists

You can activate drop-down lists from the keyboard. Simply tab to the drop-down list field and press **< F4 >** or **< Alt >+< ↓ >** ("Alt" key plus the down arrow key).

3.3.7. Navigating the Date Picker Calendar Pop-ups

Using the date selection pop-up calendars (known as "date pickers") may be somewhat problematic for those using screen readers such as JAWS. The pop-up date picker calendar is essentially a graphic, rather than text, feature. Although it's designed for quick navigation using the mouse, the following keys can also be used to navigate the calendar pop-ups:

- **< F4 >** or **< Alt >+< ↓ >** ("Alt" key plus the down arrow key) can be used to display the drop-down calendar.
- **< Page Up >** displays the previous month.
- **< Page Down >** displays the following month.
- **< Ctrl >+< Page Up >** displays the same month in the previous year.
- **< Ctrl >+< Page Down >** displays the same month in the following year.
- **< Arrow >** keys (left, right, up, down) change the day of the month. If you continue to arrow up, down, left or right, the month will eventually change accordingly.
- **< Ctrl >+< Home >** jumps to the first day of the month.
- **< End >** jumps to the last day of the month displayed.
- **< Enter >** selects date chosen and closes the pop-up.
- **< Esc >** closes the pop-up without making a selection (but remember that you must make a selection before you can proceed to the next step).

3.3.8. Dual-List Controls

CCR contains a number of "dual-list" controls. For example, a list of "available" names (of drugs, etc.) may be displayed on the left side of such a control.

You may choose one or more of the names and move it to the "selected" list on the right side of the control by clicking a right-pointing arrow command icon in the center between the two lists, or the double right-pointing arrow to move all the names to the selected list.

Likewise, you may choose a selected name and remove it from the selected list by clicking a left-pointing arrow command icon, or click the left-pointing double arrow to remove all of the names from the selected list.

Effective with CCR 1.5.13, you may use **< Enter >** instead of the command icons to move individual names from one list to the other.

In addition, when a dual-list control is selected and a screen reader is active:

- The column header for the left-hand list is changed to Available Name and the right-hand column header is changed to Selected Name.
- The left- and right-pointing arrows and double arrows are changed to words (Add, Remove, Add All and Remove All).

3.3.9. Row and Header Information in Grids

In any data table or grid (where rows and columns are displayed)…

- **< Insert >+< ↓ >** ("Insert" key plus the down arrow key) will cause JAWS to say the current row and header information. See your JAWS manual for more information.

3.3.10. Context-Sensitive Menus

- **< Shift >+< F10 >** will display context-sensitive menus where appropriate.

4. Local Registry Population and Update

4.1. Initial Data Load

Initial creation of the CCR patient lists were based on the patient lists in the CCR:ICR and CCR:HEPC Registries.

4.2. Population of the Local Registry

This method of populating the local registry will occur during each of the automatic nightly updates.

The CCR application searches inpatient files (`#45 PTF`), outpatient files (`#9000010 VISIT`), and the problem list (`#9000011 PROBLEM`) to identify patients with registry-specific ICD-9 codes, and searches the laboratory files (`#63 LAB DATA`) for positive registry-specific antibody test results. These ICD-9 codes and antibody tests are defined for each registry. As CCR recognizes the earliest instance of data that indicates a positive result, it adds the patient to the registry with a status of "pending." These pending patients must be reviewed locally, and either confirmed as having the registry-specific condition, or deleted from the registry.

If review of a pending patient indicates that the patient is not truly infected– for example, the coding was done in error– the patient should be deleted from the registry. After this action is taken for a patient, the software will not again select the same patient based on the same data. If there are multiple instances of erroneous coding for the same patient, the system will recognize the subsequent instance of such coding and again add the patient to the registry as a pending patient. Local facilities should take appropriate action to correct any miscoding identified in the record.

In the event that a patient is confirmed in the registry and later information reveals that the patient is not positive for the monitored condition, that patient should be deleted from the registry.

4.3. Deceased Check

A check of the Patient file [#2] will be performed for each patient in the local registry to validate whether or not the patient is deceased. If a registry coordinator becomes aware of a patient death that is not reflected in the record, he or she should contact the appropriate Medical Administration Service (MAS) or Decedent Affairs staff to have the death recorded in the system.

THIS PAGE INTENTIONALLY LEFT BLANK

5. Signing On and Opening a Clinical Case Registry

Access to the HIV and HEPC registries is obtained through the Clinical Case Registries package. You must first sign on to the CCR to open either of these registries.

You can sign onto CCR after the application has been added to your Computerized Patient Record System (CPRS) Tools menu or installed on your workstation and you have been assigned a security key by your local Automated Data Processing Application Coordinator (ADPAC) or Information Security Officer (ISO).

To start the CCR application, follow these steps:

1. Select CCR from your Tools menu within CPRS, or double-click the CCR shortcut on your desktop.

Note: The first time you run the program from a shortcut, especially if you are working from a remote location, you may see the following or a similar warning. This is a Microsoft Windows message, wanting to know if you wish to permit the CCR application permission to "break though" the Windows firewall in order to make the connection to the server.

Figure 8 – Windows Security Warning

1. Unblock Click the **[Unblock]** button.

After you unblock the program (if necessary), the Connect To window displays:

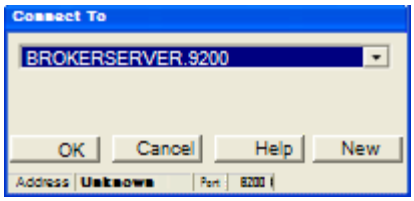


Figure 9 – Connect To Pop-up

If you are launching CCR from CPRS Tools, the correct account information will automatically appear. If you are launching CCR from a desktop icon, you may need to ask your IRM support person for the account information to enter.

Note: The Connect To window appears only if the site has multiple servers; otherwise the VistA Sign-on window automatically displays as shown in step 2.

2. Click **[OK].**

   After connecting to the appropriate account, the VistA Sign-on window opens.

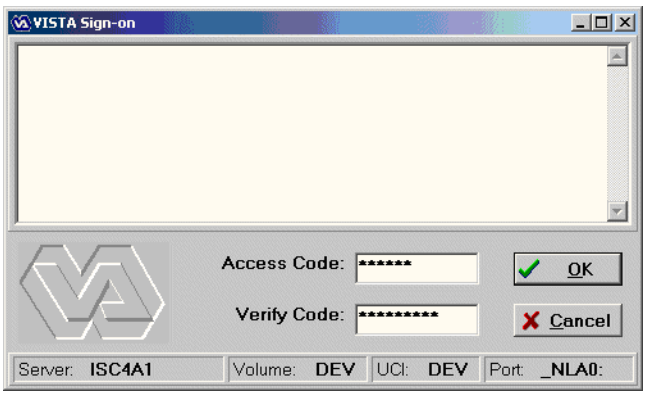


Figure 10 – VistA Sign-on Window

Type your access code into the Access Code field and press **< Tab >** (or click in the Verify Code field).

Note: If you launch CCR from CPRS Tools and your workstation is configured for Clinical Context Object Workgroup standard (CCOW) and Single Sign-On, the VistA Sign-on window will not open at this point. You will be automatically signed in to CCR using your CPRS access code and verify code.

Note: You may also type both the access code followed by a semicolon **< ; >** and then the verify code in the Access Code box. After you have done this, press **< Enter >** or click **[OK]**.

3. Type your verify code into the Verify Code field and press **< Enter >** or click **[OK]**. The Select a Registry window opens.

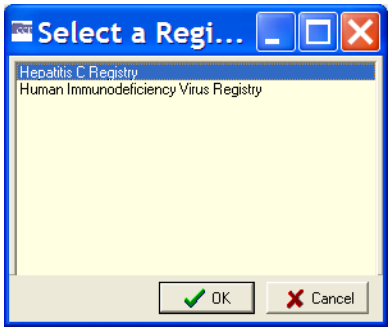


Figure 11 – Select a Registry Pop-up

4. Click a registry name to select it, and then click **[OK]**.

   The selected registry opens in the main CCR window. If you have access to only one registry, it will open automatically.

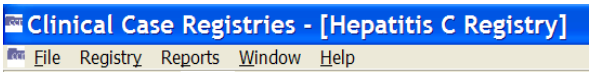
   You can also set up your desktop shortcut to specify which registry is to open automatically.

   RESOURCE See 11.5 below for information on command-line switches for use in the shortcut.

THIS PAGE INTENTIONALLY LEFT BLANK

6. Registry Window Menus

The Registry Window Menus are displayed in the menu bar near the top of the window. The menus are File, Registry, Reports, Window, and Help.



When you click one of these, a list of menu options (a "drop-down" list) is displayed. Note that although the same menu list is presented throughout the session, the choices available from the drop-down list may vary depending on which registry is in use, which operation is being carried out at the time, and which role(s) you are assigned.

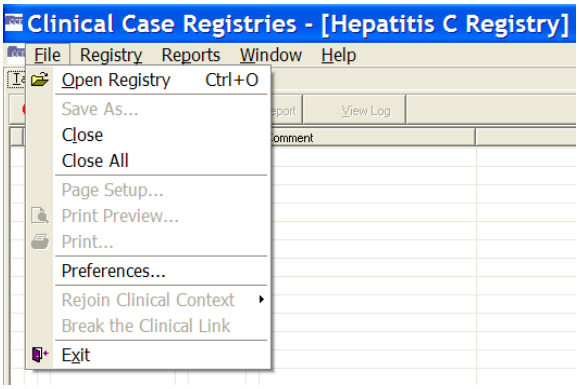


Figure 12 – Sample Menu Drop-Down List

6.1. File Menu

The File Menu displays the following menu options (note how some options may be "grayed out"):

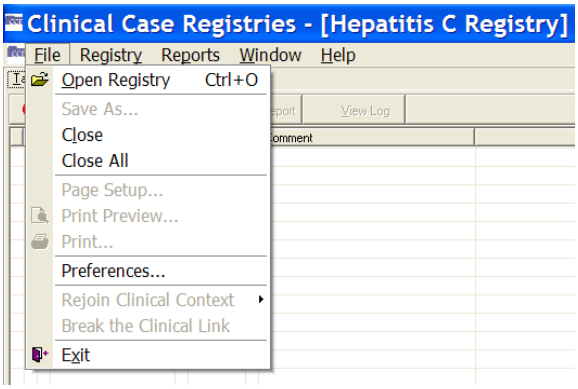


Figure 13 – File Menu Drop-Down List

- Open Registry
- Save As... | Save As...
- Close
- Close All
- Page Setup or Page Setup
- Print Preview... | Print Preview...
- Print... | Print...
- Preferences
- Rejoin Clinical Context | Rejoin Clinical Context
- Break the Clinical Link | Break the Clinical Link
- Exit

6.1.1. File | Open Registry menu option

The File, Open Registry menu option is used to open a CCR session. More than one CCR session can be opened at the same time. The registry displayed is named in the blue bar located at the top of the window.

When you first run the application, you may be asked which registry you wish to use (see right). To view the number and type of all open sessions, or to select another open session to view, go to the Window Menu.

The selected registry opens in the main CCR window. If you have access to only one registry, it will open automatically.

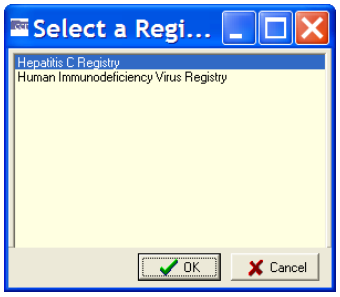


Figure 14 – Select a Registry Pop-up

You can also set up your desktop shortcut to specify which registry is to open automatically.

RESOURCE See 11.5 below for information on command-line switches for use in the shortcut.

6.1.2. File | Save As menu option

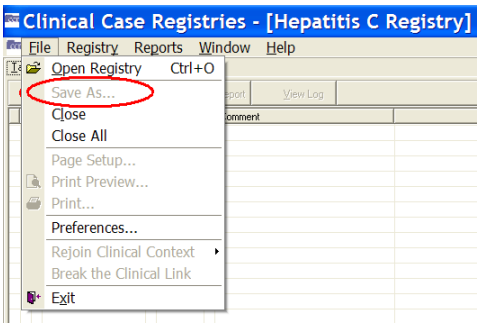
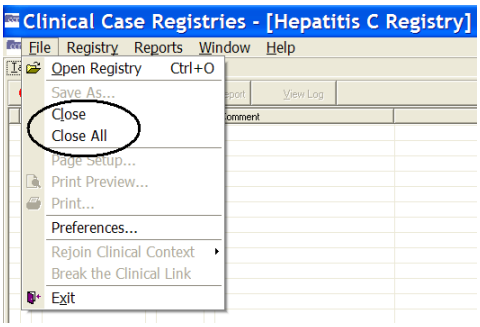


Figure 15 – File | Save As menu option

The Save As menu option on an active report window opens a window used to export reports produced in CCR. This menu option will be unavailable ("grayed out") when the active window is not a report.

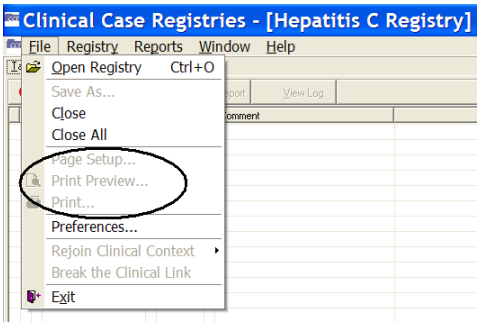
6.1.3. File | Close and Close All menu options



The Close menu option closes only the active window that is displayed. The Close All menu option closes all child windows listed in the Window Menu.

Figure 16 – File | Close & Close All menu options

6.1.4. File | Page Setup, Print Preview, and Print menu options



These options are available only when a report is selected as the active window.

The Page Setup menu option launches the Page Setup window from which you can set margins, paper source, paper size, page orientation, and other layout options.

The Print Preview menu option will show how the file will appear when you print it.

Figure 17 – File | Page Setup & Print menu options

The Print menu option opens the Print window from which you can print the active document and select printing options.

These three menu options are normally used to format and print reports from the registry data. They will be unavailable ("grayed out") when the active window is not a report.

6.1.5. File | Preferences menu option

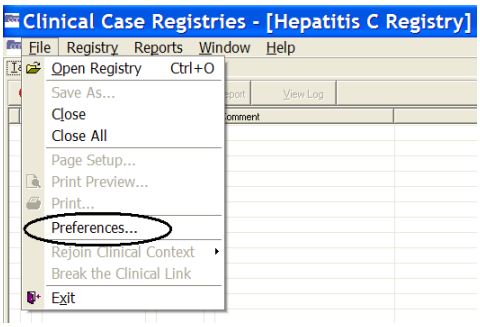


Figure 18– File | Preferences menu option

The Preferences... menu option allows you to customize general and appearance-related settings that affect the CCR window and its behavior.

6.1.6. File | Rejoin Clinical Context menu option

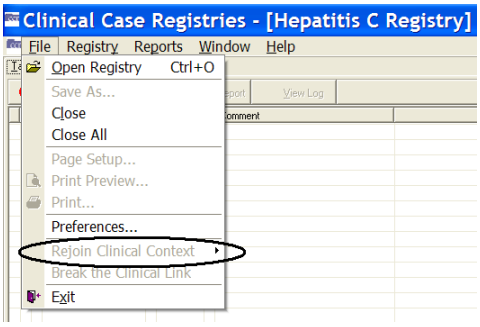
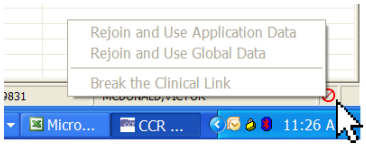


Figure 19– File | Rejoin Clinical Context menu option

This menu option enables you to participate in a CCOW Clinical Context and synchronize your CCR clinical data with other CCOW-compliant applications. For example, when CCR and CPRS are both open and are sharing a context, if you change to a different patient in one application, the other application will change to that patient as well.

If CCOW is installed, then by default, the CCOW link is automatically active. You can tell whether CCOW is running by observing the bottom right-hand corner of the CCR window.



In the illustration at right, CCOW is not active, and the user has right-clicked the "no" symbol to display the options, which are grayed-out in this sample:

- Rejoin and Use Application Data
- Rejoin and Use Global Data
- Break the Clinical Link

If CCOW were active, these options would be available for the user.

6.1.7. File | Break the Clinical Link menu option

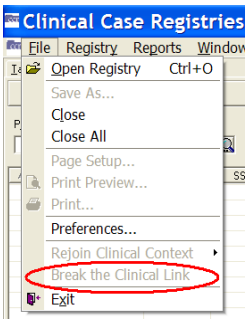


Figure 20– File | Break the Clinical Link menu option

When a CCOW Clinical Context link is active (allowing you to work on two different patients when multiple CCOW-compliant applications are open), this menu option enables you to discontinue the link. For example, if CCR and CPRS are both open and you would like to open a different patient file in each application, select Break the Clinical Link to de-synchronize the clinical data.

6.1.8. File | Exit menu option

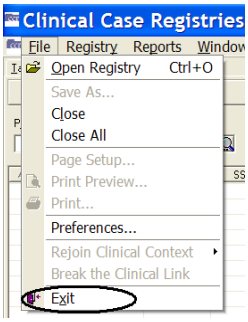
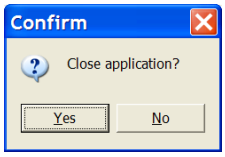


Figure 21– File | Exit menu option

The Exit menu option is used to close the CCR application and all open sessions. You will be prompted to confirm this selection:



6.2. Registry Menu

Clicking on Registry automatically takes you to the Registry tab and displays the following menu options:

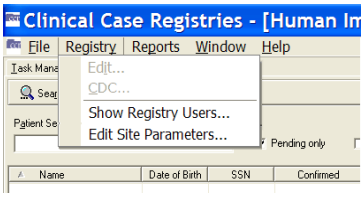


Figure 22 – Registry Menu Drop-Down List

- Edit... | Edit... or Confirm... | Confirm... (depending on circumstances; see below)
- CDC... (only if CCR:HIV is open)
- Show Registry Users...
- Edit Site Parameters...

6.2.1. Registry | Confirm/Edit menu option

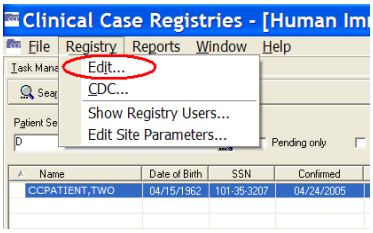


Figure 23 – Registry | Confirm/Edit menu option

This menu option will appear as Confirm... or Edit... depending on which patient is selected. If you select a patient with a status of Pending, the Confirm... menu option will allow you to open the patient record and verify that the patient does or does not belong in the registry. If you select a patient who has already been confirmed in the registry, the Edit... menu option allows you to update the patient's record. If you have not yet selected a patient, the option will be unavailable ("grayed-out").

6.2.2. Registry | CDC menu option (CCR:HIV only)

If CCR:HIV is open, and at least one patient has been found, clicking this option opens a window designed according to the CDC case report form. Select information already in the system (demographic data) is automatically inserted into the form. For information on the CDC form, see page 121.

6.2.3. Registry | Show Registry Users menu option

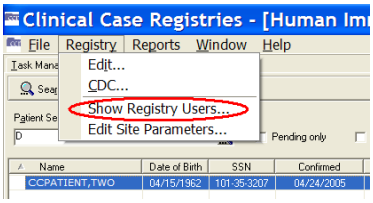


Figure 24 – Registry | Show Registry Users menu option

This menu option displays the Users of the Registry window. From this window, you can view the names of CCR users, their Internal Entry Number (IEN), and the type(s) of user access granted to each user.

CCR users can be granted one or more of the following types of access:

- User – can generate reports but not enter/ edit patient data
- Admin – can enter/edit patient data or registry parameters and generate reports
- IRM – can install, remove or change programming

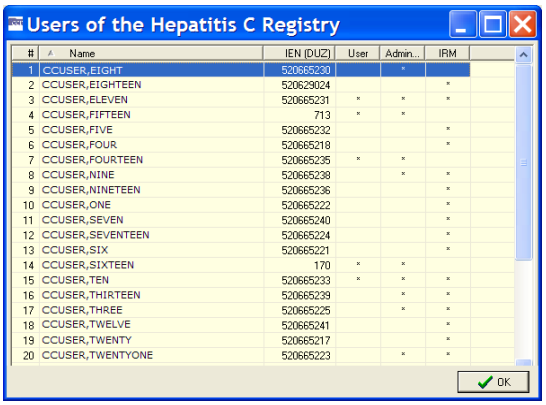


Figure 25 – Registry Users List

The type of access that is granted to a user is controlled by the assignment of Security Keys. For more information about security keys, see page 34.

6.2.4. Registry | Edit Site Parameters menu option

This menu option displays the Site Parameters window. From this window, you can add or remove values that define the system profile for each registry at the local facility. You will not be able to edit any of the national CCR values.

Use the following four tabs to set your local Site Parameters:

- Lab Tests
- Registry Meds
- Notifications
- Local Fields

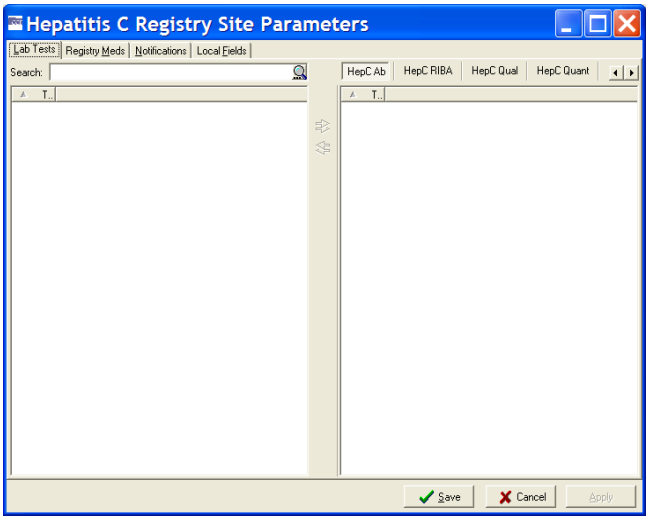


Figure 26 – Registry | Edit Site Parameters menu option

6.2.4.1. Lab Tests tab

Lab Tests From this tab, you can indicate which local lab tests (orderable items), from the `LAB TEST file #60`, are used for reporting registry-specific results. These values are used for reports throughout the CCR.

Important: If a facility has used numerous local names to refer to these tests over the years, then all of these test names should be selected, including those that have been "Z'd out" (a lab test that is no longer in use and has one or more "Z" characters appended to the beginning of the test name). **This is especially important at merged facilities**. Registry coordinators should confer with their clinical staff and Lab ADPAC to assure that all variations of test names are entered.

6.2.4.2. Registry Meds tab

Registry Meds From this tab, you can view two lists of medications used in the active registry: Local Registry Medications, and Generic Registry Medications.

- The Local Registry Medications list identifies registry-related drugs and dosages used at the facility but not already included in the National Registry Medication list. This list appears in the upper right pane and can be modified by local registry coordinators. In general there will be no or very few medications that are not already included in the National Registry Medication list.
- The Generic Registry Medications list contains all generic medications relevant to the registry that have been approved by the FDA as of June, 2008. The VA generic name is used because it includes all formulations and strengths of the drug. Local names for these medications are not displayed in this list. The Generic Registry Medications list appears in the lower right pane, and cannot be modified locally. As new medications receive FDA approval and are placed on the VA formulary, the National Registry Medications list in `ROR REGISTRY PARAMETERS File #798.1` will be updated.

In most cases, the local coordinator will not need to add to this list. An exception might be when a new medication (not just a different dosage form, but a new medication altogether) to treat the registry specific condition is FDA approved. It can take some time for the VA Generic name to be set up in the local system, and patients may receive the new medication prior to the VA Generic name being set up. In this situation the local dispensing pharmacy creates a local drug name for the new drug, which the coordinator can add to the Local Registry Medications list. When the VA Generic name is installed in the system, the local Pharmacy ADPAC links any previously created local drug names to the new VA Generic name.

6.2.4.3. Notifications tab

Notifications From this tab, you can add to or remove from the list of people who have been identified as registry coordinators or who have been selected to receive notifications. These users will receive alerts generated by the CCR system when a registry error occurs, such as a problem in the transmission of data or attempted access by an unauthorized user. Notifications are typically sent to the IRM support person and the registry coordinator.

6.2.4.4. Local Fields tab

Local Fields From this tab, you can create and define fields to track pertinent aspects of care for your local environment. For example, you can set up fields in the Hepatitis C registry to document sustained viral response and another to note that a patient refused a liver biopsy. These fields can be applied to a patient through the Patient Data Editor screen. Local fields are available to all users of the registry and are registry specific – if you create a field in CCR:HEPC, it will not appear in CCR:HIV.

6.3. Reports Menu

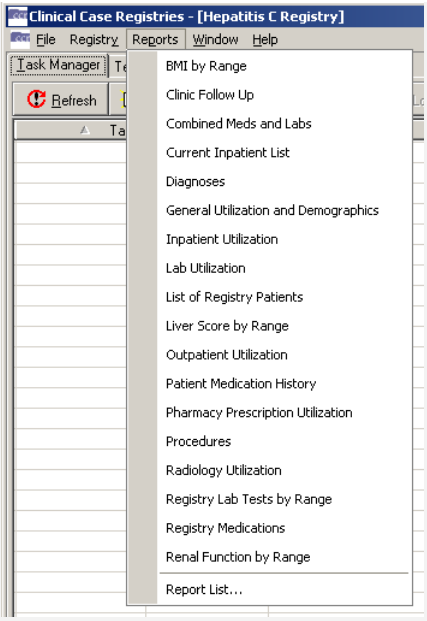
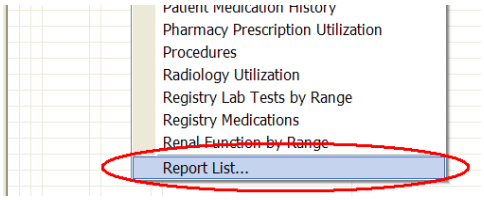


Figure 27 – Reports Menu Drop-Down List

The Reports menu displays the list of reports that are available to you, and also offers a Report List option. When you select a report from the list, a secondary Registry Reports window displays the specific parameters and criteria that you can select to generate the report. The Task Manager tab of the GUI is automatically activated when the Reports menu is opened.[B]

For details on individual reports, see Registry Reports.

6.3.1.



The Report List... option provides you with an alternate method of generating reports.

When you select this option, a secondary Registry Reports window displays two panes.

Figure 28 – Reports | Report List menu option

The left pane, under the heading List of Reports, displays an alphabetical list of the reports that are available to you. From this List of Reports, you can select the report to generate. The selected report is identified with an arrow.

The right pane displays the specific parameters and criteria that you can select to generate the report.

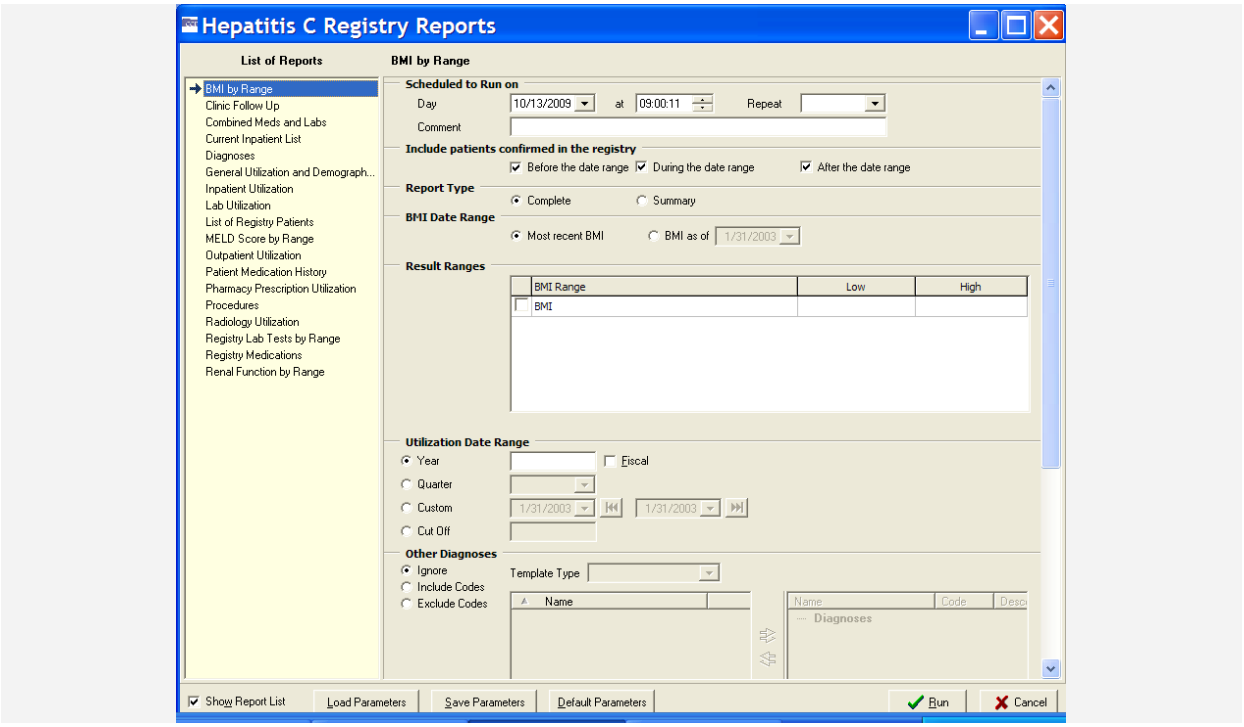
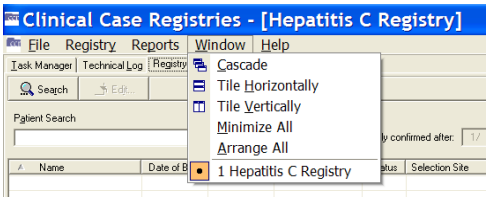


Figure 29 – Sample Report Setup Screen

For details on individual reports, see Registry Reports.

6.4. Window Menu



Each session of the registry and each report selected for display will appear in its own window within the larger CCR window. You can choose to display these windows in several ways using the Window menu to select the following menu options:

Figure 30 – Window Menu Drop-Down List

- The Cascade menu option allows you to cascade the view of all open windows. Cascading the windows stacks them so that each window title bar is visible.
- The Tile menu options – Tile Horizontally and Tile Vertically – allow you to view the windows in these display modes.
- The Minimize All menu option places the open windows in the minimized mode, meaning that the window is not open and cannot be viewed, but the title of the window is displayed in the bottom part of the CCR window.
- The Arrange All menu option arranges the icons of minimized child windows in the bottom part of the CCR main window.

In the area below the Arrange All menu option, you can view the number of open windows, including registry windows and any reports that are being viewed. The open windows are listed numerically in the order in which they were opened.

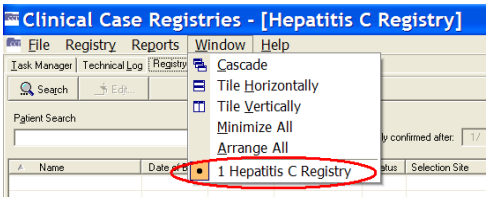
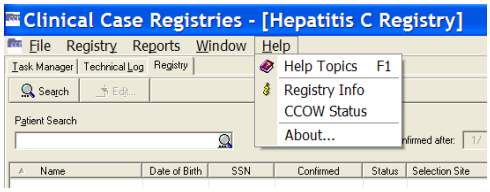


Figure 31 – Window | Active Registry

The current active window is identified with a bullet. To activate another window, click the desired window on the drop-down menu.

6.5. Help Menu

The Help menu displays the following menu options:



- Help Topics
- Registry Info
- CCOW Status
- About…

Figure 32 – Help Menu Drop-Down List

6.5.1. Help | Help Topics menu option

- The CCR Online Help file is launched from the Help Topics menu option, or by pressing **< F1 >.** The drop-down Help menu offers you the Help Topics page (sort of a table of contents for the help file), while **< F1 >** offers you help related to the specific screen and entry field that you are viewing when you press the key. Help files include instructions, procedures, and other information to help you use the CCR application. *Note:* The display you see in the actual help file may vary from the illustration below.

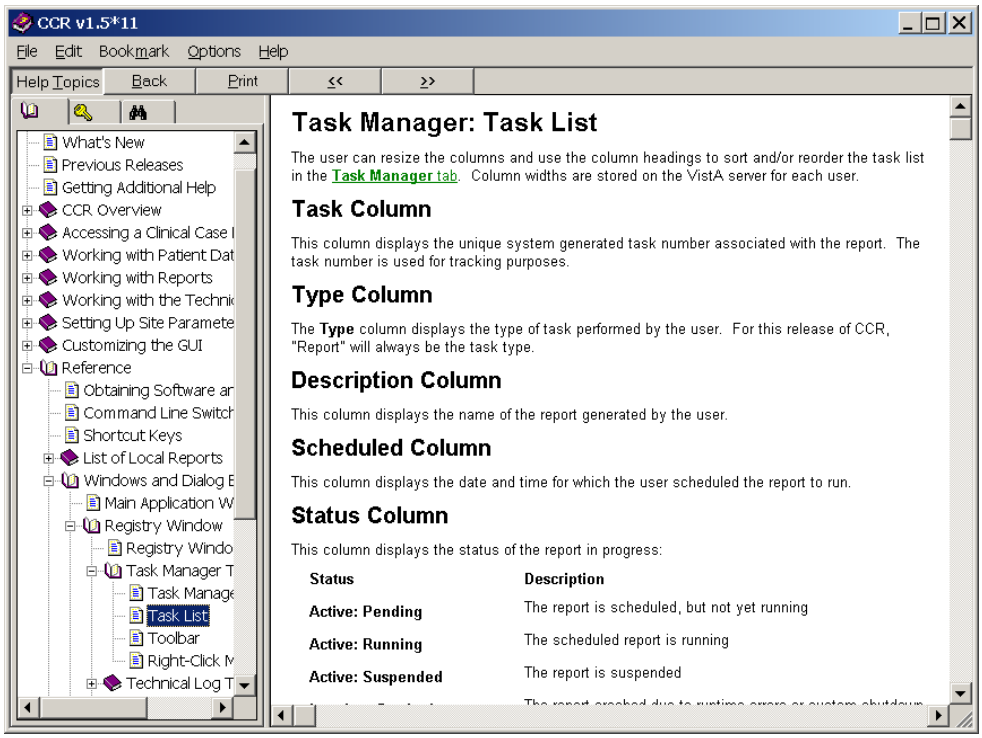
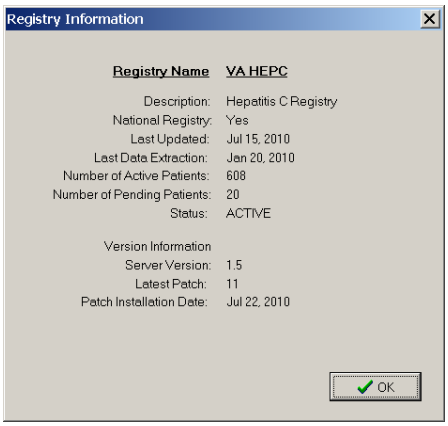


Figure 33 – Sample Online Help Page

6.5.2. Help | Registry Info menu option

The Registry Information pane is launched from the Help | Registry Info menu option.



This pane displays basic information about the active registry including the following items as shown in Figure 34:

- Date of the last registry update (the date any changes were made to your local registry list)
- Date of the last data extraction
- Number of active and pending patients in the registry during the last update
- Server version, latest patch number, and the patch installation date

Figure 34 – Help | Registry Info pop-up

6.5.3. Help | CCOW menu option

CCOW allows VistA applications to synchronize their clinical context based on the HL7 Clinical Context Object Workgroup standard. In simple terms, this means that if CCOW-compliant applications are sharing context and one of the applications changes to a different patient, the other applications will change to that patient as well.

The CCOW Status pane is launched from the CCOW menu option. It displays information about whether or not the Contextor software has been installed, and whether the application is participating in a clinical context.

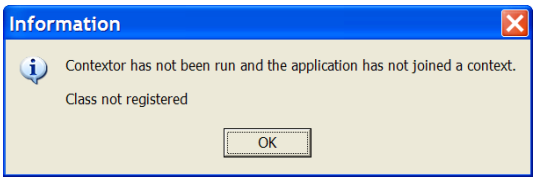


Figure 35 – Contextor Status pane

For more information about the CCOW standards for VistA applications, see the Workgroup web site at: http://vaww.VistA.med.va.gov/ccow/.

6.5.4. Help | About CCR menu option

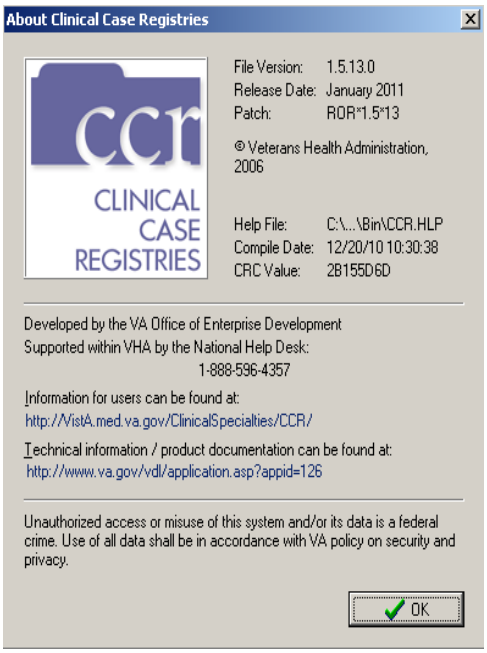


Figure 36 – Help | About pane

This menu option displays the About Clinical Case Registries pane. It shows basic information about the current file version including the release date, patch number, where the Clinical Case Registries software was developed and the software compile date. Click **[OK]** or press the **< Esc >** key to close the pane.

For CCR 1.5.10, this window was modified to meet current VA GUI Standards and Conventions requirements.

Use this option to determine which version of the **GUI** that you have installed. If the **GUI** and **VistA** software versions do not match, you may encounter problems with the application. For example, if your site has installed Patch `ROR*1.5*13`, your GUI should also be at Patch level 13.

7. Setting Up Site-Specific Parameters

Each medical center or site that uses CCR can set the following parameters:

- Lab Tests
- Registry Medications
- Notifications
- Local Fields
- Preferences (default settings)

7.1. Adding Lab Tests

Use the Lab Tests tab on the Site Parameters window to indicate which local lab tests (local test names) should be used to report HIV- or Hepatitis C-specific results.

Note: These parameters must be set up in order for the Registry Lab Tests By Range report to work properly.

1. From the Registry menu, select Edit Site Parameters. The same choices are available for either registry. Click the Lab Tests tab.

2. On the right pane, select a lab test category by clicking its tab. Note that the selected tab (HepC Ab in the example below) appears to be "depressed" on screen.

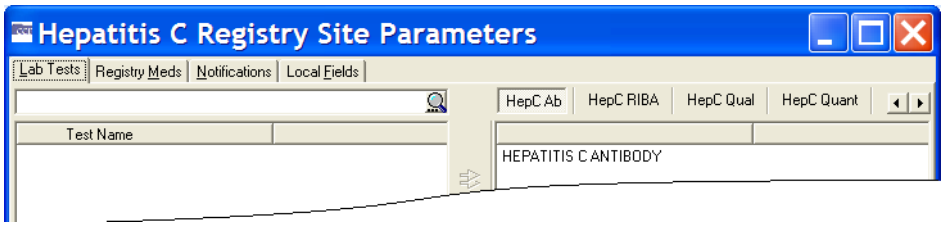


Figure 37 – Site Parameters panes

Depending on the size of the window, some of the available tabs may not appear at first. If this is the case, either expand the window, or use the left and right scroll buttons to display more choices.

CCR:HIV tabs include CD4 count, CD4 %, HIV Viral Load, HIV Ab and HIV Western blot.

CCR:HEPC tabs include HepC Ab, HepC RIBA, HepC Qual, HepC Quant, and HepC Genotype.

3. In the search box on the left pane, type a partial or full name of the test you want to add in the Target field, and then press **< Enter >** or click the **[Start Search]** command icon (magnifying glass) ( ).

Note: The system will search for tests using *begins with* criteria. That is, the search will find tests whose names *begin with* the letters typed in the target field. If the characters you supply are merely *contained in* the test name, the test will not be found.

Important: **[Search]** entries must be in ALL UPPER-CASE characters. Using lower-case or mixed-case entries will not work!

Important: When you start a search, the magnifying glass icon changes to a red X ( ) (although you may not see this, if the search is a short one). Click the X (or press **< Ctrl >+< Alt >+< C >**) to stop the search at any time.

The left-side pane displays the test(s) which match the criteria in the Target field. From the left-hand pane, select the test(s) that you want to add to the tab you have selected in the right-side pane, and then click the right arrow ( ) to transfer the selected test(s) to the right-side pane. You can add *all* the tests shown on the left-side pane by clicking the double right arrow ( ):

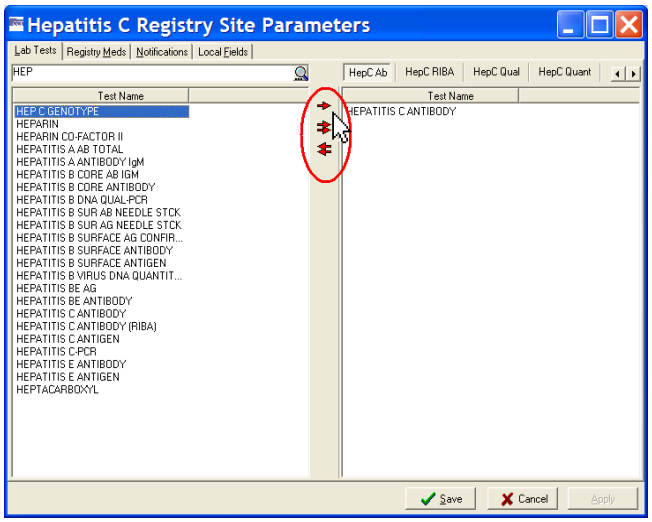


Figure 38 – Adding Tests to Site Parameters

Conversely, you can use the double left arrow to remove all tests from the right pane.

See also 3.3.8 above for information on using assistive technology with this and similar screens.

Important: If a facility has used numerous local names to refer to these tests over the years, then all of these test names should be selected, including those that have been "Z'd out" (a lab test that is no longer in use and has one or more "Z" characters appended to the beginning of the test name). **This is especially important at merged facilities**. Registry coordinators should confer with their clinical staff and Lab ADPAC to ensure that all variations of test names are entered.

4. Save Click the **[Save]** button to save any changes…

   Cancel …or click **[Cancel]** to close without saving.

Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **[Save]** button.

7.2. Removing Laboratory Tests

Use the Site Parameters window to remove local lab tests (local test names) from the report categories used to report HIV- and Hepatitis C-specific information.

From the Registry menu, select Edit Site Parameters. The same choices are available for either registry. Click the Lab Tests tab.

On the right pane, select a lab test category by clicking its tab. Note that the selected tab (HepC Ab in the example below) appears to be "depressed" on screen.

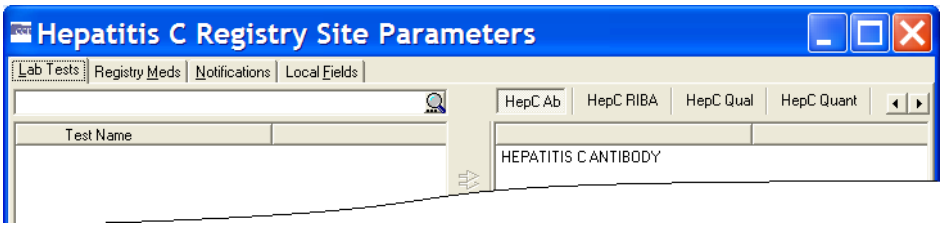


Figure 39 – Site Parameters panes

Depending on the size of the window, some of the available tabs may not appear at first. If this is the case, either expand the window, or use the left and right scroll buttons ( ) to display more choices.

The right-side pane displays a list of the laboratory tests that have been added to each report category type.

1. On the right pane, select a lab test category by clicking its tab. A list of the tests associated with the selected category displays in the right side pane.

2. Select the test(s) from the right side pane that you want to remove. The left red arrow (←) becomes available. Click the left arrow to delete the selected test(s) from the right side pane.

See also 3.3.8 above for information on using assistive technology with this and similar screens.

3.  Click the **[Save]** button to save any changes…

 …or click **[Cancel]** to close without saving.

Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **[Save]** button.

7.3. Adding Registry Medications

(See Adding Lab Tests for illustrations of adding laboratory tests. The general process of adding Registry Medications is similar.)

Use the Registry Meds tab on the Site Parameters window to identify medications and dosages used at the facility that are not included in the Generic Registry Medications list. The medications included in the Generic Registry Medications are listed in the lower right pane.

Registry medications are used to treat the condition being tracked and not complications of the disease or its treatment. For example, the CCR:HIV tracks antiretrovirals but not PCP prophylaxis drugs; the CCR:HEPC tracks peginterferon and ribavirin but not epoetin.

In most cases, the local coordinator will not need to add to this list. An exception might be when a new medication (not just a different dosage form, but a new medication altogether) to treat the registry specific condition is FDA approved. It can take some time for the VA Generic name to be set up in the local system, and patients may receive the new medication prior to the VA Generic name being set up. In this situation the local dispensing pharmacy creates a local drug name for the new drug, which the coordinator can add to the Local Registry Medications list. When the VA Generic name is installed in the system, the local Pharmacy ADPAC links any previously created local drug names to the new VA Generic name.

1. From the Registry menu, select Edit Site Parameters. The same choices are available for either registry. Click the Registry Meds tab.
2. At the top of the left-side pane, type a partial or full name of the drug you want to add in the Target field, and then press **< Enter >** or click the **[Start Search]** button (magnifying glass icon).

Note: The system will search for drugs using *begins with* criteria. That is, the search will find drugs whose names *begin with* the letters typed in the target field. If the characters you supply are merely *contained in* the drug name, the test will not be found.

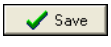
Important: **[Search]** entries must be in ALL UPPER-CASE characters. Using lower-case or mixed-case entries will not work!

Important: When you start a search, the magnifying glass icon changes to a red X () (although you may not see this, depending on how long the search takes). Click the X (or press **< Ctrl >+< Alt >+< C >**) to stop the search at any time.

The left-side pane displays the drugs that match the criteria in the Target field.

3. Select the drug(s) you want to add from the left-side pane, and then click the right arrow or double-click the name to transfer the selected drug(s) to the upper right-side pane. Add all drugs on the left-side pane by clicking the double right arrows.

See also 3.3.8 above for information on using assistive technology with this and similar screens.

4. 

Click the **[Save]** button to save any changes…

…or click **[Cancel]** to close without saving.

Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **[Save]** button.

7.4. Removing Registry Medications

(See Removing Laboratory Tests for illustrations of removing laboratory tests. The general process of removing Registry Medications is similar.)

It is generally *not necessary to remove* a mediation form this list unless it was somehow entered in error. Even if a medication used historically becomes outdated and no longer used, it should remain on the list, because removing it would mean the software would omit past instances in which it was used to treat the registry condition. You can remove local names for registry medications from the Registry Meds tab on the Site Parameters window.

1. From the Registry menu, select Edit Site Parameters, and then click the Registry Meds tab.

   The upper right-side pane displays a list of the medications identified as being used locally at the facility, in addition to the generic medications listed in the lower right-side pane.

2. From the upper right-side pane, select the drug(s) to remove, and then click the left arrow (←) to delete the drug(s) from the list.

See also 3.3.8 above for information on using assistive technology with this and similar screens.

3. Save Click the **[Save]** button to save any changes…

   Cancel …or click **[Cancel]** to close without saving.

Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **[Save]** button.

7.5. Adding Notifications

(See Adding Lab Tests for illustrations of adding laboratory tests. The general process of adding Notifications is similar.)

Certain users such as IRM staff and Registry Coordinators can receive system-generated notifications and alerts when problems occur with the registry, such as a problem in the transmission of data or attempted access by an unauthorized user. Use this procedure to assign these alerts through the Registry menu.

1. From the Registry menu, select Edit Site Parameters, and then click the Notifications tab.
2. Enter a partial or full surname of the user you want to add in the Target field at the top of the left hand pane, and then press **< Enter >** or click the **[Start Search]** button (magnifying glass icon).

Note: The system will search for users using *begins with* criteria. That is, the search will find users whose names *begin with* the letters typed in the target field. If the characters you supply are merely *contained in* the user's name, the user will not be found.

Important: **[Search]** entries must be in ALL UPPER-CASE characters. Using lower-case or mixed-case entries will not work!

Important: When you start a search, the magnifying glass icon changes to a red X () (although you may not see this, depending on how long the search takes). Click the X (or press **< Ctrl >+< Alt >+< C >**) to stop the search at any time.

The left-side pane displays a list of users matching the criteria in the Target field.

Tip: Clicking the **[Start Search]** button when the Target field is empty will return all selectable user names in the left-side pane. This is the entire list of all people with VistA access and would likely take several minutes to process, often exceeding the system timeout parameter. There are few if any times when this option would be used.

3. From the left-side pane, select the name of the user(s) to add, and then click the right arrow or double-click the name to transfer it to the right-side pane. Add all users on the left-side pane by clicking the double right arrow.

See also 3.3.8 above for information on using assistive technology with this and similar screens.

4. Save Click the **[Save]** button to save any changes…

   Cancel …or click **[Cancel]** to close without saving.

Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **[Save]** button.

7.6. Removing Notifications

(See Removing Laboratory Tests for illustrations of removing laboratory tests. The general process of removing Notifications is similar.)

Warning: Users who are removed from the Notifications list will no longer receive system-generated alerts when problems occur. However, removing a name from the Notifications list does *not* remove that person's access to the registry.

Notifications are managed through the Notifications tab on the Site Parameters window.

1. From the Registry menu, select Edit Site Parameters, and then click the Notifications tab.

   The right-side pane displays a list of users who are currently set to receive notifications.

2. From the right-side pane, select the name of the user(s) to remove, and then click the left arrow to delete the name of the user from the list.

See also 3.3.8 above for information on using assistive technology with this and similar screens.

3. Save Click the **[Save]** button to save any changes…

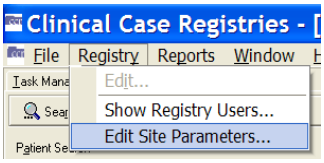
   Cancel …or click **[Cancel]** to close without saving.

Note: You will be prompted to save or cancel your changes if you attempt to close the window without first clicking the **[Save]** button.

7.7. Adding Local Fields

Local Fields can be used to track pertinent aspects of care in your local environment. For example, you can add fields to track which patients attended an educational group session, or track a particular test result. These will be available to all users of the registry and are registry specific – if you create a field in CCR:HEPC, it will not appear in CCR:HIV.

From the Registry menu, select Edit Site Parameters.



The same choices are available for either registry.

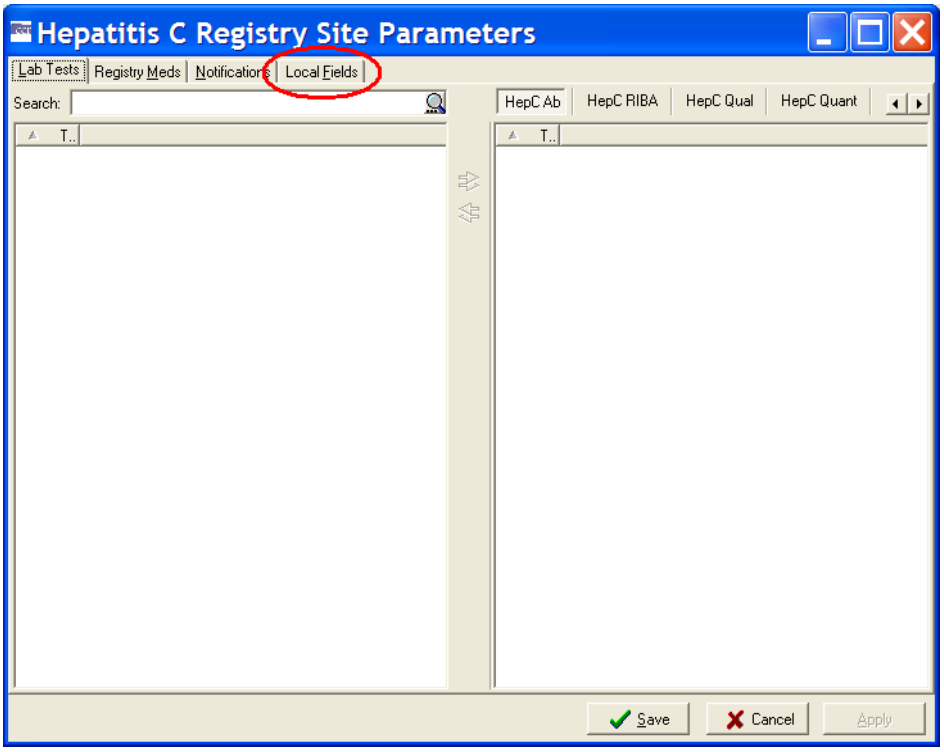


Figure 40 – Edit Site Parameters | Selecting Local Fields tab

Local Fields Click the Local Fields tab.

The Local Fields window contains the list of pre-defined local fields, if any…

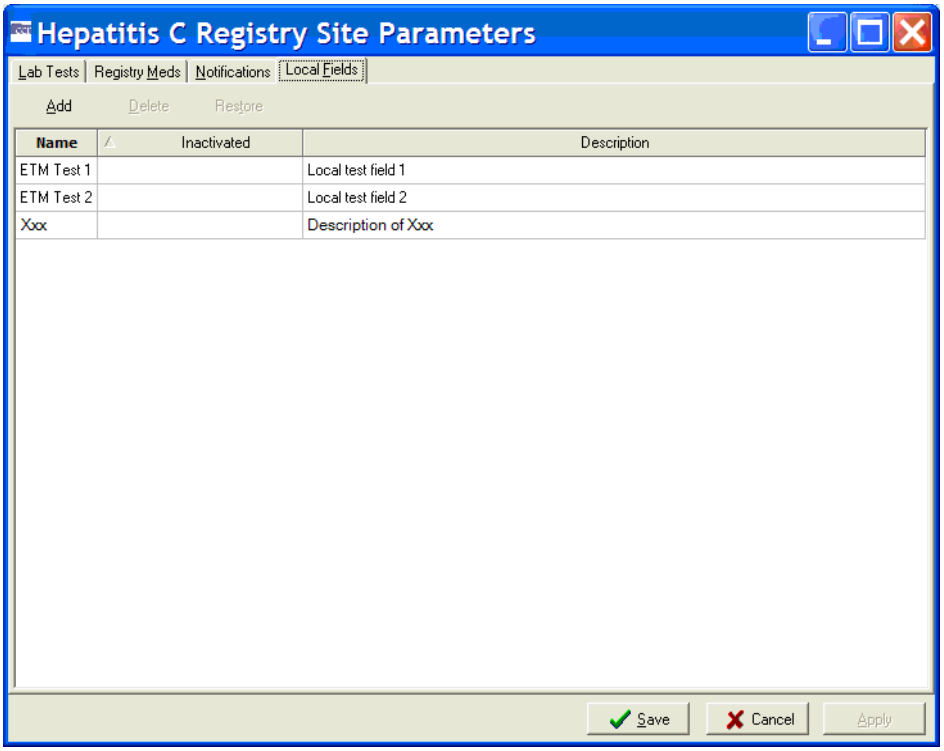


Figure 41 – Edit Site Parameters | Local Fields tab

If no local fields have been defined, the window will be empty, and the **[Add]** command icon will be available…

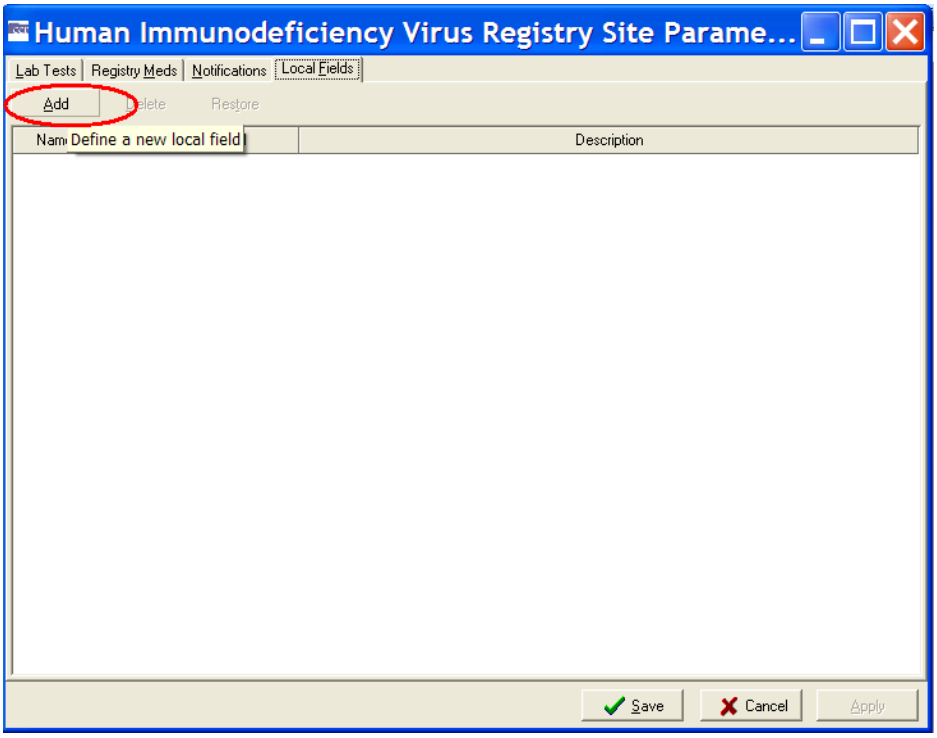
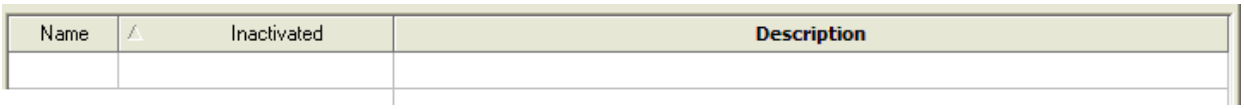


Figure 42 – Edit Site Parameters | Local Fields tab (Add button)

In either case, the process of adding a local field is the same.

1. Click the **[Add]** command icon. A blank entry row appears in the list. Note that the row background is white, indicating fields in which you can enter data:



2. Click inside the Name field and enter a brief label that reflects what the field means. This label will appear in the Patient Data Editor window, so it needs to be clear what the field indicates.
3. Click the Description field and enter a concise description for the new field.

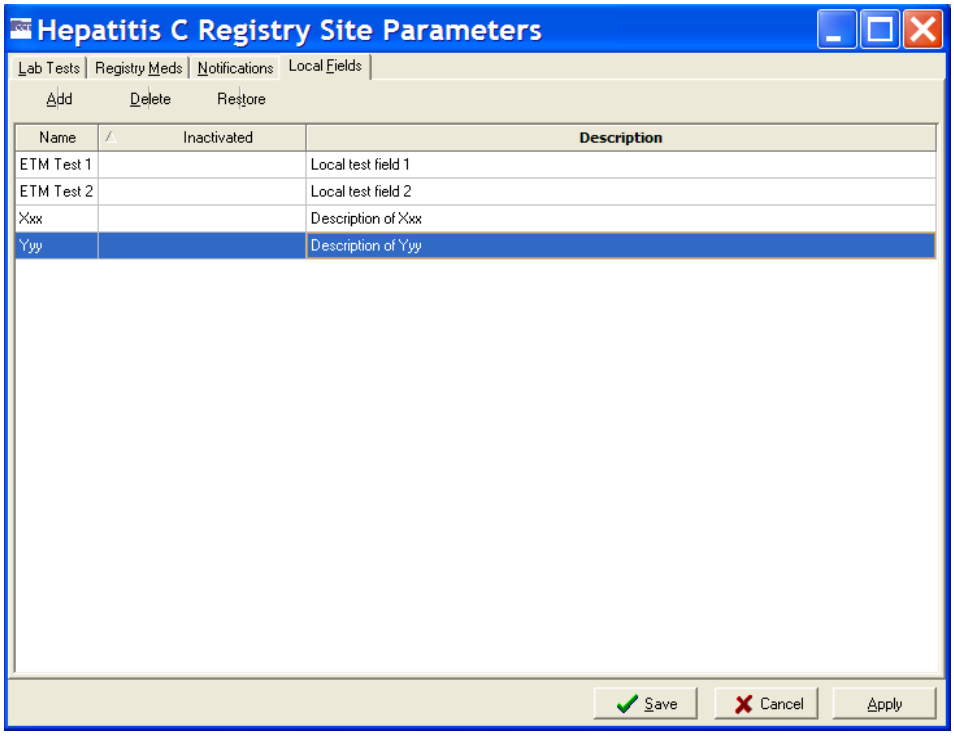


Figure 43 – Edit Site Parameters | Adding a Local Field

4. Click **[Apply]** to save the new field and continue to work with local fields, or click **[Save]** to save the new field and close the window. Click **[Cancel]** to close without saving.

To verify that the newly created field is operational, open a patient record in the Patient Data Editor (see Confirming a Pending Patient Record) and click on the Local Fields tab. The newly-created field will be available there.

7.8. Inactivating or Deleting Local Fields

Tip: If a Local Field is no longer needed, you can inactivate it or delete it. **In most cases it is preferable to inactivate a local field, rather than delete it.** Inactivated local fields remain on this list but no longer appear elsewhere in the registry, such as in the Patient Data Editor window or as choices when running reports. Inactivated fields can be reactivated for use at a later date. Deleted local fields are removed from the system entirely and **cannot** be restored.

1. From the Registry menu, select Edit Site Parameters, and then click the Local Fields tab.

   The Local Fields window opens, containing the list of existing local fields.

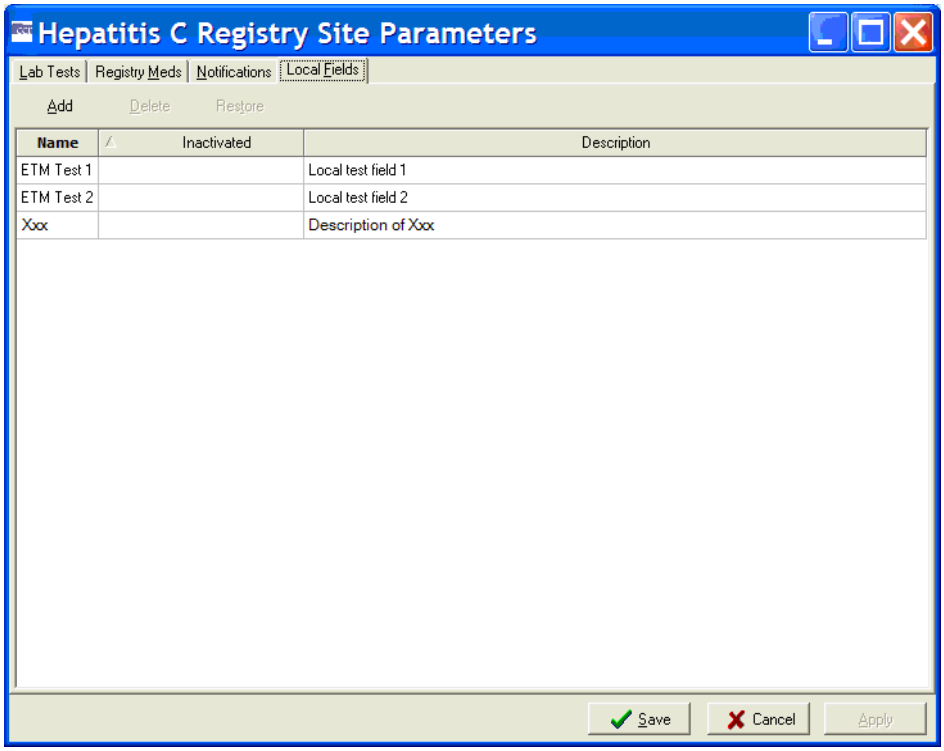


Figure 44 – Edit Site Parameters | Local Fields tab (showing existing Local Fields)

2. Delete Note that the **[Delete]** command icon is unavailable. Click a field to select it.

   Delete The **[Delete]** command icon becomes available.

3. Click the **[Delete]** command icon. A confirmation dialog box opens:

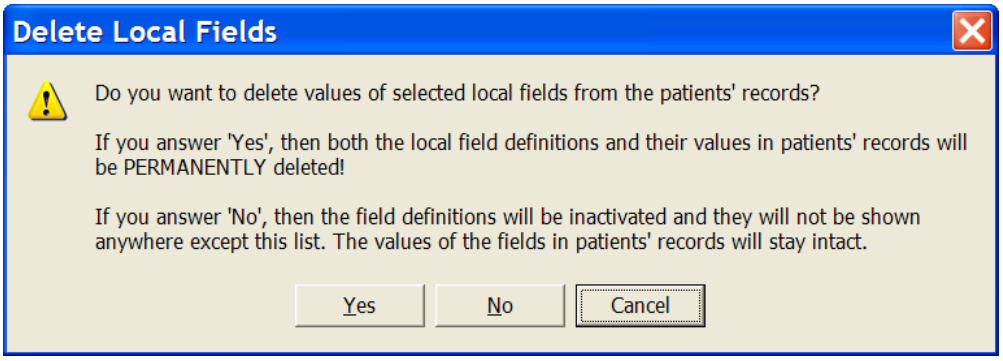


Figure 45 – Delete Local Fields Confirmation pop-up

- Click **[Yes]** to *delete the field* and remove all of its related values from patient records.

- Click **[No]** to *inactivate the field* and leave the related values in patient records. "Inactivated" fields will not appear in the Patient Data Editor window or in reports, but they will appear on this list.
- Click **[Cancel]** to leave the selected field as it is.

7.9. Reactivating Local Fields

If a Local Field has been inactivated, you can reactivate or "restore" it (deleted fields cannot be restored).

1. From the Registry menu, select Edit Site Parameters, and then click the Local Fields tab.

   The Local Fields window opens, containing a list of existing local fields. An inactivated local field has a date in the Inactivated column.

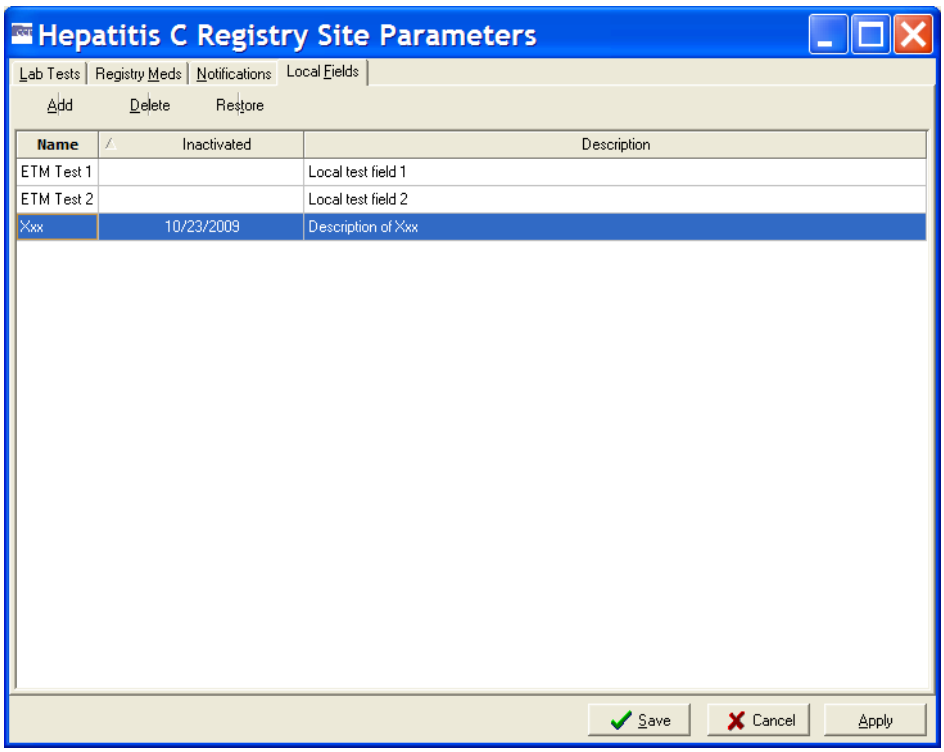


Figure 46 – Edit Site Parameters | Local Fields tab (showing Inactivated Field)

2. Click an inactivated Local Field to select it, and then click the **[Restore]** command icon. Or, right-click the field and select Restore from the context menu:

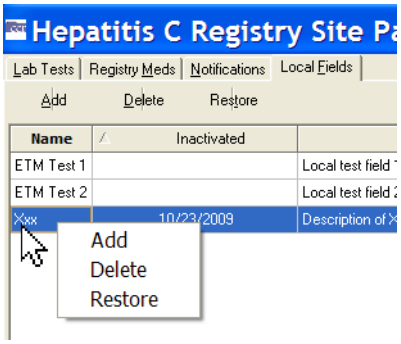


Figure 47 – Edit Site Parameters | Local Fields Context menu

The date is removed from the Inactivated column, and the local field is available to use again.

3. Apply Click **[Apply]** to save the restored field and continue to work with Local Fields…

Save … or click the **[Save]** button to save the restored field and continue to work with Local Fields…

Cancel …or click **[Cancel]** to close the Local Fields pane without saving.

7.10. Confirming Local Field Changes

If you make any changes on the Local Fields pane, you will be prompted to save your work when you close the pane:

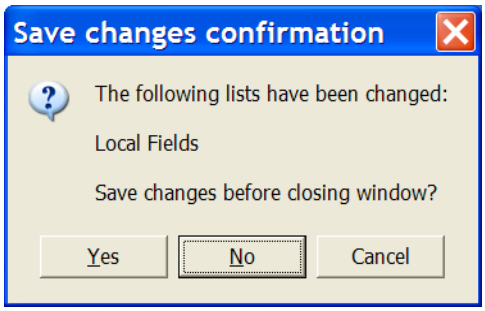


Figure 48 – Edit Site Parameters | Local Fields Change confirmation

Yes Click **[Yes]** to save any changes made and close…

No … or click the **[No]** button to discard any changes and close…

Cancel …or click **[Cancel]** to close the Local Fields pane without saving any changes.

7.11. Changing System Default Settings

The following settings allow you to customize the way your system performs and how the GUI looks.

7.11.1. Changing the Maximum Number of Patients to Retrieve

You can speed up your searches by limiting the number of patients to be retrieved in each search. Be aware, however, that setting a lower value in registries with large numbers of patients may result in incomplete reports.

1. From the File menu, select Preferences.

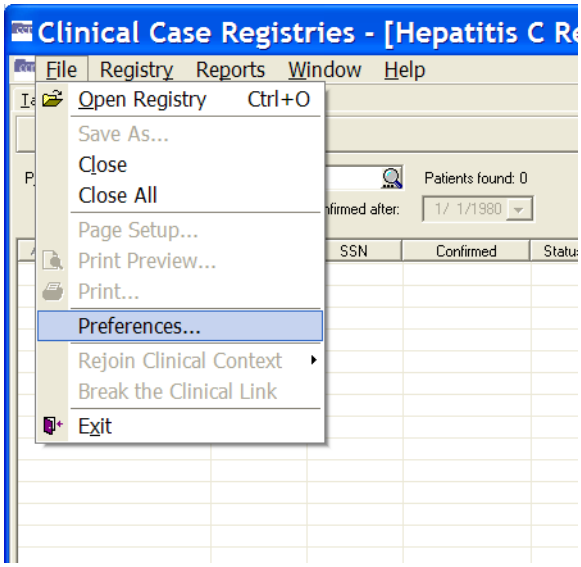


Figure 49 – File | Preferences menu option

The Preferences window displays.

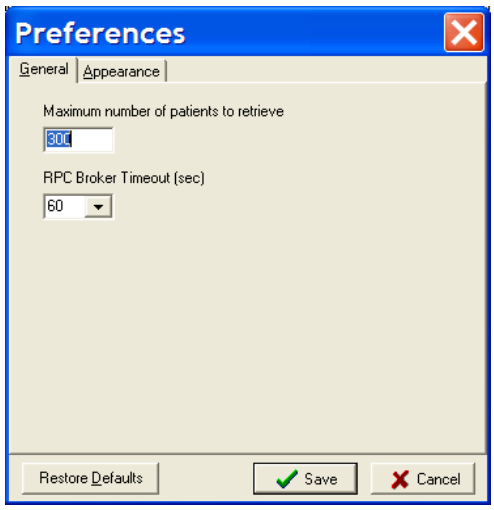


Figure 50 – Preferences window

2. On the General tab of the Preferences window, type the maximum number of patients to retrieve in the applicable field.

Tip: The default number of maximum patients to retrieve is 300. In registries with larger volumes of patients, it will be helpful to set this value fairly high.

3. Restore Defaults Click the **[Restore Defaults]** button to restore the default values…

   Save …or click the **[Save]** button to save any changes…

   Cancel …or click **[Cancel]** to close without saving.

   The Preferences window automatically closes.

7.11.2. Changing the RPC Broker Timeout Parameter

1. Select Preferences from the File menu.

   The Preferences window displays. Make sure the General tab is selected.

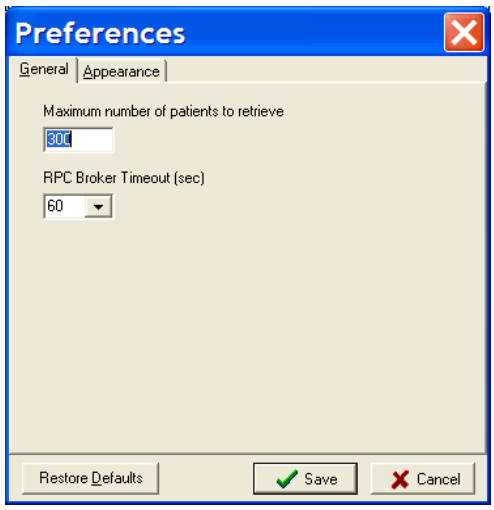


Figure 51 – Preferences window (Broker Timeout)

2. Tab to (or click in) the RPC Broker Timeout (sec) field. Select the number of seconds from the RPC Broker Timeout (sec) dropdown list.

Tip: The default number of seconds before timeout is 60.

3. Restore Defaults Click the **[Restore Defaults]** button to restore the default values…

   Save …or click the **[Save]** button to save any changes…

   Cancel …or click **[Cancel]** to close without saving.

   The Preferences window automatically closes.

7.11.3. Changing the Screen Colors and Options

1. Select Preferences from the File menu.

   The Preferences window displays.

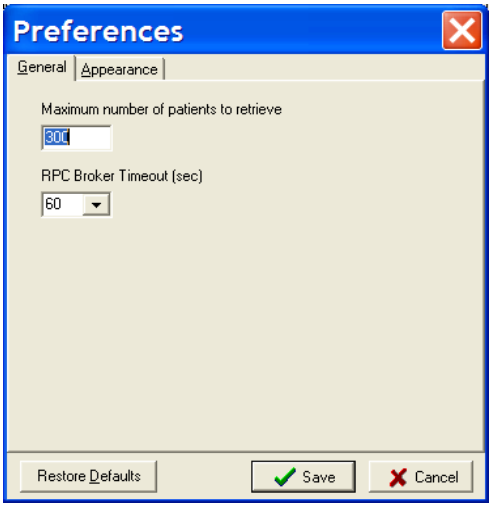


Figure 52 – Preferences window (General tab displayed)

2. Click the Appearance tab. The Appearance pane displays:

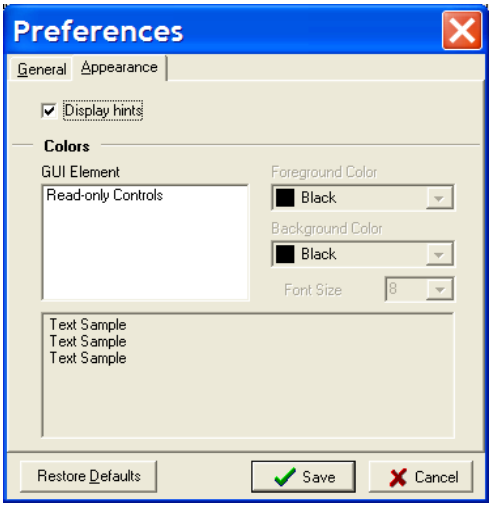


Figure 53 – Preferences window (Appearance tab displayed)

3. Display hints Click the Display Hints checkbox to enable tool tips throughout the application.
4. Click a GUI Element name (for example, *Read-only Controls*) to select it and activate the color options.

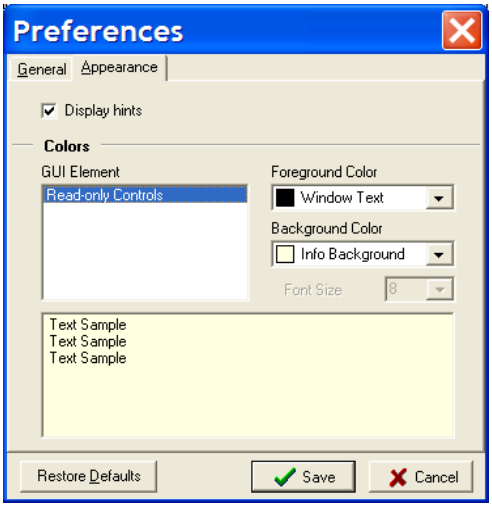


Figure 54 – Preferences window (Appearance | Colors)

5. Select a Foreground Color from the drop-down list to set the text color for the selected element. You may select from approximately 20 actual colors, or match the element to some color scheme already set for your Windows installation.

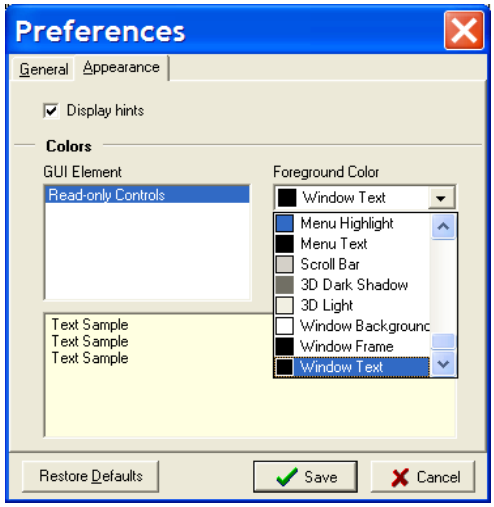


Figure 55 – Preferences window (Appearance | Colors | Foreground)

6. Restore Defaults Click the **[Restore Defaults]** button to restore the default values…

   Save …or click the **[Save]** button to save any changes…

   Cancel …or click **[Cancel]** to close without saving.

   If you select **[Save]** or **[Cancel]**, the Preferences window automatically closes. Otherwise, continue below.

7. Select a Background Color from the drop-down list to set the background color for the selected element. Repeat the process shown above to modify Background Color. Again,

you may select from approximately 20 actual colors, or match the element to some color scheme already set for your Windows installation. Be careful not to select a background color that's the same color as the foreground color previously selected!

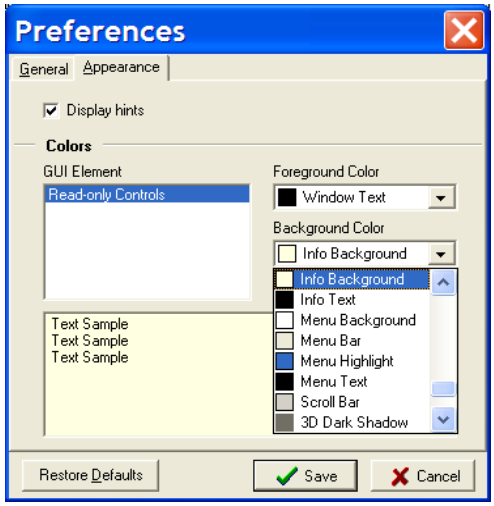


Figure 56 – Preferences window (Appearance | Colors | Background)

The selected colors are shown in the Text Sample box at the bottom of the Options window.

8. Restore Defaults Click the **[Restore Defaults]** button to restore the default values…

   Save …or click the **[Save]** button to save any changes…

   Cancel …or click **[Cancel]** to close without saving.

   The Preferences window closes and selected colors and options are displayed throughout the GUI.

7.11.4. Restoring Default GUI Settings

1. From the File menu, select Preferences.

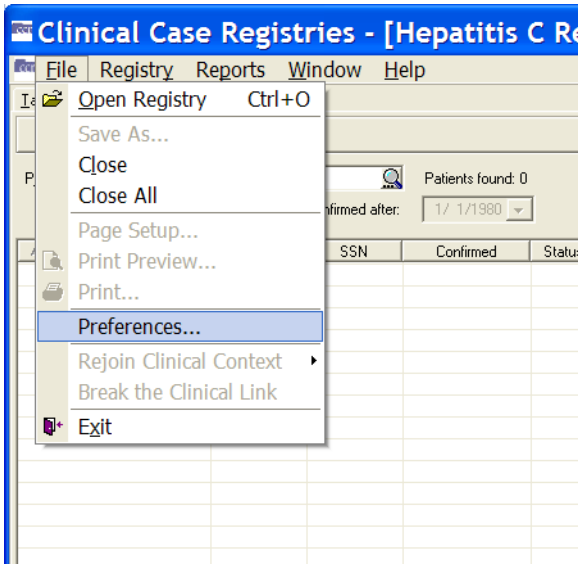


Figure 57 – File | Preferences menu option

The Preferences window displays:

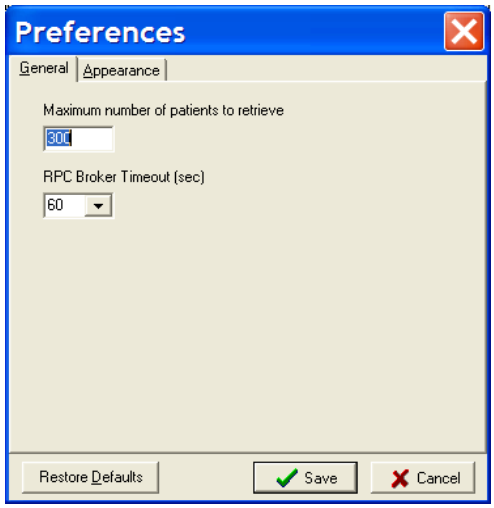


Figure 58 – Preferences window (General tab displayed)

2. Restore Defaults Click the **[Restore Defaults]** button.

   The system defaults are displayed in the Preferences window.

3. Save Click the **[Save]** button to save any changes…

   The system defaults are restored for all options and the Preferences window automatically closes.

THIS PAGE INTENTIONALLY LEFT BLANK

8. Registry Window Tabs

When you open a registry, a "child" window is displayed inside the main application window. This window contains registry-specific interface elements. When the registry window is activated, the main menu of the application is updated with the registry-specific menus and options.

The main Registry window is divided into sections that are accessible through the Task Manager, Technical Log, and Registry tabs.

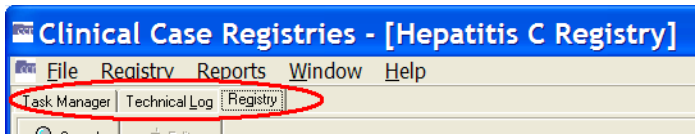


Figure 59 – Three Major Tabs

8.1. Task Manager tab

The Task Manager tab displays a list of the reports that a user has generated. Each report is associated with a task number. Adjacent to the task number is the name of the report, the date and time that the report is scheduled to run, the status of the report, its progress, the date and time the report was completed and any comments that were entered when the report was selected.

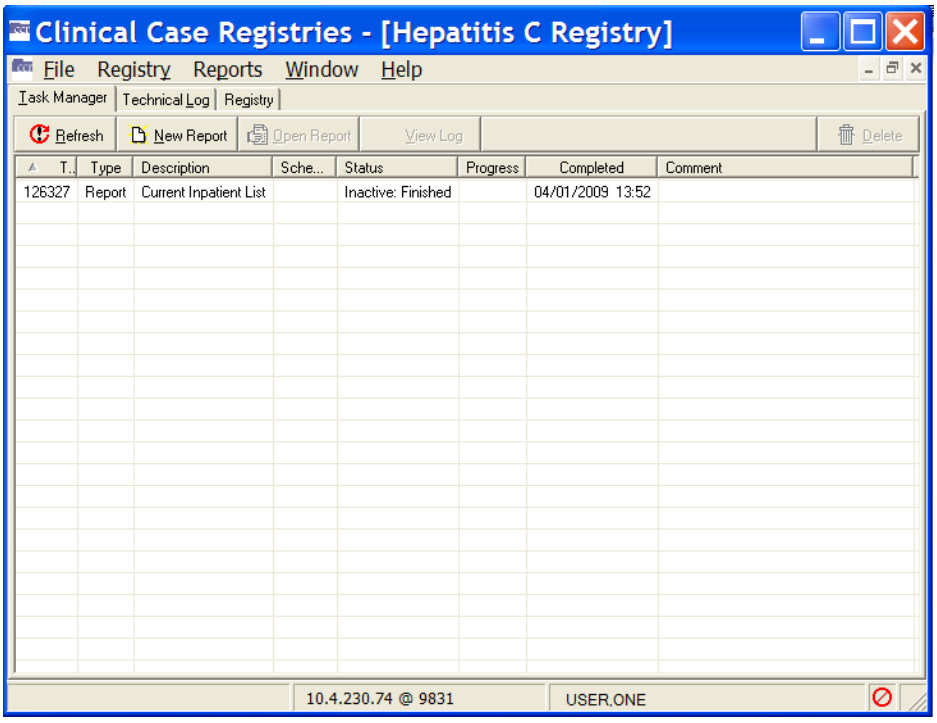


Figure 60 – Task Manager tab

Tip: Completed reports appear on the Task Manager tab for 14 days after they finish running, at which point they are automatically deleted from the list. To save a report for use beyond that 14 day period, see the instructions on page 95.

You can sort the information displayed on the Task Manager tab in ascending or descending order by clicking the column headings.

From the Task Manager tab, you can view completed reports, generate new reports, delete generated reports from the list, and check the status of reports that are in progress.

8.1.1. Task column

Task The Task column displays the unique system generated task number associated with the report. The task number is used for tracking purposes. This column is frequently displayed with all except the letter "T" hidden; you may have to expand the column width to see the full label.

8.1.2. Type column

Type The Type column displays the type of task performed by the user. For this release of the CCR, the task type will always be Report.

8.1.3. Description column

Description The Description column displays the name of the report.

8.1.4. Scheduled column

Scheduled The Scheduled column displays the date and time at which the report is scheduled to run.

8.1.5. Status column

Status The Status column displays the status of the report in progress. The following table lists the status values and their meanings.

Table 21 – Task Manager Status Column Entries

Status	Description
Active: Pending	The report is scheduled, but not yet running
Active: running	The scheduled report is running
Active: Suspended	The report is suspended
Inactive: Crashed	The report crashed due to runtime errors or system shutdown

Status	Description
Inactive: Errors	The report was completed with errors (the results can be incomplete)
Inactive: Finished	The scheduled report was completed successfully
Inactive: Interrupted	The report was stopped by the user (using the VistA Menu option)
Stopping	The user attempted to delete the report task, but the report has not yet been deleted from the system.

8.1.6. Progress column

Progress The Progress column displays the progress of the report as a percentage of completion.

8.1.7. Completed column

Completed The Completed column displays the date and time the report completed running.

8.1.8. Comment column

Comment The Comment column displays the text from the Comment field on the Report setup window, if any. This column displays up to 60 characters.

8.1.9. Refresh button

Refresh The **[Refresh]** button updates the Task Manager tab by displaying any new data on the status of reports that has been added since the window was accessed.

Note: Clicking the **[Refresh]** button does *not* update the data contained in a report that has already completed.

8.1.10. New Report button

New Report The **[New Report]** button displays the Registry Reports window from which you can select and generate new reports.

8.1.11. Open Report button

Open Report The **[Open Report]** button allows you to view a selected report.

Open Report If no report is selected in the Task Manager tab, this button will be deactivated ("grayed out").

8.1.12. View Log button

View Log The **[View Log]** button switches the main window display from the Task Manager tab to the Technical Log tab and displays detail for the selected report. See the Technical Log Tab section (page 100) for more information.

View Log If no report is selected in the Task Manager tab, this button will be unavailable ("grayed out").

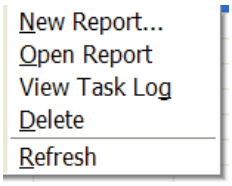
8.1.13. Delete button

Delete The **[Delete]** button allows you to delete a selected report from the Task Manager tab display. You will be prompted to confirm that the selected report should be deleted.

Delete If no report is selected, the **[Delete]** button will be unavailable ("grayed out").

8.1.14. Right-Click Menu options

The following menu options are available from the Task Manager tab display when you click the right mouse button anywhere on the tab:



- New Report...
- Open Report
- View Task Log
- Delete
- Refresh

Figure 61 – Task Manager Context Menu options

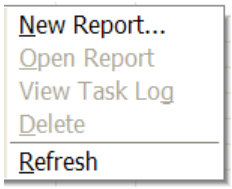


Figure 62 – Task Manager Context Menu options (some unavailable)

The Open Report, View Task Log, and Delete menu options are only activated and selectable when you click the right-side mouse button on a task. If you right-click elsewhere, these options are unavailable ("grayed out").

8.2. Managing Reports from the Task Manager view

8.2.1. Viewing a Report

Use the **[Open Report]** button from the Task Manager tab to view a selected report:

1. From the task list in the Task Manager window, select the report you want to view.

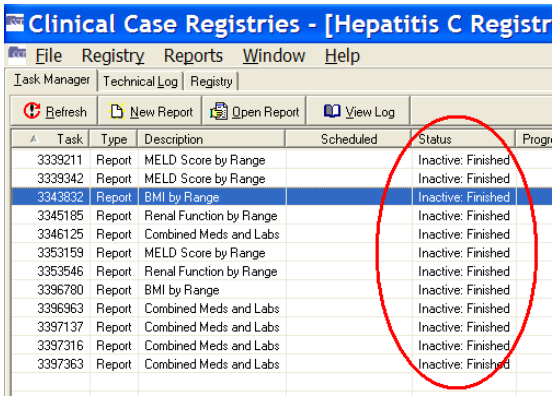


Figure 63 – Task Manager tab Showing Status Column

Note: Check the Status column to be sure that the report has finished running (Inactive:Finished).

2. Open Report Once you select a report, the **[Open Report]** button becomes available. Click the **[Open Report]** button, or double-click the selected report.

The selected report displays; the BMI by Range report is seen here as an example.

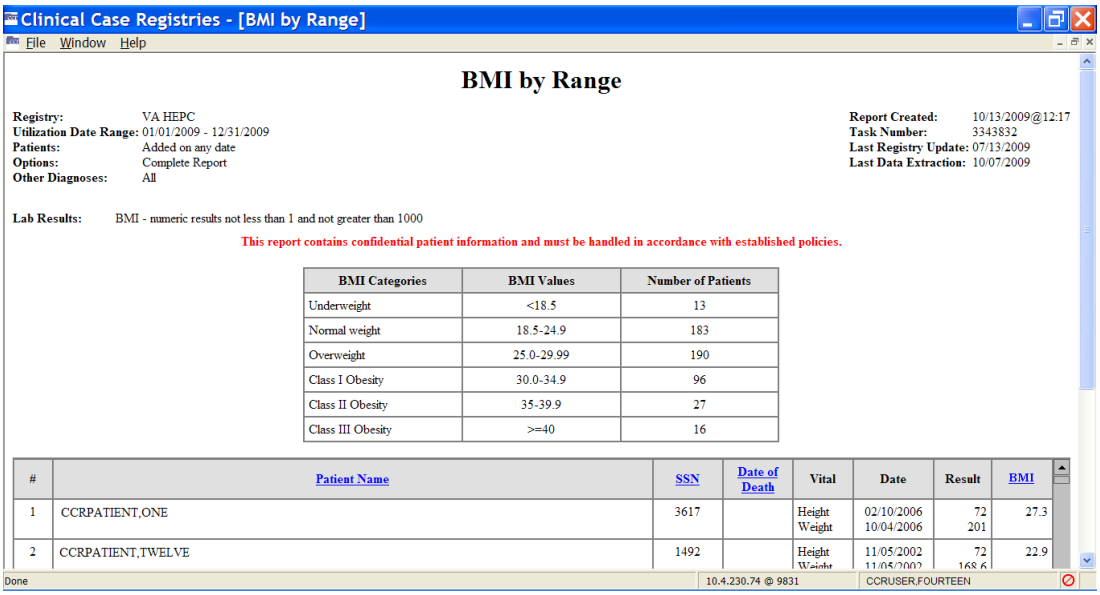


Figure 64 – Sample Report Output

Note: If the report is large, it may take several minutes for the report to display. The screen will temporarily appear blank and the words "Loading and Transforming the report" will appear in the bottom left hand corner while the report is loading for display. Please be patient.

To open multiple reports for viewing, minimize the open report or select the registry name from the Window menu, then repeat steps 1 and 2. Or, press **< Ctrl > + < F6 >** to switch back to the Task Manager view, and then repeat steps 1 and 2.

8.2.2. Copying Text from a Report

When viewing a report, you can copy and paste the report text.

1. While viewing the report output, right-click anywhere on the report display.

   The right-click pop-up menu displays.

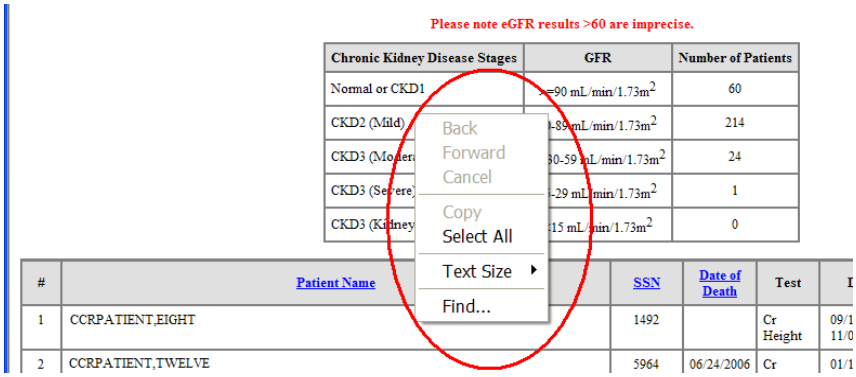


Figure 65 – Sample Report Output (showing Context menu)

2. From the right-click menu, choose Select All.

The text of the report is highlighted:

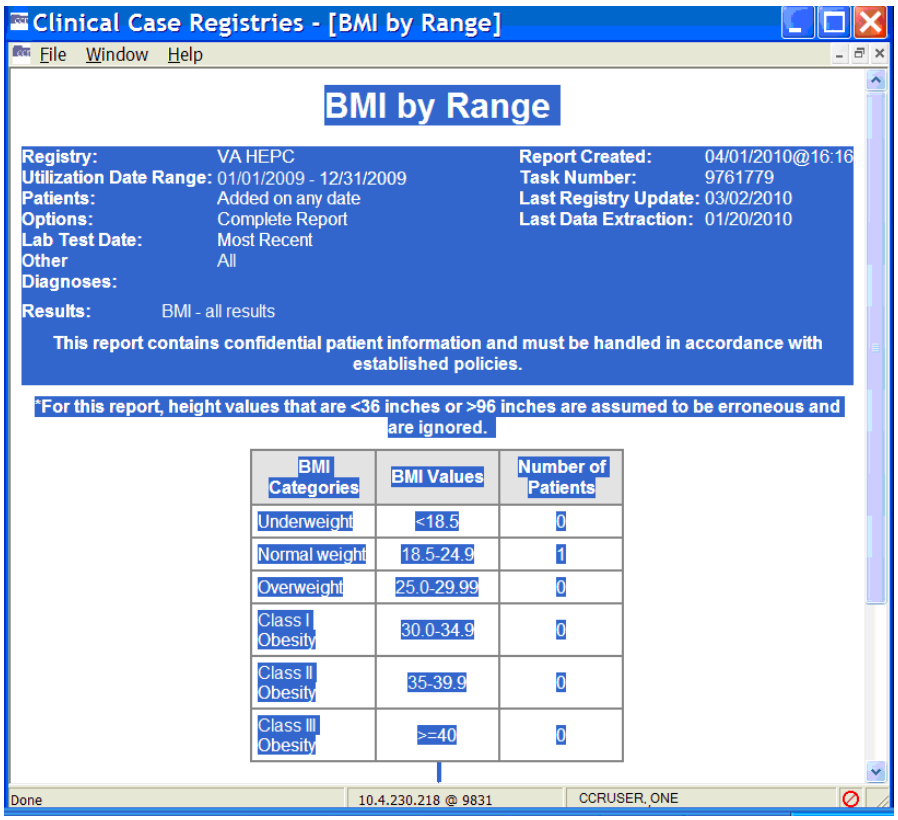


Figure 66 – Sample Report Output (showing all content selected)

3. From the right-click menu, select Copy.
4. Place the cursor in the document where you want to paste the report output, then press **< Ctrl > + < V >,** or select Paste from the right-click menu.

   The report text will be pasted to the selected location.

Note: The above procedure will copy the report data as text. To be able to sort and otherwise manipulate the data in a report, use the Save as command on the File menu to export to a file which you can then open in another program (e.g., Excel or Access) instead of using this copy-and-paste function.

8.2.3. Changing the Text Size of a Report

You can change the size of the text in the report output.

1. While viewing the report output, right-click anywhere on the report display.

   The right-click pop-up menu displays.

2. Select Text Size, and then select the desired text size from the options displayed.

8.2.4. Finding Text on a Report

Use the Find option on the right-click menu while viewing a report to search for a word or term in the report.

1. While viewing the report output, right-click anywhere on the report display.

   The right-click pop-up menu displays.

2. Click Find. The Find window displays:

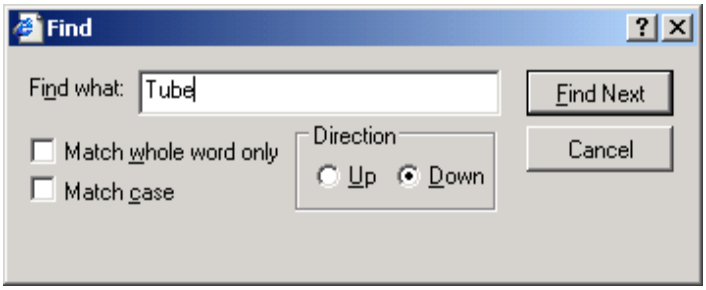


Figure 67 – Report Output Find pop-up

3. Find what: Type the word or term you want to find in the Find what: field.

   Match whole word only You can search for a match to the whole word only…

   Match case … or match by case (the default search is case-insensitive).

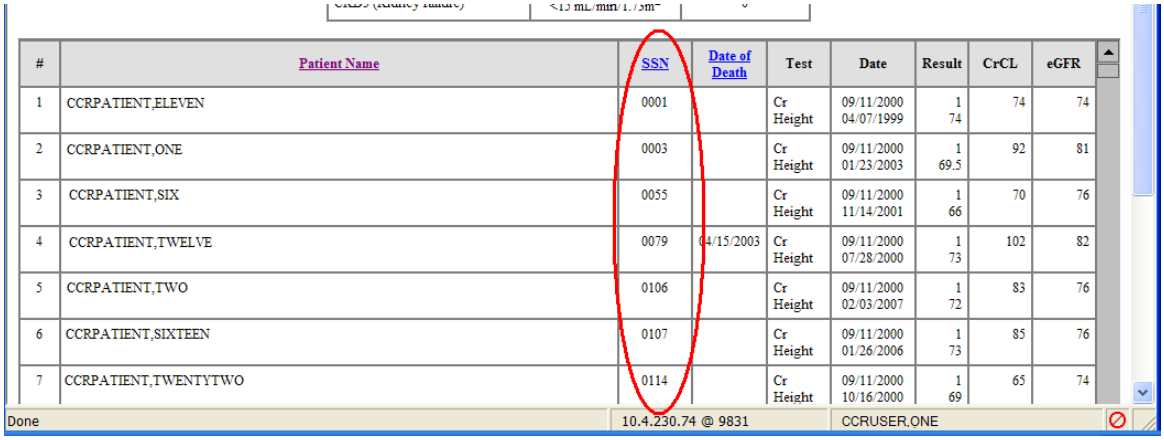
   Up Down You can also search up or down the report by selecting a radio button.

4. Find Next Click the **[Find Next]** button to find the next instance of the selected word or term.

5. Cancel Click **[Cancel]** to close the Find dialog popup.

8.2.5. Sorting/Ordering the Information on a Report

When viewing a report, you can change the order in which the information is presented by clicking the heading of a column. All tables of the same type are sorted in the same way. For example, if you sort an Outpatient Drugs table by Number of Fills in the Pharmacy Prescription Utilization, then this kind of table will be sorted in the same way in all other sections of the report.



#	Patient Name	SSN	Date of Death	Test	Date	Result	CrCL	eGFR
1	CCRPATIENT,ELEVEN	0001		Cr Height	09/11/2000 04/07/1999	1 74	74	74
2	CCRPATIENT,ONE	0003		Cr Height	09/11/2000 01/23/2003	1 69.5	92	81
3	CCRPATIENT,SIX	0055		Cr Height	09/11/2000 11/14/2001	1 66	70	76
4	CCRPATIENT,TWELVE	0079	04/15/2003	Cr Height	09/11/2000 07/28/2000	1 73	102	82
5	CCRPATIENT,TWO	0106		Cr Height	09/11/2000 02/03/2007	1 72	83	76
6	CCRPATIENT,SIXTEEN	0107		Cr Height	09/11/2000 01/26/2006	1 73	85	76
7	CCRPATIENT,TWENTYTWO	0114		Cr Height	09/11/2000 10/16/2000	1 69	65	74

Figure 68 – Sample Report Output (showing sort column)

Note: Some columns cannot be sorted. Column headings that can be used for sorting are indicated with **Bold, Blue, Underlined** text. The above sample shows the report sorted on the **SSN** column.

The information in the selected column will be displayed in either ascending or descending order and the items in the associated columns will be reordered accordingly. The report columns only sort in either ascending or descending order.

8.2.6. Saving a Report

You can save report output to an alternate location from an active report window; for example, you can export it for use in another application.

Important: Reports which contain patient information must be handled in accordance with established policies for confidential medical information.

1. While viewing the selected report, select the File menu, and then choose Save As.

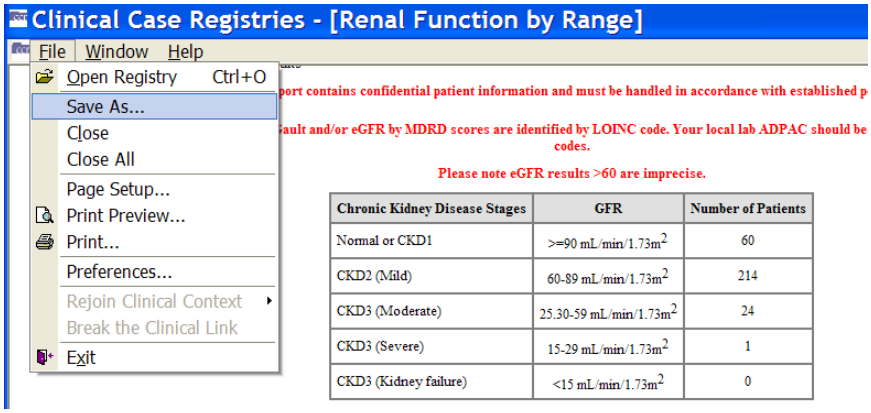


Figure 69 – Sample Report Output ("Save As" to file)

The Save the Report As window displays:

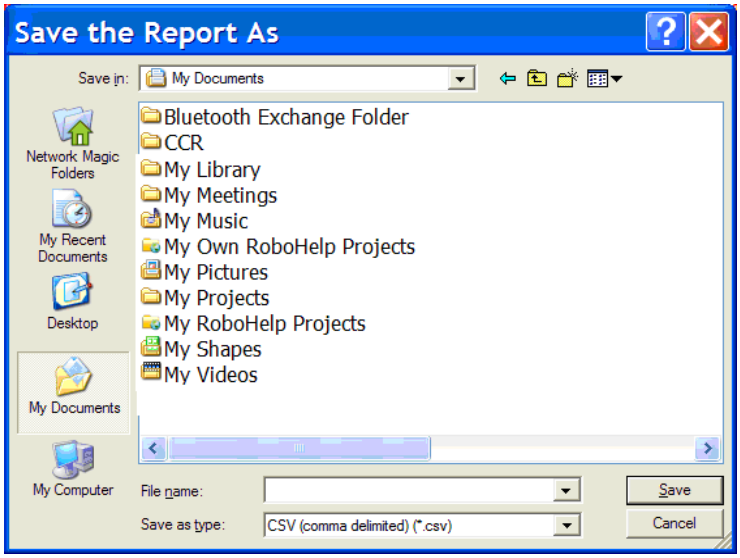


Figure 70 – Sample Report Output ("Save As" dialog)

2. Select the location to which to save the report (the "My Documents" folder is shown here).
3. Enter a name for the report in the File name field. To facilitate later use, use a name that indicates what is in the report and the date it was run– *e.g.*, "HIV Inputs 2009-Jan-05.csv".
4. Select a format from the Save as type drop down list. Reports can be saved in the following formats:
   - Comma-Separated values file (`*.csv`)
   - HTML Document (`*.htm, *.html`)

- XML Document (*.xml)

5. Click **[Save]**.

The Save the Report As window automatically closes; the report is saved to the selected location.

8.2.7. Exporting a Report to Excel or Access

Saving a report in comma-separated values (.CSV) format automatically exports (saves) the contents of the report to a file in a location determined by you during the save process.

Reports that contain multiple tables based upon the selected report parameters will be saved in separate .CSV files. The number of separate files for each saved report will depend on the report that is generated and the report parameters you selected. A sequential number will be appended to the names of the additional files.

The following list describes how the tables for each of the reports will be saved as separate files:

Table 22 – Report Files

Report	Files
BMI by Range	Patients, Summary table
Clinical Follow Up	Single file (Summary not saved)
Combined Meds and Labs	Medications Lab Results
Current Inpatient List	Single File
Diagnoses	ICD-9 Codes Patients
General Utilization and Demographics	Patients All summary tables
Inpatient Utilization	Stays Distribution of Utilization Among Bed Sections Occurrences of Missing Bed Section ID Highest Number of Stays Highest Number of Days
Lab Utilization	Results Laboratory Tests Patients with Highest Utilization
List of Registry Patients	Single file
Liver Score by Range	Single file
Outpatient Utilization	Stops Distribution of Utilization among clinics Highest Utilization of Stop Codes
Patient Medication History	Separate file for each patient

Report	Files
Pharmacy Prescription Utilization	Fills Outpatient Drugs Patients with Highest Utilization of Fills Doses Inpatient Drugs Patients with Highest Utilization of Doses Summary with Fills and Doses
Procedures	ICD-9 Codes Patients
Radiology Utilization	Procedures Patients with Highest Utilization
Renal Function by Range	Patients, Summary table (if user selects an eGFR calculation)
Registry Lab Tests by Range	Single file
Registry Medications	Single file
VERA Reimbursement (for CCR:HIV only)	Registry Medications Patients

8.2.8. Printing a Report

You can print the report from an active report window. The font size selected for the report window affects the corresponding printout; therefore, it is recommended to select smaller fonts before printing wide reports.

Important: Use only secure printers to produce reports that contain patient information. When you print a report that contains patient information, retrieve it from the printer as soon as possible.

1. While viewing the selected report, select Print from the File menu.

   The Print window displays:

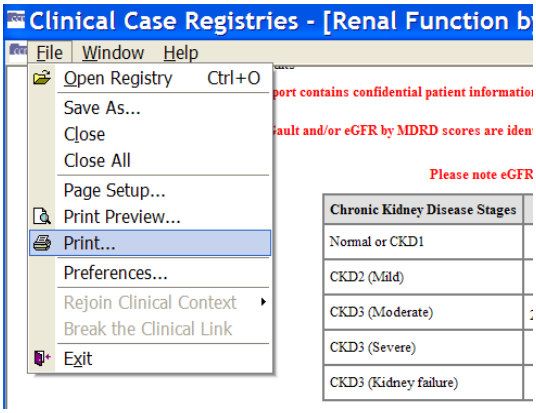


Figure 71 – File | Print menu option

2. From the Print window, if necessary, select the printer from which to print the report and select the printing options.
3. Click Apply if different printing options were selected from the Print window, and then click **[Print]**.

   The selected report prints.

Note: You can also print a report after saving it in .CSV, .HTML, or .XML format using the appropriate applications: Microsoft Word, Microsoft Excel, Microsoft Access, etc.

8.2.9. Deleting a Report

You can delete a report from the Task Manager tab.

1. From the Task Manager tab, select the report you want to delete. To select more than one report, hold down the **< Ctrl >** key and click each report name to select it.
2. Select **[Delete]**.

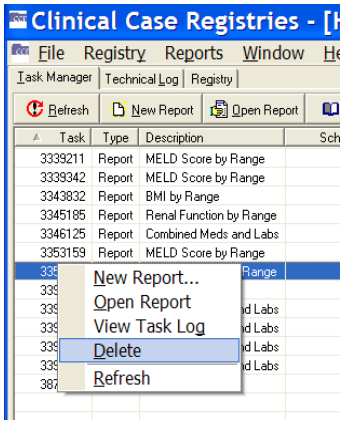


Figure 72 – Task Manager tab (Report Task Selected for Deletion)

You will be prompted to confirm the delete command.

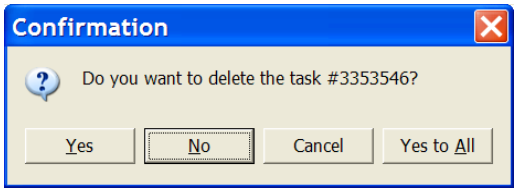


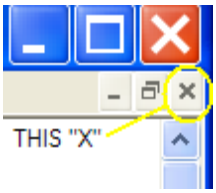
Figure 73 – Task Deletion Confirmation pop-up

3. Click **[Yes]** or **[Yes to All]** to delete the report(s).

Note: Reports are automatically deleted 14 days after the date on which they were generated.

8.2.10. Closing a Report

Close an active report window by selecting Close from the File menu. Or, in most cases, press the **< Esc >** key. You can also close a report by clicking the ☒ in the upper right corner of the *report window*:



Caution: Clicking the ☒ on the Clinical Case Registries window will also close the CCR application. A prompt will display asking you to confirm:

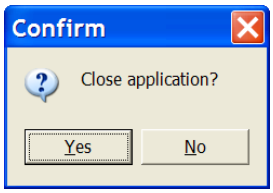


Figure 74 – Close Window Confirmation pop-up

8.2.11. Technical Log tab

Tip: Information on the Technical Log tab will not be used by most clinicians; the following is included primarily for reference purposes.

The Technical Log tab displays information regarding processes that are scheduled and performed in the registry. The tasks and events associated with registry processes are logged and displayed in a folder tree view in the left pane of the Technical Log tab view. Each folder in the tree is displayed with its associated task type and the date/time when the task occurred. The folders in the tree view are displayed chronologically for the past 7 days in descending order, with the most recent tasks at the top of the list. You can use the date range parameters to view more than seven days.

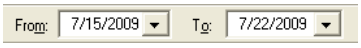
You can expand the folders to view the message details of the logged tasks. When a task is selected from the tree view, the message details about the task are displayed in the right pane. The types of message details that can be displayed include Warning, Information, Database Error, Data Quality, and Error.

This table shows the icons that are displayed adjacent to the messages associated with the logged tasks:

Table 23 – Technical Tab Message Icons

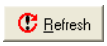
Icon	Description
	**Informational Message:** These messages present general information.
	**Data Quality Message:** These messages present information about problems with data quality. You can inform the IRM group with the details regarding these messages, though this is not mandatory.
	**Warning Message:** These messages are largely informational with the exception of the "*Registry VA is awaiting ACK*" warning. If this warning is the most recent message in the log, the IRM group should be notified; you can assume that an acknowledgment for the last extract has not yet been received.
	**Database Error Message:** The IRM group should be informed of the details within these messages.
	**Error Message:** *The IRM group MUST be informed of the details of these messages.* The message "*Error(s) during processing of the patient data*" indicates that the processing of the patient stopped but the job itself continued processing. All other **Error Messages** indicate that the running process had to stop due to the error.

8.2.12. From: and To: Date fields



The From: and To: date fields allow you to adjust the display of the Technical Log tab, by displaying those tasks and events that occurred within a selected date range. The default Technical Log view includes tasks that occurred within one week of the current date, and the date range can be expanded to include earlier activities.

8.2.12.1. Refresh button

 The **[Refresh]** refresh button updates the Technical Log display with new activities that have taken place since the last time the window was refreshed.

8.2.12.2. Types of Logged Activities

The following types of activities are displayed in the Technical Log:

Table 24 – Technical Log Activity Types

Activity Type	Description
Data Extraction	Indicates that data was extracted from the registry. The activity details include the start and end dates and times of each extraction, the number of patients processed, the number of patients processed with errors, the processing rate and the registries updated.
Report	Indicates that a user generated a report. The activity details include the start and end date and time the report was generated and the task number.
Registry Update	Indicates that an update was made to the active registry. The activity details include the start and end dates and times of each update, the number of patients processed, the number of patients processed with errors, the processing rate and the registries updated.
Access Violation	Indicates that an unauthorized user attempted to access CCR data. An alert will display on the unauthorized user's window stating that access is denied. Simultaneously and for each violation, those CCR users who receive notifications will receive an alert, and the name of the unauthorized user is recorded in the Technical Log along with the unauthorized action.

8.2.12.3. Managing Logged Activities from the Technical Log tab

Viewing the Technical Log

1. Click the Technical Log tab to display the Technical Log window.

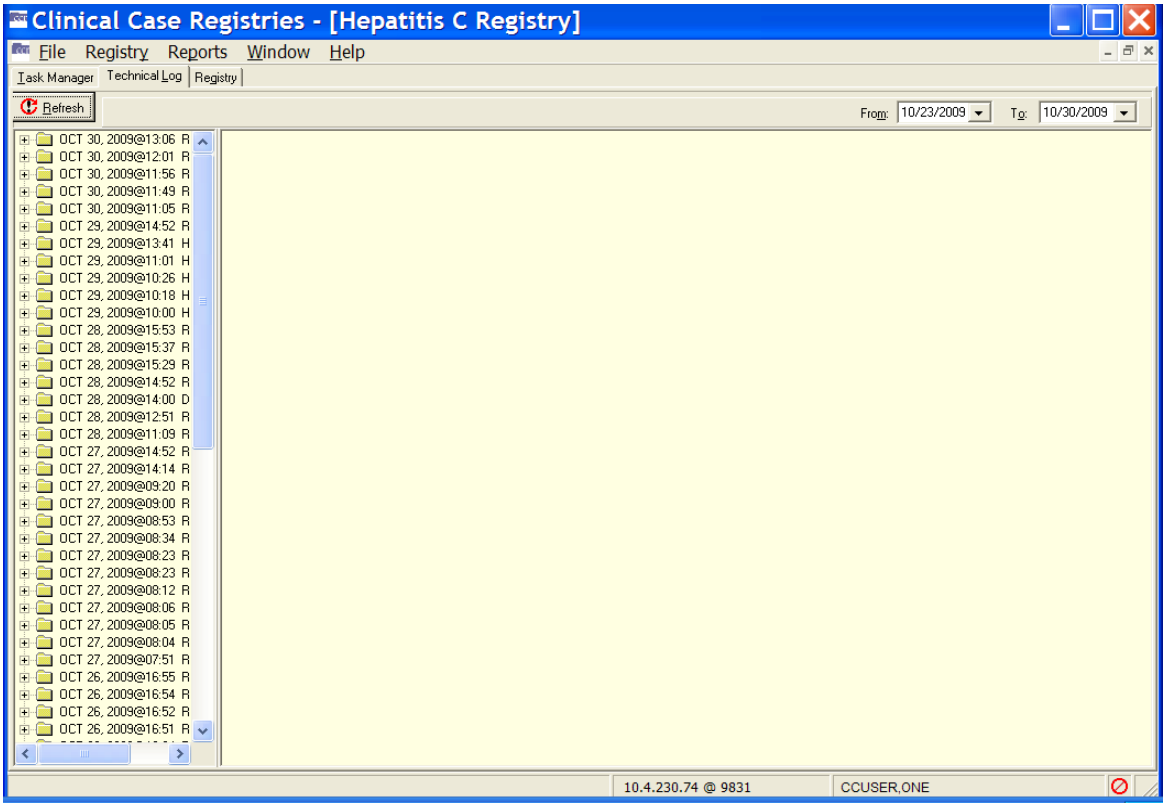


Figure 75 – Technical Log tab

2. Using the From: and To: date fields, select a date range from the drop-down calendars.
3. Refresh Click the **[Refresh]** button to display the activities that fall within the selected date range.
4. You can resize the left pane to see more information. Or, you can "hover" your mouse pointer over the folder title to get a tip on what the contents are:

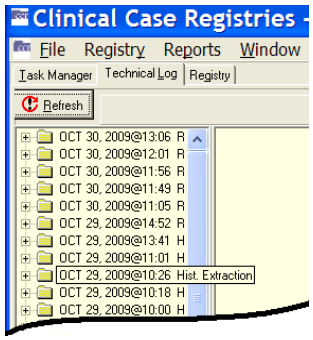


Figure 76 – Technical Log tab (showing "tip" for one task folder)

You can select (left-click on) a folder name to get an overall picture of what's in that folder:

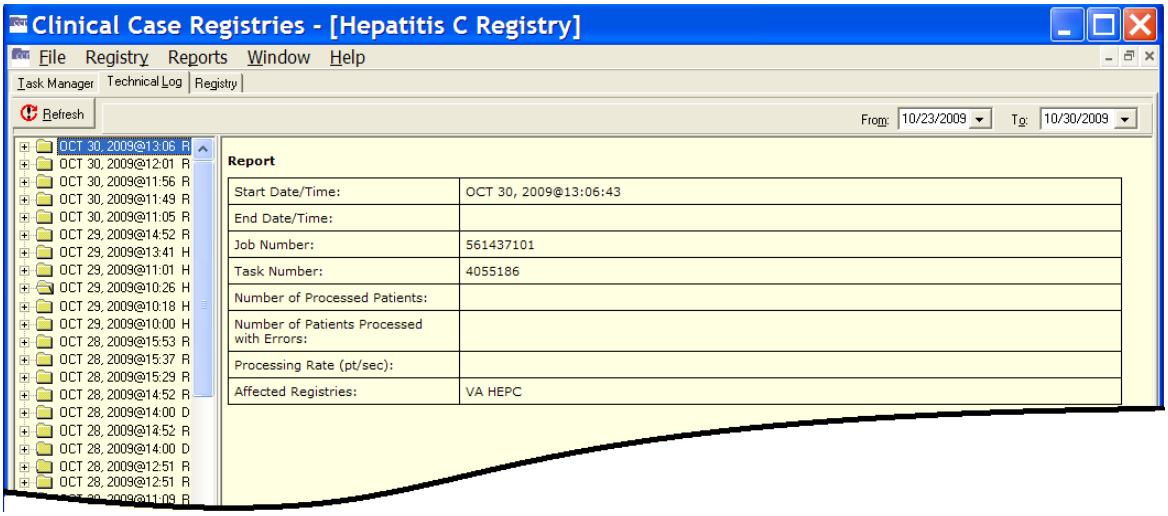


Figure 77 – Technical Log tab (showing summary for selected folder)

Viewing Activity Details

1. In the left pane, click the plus-sign (⊞) next to the activity folder to expand the heading and view all the messages associated with the selected activity. Information regarding the selected activity will display in the right pane.
2. Click the message you want to view in the left pane. Information regarding the selected message will display in the right pane.

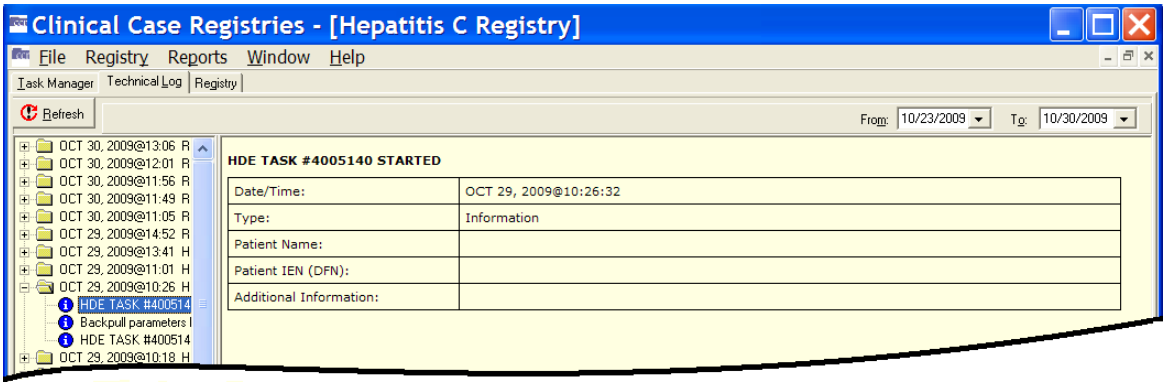


Figure 78 – Technical Log tab (showing summary and detail for selected folder)

3. Repeat as necessary to view all the associated messages and details.

8.3. Registry tab

Registry The Registry tab displays the primary interface for selecting patients and performing patient-related tasks. From the Registry tab, you can search for existing patients, confirm a

pending patient, edit a patient's record, and generate, view, and print a CDC form for a patient (CCR:HIV only).

The Registry tab is automatically activated when the Registry menu is selected, or if the Registry tab label is clicked:

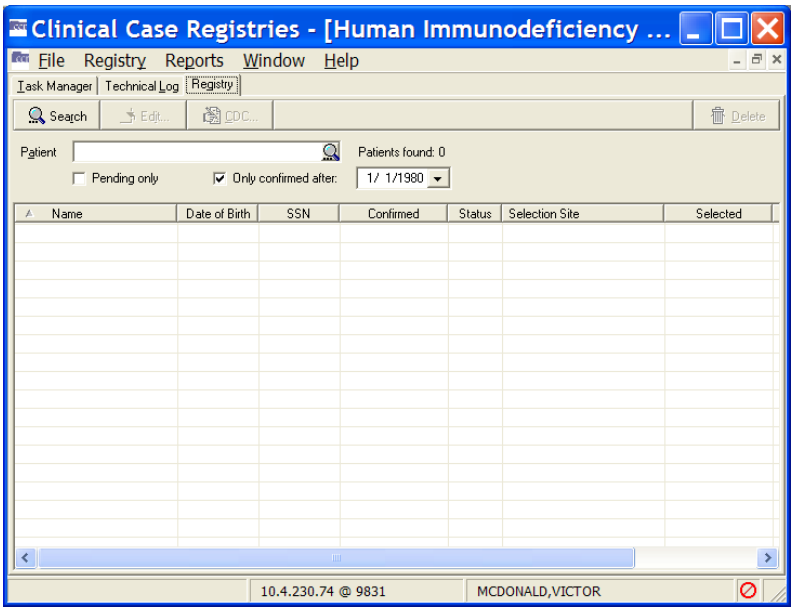


Figure 79 – Registry tab

8.3.1. Search button

Search The **[Search]** button activates the search function based on the searchable information in the Patient field and/or on the additional search options.

The system will search for names that *begin with* the characters typed in the Patient field, not based upon whether the string of characters is *contained* within a word. For example, typing "Car" in the target field would return "Carter" and "Carmichael," but not "McCarthy."

If no search criteria are provided, CCR will attempt to return all patient records; this requires considerable time, possibly exceeding system timeout parameters, and should not generally be attempted.

Tip: You can also use the **[Search]** command icon (inside the Patient name field) in place of the **[Search]** button, or press the Enter key while in the Patient name field.

When you run the search, the results are displayed. The following example shows only those patients confirmed into the registry after the date specified (Only confirmed after:):

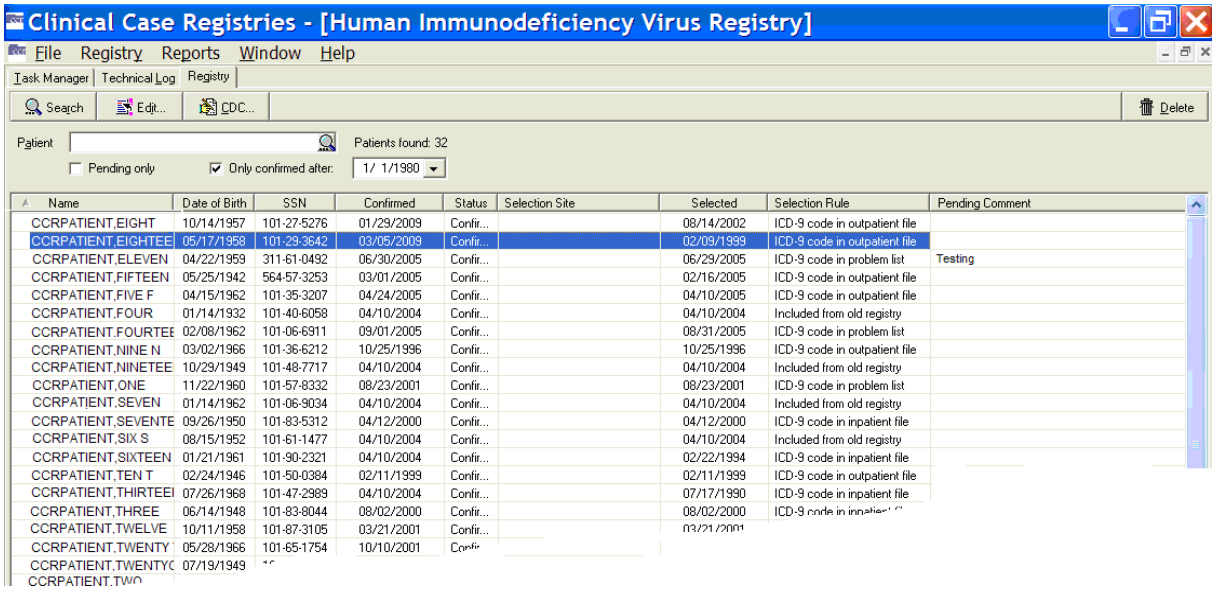


Figure 80 – Registry tab (search results displayed)

8.3.2. Confirm/Edit button

Confirm... Edit... This button may be labeled **[Confirm]** or **[Edit]**, depending on which patient is selected. If you select a patient with a status of Pending, the **[Confirm]** button will allow you to open the patient record and verify that the patient does or does not belong in the registry. If you select a patient who has already been confirmed in the registry, the **[Edit]** button allows you to update the patient's record.

8.3.3. CDC button

CDC... The **[CDC]** button is only available in CCR:HIV. It allows you to access the CDC window (see CDC Window below) for a selected patient. You can enter information on a new CDC form, or edit, view, and print an existing form.

8.3.4. Delete button

Delete The **[Delete]** button allows you to delete a record for a patient from the registry. You will be prompted to confirm before the patient record is deleted.

If a patient record is deleted because the patient was selected for the registry based on erroneous coding or a false positive test result, that patient will not be selected again based on the same instance of erroneous coding or false positive test result. However, if there are multiple instances of erroneous coding or additional false positive tests results, the patient will be selected and placed in Pending status sequentially based on each instance. If such situations are observed, it is advisable to address the local coding issue.

8.3.5. Patient field

You can enter searchable information in the Patient field to search for a patient or list of patients to view in the Patient Display list.


Note the magnifying glass icon inside the Patient field box. You may click this to start the patient search or press the **[Enter]** key, rather than using the **[Search]** button on the menu bar.

Searchable information includes the patient's full last name, the first one or more characters of the patient's last name, the patient's SSN, the last four digits of the patient's SSN, or a combination of the first letter of the patient's last name and the last four digits of the patient's SSN. You can also use # followed by the patient's 11-digit coded SSN (#12345678910) as a search parameter.[C]


Note: When the coded SSN is valid and the corresponding patient is in the registry, the patient's record populates the list of patients; otherwise, the list of patients is cleared.


Note: If your search returns no records, the following message will display. Click on the **[OK]** button to close the message and continue.

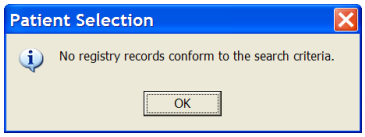


Figure 81 – "No registry records" pop-up

8.3.6. Pending only checkbox

The Pending only checkbox allows you to search for patients in the registry who have a status of Pending. Patients with Pending status must be validated and then confirmed by the Coordinator before their records are added to the registry. Data for a patient with a Pending status will not be sent to the national registry and will not be included in the reports until the patient has been confirmed.

8.3.7. Only Confirmed After checkbox

The Only confirmed after checkbox allows you to search for patients in the registry who were added to the registry after a selected date. When you check this box, the adjacent date field is activated and you can enter a date.

8.3.8. Patient List Display

The Patient List displays the patients whose records match the search criteria in the Patient field. The patient records will be displayed alphabetically according to their last names. Note that in this case, the search box was left blank— which returned all 32 records. Be careful doing this kind of search unless you are sure that the number of records is fairly low!

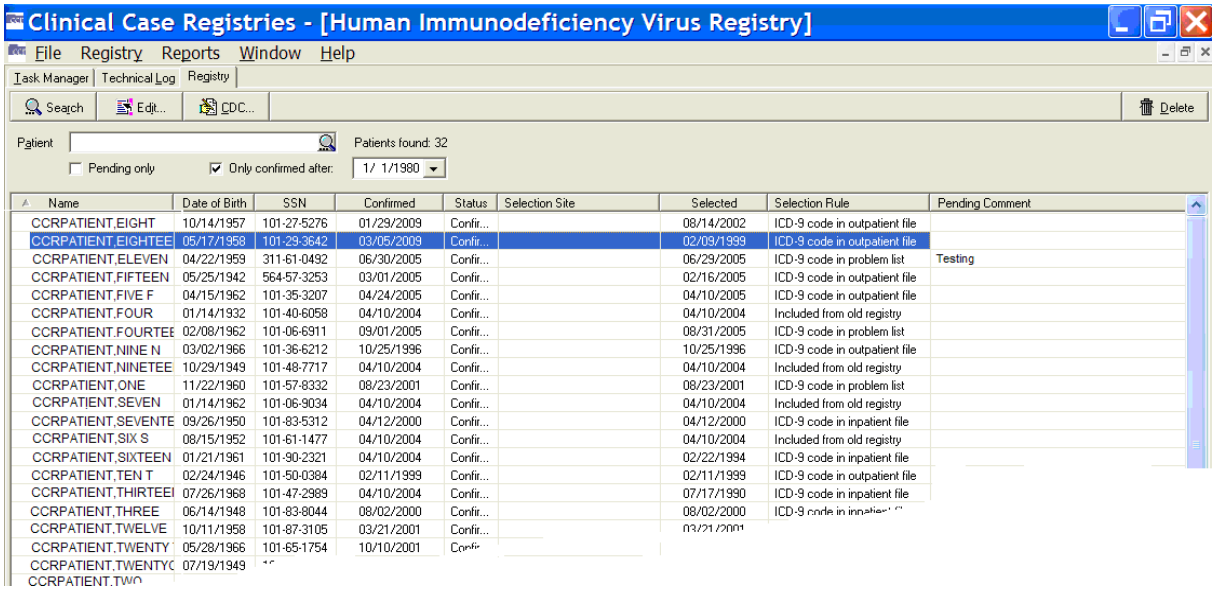
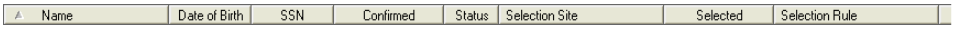


Figure 82 – Registry tab (displaying search results)

The following columns are displayed in the Patient List:



- Name
- Date Of Birth
- SSN
- Confirmed (date)
- Status
- Selection Site
- Selected (date) [D]
- Selection Rule
- Pending Comment (only if Pending patients have been selected)

You can resize these columns, and you can click any column heading to sort or reorder the Patient List display by that heading.

Note: The Date of Death and Sex columns, formerly displayed on this screen, were removed per revised requirements.[E]

8.3.8.1. Name column

The Name column displays the full name of the patient. The names are listed alphabetically by last name.

8.3.8.2. Date of Birth column

The Date of Birth column displays the patient's date of birth.

8.3.8.3. SSN column

The SSN column displays the patient's Social Security Number.

8.3.8.4. Confirmed column

The Confirmed column displays the date that the patient was confirmed in the registry.

For patients whose records existed in the Hepatitis C Case Registry, the Confirmed column displays the date of the patient's addition to the Hepatitis C Case Registry – either at the initial creation of the registry or subsequent selection by the nightly update. For patients whose records existed in ICR 2.1, this column displays the date of their earliest selection rule. For patients whose records existed in the ICR 2.1 but who did not have a selection criterion, the Confirmed column displays the date the CCR:ICR was created. For patients subsequently added to CCR:ICR, the Confirmed column displays the date that the patient was confirmed in the registry. For all subsequent patient entries in either the CCR:HEPC or CCR:HIV, the Confirmed column displays the date that the patient was confirmed in the registry.

8.3.8.5. Status column

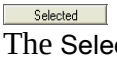
The Status column displays the registry status of the patient:

- Pending patients have been identified by the system as having positive test results or registry-related ICD-9 codes, and must be reviewed and confirmed/deleted by the registry coordinator.
- Confirmed patients have been reviewed by the registry coordinator and found to have a registry-related condition such as HIV or Hepatitis C.

8.3.8.6. Selection Site column

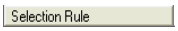
For multidivisional facilities, the Selection Site column displays the clinical site where the initial triggering ICD-9 code or positive laboratory test was entered, if it can be determined. This column will be empty for older patients.

8.3.8.7. Selected column



The Selected column displays the date of the earliest selection rule to simplify the processing of pending patients.[F]

8.3.8.8. Selection Rule column



The Selection Rule column displays the short description of the earliest selection rule to simplify the processing of pending patients.

8.3.8.9. Pending Comment column

The Pending Comment column displays the comment (if any) entered during the pending review process.

8.4. Using the Registry tab

8.4.1. Searching for Patients

You can search for patients in the registry by using the Patient field and setting additional search options.

1. Enter searchable information about the patient in the Patient field.

   Searchable information includes the patient's last name, the first one or more characters of the patient's last name, the patient's SSN, the last four digits of the patient's SSN, or a combination of the first letter of the patient's last name and the last four digits of the patient's SSN.[G] You can also use # followed by the patient's 11-digit coded SSN (#12345678910) as a search parameter.

2. Select additional search criteria if necessary:

   Check the Pending Only checkbox to limit the search to patients with a status of Pending.

   Check the Only confirmed after: checkbox and select a date to limit the search to patients who were added to the registry after the selected date.

Note: You cannot search using both the Pending only and the Only confirmed after registry entry date criteria.

3. Click the **[Search]** button or press **< Enter >** to start the search.

Tip: You can also use the **[Search]** command icon  (inside the Patient name field) in place of the **[Search]** button.

The system will search for names that begin with the characters typed in the Patient field, not based upon whether the string of characters is contained within a word. For example, typing "car" in the target field would return "Carter" and "Carmichael," but not "McCarthy."

When the search begins, the Patients Found indicator automatically updates as patients are found to match the search criteria. The patient(s) matching the search criteria will be displayed in the Patient List display.

Note the magnifying glass icon inside the Patient field box. You may click this to start the patient search, rather than using the **[Search]** button on the menu bar.

Note: The system will search for records using *begins with* criteria. That is, the search will find records for patients whose names *begin with* the letters typed in the target field. If the characters you supply are merely *contained in* the patient name, the record will not be found.

Important: **[Search]** entries must be in ALL UPPER-CASE characters. Using lower-case or mixed-case entries will not work!

Important: When you start a search, the magnifying glass icon changes to a red X (✖) (although you may not see this, depending on how long the search takes). Click the X (or press **< Ctrl >+< Alt >+< C >**) to stop the search at any time.

Note: If your search returns no records, the following message will display. Click on the **[OK]** button to close the message and continue.

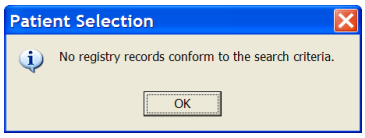


Figure 83 – "No registry records" pop-up

If the search criteria return too many patient records to display, you will be prompted to narrow your search criteria. After you press **[OK]**, the screen will display the initial part of the results of your search. You can then work with the partial results, or narrow your search criteria further.

Alternately, in order to display more patients, you can adjust the parameter that controls the maximum number of patients to retrieve. For more information, see Changing the Maximum Number of Patients to Retrieve, page 77.

8.4.2. Deleting a Patient

You can delete a patient with a status of 'Pending' or 'Confirmed' from the CCR by using the **Delete** button or the right-click menu from the Patient List display.

1. Select the confirmed or pending patient you want to delete from the Patient List display.
2. Click the **[Delete]** button or select Delete from the right-click menu. The confirmation dialog box displays.
3. Click **[Yes]** to complete the delete process or click **[No]** to cancel.

8.4.3. Using the Patient Data Editor Window {xe "Patient Data Editor:window"}Window

The Patient Data Editor window is accessed from the Registry tab, and is used to edit a patient's record. Note the Comment pane available for the patient pending in the registry (on the right, below); this feature was added for CCR 1.5.8.[H] See Figure 87 for more details.

Patient Confirmed in Registry

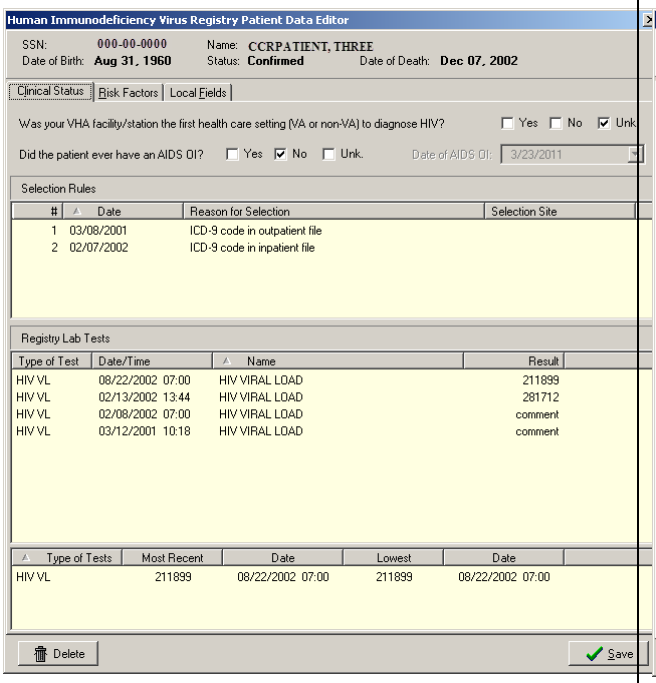


Figure 84 – Patient Data Editor (Patient Confirmed)

Patient Pending in Registry

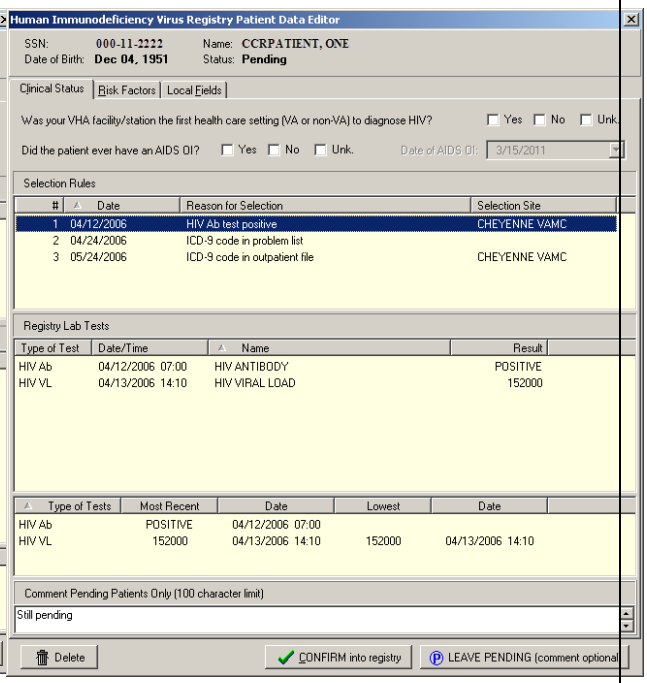


Figure 85 – Patient Data Editor (Patient Pending)

You can edit a patient's record using the fields, buttons, and checkbox options displayed on the following tabs:

1. Clinical Status tab – available in all registries. *See* 8.4.4 below.
2. Risk Factors tab – available in CCR:HIV only. *See* 8.4.5 below.

3. Local Fields tab – available in all registries and customized at the local level. Usage is optional. *See* 8.4.6 below.

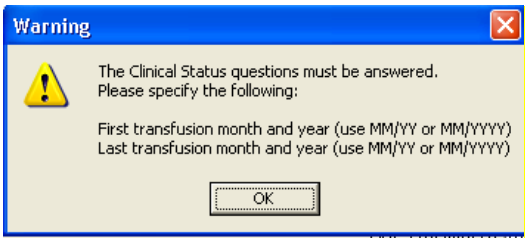
Basic identifying information is included at the top of the window, showing the SSN, patient name, date of birth, and status.

Note: If the patient does not belong in the registry…

Delete Click the **[Delete]** button in the bottom left corner of the window. The Patient Data Editor closes and a Delete patient pop-up displays. Click **[Yes]** to remove the patient from the registry.[1]

Note: Effective with CCR 1.5.15 (Patch ROR*1.5*15):

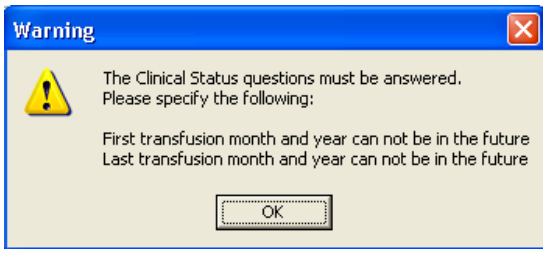
An invalid date check has been added, and an error message will be displayed if the date entered is an invalid date on the **Risk Factors Tab** for the question Received transfusion of blood/blood components (other than clotting factor).



A future date check has been added, and an error message will be displayed if the date entered is a future date on the following tabs:

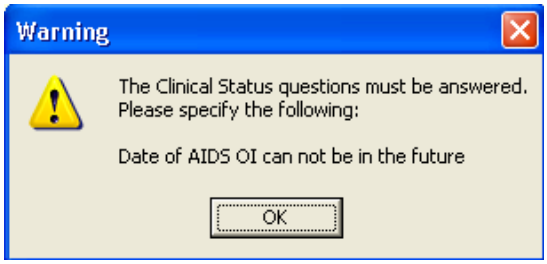
- **Risk Factors Tab**

  For the question Received transfusion of blood/blood components (other than clotting factor).



- **Clinical Status Tab**

  For the question Did the patient ever have an AIDS OI?



See Figure 87 and surrounding text for more information on using the Patient Data Editor.

8.4.4. Clinical Status tab

The Clinical Status tab on the Patient Data Editor window allows you to enter or view information regarding the patient's current clinical status. Refer to Figures 84 and 85 for more information

8.4.5. Optional Risk Factors tab

In CCR:HIV, the Risk Factors tab lists a series of questions from the CDC form regarding HIV risk behavior. These questions are optional however if you choose to answer the questions, check Yes, No, or Unk. (unknown) for each question.

8.4.6. Local Fields tab

The Local Fields tab allows you to enter registry-specific information regarding the patient's health history in locally configured fields (see page 70 for details).

8.4.7. Confirming a Pending Patient Record

When patient records are first selected by the CCR, their status is marked as Pending. These patient records are identified via the automatic nightly registry update process and must be validated before being confirmed in the registry. The local Registry Coordinator at each facility will be authorized to validate pending patients and change their status to Confirmed.

Confirmed Positive – A patient is considered Confirmed Positive if he or she has a positive antibody screening test result and a positive result on confirmatory testing. If confirmatory testing has been done, the results are displayed in the lower sections of the Patient Data Editor window.

No Confirmation Available – If the patient has a positive result on a screening test or was selected on the basis of a registry related ICD-9 code but no confirmatory test has been done, the registry coordinator will need to look in CPRS (labs, progress notes, including remote data) to see if there is information that confirms the diagnosis. If such data is not found, the patient should not be confirmed and should retain their Pending status until confirmation is available. The registry coordinator should report such cases to the provider (usually the one who ordered the screening antibody test) to order confirmatory testing. If the provider knows that the patient was confirmed positive at another facility, he or she should document that fact in a Progress note and enter the diagnosis on the Problem List. The registry coordinator can use that information to confirm the patient.

Negative Confirmatory Result – In some cases a patient may be selected because of a positive result on a **screening** test but then have a negative result on **confirmatory** testing. In such cases the coordinator should delete the patient from the registry, and the patient will not be selected again based on the same test result. If the screening test is

repeated at a later date and the result is again positive, the patient would be selected again based on that new test result.

To review the list of pending patients:

1. On the Registry tab, leave the patient field blank and click the Pending only checkbox, and then click the **[Search]** button. The system searches for Pending patients, then displays them in the Patient List:

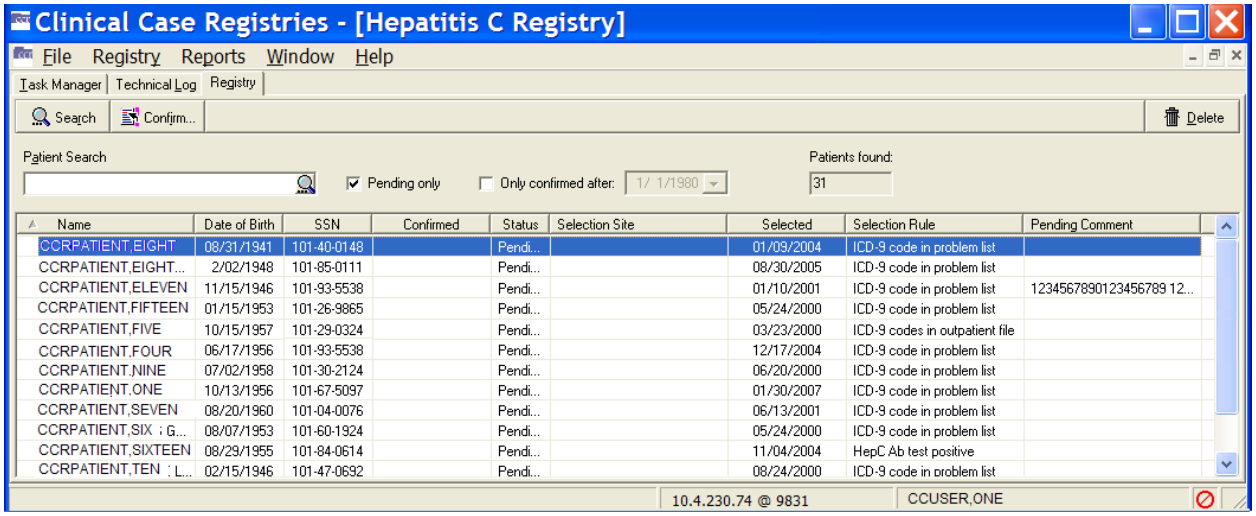


Figure 86 – Registry tab (displaying only Pending Patients)

2. Double-click the patient to be validated, or select the patient with a single click and then click the **[Confirm]** button. Use this method even if you are not certain that you wish to confirm; you can leave the patient in Pending status if you decide not to confirm. The Patient Data Editor window displays:

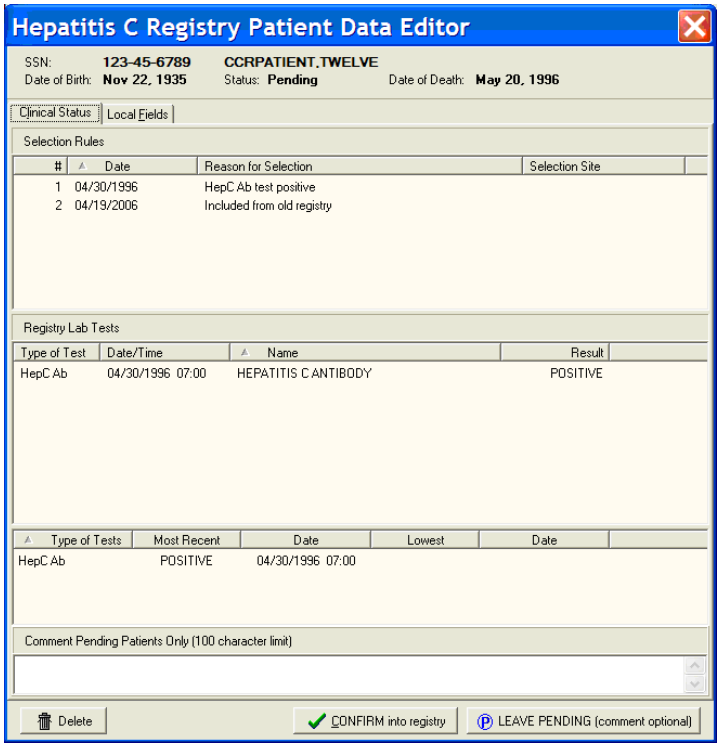


Figure 87 – Patient Data Editor (Record Selected for Confirmation)

3. Review the patient information and decide whether this patient belongs in the registry. (If there is insufficient information shown in the Patient Data Editor, then CPRS may be your best source for determining if the patient belongs in the registry.)

   - Note the (optional) Comment pane available for the patient pending in the registry (at the bottom of the Patient Data Editor screen):

Figure 88 – Comment for Pending Patients

100 characters are allowed for the comment. Any comment entered is automatically deleted once the patient is confirmed into the registry. This feature was introduced in CCR 1.5.8.

   - 

If the patient belongs in the registry, click the **[CONFIRM into registry]** button near the bottom right corner of the window. The confirmed patient's status is set to Confirmed, and the current date will be displayed in the Confirmed column in the Patient List.

- LEAVE PENDING (comment optional) If you do not wish to confirm or delete, click the **[LEAVE PENDING]** button in the bottom right corner of the window. Entering a comment in this case is optional.
- Delete If the patient does *not* belong in the registry, click the **[Delete]** button in the bottom left corner of the window. The Patient Data Editor closes and a Delete patient pop-up displays. Click **[Yes]** to remove the patient from the registry. J

Important: Opening a Pending patient record and clicking **[CONFIRM into registry]** will automatically confirm the patient in the registry. If you are not sure whether to validate the patient, click **[LEAVE PENDING]**. The patient will retain Pending status.

8.4.8. Editing a Patient Record

Follow this procedure to edit or update a patient record. This procedure is typically used by CCR:HIV users to add or update information regarding AIDS-defining opportunistic infections (AIDS-OI) or HIV risk behavior information. This procedure is also used in both CCR:HIV and CCR:HEPC to update information in Local Fields.

1. In the Registry tab view, search for the patient to be edited. The patient(s) matching the search criteria are displayed in the Patient List.
2. Double-click the patient name, or click the patient name and then click the **[Edit]** button. The Patient Data Editor window displays. See Figure 86 and surrounding text for information about the optional Pending Comment which became available with CCR 1.5.8.

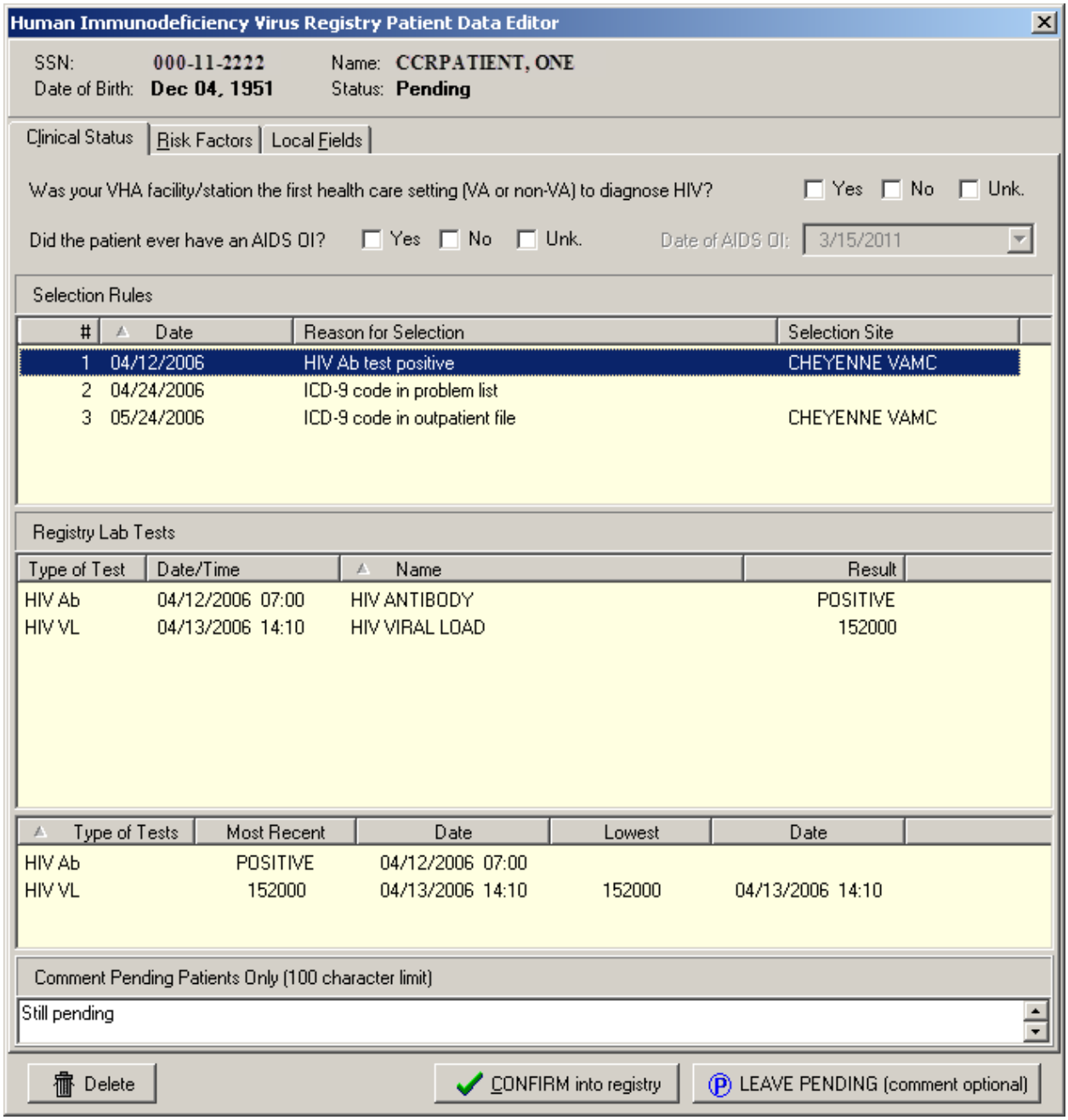


Figure 89 – Patient Data Editor (Record Selected for Editing)

3. In the Clinical Status tab view, select a value for Was your VHA facility/station the first health care setting (VA or non-VA) to diagnose HIV? This is a mandatory question and must be answered before the patient can be confirmed. (CCR:HIV only).

4. In the Clinical Status tab view, select a value for Did the patient ever have an AIDS OI? If Yes is selected, enter the date of the diagnosis in the Date of AIDS OI box. This is a mandatory question and must be answered before the patient can be confirmed. (CCR:HIV only)

Note: The Check if patient ever had an AIDS-OI checkbox is automatically selected and the Date of AIDS-OI field is populated. If an indicator disease Def box is selected in Section VIII of the CDC form in the Clinical Status section. [K]

   a. If the Check if patient ever had an AIDS-OI checkbox is previously selected (manually or automatically), neither its status nor the date is automatically updated when indicator diseases are updated.

   b. The Date of AIDS OI field uses the date of the first indicator disease listed on the CDC form.

   c. Because the indicator disease date only uses month and year to populate the Date of AIDS OI field, the day is always 1.

      - If month is omitted, January is used.
      - If both month and year are omitted, current month and year are used.

5. In the Risk Factors tab view, click the Yes, No, or Unk (Unknown) checkboxes to update the patient's HIV risk behavior information. (CCR:HIV only)

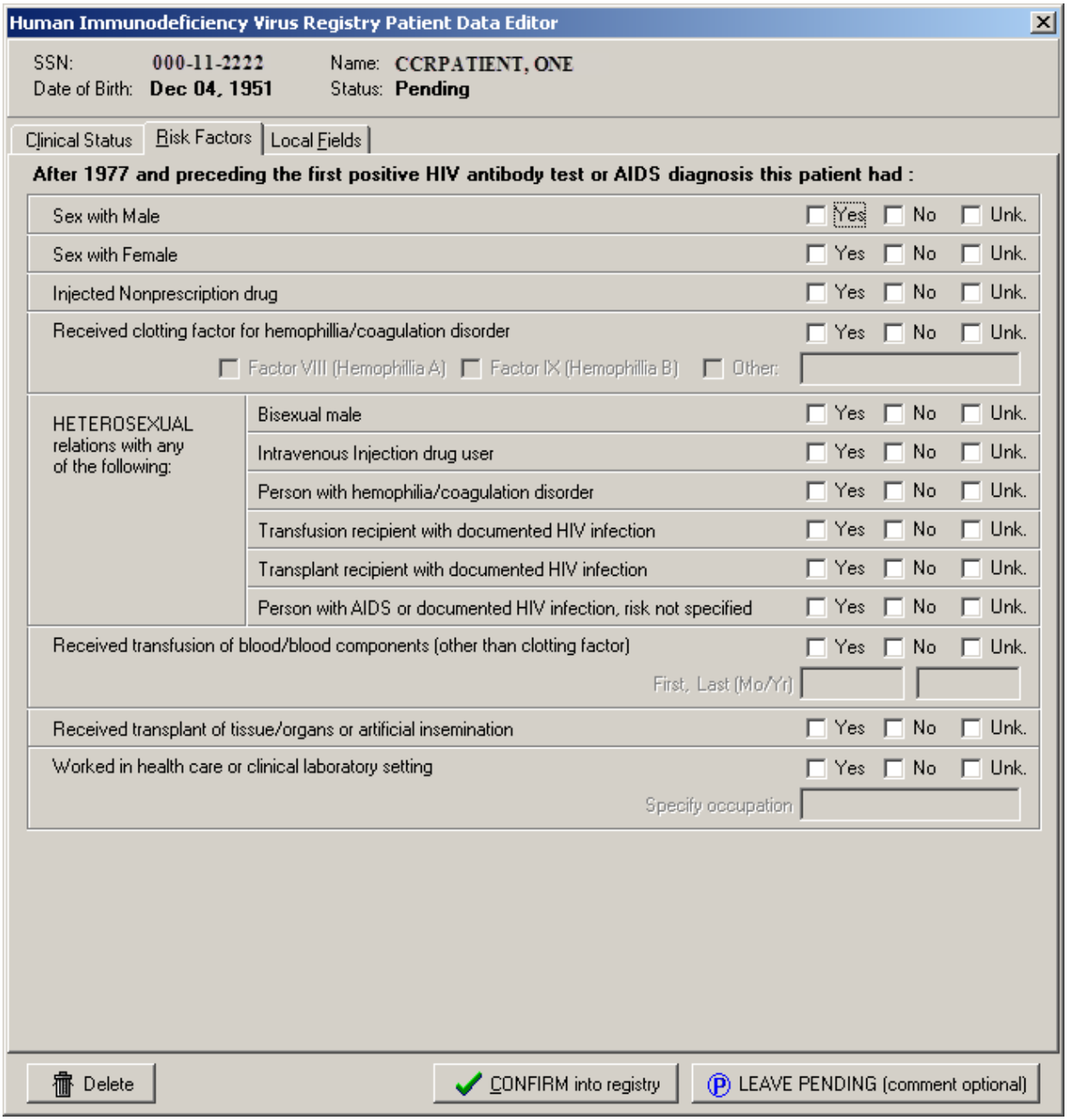


Figure 90 – Patient Data Editor (Risk Factors Tab)

6. In the Local Fields tab view, click the checkboxes to add or update information as necessary. The Local Fields tab may not be visible if your site does not use local fields.
7. When you have completed your entries in the Patient Data Editor, click the appropriate button to close the window:

- **[Delete]** to delete the patient from the registry; you will be asked to confirm the delete action
- **[Save]** to save the changes made to the record
- **[CONFIRM into registry]** to confirm the patient into the registry
- **[LEAVE PENDING]** to leave the patient in Pending status; that is, you are *not* confirming the patient into the registry
- **[Cancel]** to close the Patient Data Editor window without saving the changes

8.4.9. Deleting a Patient Record

Follow these steps to delete a patient record:

1. In the Registry tab view, search for the patient to be deleted. The patient(s) matching the search criteria are displayed in the Patient List.
2. Click the name of patient to be deleted, and then click **[Delete]**, or select Delete from the right-click menu. The confirmation dialog box displays.
3. Click **[Yes]** to complete the delete process, or click **[No]** to cancel.

8.5. CDC Window

Note: The CDC window is available only in CCR:HIV. You must have found at least one patient before using this window.

You can open the CDC window using the **[CDC]** button on the Registry tab; by selecting CDC from the Registry menu; or by selecting CDC from the right-click menu in the Patient List:

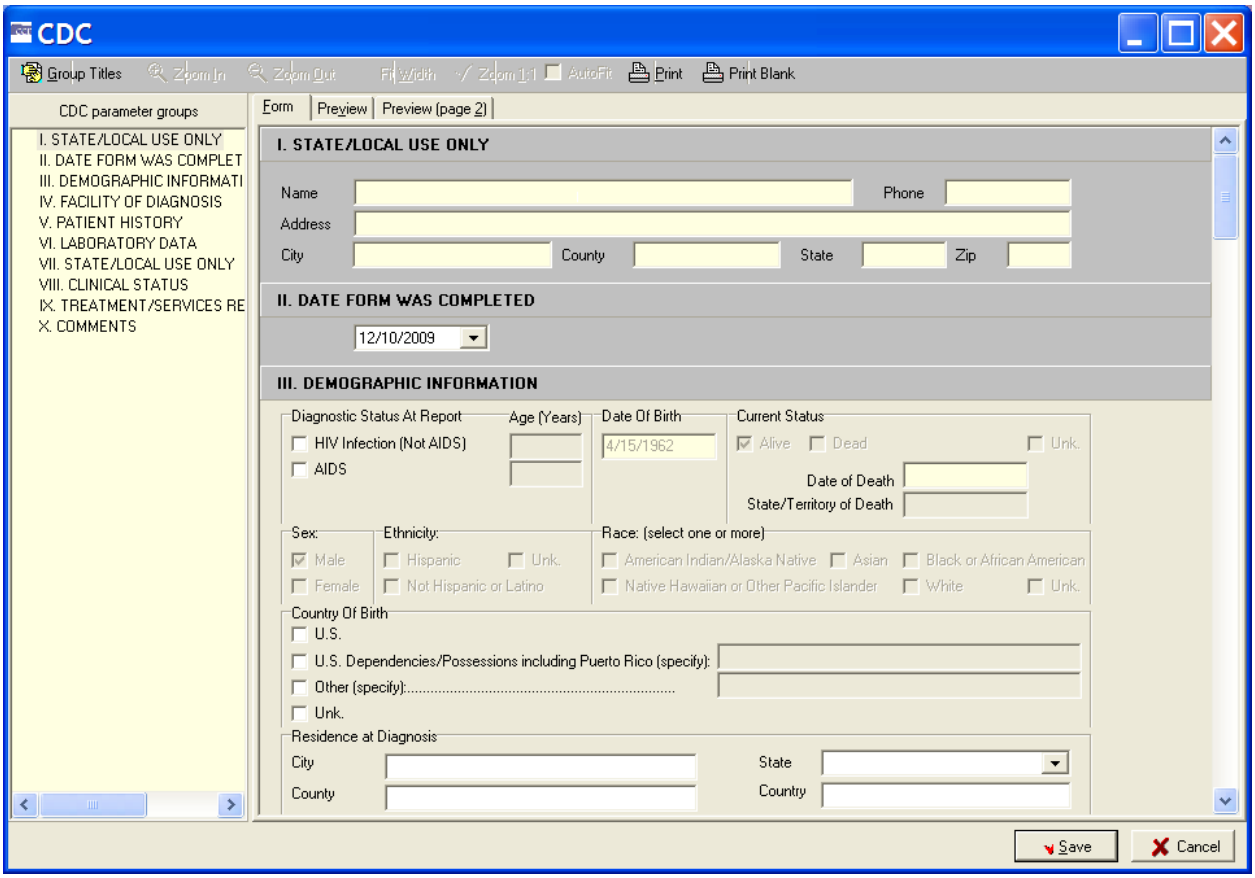


Figure 91 – CDC Window

The CDC window allows you to enter the information necessary to complete the 10 sections of the CDC Adult HIV/AIDS Confidential Case Report for a patient, edit some of the fields, and view and print a patient's existing CDC report.

The CDC window displays two panes.

The left pane contains CDC parameter groups, a list of the ten sections of the CDC report.

The right pane displays the form used to enter the patient's data.

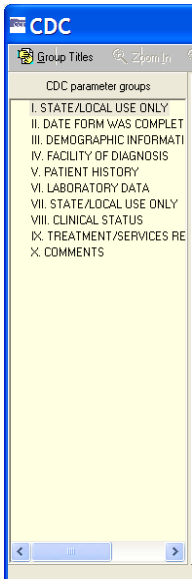


Figure 92 – CDC Window (Parameter Groups pane)

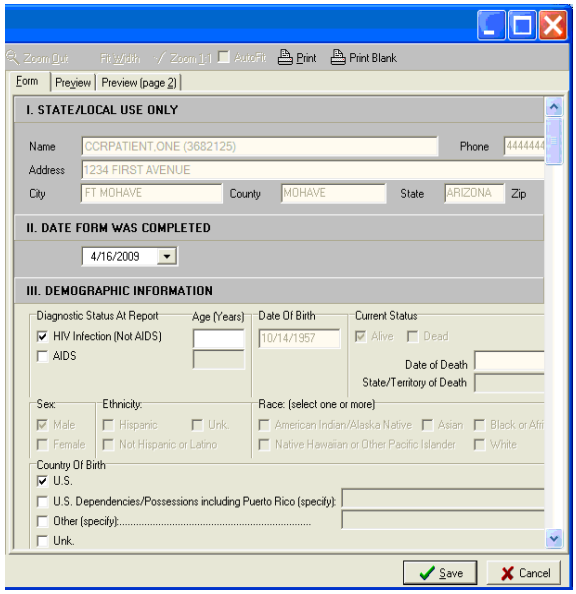


Figure 93 – CDC Window (Patient Data pane)

You can navigate to each of the 10 sections of the CDC report by using the scroll bar, or by clicking the Group Title of the desired section under CDC parameter groups in the left pane.

Group Titles You can hide or display this pane by clicking the **[Group Titles]** command icon.

The following tabs are displayed above the right pane of the CDC window:

- Form
- Preview
- Preview (page 2)

8.5.1. Form tab

Form The Form tab displays the GUI through which you can enter a patient's information. The information is displayed on the completed Adult HIV/AIDS Confidential Case Report.

8.5.2. Preview tab

Preview The Preview tab display shows you how the CDC report will appear when printed. The Preview tab displays the first page of the 2-page CDC Adult HIV/AIDS Confidential Case Report, which contains sections I through VI.

8.5.3. Preview (page 2) tab

Preview (page 2) The Preview (page 2) tab display shows you how the CDC report will appear when printed. The Preview (page 2) tab displays the second page of the 2-page CDC Adult HIV/AIDS Confidential Case Report, which contains sections VII through X.

8.5.4. Print icon

Print The **[Print]** command icon allows you to print the selected patient's CDC report.

8.5.5. Print Blank icon

The **[Print Blank]** command icon allows you to print a blank CDC report.

8.5.6. Save button

The **[Save]** button saves the information entered from the CDC Form tab and automatically closes the CDC window.

8.5.7. Cancel button

The **[Cancel]** button closes the CDC form without saving any changes made.

8.5.8. Zoom In and Zoom Out icons

The **[Zoom In]** and **[Zoom Out]** command icons allow you to incrementally enlarge or reduce the Preview and Preview (page 2) tab displays within the CDC window.

8.5.9. Fit Width icon

The **[Fit Width]** command icon automatically adjusts the size of the Preview and Preview (page 2) display to fit the width of the CDC window.

8.5.10. Zoom 1:1 icon

The **[Zoom 1:1]** command icon automatically enlarges the Preview and Preview (page 2) tab display at a 1:1 ratio.

8.5.11. AutoFit checkbox

The AutoFit checkbox automatically adjusts the size of the form so that it fits the width of the window when the window is resized.

8.5.12. Close the CDC form

When you have completed your entries on the CDC form, close the CDC window by doing one of the following on any of the ten CDC form parts:

- **[Save]** to save the record
- **[Cancel]** to cancel any changes to CDC information

8.6. Viewing a Patient's CDC Report

1. From the Registry tab, select a patient from the Patient List display.
2. 

Click the **[CDC]** button.

   The CDC window displays the selected patient's CDC report. Use the Preview and Preview (page 2) tabs to view how the CDC report will appear when printed.

8.7. Printing a Patient's CDC Report

1. From the Registry tab, select a patient from the Patient List display.
2.  Click the **[CDC]** button.

   The CDC window displays the selected patient's CDC report. Use the Preview and Preview (page 2) tabs to view how the CDC report will appear when printed.
3.  Click the **[Print]** command icon. The Print dialog displays (note that your options may vary from those shown here):

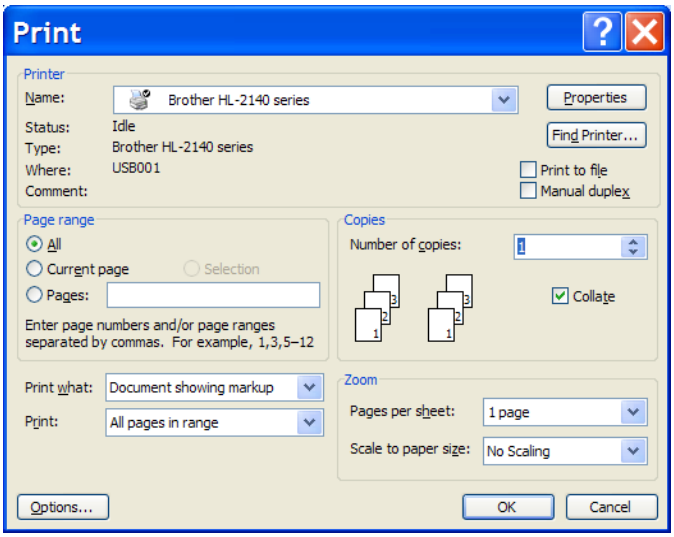


Figure 94 – Print dialog

4. Select any necessary printing options from the Print dialog, and then click **[OK]**.

8.8. Entering Information on a Patient's CDC Report

The following procedure can be used to create a new CDC report for a patient, or edit the information on a patient's existing CDC report.

1. From the Registry tab, select the patient from the Patient List display.

2. CDC... Click the **[CDC]** button. The multi-part CDC window displays:

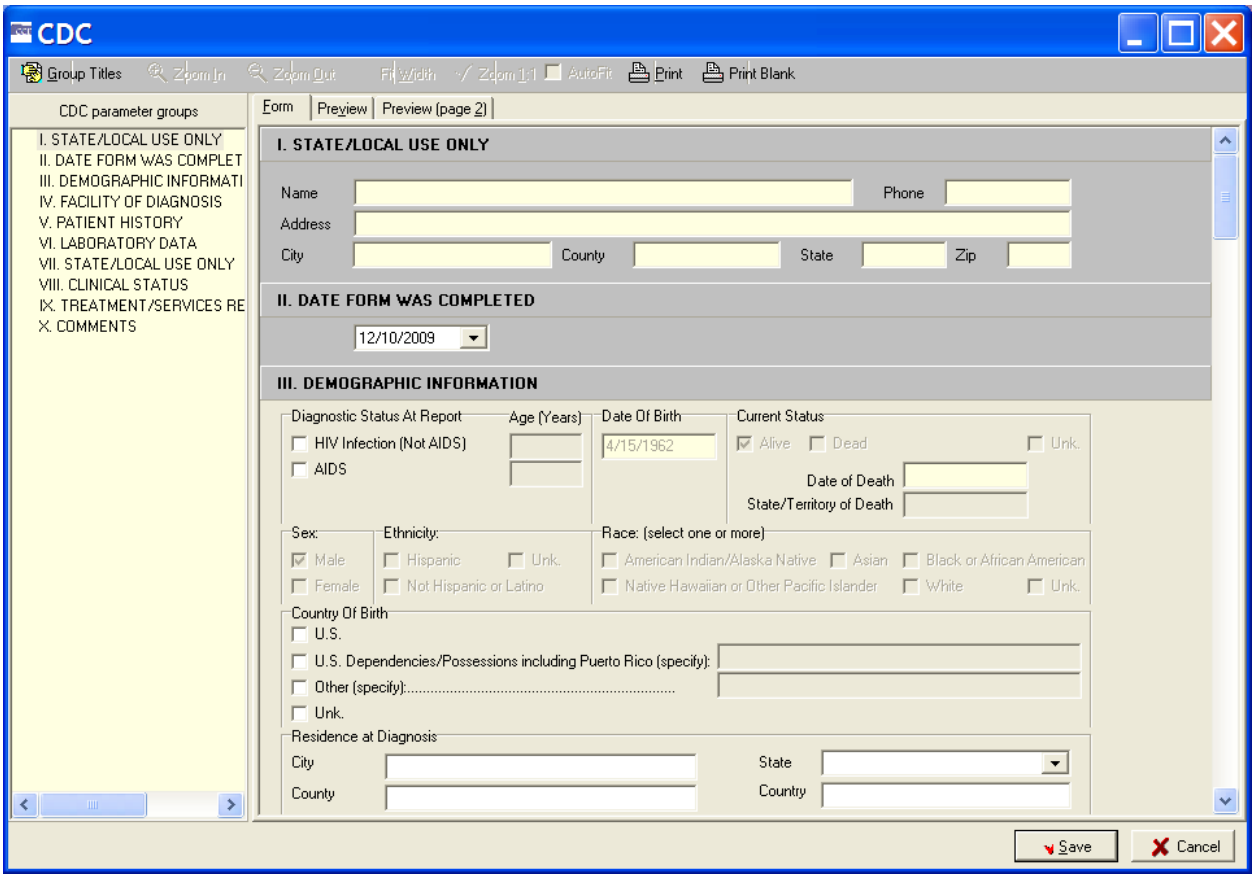


Figure 95 – CDC Window

3. Form Make sure the Form tab is selected.

4. Group Titles From the Form tab, use the **[Group Titles]** command icon or the scroll bar to navigate to the field(s) you want to enter/edit.

5. Save After entering the patient's information or editing the existing information, click **[Save]**.

   The patient's CDC report is saved and the CDC window automatically closes.

Detailed information regarding each of the Group Title sections of the CDC report is provided in the following figures and accompanying text.

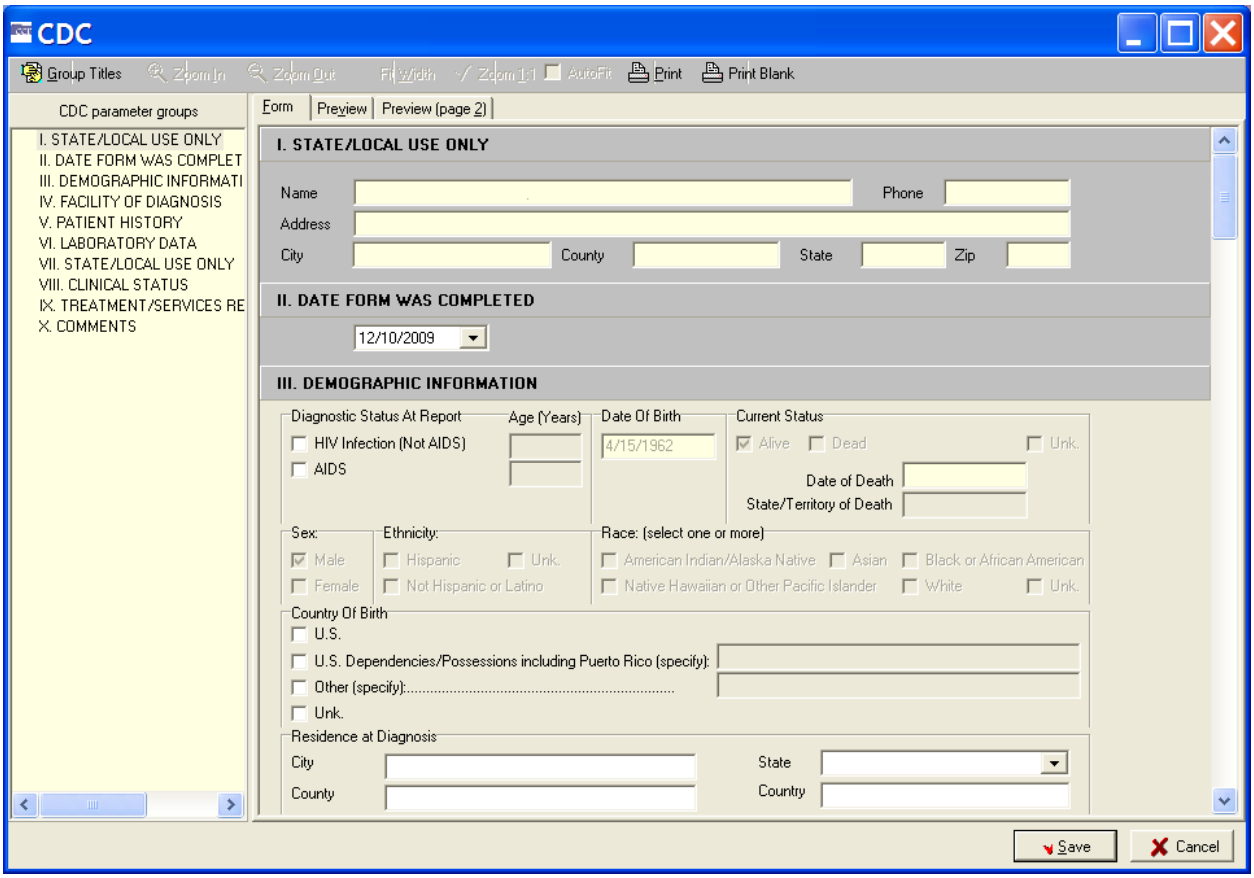


Figure 96 – Sections I, II, and III of the CDC Form

8.8.1. SECTION I – STATE AND LOCAL USE ONLY

I. STATE/LOCAL USE ONLY Information in this section is **read-only** and cannot be entered or edited from the Form tab. The address is obtained from `PATIENT file #2`. If there is an error in the address, contact Patient Registration to correct the `Patient File` which will then populate the CDC form with the corrected information.

8.8.2. SECTION II – DATE FORM WAS COMPLETED

II. DATE FORM WAS COMPLETED The current date is the default date and will be displayed automatically. To change the date, enter or select from the drop-down calendar the date that the CDC report form was completed. The date must be the current date or earlier. A future date cannot be entered.

8.8.3. SECTION III – DEMOGRAPHIC INFORMATION

III. DEMOGRAPHIC INFORMATION The following information can be entered or edited from this section:

- The patient's diagnostic status at the time of the report, and the age of the patient at the time of the diagnosis.

- The patient's country of birth, and the city, state, county, and country in which the patient resided at the time of the diagnosis.

The other fields in section III are **read-only** and cannot be entered or edited from the Form tab. The date of birth, current status, sex, ethnicity and race information is obtained from the `Patient File #2`. If there are errors in these fields, please contact Patient Registration to correct the Patient File which will then populate the CDC form with the corrected information.

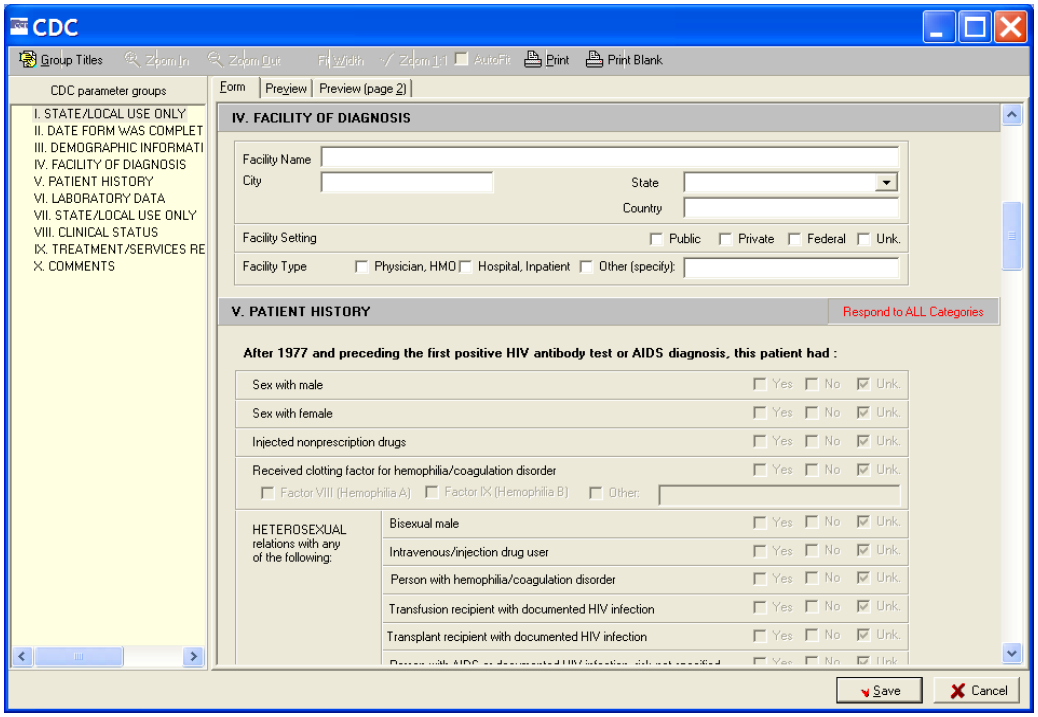


Figure 97– Sections IV and V of the CDC Form

8.8.4. SECTION IV – FACILITY OF DIAGNOSIS

IV. FACILITY OF DIAGNOSIS The following information can be entered or edited from this section:

- Facility Name – Enter the name of the facility where the patient was diagnosed.
- City – Enter the name of the city in which the facility is located.
- State – From the drop-down list, select the name of the state in which the facility is located.
- Country – Enter the name of the country in which the facility is located.
- Facility Setting – Select the appropriate facility setting by clicking a checkbox: Public, Private, Federal, or Unk. (unknown).

- Facility Type – Select the appropriate facility type by clicking a checkbox: Physician, HMO**;** Hospital, Inpatient**;** or Other. If Other, enter the type of facility in the field provided.

8.8.5. SECTION V – PATIENT HISTORY

V. PATIENT HISTORY The Patient History section is **read-only** and displays the information entered from the Risk Factors tab on the Patient Data Editor window.

Note: Patch ROR*1.5*15 corrected two issues in the Patient History section on the CDC form:

When a user answers the question After 1977 and preceding the first positive HIV antibody test or AIDS diagnosis this patient had: HETEROSEXUAL relations with any of the following: Bisexual male; Intravenous Injection drug user, the checkbox values are transposed in the Center for Disease Control (CDC) form. When the user makes a selection in the Patient Editor, the appropriate checkbox will be checked in the CDC form.

When a user selects Yes to the question Received clotting factor for hemophilia/coagulation disorder in the Patient Editor, the Yes checkbox in the CDC form is not checked. When the user makes a selection in the Patient Editor, the appropriate checkbox will be checked in the CDC form.

8.8.6. SECTION VI – LABORATORY DATA

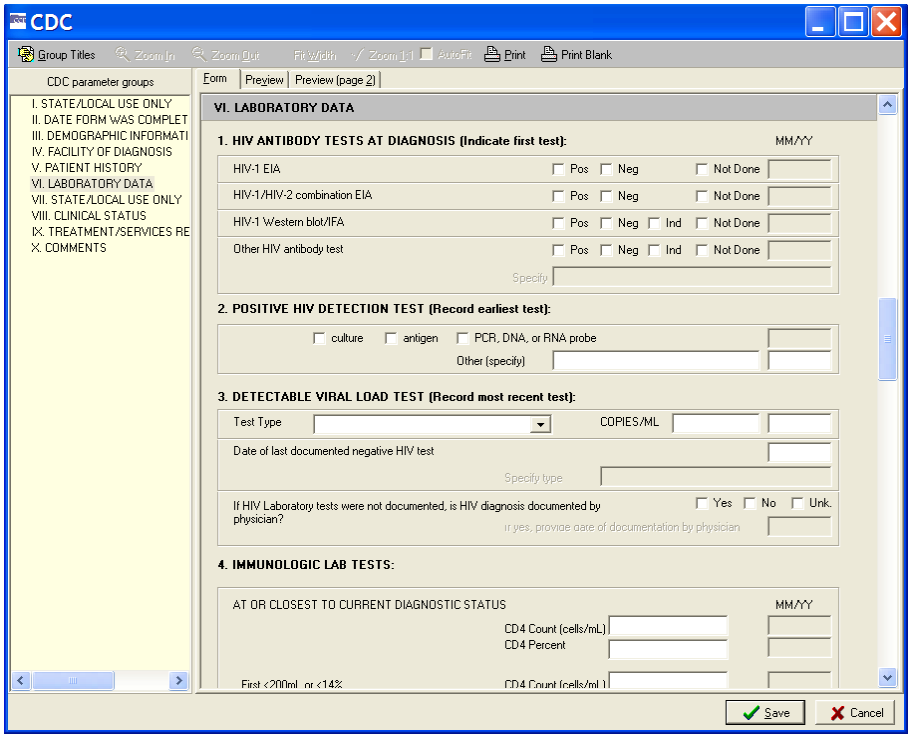


Figure 98 – Section VI of the CDC Form

VI. LABORATORY DATA This section is divided into four subsections:

8.8.6.1. 1. HIV ANTIBODY TESTS AT DIAGNOSIS (Indicate first test):

1. HIV ANTIBODY TESTS DIAGNOSIS: (Indicate FIRST test): If the tests listed in this section were performed, use the checkboxes and fields to indicate the month and year (MM/YY) the test(s) were performed and one of the following results:

- Pos Pos (positive)
- Neg Neg (negative)
- Ind Ind (indeterminate)

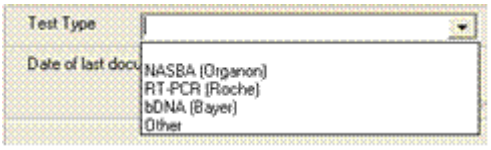
Not Done Use the Not Done checkbox to indicate that a test was not performed. If a test other than those listed was used, enter the name of the Other HIV antibody test in the field provided, and use the checkboxes to record the outcome of the test.

8.8.6.2. 2. POSITIVE HIV DETECTION TEST (Record earliest test)

2. POSITIVE HIV DETECTION TEST (Record earliest test): Use the checkboxes to select the type of test. Enter the month and year (MM/YY) of the test in the field provided. If a test other than the ones listed was used, specify the type of test in the field provided.

8.8.6.3. 3. DETECTABLE VIRAL LOAD TEST (record most recent test)

3. DETECTABLE VIRAL LOAD TEST (Record most recent test): Select one of the following test types from the Test Type drop-down list:



- NASBA (Organon)
- RT-PCR (Roche)
- bDNA (Bayer)
- Other

Enter the COPIES/ML for the selected test type in the fields provided.

If applicable, enter the month and year (MM/YY) and test type of the last documented negative HIV test in the fields provided.

Note: Data *must* be entered manually, even if the test was performed at the VA facility, and data entered here does *not* become part of the patient's record in CPRS or CCR.

Use the applicable checkbox to indicate whether the HIV diagnosis is documented by a physician. If the Yes checkbox is selected, enter the date the physician documented the HIV diagnosis in the field provided.

8.8.6.4. 4. IMMUNOLOGIC LAB TESTS

4. IMMUNOLOGIC LAB TESTS: Type the applicable CD4 counts and percentages, and the month and year (MM/YY) of each of the tests in the fields provided.

Note: Data must be entered manually, even if the test was performed at the VA facility, and data entered here does *not* become part of the patient's record in CPRS or CCR.

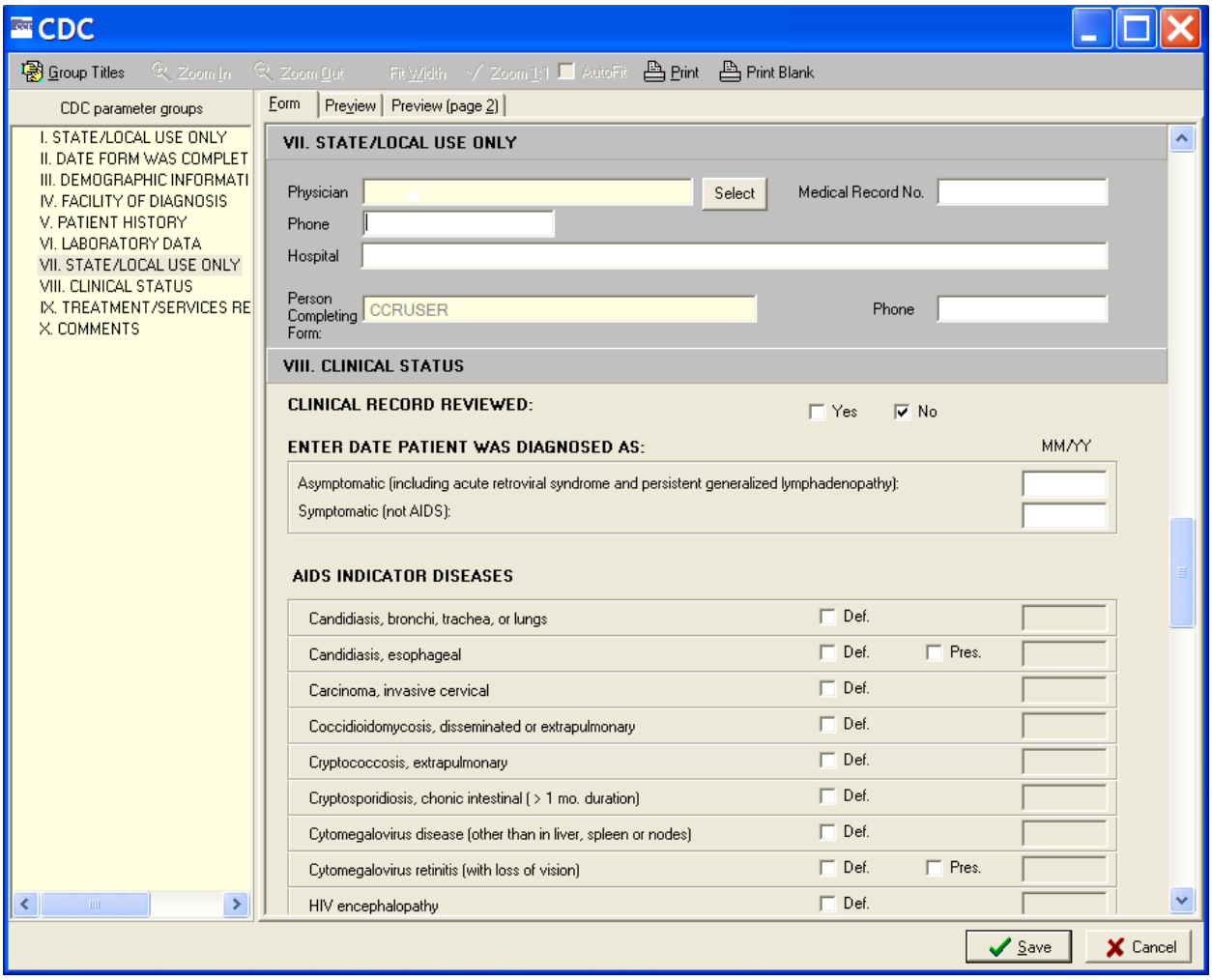


Figure 99 – Sections VII and VIII of the CDC Form

8.8.7. SECTION VII – STATE AND LOCAL USE ONLY

VII. STATE/LOCAL USE ONLY Note that background of the Physician field is other than white, indicating that you cannot type directly into the field. You must use the **[Select]** button to insert the name of the physician in the Physician field.

1. Select Click the **[Select]** button.

   The VistA User Selector window displays:

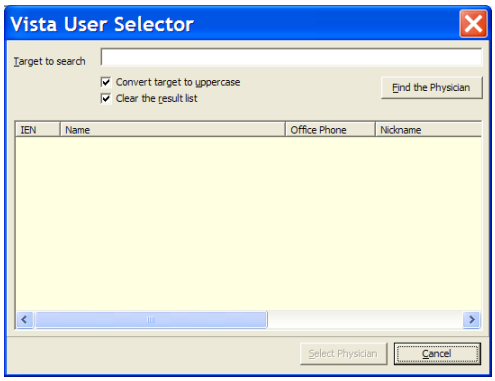


Figure 100 – VistA User Selector pop-up

   The Medical Record No. field is automatically populated with the selected patient's medical record number.

2. Find the Physician Type the full or partial last name of the physician, then press **< Enter >** or click **[Find the Physician]**.

   The list will update to display those physician names that match the search criteria.

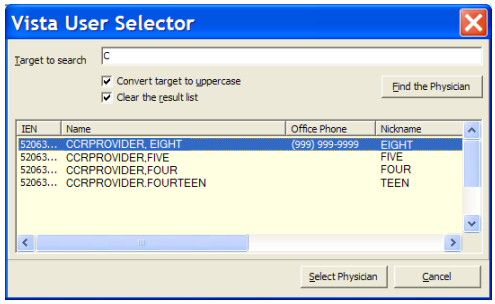


Figure 101 – VistA User Selector (showing search results)

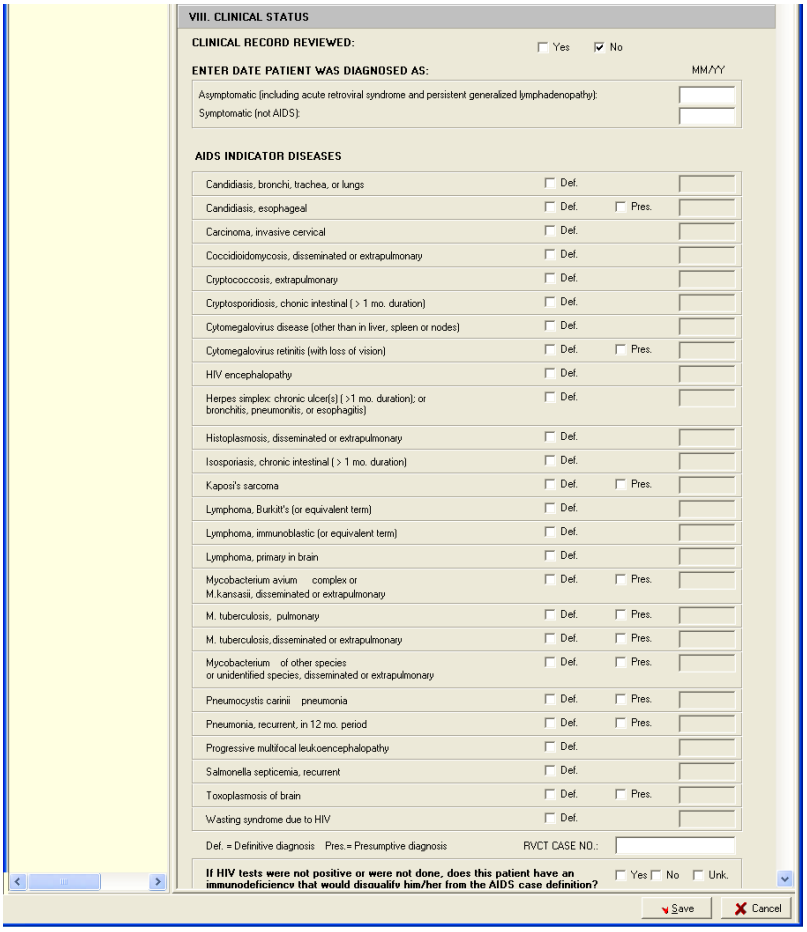
3. Select the name of the physician from the list, and then click **[Select Physician].**

   The VistA User Selector window automatically closes and the selected name will be displayed in the Physician field of the CDC form.

   The selected physician's Phone number and Hospital information will be automatically populated in the fields provided. The current user's name and phone number automatically populate the Person Completing Form and Phone fields.

8.8.8. SECTION VIII – CLINICAL STATUS

VIII. CLINICAL STATUS



Use the applicable checkboxes to indicate whether the patient's clinical record was reviewed.

Enter the month and year (MM/YY) the patient was diagnosed as asymptomatic or symptomatic in the fields provided.

Use the checkboxes to select the applicable AIDS INDICATOR DISEASES. Use the Def. checkbox to indicate a definitive diagnosis and the Pres. checkbox (when provided) to indicate a presumptive diagnosis. Enter the month and year (MM/YY) of the diagnosis for each selected disease in the field provided.

Figure 102 – Section VIII of the CDC Form

Note: When an indicator disease Def checkbox is selected, the Check if patient ever had an AIDS-OI checkbox and the Date of AIDS-OI field are automatically populated on the Patient Data Editor in the Clinical Status tab of the Registry tab. [L]

All reporting areas (i.e., the 50 states, the District of Columbia, Puerto Rico, and other U.S. jurisdictions in the Pacific and Caribbean) report tuberculosis (TB) cases to the CDC using a standard case report form. If the selected patient has been diagnosed with M. tuberculosis**,** pulmonary and/or M. tuberculosis, disseminated or extrapulmonary, type the applicable Report of a Verified Case of Tuberculosis case number in the RVCT CASE NO. field.

Use the applicable checkbox to indicate whether in the absence of positive HIV test results, the patient has an immunodeficiency that would disqualify him/her from the AIDS case definition. Select Yes, No, or Unk. (unknown).

8.8.9. SECTION IX – TREATMENT/SERVICES REFERRALS (optional)

IX. TREATMENT/SERVICES REFERRALS (OPTIONAL) This section of the CDC report is optional.

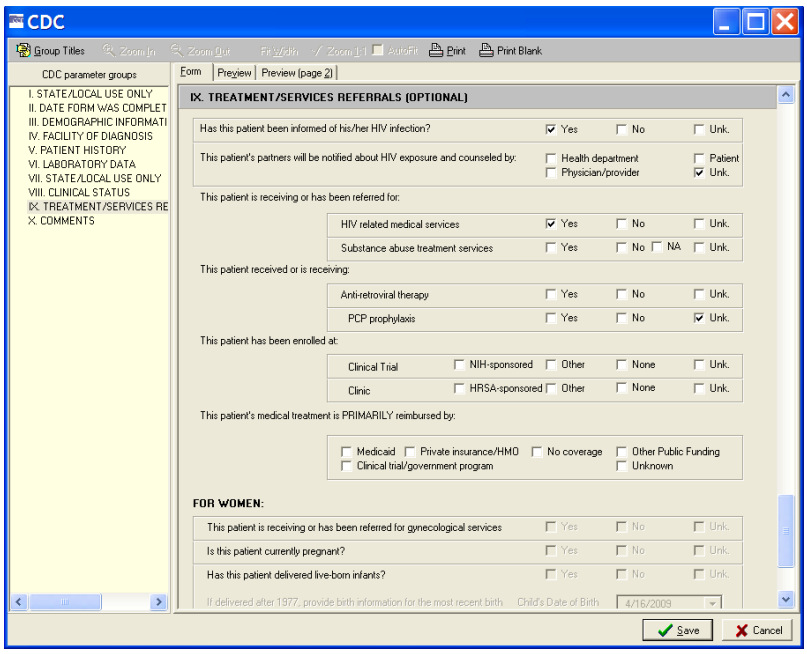


Figure 103 – Section IX of the CDC Form

Use the applicable checkboxes to indicate:

- Whether the patient has been informed of his/her HIV infection
- Whether the patient's partners will be notified about HIV exposure, and the resource that will be used to provide counseling
- The types of services to which the patient has been referred or is receiving
- Whether or not the patient is receiving or has received anti-retroviral therapy and/or PCP prophylaxis
- Whether or not the patient has been enrolled in a clinical trial, and whether the clinical trial is NIH sponsored
- Whether or not the patient has been enrolled in a clinic and whether the clinic is HRSA sponsored

- The *primary* source of reimbursement for the patient's treatment

FOR WOMEN: The **FOR WOMEN** subsection allows you to enter information specific to female patients. This subsection will be unavailable for male patients.

Use the applicable checkboxes to indicate:

- If the patient is receiving or has been referred to gynecological services
- If the patient is currently pregnant
- If the patient has delivered live born infants. If Yes is checked, complete these additional fields:

  Select the Child's Date of Birth, and then enter the name of the hospital at which the child was born, the city and state in which the hospital is located, and the child's Soundex and Patient Numbers in the fields provided.

8.8.10. SECTION X – COMMENTS

X. COMMENTS Type your comments in the field provided. The Comments field can accommodate 300 characters.

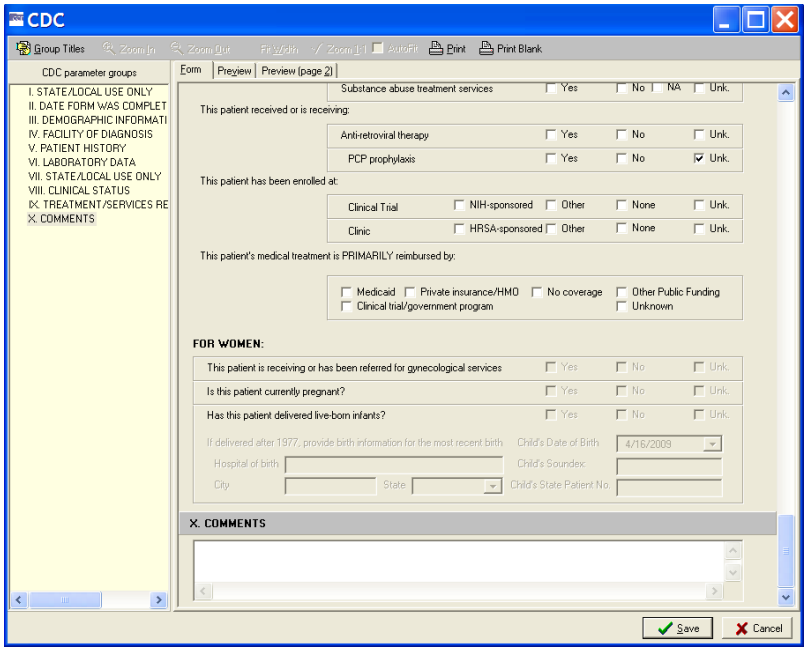


Figure 104 – Section X of the CDC Form

Click the **[Save]** button to save any changes, or…

Click **[Cancel]** to close without saving.

9. Registry Reports

A key benefit of the CCR is its reporting capability. Approximately eighteen standard reports are available in both Clinical Case Registries, and one additional report is available in CCR:HIV.

All of these reports are set up from the Reports menu. You can set specific reporting options for each report, and schedule a date and time for the report to run. After the report is generated, you can view, save, and print the report from the Task Manager tab.

Improved reporting functionality allows clinicians and administrators to:

- Track important aspects of care through customizable report parameters, including *"not"* logic (for example, find patients on drug X who *did not* have a particular lab test)~
- Save report parameters for later re-use
- **[Search]** the population of patients co-infected with both Hepatitis C and HIV, and return results on a single integrated report
- Create patient-based Divisional reporting

See Section 10 Local Reports for detailed information and examples of each report.

9.1. Registry Reports Window

The Registry Reports window is the window from which you can select the specific parameters and criteria used to generate the selected report. The Registry Reports window can be displayed in a single pane, or 2-pane mode. When the Registry Reports window is accessed from the Report menu**,** Report List menu option, or the **New Report** button, it is displayed in the 2-pane mode:

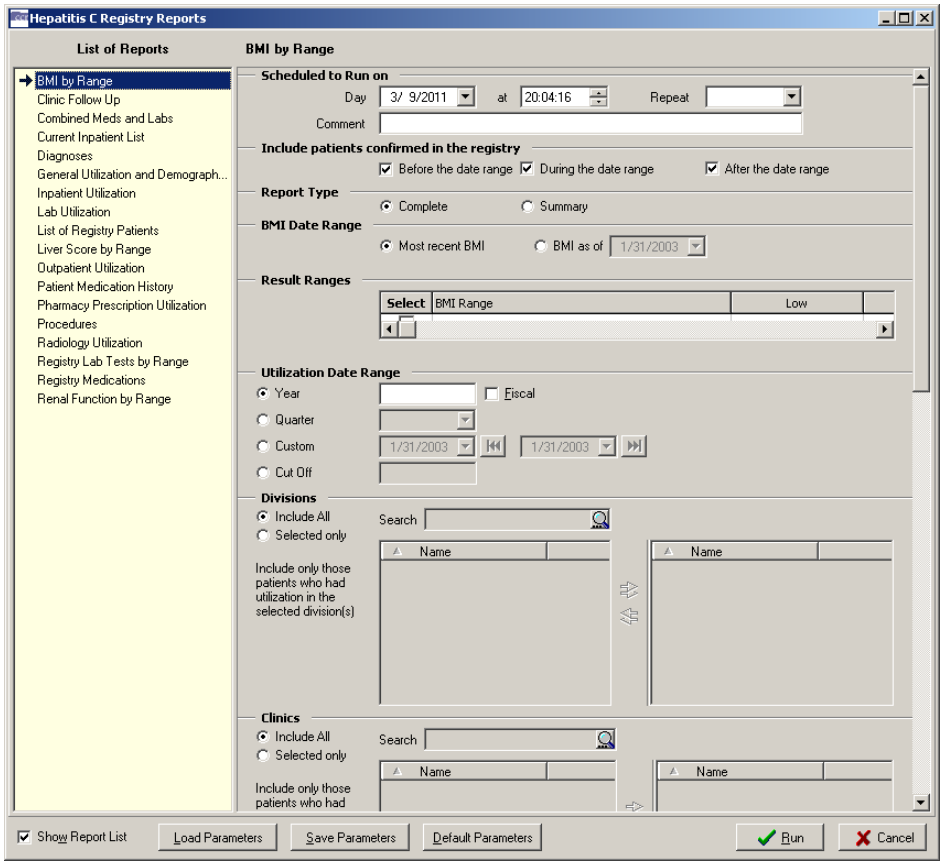


Figure 105 – Sample Report Setup window, Double-Pane Model

The left pane displays the List of Reports from which you can select a report to run. The right pane displays the reporting criteria that you can select for the report.

You can hide or display the List of Reports via the Show Report List box. To show the reports in single-pane mode, uncheck the Show Report List box:

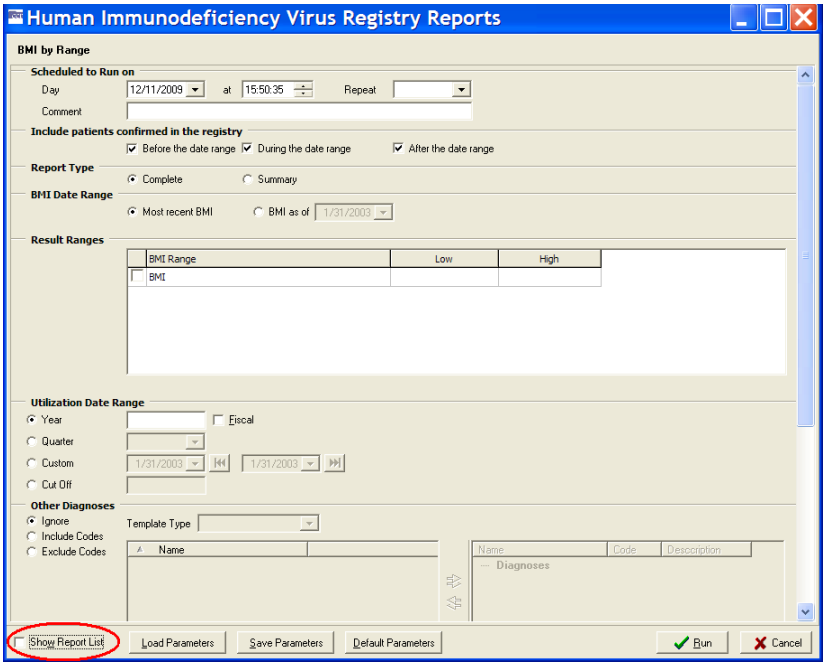


Figure 106 – Sample Report Setup window, Single-Pane Mode (showing "Show Report List" option)

9.1.1. Accessing the Registry Reports Window

You can access the Registry Reports window using the following methods:

- Select a report from the Reports menu
- Select Reports List from the Reports menu
- Click the **[New Report]** button in the Task Manager view
- Select New Report from the right-click menu in the Task Manager view

9.1.1.1. Reports Menu

The Reports menu displays the list of all available reports. When you select a report from the list, a secondary Registry Reports window displays the specific parameters and criteria that you can select to generate the report.

- You can also select Report List from the Reports menu. When you select this option, the Registry Reports window displays a list of all available reports on the left side of the window. You can select a report to generate from this List of Reports, and the selected report is identified with an arrow. The right-side pane displays the specific parameters and criteria that you can select to generate the report.

9.1.1.2. New Report button and right-click menu option

From the Task Manager tab view, you can access the Registry Reports window by clicking the **[New Report]** button, or by selecting New Report from the right-click menu.

The Registry Reports window displays a list of all available reports on the left side of the window. You can select a report to generate from this List of Reports, and the selected report is identified with an arrow. The right pane displays the specific parameters and criteria you can select to generate the report.

9.1.2. Date Range Parameters

Most registry reports allow you to set Date Range parameters to determine the window of time from which to capture the data for the report.

If date range parameters are incorrectly set, a warning will prompt you to check the Report Period parameters when you click the [Run] button. For example, if a Quarter is selected but no Year, you will be warned that the Year or Quarter value is not valid.

See Pop-up Calendars on page 33 for information on how to use the various pop-up calendar functions.

Table 25 – Date Range Parameters

Date	Parameters
Year	Enter the four digit year in **YYYY** format. The Year date range parameter will include all relevant data within the selected calendar year (January 1 through December 31) on the report. Check the **Fiscal** box to include all data within the selected fiscal year (October 1 through September 30) on the report.
Quarter	Select a quarter (**I** – **IV**) from the drop-down list. Used with the Year date range parameter, the Quarter parameter allows you to include on the report only relevant data within the selected quarter of the selected year. The appropriate date range is automatically selected for calendar or fiscal quarters.
Custom	Use the Custom date range parameter to include on the report only relevant data within a selected date range inclusive of the selected start and end dates of the date range. Enter the start date of the date range in the left-side field, or click the left arrow button next to the field to automatically set the date field to 12/30/1899 to include all data. Enter the end date in the right-side field, or click the right arrow button next to the field to set the date field to the current date.
Cut Off	Define a time range to be included on the report using the Cutoff option. Enter a value for the amount of time, in days, to "go back" from the current date, using digits and the **< W >** and **< M >** keys to specify the number in weeks or months. For example, enter **20** in the Cut Off field to include data from the last 20 days through the current day on the report. **30W** will include data from the last 30 weeks through the current day, and **2M** will include data from the last two months through the current day.

9.1.3. Include Patients Confirmed in the Registry checkboxes

Many of the reports allow you to include patients who were added to the registry before, during, and/or after the selected date range by checking one or more of the checkboxes provided. An error message will display if no checkbox is selected.

9.1.4. Other Registries modes

"Modes" replace the checkboxes formerly available in this section.[M]

Many of the reports include patients who appear in the registry that you are signed into with the option to include/exclude[N] patients who are in any other registry selected to which the user has keys. Currently there are only two registries – Hepatitis C and HIV. If you are signed into CCR:HIV, the option to select another registry is set to Hepatitis C. Conversely, when you are signed into CCR:HEPC, the option is set to HIV. See selecting a mode for instructions on using the Mode selector.

The software checks the registries associated with specified patients and/or registries not associated with specified patients. If not marked, the registries are ignored.

9.1.5. Load / Save / Default Parameters Buttons

The **[Load Parameters]** and **[Save Parameters]** buttons allow you to save and later reuse a report set up. These buttons are located at the bottom of the Registry Reports window and are available for all reports.

The **[Default Parameters]** button allows you to clear current values and load default parameters for a report.[O]

When you click **[Save Parameters,** all the selections you have made in each section of the Registry Reports window will be stored as a template.

When you click **[Load Parameters],** two lists of saved templates will be displayed– Common Templates are issued with the software package and are available to all users; Your Templates are available only to you, not to all registry users – and you can select one to automatically "fill in" the fields of the report form.

When you load a template, it will overwrite what you have already entered on a screen. Once a template is opened, you can modify the parameters to meet your current needs.

You can delete a template by selecting it and then clicking the ✕ button next to the template list selector (at right, shown as

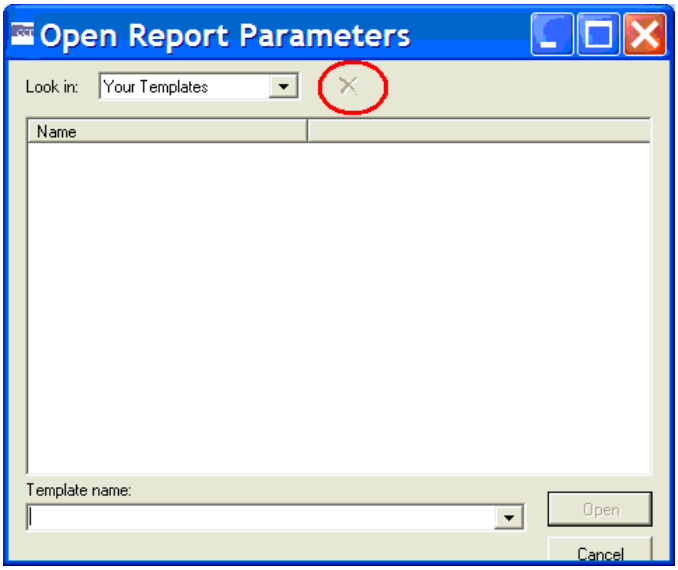


Figure 107 – Open Report Parameters pop-up (showing

"grayed out"). **"Delete" command icon)**

9.2. Generating a Report

The following is a general procedure for selecting and setting up a report in CCR; not all of these options and settings are available in each report, but the process is essentially the same for all reports. If you want detailed information for a particular report, see the Local Reports section for more information.

1. Select a report from the Reports menu. The Registry Reports window displays the reporting criteria selections for the selected report.
2. Select a Date Range, if applicable, for the selected report. See the Date Range Parameters topic for more information.
3. Select a date and time in the Scheduled to Run on section. If no other date and time are specified, the report will begin running immediately.

Note: Some reports require little processing and can quickly retrieve and display the data for the selected report. However, reports that are likely to require more processing time – such as those with large numbers of patients and/or several variables – should be scheduled to run on a date and time when VistA server resources are not being used as heavily.

4. Select a Repeat interval, if desired: select **1D** to repeat this report each day after its first run, or select **1M** to repeat it one month from its first run. To run this report on the first of each month at 4:00 AM, select **1M(1@4AM)**. Leave this field blank if repeated reporting is not required.
5. Check one or more of the Include Patients Confirmed to the Registry checkboxes to include patients who were added to the registry before, during, and/or after the selected date range, or any combination of the three. See Include Patients Confirmed in the Registry for more information.

Note: Patch ROR*1.5*10 introduced a new capability for several reports by adding a new [All Registry Meds] button on the **Medications panel** for the Combined Meds and Labs, Patient Medication History, and Pharmacy Prescription Utilization reports.

6. 

The [All Registry Meds] button defaults to not available ("grayed out").

The button becomes available when you choose Selected only (rather than Include all) under **Medications**:

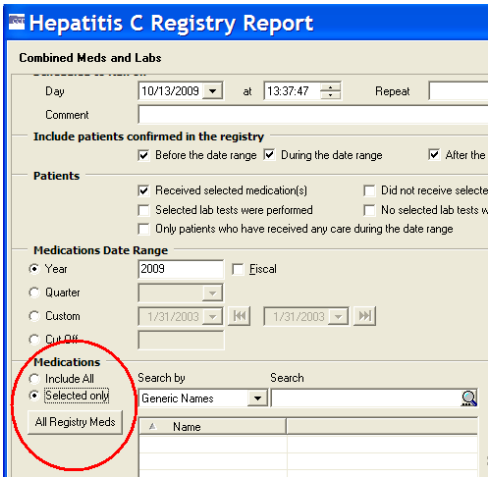


Figure 108 – Medications pane, showing "All Registry meds" button

When the [All Registry Meds] button is clicked, all the Registry medications are displayed, and you may select one or more medications to be included in the report. Before selecting any medications, however, you must enter a name for the first group in the field on the right-hand pane. If you do not do so, you will see an error popup:

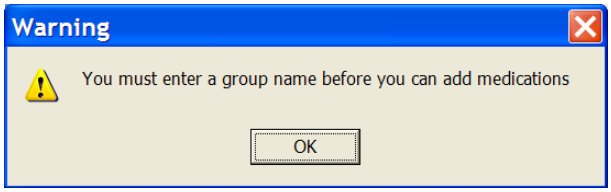


Figure 109 – Group Name Reminder pop-up

Enter the Group Name…

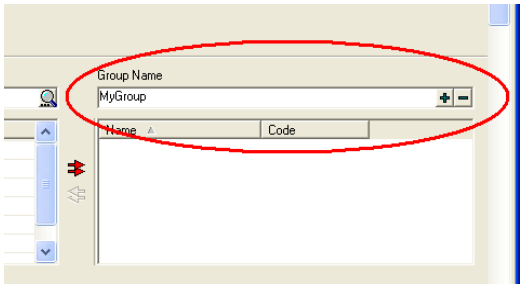


Figure 110 – Entering and Adding the Group Name

…and then click the large plus sign ( ) button to add the group to the right column. The Group Name (for example, "MyGroup") is then displayed in the right column of the pane:

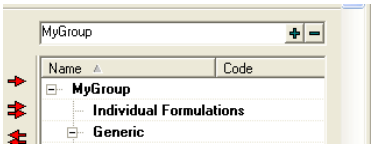


Figure 111 – Group Name Displayed

Make your selection(s) from the left-hand column by clicking on the medication name and then clicking the right arrow to move the medication to the right column of the pane. Select and click the left arrow (only available when at least one medication is in the right column) to remove that medication from your list. Use the double arrows to move *all* medications to/from the right column.

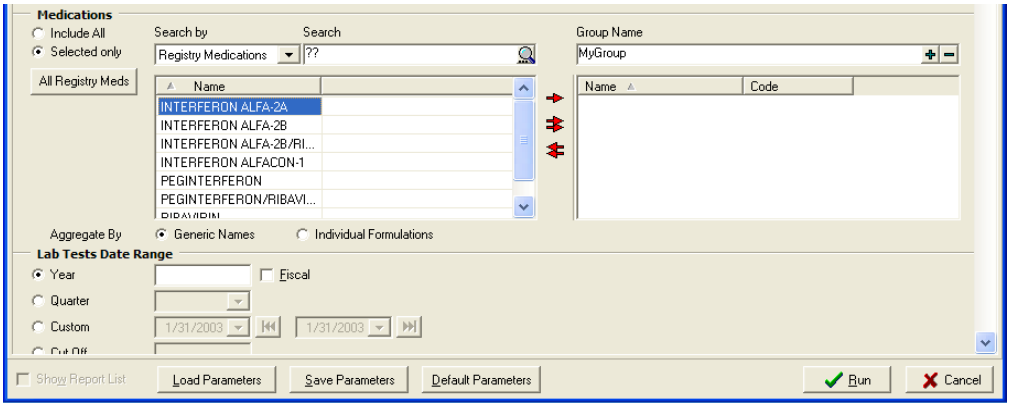


Figure 112 – Selecting Medications

7. Select the additional criteria specific to the selected report that you want to include. Refer to the Local Reports section for detailed information regarding each of the reports.
8. Click the **[Run]** button to request the report.

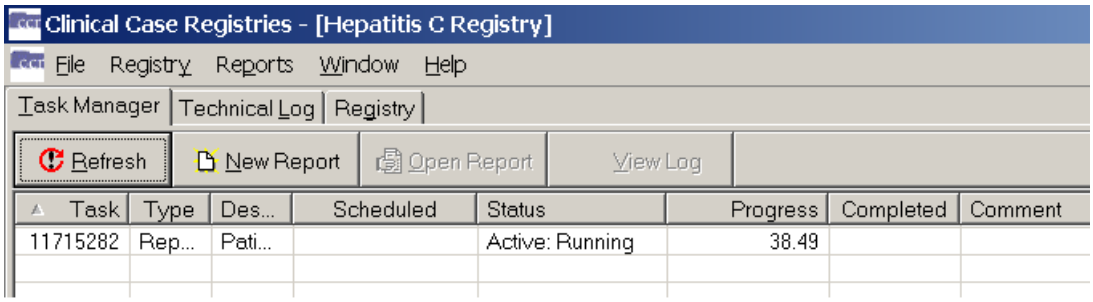


Figure 113 – Requested Report in Task Manager

The Task Manager tab will display the reports that have been requested. If the report is scheduled to run in the future, the date and time the report is scheduled to run will be

displayed in the Scheduled column. The Status column will display the status of the report being run. The Progress column will display the progress of the report as a percentage of completion.

Click the **[Refresh]** button to update the Progress column.

The generated report will be displayed in Task Manager for two weeks. After two weeks, the system will automatically delete the report from the list. You can access the report at any time during the two-week window to view, sort, print, delete, and/or save the report to an alternate location. Refer to the Managing Reports from Task Manager section for more information.

9.2.1. Scheduling a Report

Use the Scheduled to Run on section of the Registry Reports window to set a date, time, and frequency to run the selected report.

1. Enter the date on which you want to report to run in the Day field.
2. Select a time for the report to run in the At field. Click the hour in the time field, and then use the arrow buttons to select the hour. Repeat this process for minutes, seconds, and AM/PM options.
3. To run the selected report once, leave the Repeat field empty. To automatically repeat the report, select a time interval from the Repeat drop-down list:
   - Select **1D** to run the report once each day at the selected time.
   - Select **1M** to run the report monthly on the same date each month.

Note: Be sure that the date selected for monthly recurring reports occurs in each subsequent month. For example, a monthly recurring report that is set to run on the 31st will not be produced for months that have less than 31 days

   - Select **1M(1@4AM)** to run the report on the first day of each month at 4AM.

Note: Enter a future date to prevent the report from running immediately.

Enter a comment up to 60 characters in the Comment field. This Comment will display on the Task Manager (and in the header on the finished report) and can be used to provide report characteristics to help distinguish reports if you are running multiple reports.

4. When you have completed each section of the report window, click [Run] to queue the report.

9.2.2. Discontinuing a Scheduled Report

If a report that is scheduled to run repeatedly at specified intervals is no longer needed, you can discontinue the report in the future by performing the following steps:

1. In the Task Manager tab view, locate the task description for the next date and time the report is scheduled to run. Click the task to select it. Note that when a task is selected, the **[Delete]** button comes active:

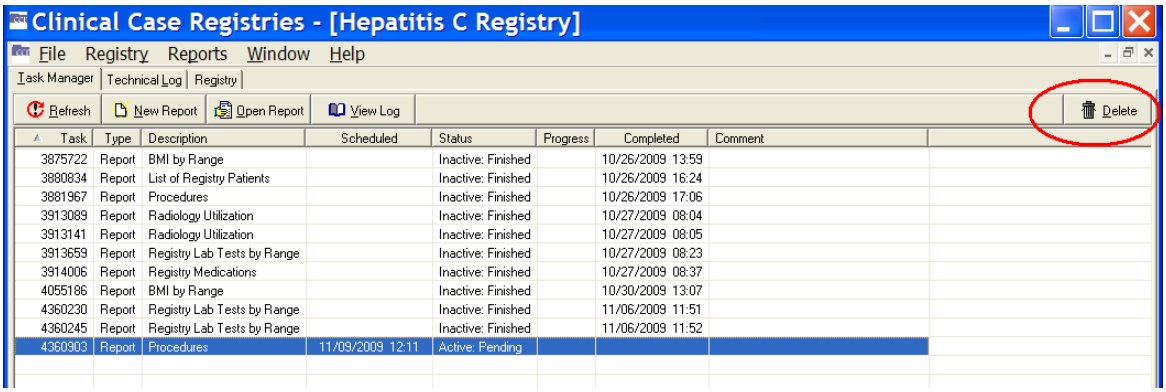


Figure 114 – Report Selected (note Delete button available)

2. Delete Click the **[Delete]** button, or select Delete from the right-click menu. A confirmation dialog box displays.

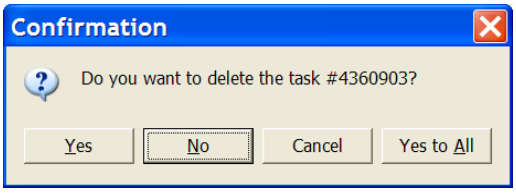


Figure 115 – Task Deletion Confirmation pop-up

3. Click **[Yes]** (or **[Yes to All]** if more than one task has been selected). The scheduled report(s) will be discontinued.

10. Local Reports

Approximately eighteen local reports are available to both registries, and one additional report is available in CCR:HIV. These reports are intended to be set up and printed at local user sites and only contain local information.

To access the local reports, in the main Registry window, select the Reports menu, and select the appropriate report. Table 26 lists each report, its function and the panes included in the report. To view instructions for each included field, click the hyperlink in the Panes Included column. When all of the fields in the report are completed, click:

1. **Run.** Click **[Run];** The report is added to the Task Manager tab and will run at the specified date and time.
2. **Cancel.** To discard your entries and cancel the report, click **[Cancel]**.

Table 26 – Local Report Elements

Report Name	Report Function	Panes Included
Body Mass Index (BMI) by Range	The BMI by Range report is one of three "by range" reports introduced by Patch ROR*1.5*10. It provides a list of patients whose body mass index (BMI) is within a user-specified range (low to high) and within a specified date range or the most recent observation. A complete or summary report is available.	Scheduled to Run On Include Patients Confirmed in the Registry Report Type BMI Date Range BMI Result Ranges Utilization Date Range Divisions Clinics Select Patient

		Other Diagnoses Other Registries Local Fields
Clinic Follow Up	The Clinic Follow Up report is designed to help you identify patients who have or have not attended specified clinics in your health care system. This report displays a list of living patients who were or were not seen in selected clinics, and/or received any care during the selected date range selected.	Date Range Scheduled to Run On Include Patients Confirmed in the Registry Patients Clinics Divisions Select Patient Other Diagnoses Other Registries Local Fields
Combined Meds and Labs	The Combined Meds and Labs report is a complex report that identifies patients in the registry who received specific medication and/or specific laboratory tests within a specified date range. This report can be run for pharmacy alone, laboratory alone, or both. In addition, a range can be placed on numeric lab test results to permit searching for patients with particular values. This report identifies patients using the following basic logic: • People who did or did not receive medication(s) (single or groups) and/or • People who did or did not receive lab test(s) (you can filter values for numeric tests) • People who had some type of utilization	Scheduled to Run On Include Patients Confirmed in the Registry Patients Medications Date Range

	The date ranges can vary between these three areas to permit, for example, the viewing of labs for an extended period beyond the prescription period. These three main filters along with specific medication and lab test selection can be used to run queries of the following types: • Find patients with particular lab results who are not receiving medication for this condition (*e.g.*, high cholesterol who are not on a statin). • Find patients receiving a medication who are not receiving appropriate monitoring (*e.g.*, on ribavirin who have not had a CBC). Queries can also be constructed to answer complex questions such as "Are patients on contraindicated drug combinations and if there is a lab test marker for toxicity or treatment failure, who has abnormal labs?" Both the input screen and the output format of the Combined Meds and Labs report were modified for CCR 1.5.[P] When both Received selected medication(s) *and* Selected lab tests were performed are selected, the report contains a set of meds tables and a set of labs tables by patient. *Example:* Patient A – Meds, Labs; Patient B – Meds, Labs Meds table is sorted by medication names in ascending order. Labs table is sorted by test names in ascending order and then by result dates in descending order. When either Received selected medication(s) *or* Selected lab tests were performed is selected, the report contains lists of patients in separate labs tables and meds tables. When both Did not receive selected medication(s) *and* No selected lab tests were performed are selected, the report contains a list of patients who have neither labs nor meds. The Only patients who have received any care during the date range checkbox is mainly used with Did not receive selected medication(s) and No selected lab tests were performed.	Medications Lab Tests Date Range Lab Tests Utilization Date Range Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Current Inpatient List	The Current Inpatient List report lists the names of patients who are assigned an inpatient bed at the time the report is run. If no active patients are currently inpatients, no report will be generated; however, a notification alert will be sent to the requestor of the report.	Scheduled to Run On Other Diagnoses

	 **Note:** To identify a list of inpatients during a specific time period, use the Inpatient Utilization report instead of this one.	Other Registries Local Fields
Diagnoses	The Diagnoses report identifies patients who have particular ICD-9 codes for a particular condition. The system searches completed admissions, outpatient visits, and entries in the Problem List file for ICD-9 codes assigned to any registry patients within the selected date range. The Diagnose**s** report selects a patient only when the patient has at least one ICD-9 code from each non-empty group; otherwise all patient diagnoses are disregarded and not included in counts.[Q] Remember that the "ignore, include or exclude" filter is *not* available for this report.	Date Range Scheduled to Run On Include Patients Confirmed in the Registry Report Type ICD-9 Divisions Clinics Select Patient Other Registries Local Fields
General Utilization and Demographics	The General Utilization and Demographics report provides a list of patients with specified types of utilization during a defined period. Additional demographic information, such as age and race, can be included in the final report. Patients that have been inactivated due to death are included in this report if they required health care within the selected date range.	Date Range Scheduled to Run On Include Patients Confirmed in the Registry Report Type Type of Utilization

		Report Options Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Inpatient Utilization	The Inpatient Utilization report provides a list of patients or summary data on patients who were hospitalized in a specified period, with the option of additional filters.	Date Range Scheduled to Run On Include Patients Confirmed in the Registry Options Divisions Select Patient Other Diagnoses Other Registries Local Fields
Lab Utilization	The Lab Utilization report provides a list of the number of lab orders and lab results during the selected date range. The report can be run for either individual tests or for panels (e.g., Hgb or CBC). This report includes only information about the *number* of tests performed, not about the results. The report only includes completed tests and does not cover the microbiology package.	Date Range Scheduled to Run On Include Patients Confirmed in the

		Registry Report Options Lab Tests Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
List of Registry Patients	The List of Registry Patients report displays a complete list of patients in the local registry. Users can select from patients who are pending validation into the registry or those already validated/confirmed or both. Registry specific information (such as date confirmed and some patient identifiers) can be printed with this report.	Scheduled to Run On Registry Status Report Options Other Diagnoses Other Registries Local Fields
Liver Score by Range Report	Effective with Patch ROR*1.514, the MELD Score by Range report has been renamed and is now the Liver Score by Range report. It provides a list of patients and their liver scores within a user-specified range (low to high score) and either the most recent score or observations during a specified date range. The user can select from APRI, FIB-4, Model for End-Stage Liver Disease (MELD) or MELD with Incorporation of Serum Sodium (MELD-Na) scores. The report allows the user to select any single score or a combination of up to two liver scores. If selecting multiple scores, the user can select the APRI and FIB-4 combination or the MELD and MELD-Na combination. If APRI is selected, the user must enter the upper limit of normal (ULN) for the	Scheduled to Run On Include Patients Confirmed in the Registry Liver Score Date Range Result Ranges

	AST value to be used in the calculation.  **Notes:** Effective with CCR 1.5.10 (Patch ROR*1.5*10): 1. For patients where a value cannot be calculated because there are no lab tests, the lab Result field will be blank and the MELD (and/or MELD-Na) column will be blank. 2. Results will be ignored if the SPECIMEN TYPE (file 63.04, field #.05) contains UA or UR. 3. For patients where the Creatinine result is >12 (invalid), earlier results will be checked for a valid value. If no valid value is found, the Result field will contain the invalid result with "✱" next to it, and both scores will be blank (not calculated). 4. For patients where the Sodium result is <100 or >180 (invalid), earlier results will be checked for a valid value. If no valid value is found, the Result field will contain the invalid result with "✱" next to it, and the MELD-Na score will be blank (not calculated). 5. If you do not select (check) either report (MELD or MELD-Na) in the **Result Ranges** panel, the report will display both scores.  **Notes:** Effective with CCR 1.5.15 (Patch ROR*1.5*15): The "Liver Score by Range" report includes rows for tests that are not related to the test(s) selected by the user. Test rows should no longer appear if they are not used in the report calculations. If the user selects the APRI and/or FIB4 tests, then the Bili, Cr, INR, and Na rows should not appear on the report. If the user selects the MELD and/or MELDNA tests, then the AST, Platelet, and ALT rows should not appear on the report.	Utilization Date Range Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Outpatient Utilization	The Outpatient Utilization report provides a count of outpatient clinic utilization during the specified date range with an option to identify patients with the highest utilization. There is no specific detail on which patients went to which clinics or when they went– use the Clinic Follow	Date Range Scheduled to Run On Include Patients

	Up report for that purpose.	Confirmed in the Registry Options Divisions Select Patient Other Diagnoses Other Registries Local Fields
Patient Medication History	The Patient Medication History report provides all inpatient and outpatient prescription fills for selected patients over a specified time period. This report searches inpatient unit dose, IV medications, and outpatient prescriptions for any or specified prescription fills.  **Note:** Effective with CCR 1.5.13 (Patch ROR*1.5*13), this report is enhanced to allow users to select the most recent fill only, or all fills. The report output has been enhanced to include a column displaying the number of fills remaining.	Date Range Scheduled to Run On Activity Report Options Medications Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Pharmacy Prescription Utilization	The Pharmacy Prescription Utilization report provides a count of prescriptions filled during a specified date range, with the option of identifying patients with the highest utilization. This report does not include information about specific medications filled by individual patients; use	Date Range Scheduled to Run On

	the Patient Medication History report for that information.	Include Patients Confirmed in the Registry Activity Options Medications Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Procedures	The Procedures report provides a list of patients or summary data on patients who had a selected procedure during the specified date range, with the option of additional filters.[R] This report searches on inpatient and outpatient procedures. The sorting of the Procedures report was changed for CCR 1.5.[S] • When the report is sorted by patient data, the procedures are grouped by patient. • When the report is sorted by procedure data, the report is *not* grouped and the patient data is duplicated in each row.  **Note:** If a patient is not selected for a report, all corresponding procedures are disregarded and not included in counts.	Date Range Scheduled to Run On Include Patients Confirmed in the Registry Procedures Patients Report Type ICD-9 CPT Utilization Date Range

		Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Radiology Utilization	The Radiology Utilization report provides a count of radiology procedures utilized within the specified date range, with an option to identify the patients with the highest utilization.	Date Range Scheduled to Run On Include Patients Confirmed in the Registry Report Options Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Registry Lab Tests by Range	The Registry Lab Tests by Range report allows the user to search for registry-specific lab tests and to filter on results of laboratory tests where the results are in a numeric format. In order for this report to work, the Registry Labs list must be set up and current at your facility; see the Adding Lab Tests section for details on how to set up local Registry Labs.	Date Range Scheduled to Run On Include Patients Confirmed in the

		Registry Result Ranges Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields
Registry Medications	The Registry Medications report provides counts and/or names of patients who received at least one prescription fill for a registry specific medication during a defined period.	Date Range Scheduled to Run On Include Patients Confirmed in the Registry Activity Report Type Medications Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields

Renal Function by Range	The Renal Function by Range report provides a list of patients whose renal function scores are within a user-specified range (low to high scores) and either the most recent score or scores or observations within a specified date range. The report includes the most recent Creatinine Clearance by Cockcroft-Gault or Estimated Glomerular Filtration Rate (eGFR) by Modification of Diet in Renal Disease Study (MDRD) Equation for patients in registry, with the ability to limit it to a range of Creatinine Clearance or Estimated GFR and ability to limit it to patients with utilization in a user specified range.  **Notes:** Effective with CCR 1.5.10 (Patch `ROR*1.5*10`): The following formulas will be used for the calculations of the Renal Function by Range report: **Cockcroft-Gault** = (140-age) x ideal weight in kilograms (* 0.85 if female) / Creatinine *72 → *Ideal weight in kilograms calculated:* Males = 51.65 + (1.85*(height in inches - 60)) Females = 48.67 + (1.65 * (height in inches – 60)) **MDRD** = 175 x creatinine ^-1.154 x age^-0.203 x (1.212 if Black – so have to check race field to see if race is 2054-5) x 0.742 if female → Height will be pulled from the `GMRV VITAL MEASUREMENT FILE` (`#120.5`) where `VITAL TYPE field (.03)` equals `HEIGHT`. The vital measurement will be pulled from the `Rate FIELD (1.2)`. → The patient's information, sex and race, will be determined using data in the `PATIENT file (#2)` through the `^VADPT API`. Results will be ignored if the `SPECIMEN TYPE` (`file 63.04, field #.05`) contains UA or UR. For patients where the Cr result is >12 (invalid), earlier results will be checked for a valid value. If no valid value is found, the Result field will contain the invalid result with "✱"	Scheduled to Run On Include Patients Confirmed in the Registry Report Type Renal Function Date Ranges Result Ranges Utilization Date Range Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields

	next to it, and both scores will be blank (not calculated). For patients where the Height is <36 or >96, or contains 'CM' (measurement in centimeters is invalid), the Result field will contain the invalid result with "✱" next to it, and the CrCL will be blank (not calculated). If you do not select (check) either report (CrCl or eGFR) in the **Result Ranges** panel, the report will display both scores.  **Notes:** Effective with CCR 1.5.15 (Patch ROR*1.5*15): The "Renal Function by Range" report will now include an option to calculate CKD-EPI scores. A checkbox to select "eGFR by CKD-EPI" will be added to the Result Ranges panel. A CKD-EPI column will be added to the report. The current eGFR column heading will be changed to MDRD. The Creatinine LOINC codes that are used on existing calculations will be utilized, 15045-8, 21232-4, 2160-0. The CKD-EPI formula is eGFR by CKD-EPI = 141 x $\min(Scr/k, 1)^{a}$ x $\max(Scr/k, 1)^{-1.209}$ x 0.993^{Age} x 1.159 [if black] x 1.018 [if female], where Scr = serum creatinine, k = 0.7 for females and 0.9 for males, a = -0.329 for females and -0.411 for males, min indicates the minimum of Scr/k or 1, and max indicates the maximum of Scr/k or 1. In addition, the Report Summary table will be modified to read "Number of Patients by MDRD" and "Number of Patients by CKD-EPI." If the user chooses MDRD, CKD-EPI is hidden, and vice versa. If the user chooses both MDRD and CKD-EPI, information for both is displayed.	
VERA Reimbursement	**CCR:HIV ONLY** The Veterans Equitable Resource Allocation (VERA) Reimbursement report is available only in the CCR:HIV Registry and can provide counts and/or names of patients who meet criteria for complex care or basic care reimbursement based on care received for HIV. The report can also include patients on investigational medications although these patients currently	Date Range Scheduled to Run On Include Patients

	do not receive complex care reimbursement if they receive only investigational antiretrovirals (ARVs). Please note that it is possible that a patient who meets criteria for basic level based on HIV related factors could meet criteria for complex level based on other conditions. Also note that the report logic is based on the current VERA algorithms which may change in the future.	Confirmed in the Registry Options Medications Divisions Clinics Select Patient Other Diagnoses Other Registries Local Fields

10.1. Report Title

The report title is displayed at the top of the report screen.

10.2. Scheduled To Run On Pane

1. Select a date and time in the Scheduled to Run on section. If no other date and time are specified, the report will begin running immediately.

Note: Some reports require little processing and can quickly retrieve and display the data for the selected report. However, reports that are likely to require more processing time – such as those with large numbers of patients and/or several variables – should be scheduled to run on a date and time when VistA server resources are not being used as heavily.

2. Select a Repeat interval, if desired: select **1D** to repeat this report each day after its first run, or select **1M** to repeat it one month from its first run. To run this report on the first of each month at 4:00 AM, select **1M(1@4AM)**. Leave this field blank if repeated reporting is not required.
3. Enter a Comment in the field provided, if desired.

10.3. Include Patients Confirmed in the Registry

Set the Include patients confirmed in the registry parameters (see the Generating a Report topic for detailed instructions.).

10.4. Date Range Pane(s)

Most registry reports allow you to set Date Range parameters to determine the window of time from which to capture the data for the report. Depending on the report, one or more Date range selections may be made. For example, in the Combined Meds and Labs report, you may specify date ranges for Medications, Lab Tests, and Utilization.

If date range parameters are incorrectly set, a warning will prompt you to check the Report Period parameters when you click the [Run] button. For example, if a Quarter is selected but no Year, you will be warned that the Year or Quarter value is not valid.

See Pop-up Calendars for information on how to use the various pop-up calendar functions.

Refer to Section 9.1.2 Date Range Parameters for information on the date range parameters.

10.5. Report Elements to Include

All reports give you some latitude as to what elements are included in the report. All have the options Include all and Selected only, which allow you to specify whether you want to see all the data about the report subject. For example, in the Combined Meds and Labs report, you can specify all medications or select certain medications (or groups of medications) to be included. In that same report, you can specify that you want to see results on all lab tests, or only selected ones.

Note that the Combined Meds and Labs report offers the option to Include All or Selected only. There is also an option to Display all or Only most recent in time period lab tests. Both option sets were added with CCR 1.5.8.

10.6. Utilization Date Range

Set the Utilization Date Range (see the Generating a Report topic for detailed instructions on date ranges).

10.7. Divisions

Use the Divisions panel to select one or more Divisions to be included in the report. Include All and Selected only appear on the Divisions panel.[T]

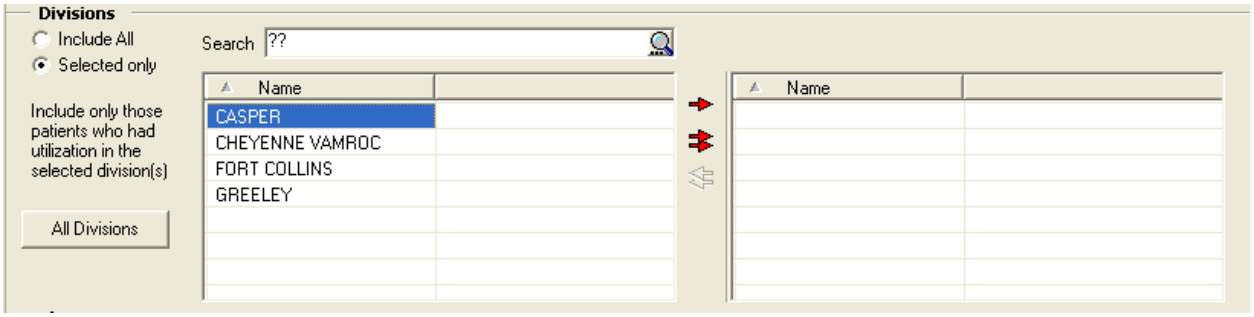


Figure 116 – Divisions

- Enter "??" in the **Search** box to display all available divisions in the left-hand list box.
- Click **Include All** to report on all divisions. If you choose Include All, the report considers all registry patients.
- Click **Selected only** to report on patient(s) seen in one or more specific divisions. If you choose Selected only, the report includes only those patients who had utilization in the selected division(s).
- The **[All Divisions]** button will be disabled when the **Include All** radio button is selected and enabled when the **Selected Only** radio button is selected.

10.8. Clinics

Using the radio buttons, select one or more clinics in the **Clinics** section:

- Click **Include All** to select all clinics to be included the report
- Click **Selected only** to specify one or more particular clinics to be included in the report. Use the clinic selection panes to locate and select the clinics:

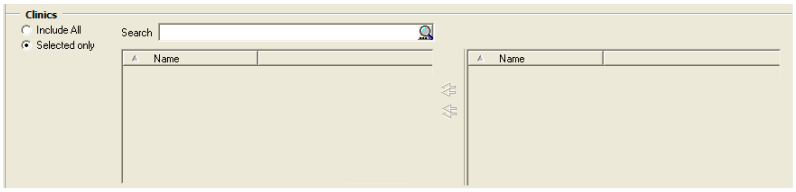


Figure 117 – Clinic Follow Up Report Setup Screen (Clinics pane)

- Enter the first few letters of the clinic name, and then click the **[Search]** button. A list of matching clinic locations is displayed below the search field. Clinic names are the same ones used in the appointment scheduling process.
- Select a clinic name, and then click the right arrow to move it to the right pane. Repeat this procedure until all desired clinics are selected and appear in the right pane.

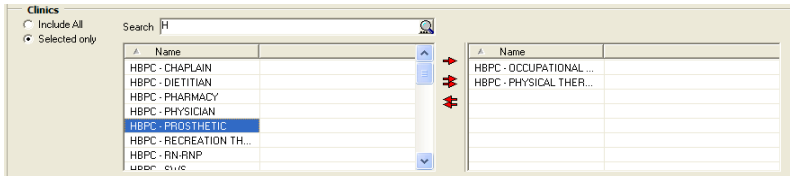


Figure 118 – Report Setup Screen (Clinics pane), showing Clinic Names being selected

- To remove a selected clinic, click the name of the clinic in the right pane and click the left arrow button.

10.9. Select Patient

Click **Selected only** to specify one or more particular patients to be included in the report. If you choose **Selected only**, the **Other Registries** and **Local Fields** panels are disabled and the report includes only selected patients. If a patient did not receive selected medications, the patient is added to the report anyway with No Data as the indicator.

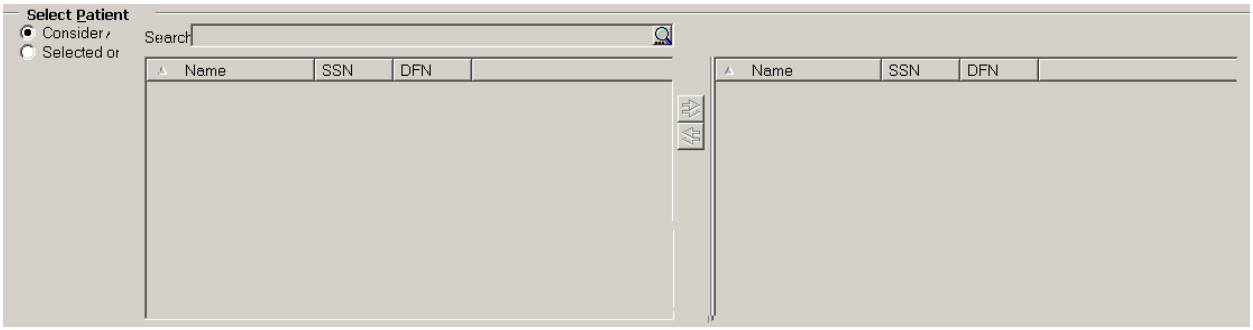


Figure 119 – Select Patient

- Enter the first few letters of the patient's **name** (default), the last four digits of the **SSN**, **date of birth**, **age**, or **date of death** and click the **[Search]** button.
- A list of matching patients displays below the search field.

- To move a patient to the right pane, select a name and click the single right arrow. Repeat this process until all desired patients are selected and appear in the right pane.
- To move a patient back to the left pane, select a name and click the single left arrow. Repeat this process until all desired patients are selected and appear in the left pane.
- To move all the names to the right pane, click the double right arrows.
- To move all the names back to the left pane, click the double left arrows.

10.10. Other Diagnoses

OPTIONAL Note that the report also offers the option to Ignore, Include or Exclude Codes in Other Diagnoses. This was added with CCR 1.5.8. In this pane:

- Select **Ignore** to ignore any other diagnoses that may be present.
- Select **Include** Codes to specify which other diagnosis codes should be considered.
- Select **Exclude** Codes to specify which diagnosis codes should *not* be considered.

  In the latter two cases, you will be able to specify **Your Templates** (if you have any defined) or **Common Templates** to be used.
- From the pull-down list, select one of the template classes. The list of templates appears in the left pane:

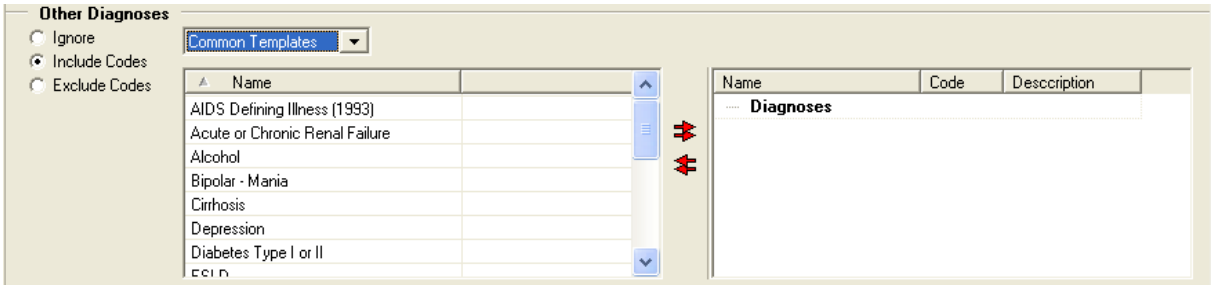


Figure 120 – Other Diagnoses pane

- Highlight the desired template name. The red right arrow (➔) command icon becomes available above the double arrows; click the arrow to move the template to the right pane. In this case, the Alcohol template was selected and moved to the right pane:

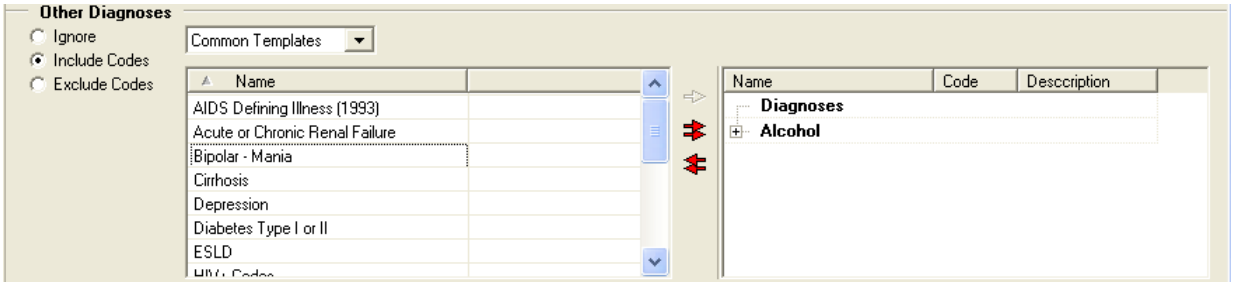


Figure 121 – Other Diagnoses pane (selecting individual Codes to be included)

- Note the plus sign (⊞) to the left of the template name. Click to expand the template and display the diagnosis names associated with that template:

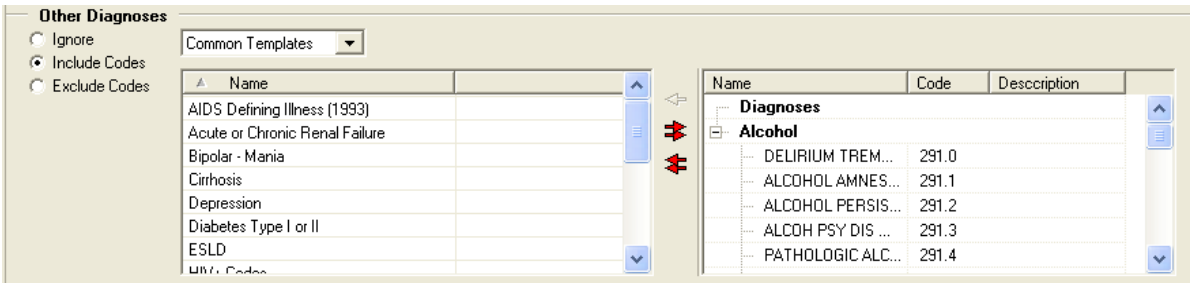


Figure 122 – Other Diagnoses pane (selecting All Codes)

- Or, use the double right arrow ⏩ to move all the diagnosis templates to the right pane.
- Once the diagnoses are displayed in the right pane, you can select one or more and use the left red arrow ◀ to remove that specific diagnosis from the right-hand panel. Or, use the double left arrow ⏪ to remove all the diagnoses from the right-hand panel.

In CCR 1.5.8, when you used this filter and then removed a previously-selected group of diagnoses from the right pane, the group header would remain in the right pane. Effective with CCR 1.5.10, you may also remove the header from the selected panel. Highlight the group header and press the **[Delete]** key to remove the header. Or, highlight the group header and click the left red arrow to delete the header.

Note: Patch `ROR*1.5*10` added a new ICD-9 diagnosis group to the Common Templates:	
Hepatocellular Carcinoma (HCC): 155.0	**Esophageal varices:** 456.0, 456.1, 456.20, 456.21
HCC is a primary malignancy (cancer) of the liver. Most cases of HCC are secondary to either a viral hepatitide infection (hepatitis B or C) or cirrhosis (alcoholism being the most common cause of hepatic cirrhosis). It is also known as primary liver cancer or hepatoma.	*Esophageal varices are fragile, swollen veins at the base of the muscular tube (esophagus) that serves as the conduit between the mouth and the stomach.*
ICD-9 155.0: Malignant neoplasm of liver primary	*456.0: Esophageal varices with bleeding* *456.1: Esophageal varices without bleeding* *456.20: Esophageal varices in diseases classified elsewhere with bleeding* *456.21: Esophageal varices in diseases classified elsewhere without bleeding*

10.11. Report Type (Complete/Summary)

Figure 123 – Report Type

Using the radio buttons, select the Report Type: **Complete** or **Summary**.

10.12. BMI Date Range

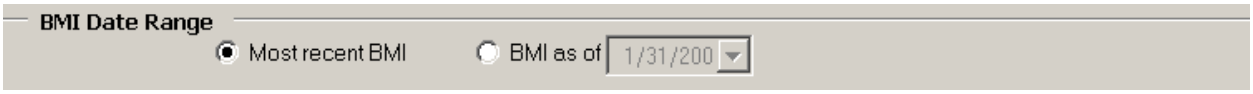


Figure 124 – BMI Date Range

Specify the BMI Date Range by checking either **Most recent BMI** or **BMI as of**. In the latter case, enter the "as of" date.

10.13. BMI Result Ranges

Figure 125 – Result Ranges

Set the Result Ranges for the BMI report by checking the box and entering the low and high values as appropriate.

Note: Effective with CCR 1.5.10 (Patch `ROR*1.5*10`), if you do not select (check) BMI in the **Result Ranges** panel, the report will display the `BMI` score.

10.14. Other Registries

OPTIONAL In this section, select a Mode, to *include* in or *exclude* from the report, patients with HIV/HEPC co-infection, who also meet the above criteria. [U]

Figure 126 –Other Registries

You must click in the space immediately below the Mode button to display the drop-down list arrow. Click the arrow to see the choices and make your selection::

Figure 127 –Other Registries, Highlighted Choices

10.15. Local Fields

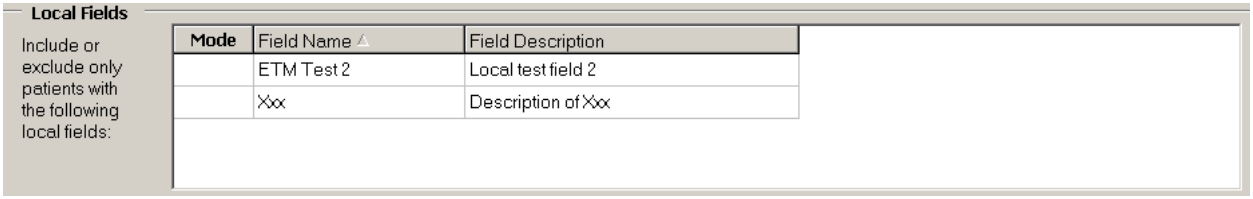


Figure 128 – Local Fields

OPTIONAL In the **Local Fields** section, select a Mode, to *include* in or *exclude* from the report output, patients associated with the local field. If you select more than one filter, the search will look for people with filter #1 *and* filter #2 *and* filter #3, and so on (see Adding Local Fields for more information).[v] Note that **Local Fields** choices will only be seen if your site has created any local fields.

10.16. Load Parameters

OPTIONAL **Load Parameters.** If parameters have previously been saved (refer to Section 9.1.5 Load / Save / Default Parameters Buttons), the parameters can be loaded. Click the **[Load Parameters]** button to use a pre-defined set of ICD-9 codes for a particular condition, such as depression or diabetes. The Open Report Parameters popup displays:

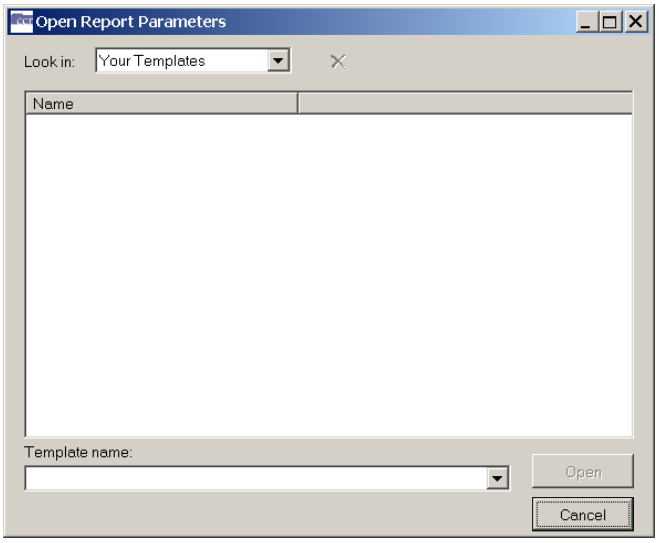


Figure 129 – Open Report Parameters

Look in. From the pull-down list, select **Common Templates** or **Your Templates.**

Template Name. Select the template name from the pull-down list provided and click **[Open].** The associated diagnosis codes are loaded into the Registry Reports window. Or, click **[Cancel]** to stop the selection process.

Note: If multiple diagnosis codes are selected, the report will include any patient who has at least one of the selected codes.

OPTIONAL **Save Parameters.** To save this report set-up for future use, click the **[Save Parameters]** button. The Save Report Parameters as window opens; enter a template name and click **[Save]**.

10.17. Patients

The Patients pane has different options for three different local reports:

- Clinic Follow Up Report
- Combined Meds and Labs Report
- Procedures Report

Each report is detailed in the sections below.

10.17.1. Clinic Follow Up Report Patients Pane

Check one or more Patients checkboxes to include the following types of patients:

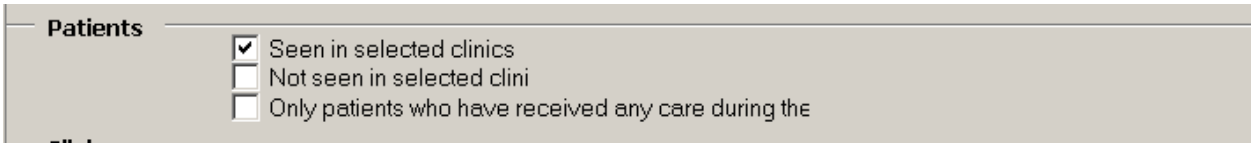


Figure 130 -- Patient Pane -- Clinic Follow-Up Report

- **Seen in selected clinics** includes patients seen (with a completed encounter) in the specified clinics. Patients who had appointments but were "no shows" or who cancelled the appointment will not show up as "Seen."
- **Not seen in selected clinics** includes patients who were *not* seen in the specified clinics, including patients who died during or after the time period.
- **Only patients who have received care during the date range** includes patients that have received some care of any type (clinic visit, inpatient stay, pharmacy refill, etc.) during the selected date range.
    - If this checkbox is unchecked, the report will check all living patients in the registry against the selected clinics.
    - Check this box in conjunction with the **Not seen in selected clinics** box to find a list of patients who had some type of utilization at your facility but who were not seen in the selected clinics.

10.17.2. Combined Med Labs Report Patients Pane

Check one or more **Patients** checkboxes to include the following types of patients:

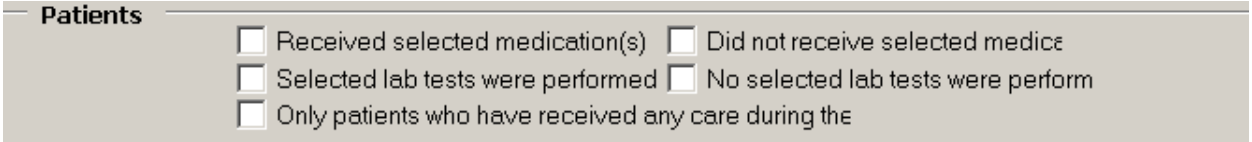


Figure 131 – Patients Pane – Combined Med Labs Report

- **Received selected medication(s)** includes patients who received the medications specified in the Medications section, during the Medications Date Range.
- **Did not receive selected medication(s)** includes patients who did not receive any of the medications specified in the Medications section, during the Medications Date Range.
- **Selected lab tests were performed** includes patients who received the lab test(s) specified in the Lab Tests section, during the selected Lab Date Range.
- **No selected lab tests were performed** includes patients who did not receive the lab test(s) specified in the Lab Tests section, during the Lab Date Range.

Only patients who have received care during the date range includes patients that have received care of any type (clinic visit, inpatient stay, pharmacy refill, etc.) during the **Utilization Date Range**. If this checkbox is unchecked, the report will check all living patients in the registry against the selected medications and/or lab tests.

10.17.3. Procedures Report Patients Pane

Check one or more **Patients** checkboxes to include in your report patients associated with selected procedures performed or no selected procedures performed in a specified date range. Selecting the **Only patients who have received care during the date range** checkbox activates the **Utilization Date** Range Panel.[W]

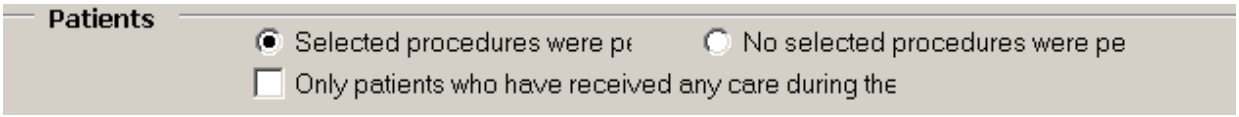


Figure 132 – Patients Pane on the Procedures Report

- The **Only patients who have received care during the date range** checkbox is mainly used in combination with **No selected procedures were performed**.
- **Selected procedures were performed** includes patients who received the type of procedure(s) specified in the Procedures section.
- **No selected procedures were performed** includes patients who did not receive the type of procedure(s) specified in the Procedures section.
- **Only patients who have received care during the date range** includes patients that have received care of any type (clinic visit, inpatient stay, pharmacy refill, etc.) during the

Utilization Date Range. If this checkbox is unchecked, the report will check all living patients in the registry against the procedures.

10.18. Medications Date Range

On the Combined Meds Labs Report, if a medications-related box is checked in the **Patients** section, set a **Medications Date Range**.

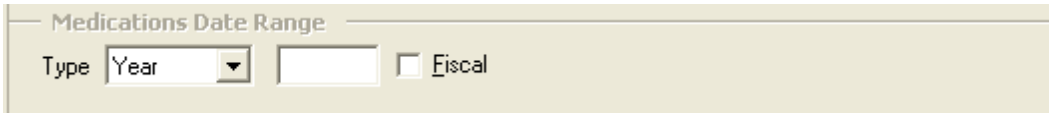


Figure 133 – Medication Date Range

10.19. Medications

Select one or more **Medications**:

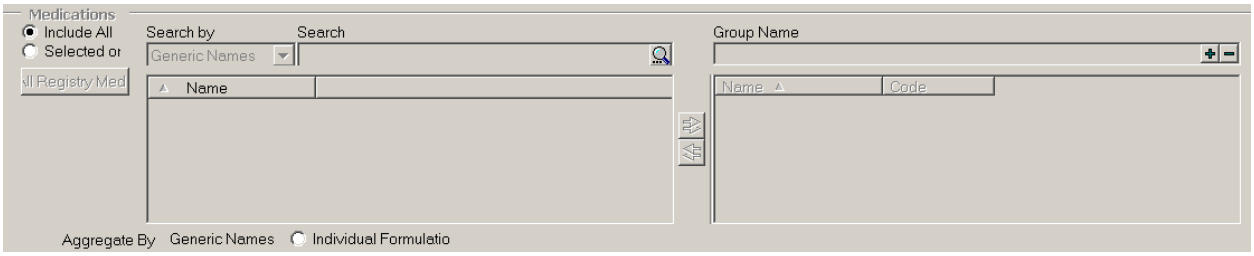
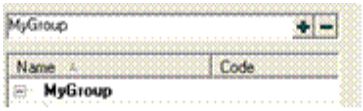


Figure 134 – Medication Date Range

- Click **Include All** to select all medications for inclusion in the report
- Click **Selected only** to specify one or more particular medications to be included in the report. Use the medication selection panes to find and select the meds:
  - Select a type of medication name from the drop-down list. Medications are listed by formulation, VA generic name, VA Drug class codes or names, and by other registry-specific groups (registry meds, investigational drugs).
  - Enter the first few letters of the medication in the left-side field and click the **[Search]** button. A list of matching meds is displayed below the search field. When you are using the search box to select specific medications for this report, the text in the search box will automatically convert to uppercase.
  - Select a medication name. The right arrow (➔) command icon then appears. Click the arrow to move the selected medication to the right pane. The medications will be automatically categorized in the list. Repeat this procedure until all desired meds are selected and appear in the right pane.

  You can use Groups to find patients who received a combination of medications:

- Before selecting any medications, type a name for the first group in the field on the right-hand pane, and then click the large plus sign ( ) button. The Group Name is then displayed in the right pane:



- **[Search]** for and select the medications to be included in this group, and then click the right-arrow command icon to move them to the right pane. The medications will be automatically categorized under the Group name in the list.
- Type a name for the next group in the right-side field, and then click the plus-sign button to add the new group name to the Medications list in the right pane. Add medications to this group using the steps above.
- Repeat this process to create as many groups as you need. The report will look for patients that have at least one prescription fill from each group.

  CCR uses *"or"* logic within a group, and *"and"* logic between groups. If you have only one group on your report, the report includes any patient who received at least one drug in the group. If you have multiple groups, it includes patients who received at least one medication from ALL groups.

- To remove a selected medication, click the name of the medication in the right pane and click the left arrow command icon.

Note: Selected medications remain on the selected list, so be sure to remove them if you do not want to include them the next time you run this report.

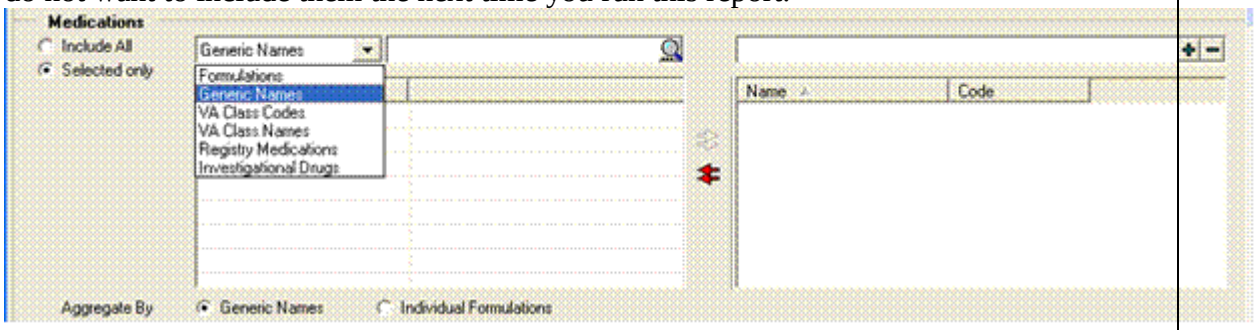


Figure 135 – Combined Meds & Labs Report Setup Screen (showing Generic Medication Names)

Review your selections by clicking the + or – signs to expand or collapse the lists in the right pane.

- Investigational Drugs and Registry Medications. CCR 1.5.8 introduced a new method of handling Investigational Drugs and Registry Medications.

History: Prior to Patch ROR*1.5*8, there was a default group on the right pane called Medications which included checkbox options for Registry Medications and Investigational Drugs. Consequently, the drop-down only had four options (Formulations, Generic Names, VA Class Codes and VA Class Names).

Now, Investigational Drugs and Registry Medications appear on the drop-down list:

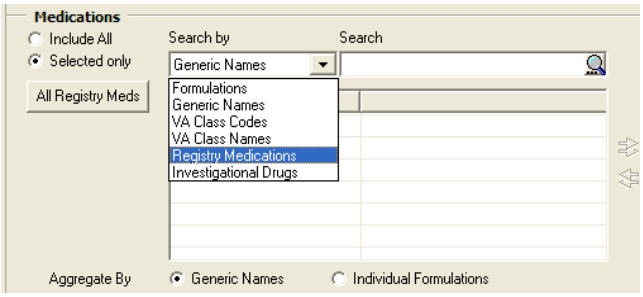


Figure 136 – Combined Meds & Labs Report Setup Screen (showing Registry Medication and Investigational Drugs Names)

When you enter a Group name (MyName in this example) and then click the "add" ( ) button, the sub-groups Individual Formulations, Generic and Drug Classes appear in the right hand pane:

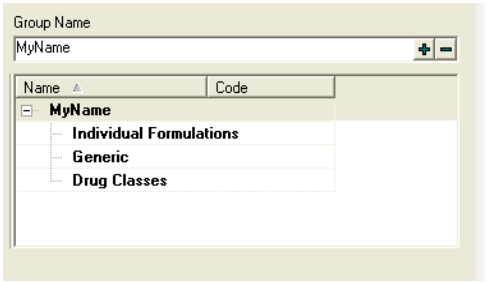


Figure 137 – Combined Meds & Labs Report Setup Screen (showing Group Name)

Note: If you select Investigational Drugs then the bottom left hand panel would display all the drugs with the VA Drug Class Code = IN140 (in the HEPC registry) or IN150 (in the HIV registry).

Since the drop down already has the option to select based on VA Class Code, if you select Investigational Drugs that should trigger the routine to retrieve drugs based on VA Class Code 140 or 150 as appropriate.

Aggregate By. You can format the output report in one of two ways.

Click an Aggregate By option radio button to format the final report by either the generic name or by individual formulations. Use the formulation option for

investigational drugs or newly-approved medications where a Generic Name does not yet exist in the local pharmacy file.

Tip: If a medication is missing on a report, re-run it using individual formulations to see if it shows up.

Note: Using these radio buttons does not affect the report set-up form.

10.20. Lab Tests Date Range

If a lab-related box is checked in the **Patients** section, set a Lab Tests Date Range.

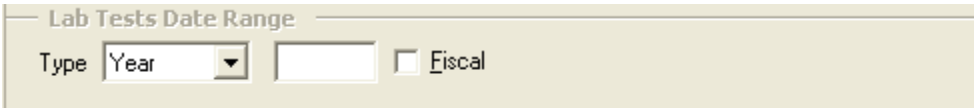


Figure 138 – Lab Test Date Range

10.21. Lab Tests

Select one or more Lab Tests:

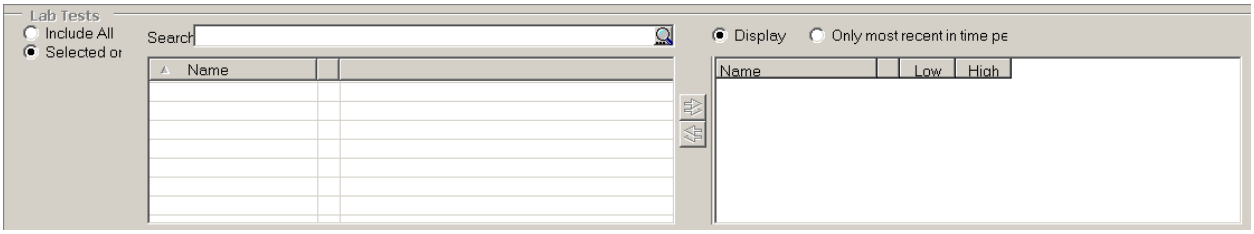


Figure 139 – Lab Tests

- Click Include All to select all lab tests to be included the report
- Click Selected only to specify one or more particular tests to be included in the report. Use the lab test selection panes to locate and select the tests:
    - Enter the first few letters of the lab test name and then click the **[Search]** button. A list of matching lab tests is displayed below the search field.
    - Select a lab test name and then click the right arrow (➔) to move the test to the right pane. Optionally, enter a Low and/or High value to search for a particular result on that test. (Decimals are acceptable, but do not use commas in these fields.)
    - Repeat this procedure until all desired tests are selected and appear in the right pane.

- To remove a selected test, click the name of the clinic in the right pane, and then click the left arrow command icon.

Note: If more than one test is selected, the report will include patients with *any one* of those tests in the selected time period. The Low and High ranges will place an additional filter on the test such that the patient must have at least ONE result within the range to be included in the report. The search is *inclusive* of the values listed in low and high fields, and if only a low or high value is listed, the report will return patients with a result above the low or below the high, respectively.

CCR 1.5.8 added a new feature: the ability to **Include All** or **Selected only**. There is also an option to **Display all** or **Only most recent in time period** lab tests. These radio buttons appear on the **Combined Meds and Labs** report only, they are not included on the **Lab Utilization** report. Click the appropriate radio button to make this selection:

10.22. ICD-9

Select one or more diagnoses in the ICD-9 section:

Note: The updated ICD-9 selection panel allows you to define groups and add ICD-9 codes to the groups. The OR logic is used for codes inside the groups and the AND logic is used between the groups. [x]

The codes of each predefined ICD-9 list are associated with the group of the same name. When a list is loaded, the content of the target ICD-9 list is not cleared, but rather the new group is added to the list.
Example: Load the Hepatitis C and Diabetes Type I or II lists. The target ICD-9 list contains both groups, and other report parameters are not affected.

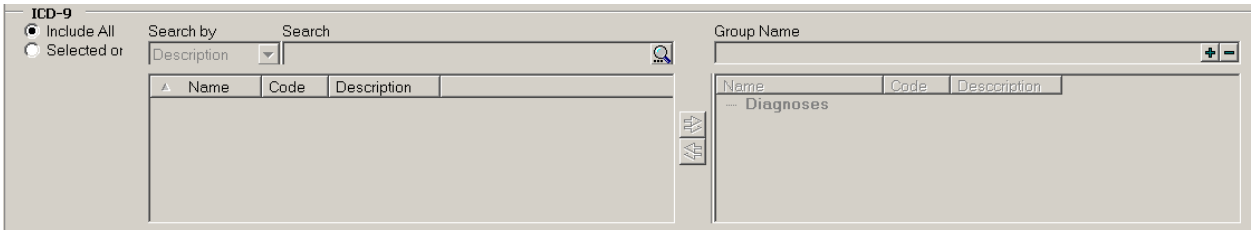


Figure 140 -- ICD-9

The name of the default group is Diagnoses.

- Click **Include All** to select all **ICD-9** codes for inclusion in the report.
- Click Selected only to specify one or more particular ICD-9 codes to be included in the report. Use the selection panes to locate and select the codes:

- Enter all or part of the description or diagnosis code, and then click the **[Search]** button. A list of matching diagnoses is displayed below the search field.
- Select a diagnosis, and then click the right arrow to move it to the right pane. Repeat this procedure until all desired diagnoses are selected and appear in the right pane.
- To remove a selected code, click the name of the code in the right pane and click the left arrow button.

10.23. Type of Utilization

Check one or more **Types of Utilization** checkboxes to include them in the report.

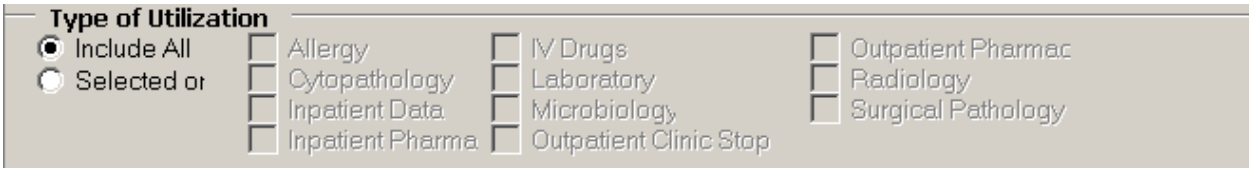


Figure 141 – Type of Utilization

- Allergy – patient had an allergy added
- Cytopathology – a test performed
- Inpatient Data – in an inpatient bed section
- Inpatient pharmacy – unit dose medication orders, not necessarily dispensed
- IV Drugs – any IV, including fluids, piggy packs, syringes, TPN (if in the system)
- Laboratory – any laboratory test (except Microbiology)
- Microbiology – any microbiology test
- Outpatient Clinic Stop – any clinic stop
- Outpatient Pharmacy – any original, refill, or partial prescription based on Fill date, not Release date (Fill is when the pharmacy put the medication in the bottle, Release is when it is actually given to the patient)
- Radiology – any procedure performed
- Surgical Pathology – any test performed

These 11 clinical areas can be used in any combination. If a patient died during the specified date range, they will be included in the report if they had utilization.

10.24. Registry Status

Figure 142 – Registry Status

Using the check boxes, select the desired patient's Registry Status: Confirmed or Pending.

10.25. Report-Specific Options

Two reports have Report Options panes:

- General Utilization and Demographic
- List of Registry Patients

The functionality of the panes are similar, however, the list options are different. The panes are described in detail in the sections below.

10.25.1. General Utilization and Demographic Report Options

Check one or more Report Options to include detailed demographic information on your population with utilization.

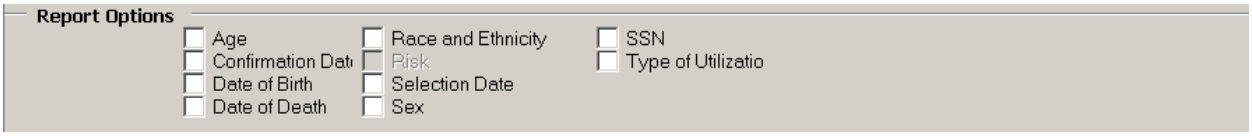


Figure 143 – Report Options

- **Age** – calculated at the midpoint of the specified date range, or at the time of death if applicable. The summary also reports average and median age for the selected population.
- **Confirmation Date** – the date confirmed into the registry. With the initial CCR 1.5 registry build, all Hepatitis C registry patients were assigned the same confirmation date, as this information was new at the time for that registry.
- **Date of Birth** – as listed in the local VistA patient file.
- **Date of Death** – as listed in the local VistA patient file.
- **Race** – categorized as: American Indian or Alaska Native, Asian, Black or African American, Declined to answer, Multiple values, No data, Unknown by patient, and White. Taken from the local VistA patient file.
- **Risk** (HIV Registry only) – reflects the Patient History questions in the Patient Data Editor.
- **Selection Date** – The first date that a selection rule criteria was found for the patient
- **Sex** – Male or Female, as listed in the VistA patient file.
- **SSN** – the full Social Security Number. **CAUTION:** Take special care to protect this confidential patient information when viewing or printing this report.
- Type of Utilization – a list of type(s) of utilization found for a given patient.

10.25.2. List of Registry Patients Report Options

Check one or more Report Options checkboxes to include the field on the report. An additional column heading will be added to the report for each checkbox that is checked. The Pending Comment checkbox is available only if you checked Pending in the **Registry Status** section.

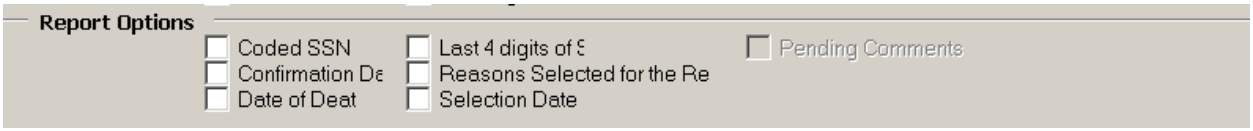


Figure 144 – List of Registry Patients Report Options

- **Coded SSN** –a scrambled patient identifier that the Center for Quality Management in Public Health (CQM) staff use when communicating with the field about patient safety or quality of care issues. When you receive a list of patients using the Coded SSN from CQM, you can run the report to match this 11 digit number with the actual patient name.
- **Confirmation date** – the date the patient's status was changed from pending to confirmed
- **Date of Death** – taken from the local VistA patient file
- **Last 4 digits of SSN** – the patient's actual SSN, not the Coded SSN
- **Reasons Selected for the Registry** – the selection rule (ICD-9 codes or lab test results) that identified the patient as a pending patient for the registry.
- **Selection Date** – the earliest date that a registry specific selection rule was found.
- **Pending Comments** – comments that may have been entered for a patient still in Pending status. Checking this option causes the report to include any comments that have been entered. This option is not enabled unless the Pending box under **Registry Status** (above) has been checked.

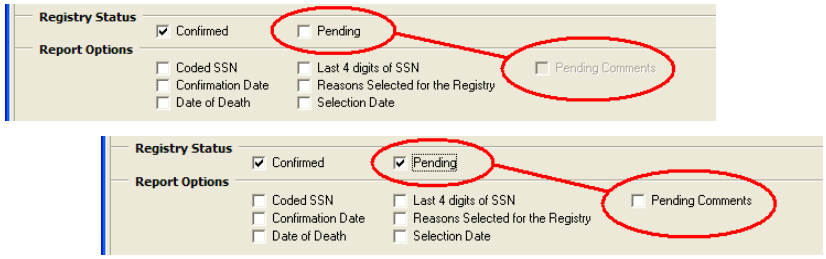


Figure 145 – Pending Comments Report Option

10.26. General Report Options

Select a report Options setting:

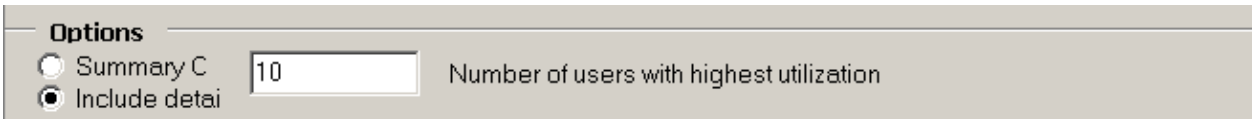


Figure 146 – Inpatient Utilization Report Options

- Click **Summary Only** to include total counts for numbers of patients and number of admissions.
- Click **Include details** and set a **Number of users with highest utilization** value to include a list of the highest-utilizing patients and the number of stays and number of days utilized during the report period. To see this level of detail on all patients, enter a number equal to (or greater than) the number of all patients in the registry

10.26.1. Lab Utilization and Radiology Utilization Report Options

There is a variation for the Lab Utilization and Radiology Utilization Reports. Follow the procedures in Section 10.1.25, with the additional instructions for the Minimum number of procedures/results to display field:

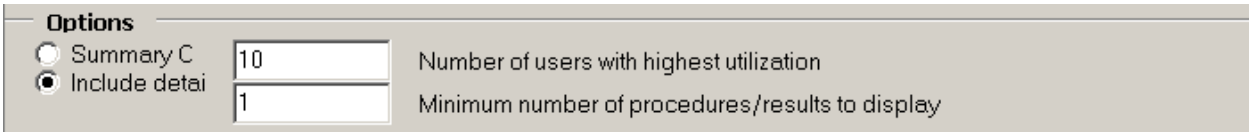


Figure 147 – Lab Utilization Report Options

- Click **Include** details to request details on the patients with highest utilization and/or for tests with at least a minimum number of results. Set the **Number of users with highest utilization** to a number equal to or greater than the total number of patients in the registry if you want to see all lab utilization for all registry patients. Set the **Minimum number of procedures / results to display** to 1 to include every lab test or procedure that is selected in the report.

10.27. Liver Score Date Range by Range Report

Set the **Liver Score Date Range** by checking either Most recent Liver score or Liver score as of. In the latter case, enter the as of date.

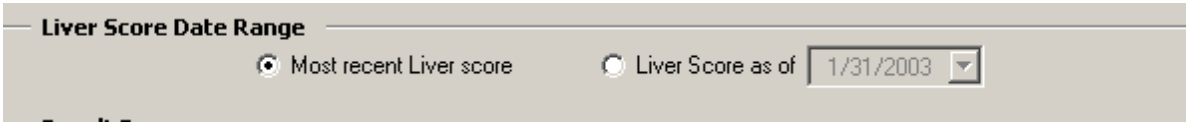


Figure 148 -- Liver Score Date Range

10.28. Liver Score Result Ranges

Set the **Result Ranges** for the calculation(s) selected by checking the desired range(s) and entering the low and high values as appropriate.

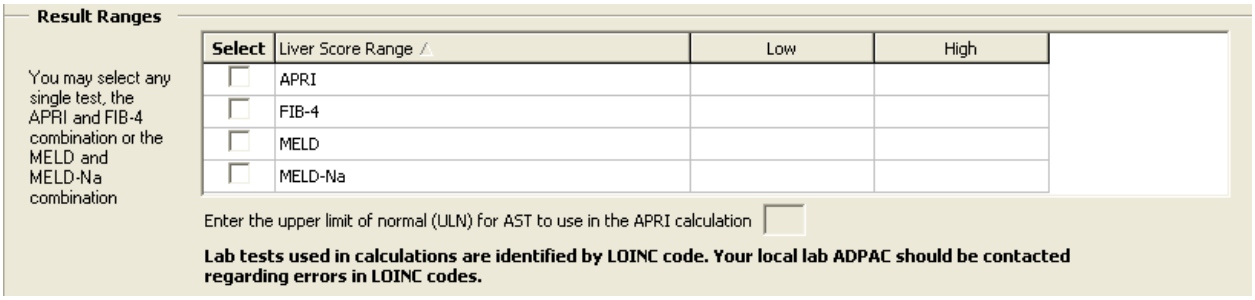


Figure 149 – Result Ranges

10.29. Activity

Set the **Activity** parameters to include Inpatient and/or Outpatient

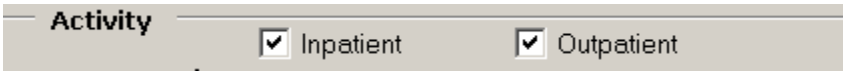


Figure 150 – Activity

10.30. Refill Type

Under **Report Options**, select the desired refill type: **Display all fill** or **Only most recent in time period**.

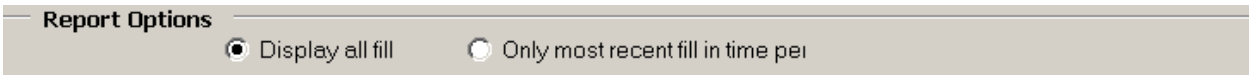


Figure 151 – Refill Type

10.31. Procedures

Check one or more **Procedures** checkboxes to include **Inpatient**, **Outpatient**, or both types of procedures. [Y]

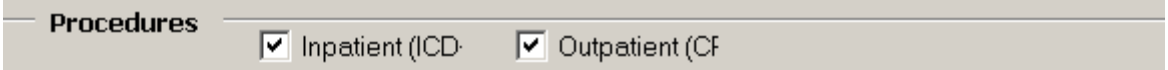


Figure 152 – Procedures

- If only **Inpatient (ICD-9)** procedures are selected, the Procedures report uses "or" logic for **ICD-9** codes inside the groups, while using "and" logic between groups.
- If only **Outpatient (CPT)** procedures are selected, a patient is added to the Procedures report when the patient has at least one **CPT** code selected on the **CPT** report parameters panel.
- If both **Inpatient (ICD-9)** and **Outpatient (CPT)** procedures are selected, a patient is added to the Procedures report when the patient has either at least one inpatient procedure **(ICD-9)** or at least one selected outpatient procedure **(CPT-4)**.
- The **Procedures** panel works in conjunction with the Patients panel.

  a. If No selected procedures were performed is selected in the **Patients** panel, the patient is added to the report only when no outpatient procedures and inpatient procedures are found in at least one of the groups.

  b. If **Only patients who have received care during the date range** is selected in the **Patients** panel, the patient utilization for the specified date range is reviewed. If there is no patient utilization for the date range, the patient is excluded from the report.

10.32. CPT

Select one or more CPT codes**:**

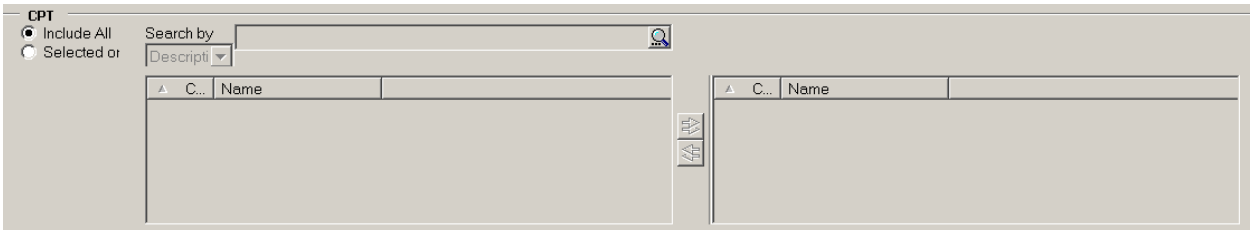


Figure 153 – CPT Codes

- Click **Include All** to include all codes in the report
- Click **Selected only** to specify one or more particular codes to be included in the report. Use the selection panes to locate and select the codes:

- Enter a partial or full description of the code, and then click the **[Search]** button. A list of matching codes is displayed below the search field.
- Select a code, and then click the right arrow to move it to the right pane. Repeat this procedure until all desired codes are selected and appear in the right pane.
- To remove a selected code, click the name of the code in the right pane, and then click the left-arrow button.

Note: Resources are available to determine the inpatient ICD-9 codes and outpatient CPT-4 codes for specific procedures. Consult with local support staff for the tools available in your facility.

10.33. Lab Test Group Result

Use the **Result Ranges** panel to select one or more **Registry** lab tests and set high and low limits for each test's results:

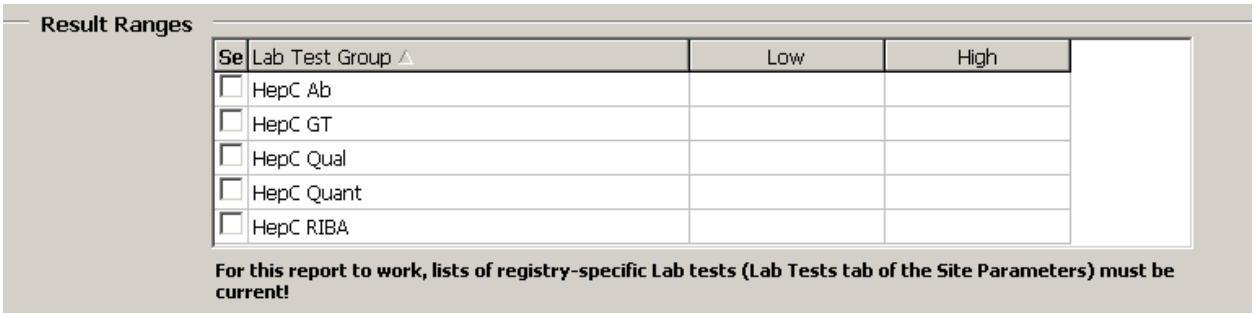


Figure 154 – Lab Test Group Result Range

- Click a **Lab Test Group** checkbox to select it, and then enter a **Low** and/or a **High** value to limit the search for a particular result on that test. Decimals are acceptable, but do not use commas in these fields.
- Specifying low and/or high ranges places an additional filter on the test: a patient must have *at least one result* within the range from each selected test to be included in the report.
- The report includes results that are equal to the specified low or high and all values in between. If only low or only high values are selected, the report will return patients with a result at or above the low or at or below the high, respectively. For example, if you want a report of patients with a result less than 200, enter 199 as the upper limit.

10.34. Registry Medications – Investigational Drugs

In the **Medications** panel, check the **Investigational Drugs** checkbox to add investigational medications to your report. If checked, the final report will aggregate by dispensed drug, as investigational medications are not assigned a VA generic name. If this box is not checked, the report will aggregate by generic name.

Figure 155 -- Registry Medications -- Investigational Drugs

10.35. Renal Function Date Range and Results

- Select the appropriate Renal Function Date Range or the Most recent renal function.

OPTIONAL Set the result ranges for the **Creatinine clearance by Cockcroft-Gault**, **eGFR by MDRD**, **eGFR by CKD-EPI** or any combination of the three reports by checking the desired range(s) and (optionally) entering the low and high values as appropriate.

Note: The Summary under Report Type is only available when the eGFR by MDRD option is selected under **Result Ranges**.

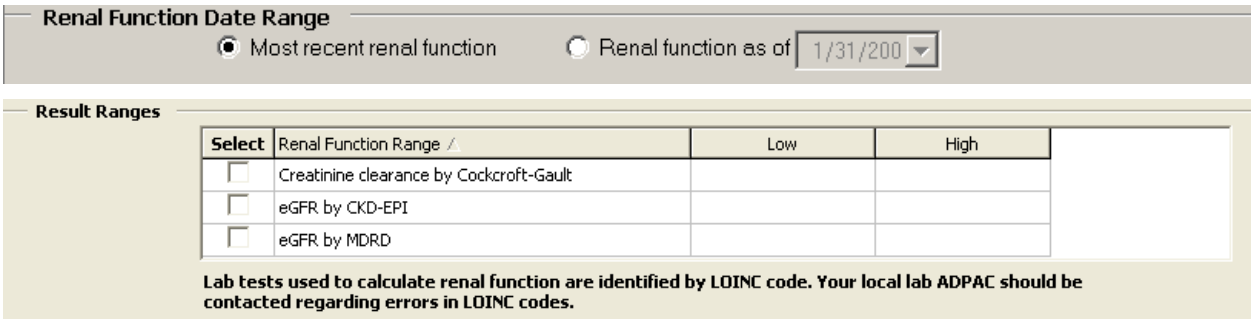


Figure 156 – Renal Function Date Range and Results

10.36. VERA Reimbursement Report Options

CCR:HIV ONLY This report is only available in the CCR:HIV Registry.

Check one or more **Options** checkboxes to select the type(s) of patients to be included, and/or additional information to appear in the report:

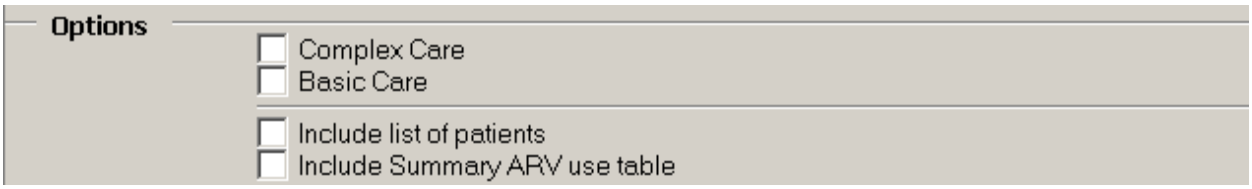


Figure 157 -- Vera Reimbursement Report Options

- **Complex Care** – patients with a clinical AIDS diagnosis as manually entered by local staff on the **Patient Data Editor** and/or those who have received at least one prescription (inpatient or outpatient) for any ARV in the specified time period, *excluding* investigational ARV drugs.
- **Basic Care** – patients with utilization during the period and no clinical AIDS diagnosis and who did not receive an ARV.
- **Include list of patients** – provides a full list of patients' names by complex or basic care.
- **Include Summary ARV use table** – provides a count of patients that received each medication, grouped by VA Generic name, in the specified time period.

11. Resources

11.1. About CCR:HEPC

11.1.1. Overview

The Hepatitis C Case Registry (CCR:HEPC) contains important demographic and clinical data on all VHA patients identified with Hepatitis C infection. The registry extracts VistA pharmacy, laboratory, and pathology databases in order to provide the key clinical information needed to track disease stage, disease progression, and response to treatment. Data from the Hepatitis C Case Registry is used on the national, regional, and local level to track and optimize clinical care of Hepatitis C infected Veterans served by VHA. National summary information (without personal identifiers) will be available to VA Central Office for overall program management as well as to inform Veterans Service Organizations, Congress, and to other federal public health and health care agencies.

11.1.2. Treatment Recommendations

The CCR software is meant to supplement data gathering that can be used by local clinicians in their patient care management model.

For patients with Hepatitis C infection, VA treatment guidelines for care may be seen at http://vaww.hepatitis.va.gov.

11.1.3. Registry Selection Rules

The CCR:HEPC identifies patients with Hepatitis C-related ICD-9 codes, positive Hepatitis C antibody test results, or positive qualitative Hepatitis C RNA test results. The software recognizes the earliest instance of data that indicates Hepatitis C infection and adds the patient to the registry with a status of Pending. These patients must be reviewed and validated locally and when confirmed as having Hepatitis C infection confirmed in the local CCR:HEPC list of registry patients with Hepatitis C.

Patients are automatically added nightly to the local registry list with a status of Pending when one or more of the following ICD-9 diagnosis codes are listed on a patient's problem list, inpatient discharge diagnoses, or outpatient encounter diagnoses:

Table 27 – HEPC Registry Selection via ICD-9 CM Diagnostic Codes

Hepatitis C-related Diagnoses	ICD-9 CM Diagnostic Codes
Hepatitis C Carrier	**V02.62**
Acute or unspecified Hepatitis C with hepatic coma	**070.41**
Chronic Hepatitis C with hepatic coma	**070.44**

Hepatitis C-related Diagnoses	ICD-9 CM Diagnostic Codes
Acute or unspecified Hepatitis C without mention of hepatic coma	**070.51**
Chronic Hepatitis C without mention of hepatic coma	**070.54**

The ICD-9 diagnostic codes are maintained as part of the standard software program. Updates will be released as needed in subsequent patches to the software and will be loaded by local IRM staff.

Patients are also automatically added nightly to the local registry with a status of Pending when a positive test result is reported for a Hepatitis C antibody test or a qualitative Hepatitis C RNA viral load. Hepatitis C antibody tests and RNA tests are identified using the following Logical Observation Identifiers Names Codes (LOINCs).

Note: Some of the codes shown here may not yet be valid at the National level.

Table 28 – HEPC Registry Selection via LOINC Codes

Hepatitis C-related Laboratory Tests	LOINC
Hepatitis C virus RNA	**11011-4, 29609-5, 34703-9, 34704-7, 10676-5, 20416-4, 20571-6, 49758-6, 50023-1**
Hepatitis C Antibody Test	**11259, 13955-0, 16128-1, 16129-9, 16936-7, 22327-1, 33462-3, 34162-8, 39008-8, 40762-2, 5198-7, 5199-5**
Hepatitis C RIBA Test	**24011-9**
Hepatitis C virus IgG Ab [Units/volume] in Serum by Immunoassay	**57006-9**
Hepatitis C virus Antibody [Presence] in Body fluid	**51657-5**
Hepatitis C virus Antibody [Presence] in Serum from donor	**47441-1**
Hepatitis C virus Antibody [Presence] in Serum from donor by Immunoassay	**47365-2**

Hepatitis C-related Laboratory Tests	LOINC
Hepatitis C virus RNA [Presence] in Body fluid by Probe & target amplification method	**51655-9**
Hepatitis C virus RNA [Presence] in Unspecified specimen by Probe & signal amplification method	**48576-3**
Qualitative Hepatitis C RNA Test	**11259-9, 5010-4, 5011-2, 5012-0, 6422-0**

Positive results are identified as results that are equal to "P" or that contain "POS" "DETEC" or "REACT" and do not contain "NEG" "NON" or "IND." Comparisons are not case sensitive.

Note: Because this information is a critical factor in the determination of a patient being added to this registry, it is important to validate, with the Laboratory Information Manager, the LOINC Code mapping and how results are entered for the Hepatitis C lab tests.

11.1.4. About Historic Hepatitis C Case Registry patients

All patients in the previous Hepatitis C Case Registry are automatically "grandfathered" into CCR:HEPC as confirmed registry patients. Previous versions of Hepatitis C Case Registry software did not include the use of a "pending" status nor require verification prior to activation in the registry, though local coordinators were tasked to routinely review lists of newly selected patients and delete any found not to meet registry criteria.

At the time the original Hepatitis C Case Registry software was first installed, a background process was run that applied these selection rules to historic data beginning January 1, 1996. For that one-time post installation process only, patients whose only indication of Hepatitis C was ICD-9 codes (i.e., no antibody test result in the system) were required to have at least **two** instances of a Hepatitis C related ICD-9 code in order to be added to the registry. After that initial registry compilation, a single outpatient or inpatient Hepatitis C related ICD-9 code was sufficient to add a patient to the registry.

Facilities who are concerned that their CCR:HEPC patient list includes a large number of patients who were inappropriately added can utilize CCR report functions (e.g., Lab test report to look for confirmatory testing) to identify and delete patients who do not truly meet registry criteria.

11.2. About CCR:HIV

11.2.1. Overview

The CCR:HIV contains important demographic and clinical data on VHA patients identified with HIV infection. The registry extracts data from VistA admissions, allergy, laboratory, outpatient, pathology, pharmacy, and radiology databases. This is done to provide the key clinical

information needed to track disease stage, disease progression, response to treatment, and support administrative reporting.

Data from the CCR:HIV is used on the national, regional, and local level to track and optimize clinical care of HIV-infected Veteranss served by VHA. National summary information (without personal identifiers) will be available to VA Central Office for overall program management as well as to inform Veterans Service Organizations, Congress, and other federal public health and health care agencies.

11.2.2. Treatment Recommendations

CCR:HIV is meant to supplement data gathering that can be used by local clinicians in their patient care management model.

For patients with HIV infection, VA recommends clinicians consult the Kaiser Family Foundation-Department of Human Health Services treatment guidelines for HIV care. These guidelines may be seen at http://www.aidsinfo.nih.gov/guidelines/.

11.2.3. Registry Selection Rules

The CCR:HIV identifies patients with HIV-related ICD-9 codes or positive HIV antibody test results. The software recognizes the earliest instance of data that indicates HIV infection and adds the patient to the registry with a status of Pending. These patients must be reviewed and validated locally and when confirmed as having HIV infection confirmed in the local CCR:HIV registry list of registry patients with HIV.

Patients are automatically added nightly to the local registry list with a status of Pending when one or more of the following ICD-9 diagnosis codes are listed on a patient's problem list, inpatient discharge diagnoses, or outpatient encounter diagnoses:

Table 29 – HIV Registry Selection via ICD-9 CM Diagnostic Codes

HIV-related Diagnoses	ICD-9 Diagnostic Code
Asymptomatic Human Immunodeficiency Virus [HIV] Infection Status	**V08.**
Human Immunodeficiency Virus (HIV) Disease	**042.x**
HIV Causing Other Specific Disorder	**043.x**
HIV Causing Other Specific Acute Infection	**044.x**
Human Immunodeficiency Virus, Type 2 (HIV 2)	**079.53**
Nonspecific Serologic Evidence Of HIV	**795.71**
Positive Serology/Viral HIV	**795.8**

The ICD-9 diagnostic codes are maintained as part of the standard software program. Updates will be released as needed in subsequent patches to the software and will be loaded by local IRM staff.

Patients are also automatically added nightly to the local registry pending patient list when a positive test result is reported for an HIV antibody test or HIV Western Blot test. HIV antibody tests and Western Blot tests are identified using the following Logical Observation Identifiers Names Codes (LOINCs).

Note: Some of the codes shown here may not yet be valid at the National level.

Table 30 – HIV Registry Selection via LOINC Codes

HIV-related Laboratory Tests	LOINC
HIV 1 & 2 Antibody band pattern [interpretation] in Serum by Immunoblot (IB)	**43185-8**
HIV 1 [interpretation] in Serum by Immunoassay	**44607-0**
HIV 1 And 2 Antibody Test	**22357-8, 31201-7, 32602-5, 40733-8, 5223-3, 7918-6**
HIV 1 Antibody [Presence] in Body fluid by Immunoassay	**34591-8**
HIV 1 Antibody [Presence] in Body fluid by Immunoblot (IB)	**34592-6, 5221-7**
HIV 1 Antibody [Presence] in Unspecified specimen	**53379-4**
HIV 1 Antibody [Presence] in Unspecified specimen by Rapid test	**49905-3**
HIV 1 Antibody [Units/volume] in Serum by Immunofluorescence	**43599-0**
HIV 1 Antibody Test	**13499-9, 14092-1, 16974-8, 16975-5, 21007-0, 22356-0, 29327-4, 29893-5, 32571-2, 33866-5, 35437-3, 35438-1, 35438-9, 40732-0, 41143-9, 41144-7, 41145-4, 5220-9, 7917-8**
HIV 1 Western Blot Test	**21009-6**

HIV-related Laboratory Tests	LOINC
HIV 1+2 Antibody [Presence] in Serum by Immunoblot (IB)	**44873-8**
HIV 1+2 Antibody [Presence] in Serum from donor	**44533-8**
HIV 1+2 Antibody [Presence] in Unspecified specimen	**43010-8**
HIV 1+2 Antibody [Presence] in Unspecified specimen by Rapid test	**49580-4**
HIV 1+2 IgG Antibody [Presence] in Blood dot (filter paper)	**54086-4**
HIV 1+2 IgG Antibody [Presence] in Serum	**43009-0**
HIV 2 Antibody Test	**22358-6, 30361-0, 33806-1, 33807-9, 5224-1, 5225-8, 7919-4**
HIV 2 Western Blot Test	**31073-0**

Positive results are identified as results that are equal to "P" or that contain "POS" "DETEC" or "REACT" and do not contain "NEG" "NON" or "IND." Comparisons are *not* case sensitive.

Note: Because this information is a critical factor in the determination of a patient being added to this registry, it is important to validate, with the Laboratory Information Manager, the LOINC Code mapping and how results are entered for the HIV lab tests.

11.3.CCR:HIV Registry Pending Patient Worksheet

HIV Pending Patient Worksheet Name:_____ Last 4:_____ Pt should be added to ICR: ❑YES ❑NO

1. HIV positive test result /other evidence: ❑NONE - delete from registry

- ❑ + ELISA date:
- ❑ + HIV Viral load date:
- ❑ + Western Blot date:
- ❑ Narrative Note date:

2. HIV Risk info: ❑UNKNOWN

- ❑ Sex with male
- ❑ Sex with female
- ❑ Injected nonprescription drug
- ❑ Received clotting factor for hemophilia / coagulation disorder
- ❑ HETEROSEXUAL relations with bisexual male
- ❑ HETEROSEXUAL relations with injection drug user
- ❑ HETEROSEXUAL relations with person with hemophilia/coagulation disorder
- ❑ HETEROSEXUAL relations with transfusion recipient with documented HIV infection
- ❑ HETEROSEXUAL relations with transplant recipient with documented HIV infection
- ❑ HETEROSEXUAL relations with PWA or documented HIV+, risk not specified
- ❑ Received transfusion of blood/blood component (other than clotting factor)
- ❑ Received transfusion of blood/blood component (other than clotting factor)
- ❑ Mycobacterium avium complex or M. kansasii, disseminated or extrapulmonary: date
- ❑ Received transplant of tissue/organ(s) or artificial insemination
- ❑ Worked in health care or clinical laboratory setting

3. AIDS OI History ❑ NONE

- ❑ Candidiasis of bronchi, trachea, or lungs: date
- ❑ Candidiasis, esophageal: date
- ❑ Cervical cancer, invasive: date
- ❑ Coccidioidomycosis, disseminated or extrapulmonary: date
- ❑ Cryptococcosis, extrapulmonary: date
- ❑ Cryptosporidiosis, chronic intestinal (>1 month's duration): date
- ❑ Cytomegalovirus disease (other than liver, spleen, or nodes): date
- ❑ Cytomegalovirus retinitis (with loss of vision): date
- ❑ Encephalopathy, HIV-related: date
- ❑ Herpes simplex: chronic ulcer(s) (>1 month's duration); or bronchitis, pneumonitis, or esophagitis: date
- ❑ Histoplasmosis, disseminated or extrapulmonary: date
- ❑ Isosporiasis, chronic intestinal (>1 month's duration) : date
- ❑ Kaposi's sarcoma: date
- ❑ Lymphoma, Burkitt's (or equivalent term): date
- ❑ Lymphoma, immunoblastic (or equivalent term): date
- ❑ Lymphoma, primary, of brain: date
- ❑ Lymphoma, immunoblastic (or equivalent term): date
- ❑ Lymphoma, primary, of brain: date
- ❑ Mycobacterium avium complex or M. kansasii, disseminated or extrapulmonary: date
- ❑ Mycobacterium tuberculosis, any site (pulmonary or extrapulmonary): date
- ❑ Mycobacterium, other species or unidentified species, disseminated or extrapulmonary: date
- ❑ Pneumocystis carinii pneumonia: date
- ❑ Pneumonia, recurrent: date
- ❑ Progressive multifocal leukoencephalopathy: date
- ❑ Salmonella septicemia, recurrent: date
- ❑ Toxoplasmosis of brain: date
- ❑ Wasting syndrome due to HIV: date

4. COMMENTS:

11.4. Clinical Case Registries Shortcut Keys

In the following table, two or more keys connected by a comma (,) indicate that the keys should be pressed in succession. Keys connected by a plus sign (+) indicate that the keys should be pressed at the same time.

Window	Option/Text	Shortcut	Action / Opens
Any		**< F1 >**	Online Help file
Main (Registry)	File menu	**< Alt > , < F >**	
	Open Registry	**< Alt > , < F > , < O >**	Select a Registry to open
	Save As…	**< Alt > , < F > , < A >**	
	Close	**< Alt > , < F >, < L >**	
	Close All	**< Alt > , < F >, < C >**	
	Page Setup…		
	Print Preview…		
	Print…	**< Alt > , < F > , < P >**	
	Preferences		Preferences
	Rejoin Clinical Context…		
	Break the Clinical Link…		
	Exit	**< Alt > , < F >, < X >**	
	Registry menu	**< Alt > , < Y >**	
		< Ctrl > + < F6 >	Next registry
		< Shift > + < Ctrl > + < F6 >	Previous registry
		< Ctrl > + < F4 >	Close current registry
	Edit (HIV)	**< E >**	Human Immunodeficiency Virus Patient Data Editor
	CDC (HIV)	**< C >**	CDC (Form)
	Show Registry users…	**< S >**	Users of the (HIV or HEPC) Registry
	Edit Site Parameters…	**< D >**	
	Confirm (HEPC)	**< C >**	Hepatitis C Patient Data Editor

Window	Option/Text	Shortcut	Action / Opens
	Show Registry Users	**< S >**	Users of the (HIV or HEPC) Registry
	Edit Site Parameters	**< D >**	(HIV or HEPC) Site Parameters
(HIV or HEPC) Site Parameters		**< Ctrl > + < Alt > + < C >**	Cancel a search (dual-list selectors on site parameters form, patient search)
		< Space >	Move the record between lists (dual-list selectors)
		< Enter >	Edit cell value (local fields)
	Lab Test tab	**< Alt > + < L >**	
	Registry Meds tab	**< Alt > + < M >**	
	Notifications tab	**< Alt > + < N >**	
	Local Fields tab	**< Alt > + < F >**	
Reports Menu	Reports menu	**< Alt > + < P >**	
	Clinic Follow Up	**< C >**	
	Combined Meds and Labs	**< O >**	
	Current Inpatient List	**< U >**	
	Diagnoses	**< D >**	
	General Utilization and Demographics	**< G >**	
	Inpatient Utilization	**< I >**	
	Lab Utilization	**< L >**	
	List of Registry Patients	**< S >**	
	Outpatient Utilization	**< T >**	
	Patient Medication History	**< P >**	
	Pharmacy Prescription Utilization	**< H >**	

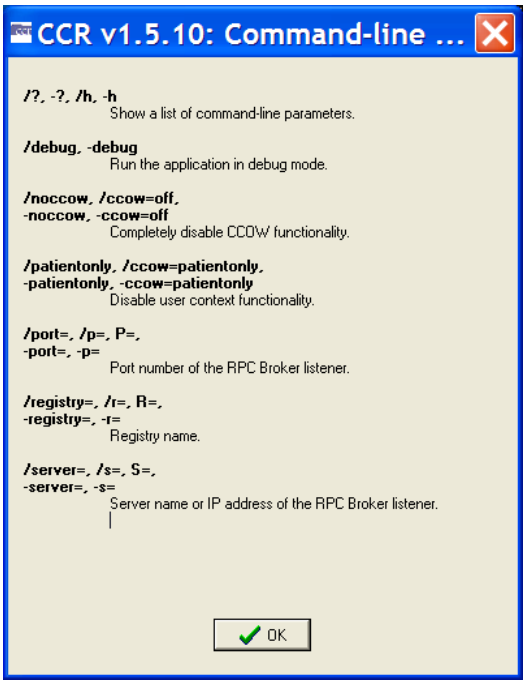
Window	Option/Text	Shortcut	Action / Opens
	Procedures	< E >	
	Radiology Utilization	< A >	
	Registry Lab Tests by Range	< Y >	
	Registry Medications	< M >	
	VERA Reimbursement Report (HIV only)	< V >	
	Report List	< R >	List of Reports panel
Window Menu	Window menu	< Alt > + < W >	
	Cascade	< C >	
	Tile Horizontally	< H >	
	Tile Vertically	< V >	
	Minimize All	< M >	
	Arrange All	< A >	
Help Menu	Help menu	< Alt > + < H >	
	Help Topics	< F1 >	
	Registry Info	< R >	
	CCOW Status	< C >	
	About	< A >	

Window	Option/Text	Shortcut	Action / Opens
Report Parameters			
		< Ctrl > + < Alt > + < C >	Cancel a search (double-pane selectors on report parameters forms, patient search)
		< Space >	Move the record between lists (double-pane selectors)
		< Tab >	Move through the report parameters
		< F1 >	Online Help
	Load Parameters	< L >	
	Save Parameters	< S >	
	Default Parameters	< D >	
	Run	< R >	
		< Ctrl > + < F6 >	Next report output
		< Shift > + < Ctrl > + < F6 >	Previous report output
		< Ctrl > + < F4 >	Close current report output
Task Manager tab		< Alt > + < T >	
		< Delete >	In Task list, delete selected records
	Refresh	< Alt > + < R >	
	New Report	< Alt > + < N >	
	Open Report	< Alt > + < O >	
	View Log	< Alt > + < V >	
	Delete	< Alt > + < D >	
Tech-nical Log tab		< Alt > + < T >	
	Refresh	< Alt > + < R >	
Registry tab		< Alt > + < G >	

Window	Option/Text	Shortcut	Action / Opens
		< Enter >	(HIV or HEPC) Patient Data Editor
	[Search]	**< Alt > + < R >**	
	Edit (HIV)	**< Alt > + < I >**	Human Immunodeficiency Virus Registry Patient Data Editor
	Confirm (HEPC)	**< Alt > + < I >**	Hepatitis C Registry Patient Data Editor
	CDC (HIV)	**< Alt > + < C >**	CDC (Form)
	Delete	**< Alt > + < D >**	
(HIV or HEPC) Registry Patient Data Editor		**< Alt > + < I >**	
		< Enter >	Edit cell value (local fields)
		< Space >	Toggle a checkbox (local fields)
	Clinical Status tab	**< L >**	
	Risk Factors tab (HIV)	**< R >**	
	Local Fields tab	**< F >**	
	Save	**< S >**	
CDC (HIV)		**< Alt > + < C >**	
	Form tab	**< F >**	
	Preview tab	**< V >**	
	Preview page 2 tab	**< 2 >**	
	Save	**< S >**	
		< Tab >	Move through the form parameters
CDC Form		**< F >**	
	Group Titles (CDC Parameter groups)	**< G >**	
	Zoom In	**< I >**	
	Zoom Out	**< O >**	

Window	Option/Text	Shortcut	Action / Opens
	Fit Width	**< W >**	
	Zoom 1:1	**< 1 >**	
	Print	**< P >**	

11.5.Command Line Switches



Command line switches control basic behavior of the application. They can be appended after the executable name in the Target field of the application shortcut. Names of the switches are case-insensitive.

Switch	Description
/?, /h,-?, -h	Display a dialog box containing a short description of the command line switches accepted by the application
/noccow, /ccow=off-noccow, -ccow=off	Disable the context management) functionality completely.
/ccow=patientonly-ccow=patientonly	Disable the user context functionality (Single Sign-On).
/p=, /port=-p=, -port=, P=	Instruct the application to use a non-standard port number on the VistA server.
/r=, /=-r=, -registry=, R=	Forces the GUI to open only the registry with provided name.
/s=, /server=-s=, -server=, S=	Instruct the application to connect to the server defined by the provided host name or IP address.

Examples:

```
…\ClinicalCaseRegistries.exe /S=MIRROR /R="VA HIV”

…\ClinicalCaseRegistries.exe /S="10.3.13.2" /P=9105

…\ClinicalCaseRegistries.exe -R="VA HIV"
```

Glossary[z]

A	B	C	D	E	F	G	H	I		K	L	M
N		P		R	S	T	U	V		X		
0-9												

Control-click character to see entries; missing character means no entries for that character.

Term or Acronym	Description
0 - 9	
508	*See* Section 508

Term or Acronym	Description
A	
AAC	*See* Corporate Data Center Operations**.**
Access Code	With each sign-on to VistA, the user must enter two codes to be recognized and allowed to proceed: the Access Code and Verify Code. The Access Code is assigned by IRM Service and is used by the computer to recognize the user. Each user has a unique access code. The only way this code can be changed is for the IRM Service to edit it. When the code is established by IRM, it is encrypted; that is, it is "scrambled" according to a cipher. The code is stored in the computer only in this encrypted form. Thus, even if the access code is viewed, the viewer cannot determine what the user actually types to tell the computer this code. *See also* Verify Code.
Acquired Immunodeficiency Syndrome (AIDS)	AIDS is a disease of the human immune system caused by the human immunodeficiency virus (HIV). This condition progressively reduces the effectiveness of the immune system and leaves individuals susceptible to opportunistic infections and tumors.
ADPAC	*See* Automated Data Processing Application Coordinator**.**
AIDS	*See* Acquired Immunodeficiency Syndrome**.**
AIDS-defining Opportunistic Infection (AIDS-OI)	Those illnesses said to be AIDS defining. "Opportunistic infections" are infections that take advantage of a weakened immune system.
AIDS-OI	*Acronym* for AIDS-defining Opportunistic Infection
AITC	*See* Austin Information Technology Center
AMIS	*See* Automated Management Information System
Antiretroviral (medications)	Medications for the treatment of infection by retroviruses, primarily HIV. *See also* Highly Active Antiretroviral Therapy.
ARV	*See* Antiretroviral (medications).
Austin Automation Center (AAC)	*See* Corporate Data Center Operations

Term or Acronym	Description
Austin Information Technology Center (AITC)	AITC is a recognized, award-winning Federal data center within the Department of Veterans Affairs (VA). It provides a full complement of cost-efficient e-government solutions to support the information technology (IT) needs of customers within the Federal sector. AITC has also implemented a program of enterprise "best practice" initiatives with major vendor partners that ensures customers receive enhanced, value-added IT services through the implementation of new technologies at competitive costs.
Automated Data Processing Application Coordinator (ADPAC)	The ADPAC is the person responsible for planning and implementing new work methods and technology for employees throughout a medical center. ADPACs train employees and assist users when they run into difficulties, and needs to know how all components of the system work. ADPACs maintain open communication with their supervisors and Service Chiefs, as well as their counterparts in Fiscal and Acquisitions and Materiel Management (A&MM), or Information Resource Management (IRM).
Automated Management Information System (AMIS)	The VHA Decision Support System (DSS) is a national automated management information system based on commercial software to integrate data from clinical and financial systems for both inpatient and outpatient care. The commercial software is utilized with interfaces developed to transport data into the system from the Veterans Health Information Systems and Technology Architecture (VistA), the National Patient Care Database (NPCD), the Patient Treatment File (PTF), and various VA financial information systems. The VHA began implementation of DSS in 1994. Full implementation was completed in 1999 and DSS is now used throughout the VA healthcare system.

BACK to Glossary Contents

Term or Acronym	Description
B	
B-Type Option	In VistA, an option designed to be run only by the RPC Broker, and which cannot be run from the menu system.

BACK to Glossary Contents

Term or Acronym	Description
C	
CCOW	*See* Clinical Context Object Workgroup
CCR	*See* Clinical Case Registries
CDC	*See* Centers for Disease Control and Prevention
CDCO	*See* Corporate Data Center Operations
Centers for Disease Control and Prevention (CDC)	The CDC is one of the major operating components of the United States Department of Health and Human Services. It includes a number of Coordinating Centers and Offices which specialize in various aspects of public health, as well as the National Institute for Occupational Safety and Health (NIOSH). *See* http://www.cdc.gov/about/organization/cio.htm

Term or Acronym	Description
Center for Quality Management in Public Health (CQM)	CQM, based in the VA Palo Alto Health Care System, functions as part of the VA Public Health Strategic Health Care Group at VA Central Office in Washington, DC. CQM was first established with a primary focus on HIV care; the mission expanded to include Hepatitis C issues in January 2001. In line with the mission of its organizational parent, the CQM mission further expanded to include work on various issues and conditions with public health significance, including operational support and management of data from the Clinical Case Registries (CCR) software.
Clinical Case Registries (CCR)	The Clinical Case Registries (CCR) application collects data on the population of Veteranss with certain clinical conditions, namely Hepatitis C and Human Immunodeficiency Virus (HIV) infections.
Clinical Context Object Workgroup (CCOW)	CCOW is an HL7 standard protocol designed to enable disparate applications to synchronize in real-time, and at the user-interface level. It is vendor independent and allows applications to present information at the desktop and/or portal level in a unified way. CCOW is the primary standard protocol in healthcare to facilitate a process called "Context Management." Context Management is the process of using particular "subjects" of interest (e.g., user, patient, clinical encounter, charge item, etc.) to 'virtually' link disparate applications so that the end-user sees them operate in a unified, cohesive way. Context Management can be utilized for both CCOW and non-CCOW compliant applications. The CCOW standard exists to facilitate a more robust, and near "plug-and-play" interoperability across disparate applications. Context Management is often combined with Single Sign On applications in the healthcare environment, but the two are discrete functions. Single Sign On is the process that enables the secure access of disparate applications by a user through use of a single authenticated identifier and password.
Comma-Delimited Values (CDV)	*See* Comma-Separated Values
Comma-Separated Values (CSV)	"Separated" or "delimited" data files use specific characters (delimiters) to separate its values. Most database and spreadsheet programs are able to read or save data in a delimited format. The comma-separated values file format is a delimited data format that has fields separated by the comma character and records separated by newlines. Excel can import such a file and create a spreadsheet from it.
Computerized Patient Record System (CPRS)	A Computerized Patient Record (CPR) is a comprehensive database system used to store and access patients' healthcare information. CPRS is the Department of Veteran's Affairs electronic health record software. The CPRS organizes and presents all relevant data on a patient in a way that directly supports clinical decision making. This data includes medical history and conditions, problems and diagnoses, diagnostic and therapeutic procedures and interventions. Both a graphic user interface version and a character-based interface version are available. CPRS provides a single interface for health care providers to review and update a patient's medical record, and to place orders, including medications, special procedures, x-rays, patient care nursing orders, diets, and laboratory tests. CPRS is flexible enough to be implemented in a wide variety of settings for a broad spectrum of health care workers, and provides a consistent, event-driven, Windows-style interface.
context-sensitive help	Online help is topic-oriented, procedural or reference information delivered through computer software. It is a form of user assistance. Most online help is designed to give assistance in the use of a software application or operating system, but can also be used to present information on a broad range of subjects. When a user presses the [F1] key while using the GUI application, the application automatically opens the online help file (which is distributed and installed alongside the application file itself).

Term or Acronym	Description
	Context-sensitive help is a kind of online help that is obtained from a specific point in the state of the software, providing help for the situation that is associated with that state. Context-sensitive help, as opposed to general online help or online manuals, doesn't need to be accessible for reading as a whole. Each topic is supposed to describe extensively one state, situation, or feature of the software. Context-sensitive help can be implemented using tooltips, which either provide a terse description of a GUI widget or display a complete topic from the help file. Other commonly used ways to access context-sensitive help start by clicking a button. One way uses a per widget button that displays the help immediately. Another way changes the mouse pointer shape to a question mark, and then, after the user clicks a widget, the help appears. Context-sensitive help is most used in, but is not limited to, GUI environments. Examples are Microsoft's WinHelp, Sun's JavaHelp or Panviva's SupportPoint.
Contextor software	Sentillion *Contextor* can be embedded within an application to implement most of CCOW's context participant behaviors. *Contextor* is compatible with any CCOW-compliant context manager and is designed to simplify writing applications that support the CCOW standard. It includes these development environment components: • CCOW-compliant code samples of Windows and Web applications • Development-only version of Sentillion Context Manager • Development tools for simulating and observing the behavior of a context-enabled desktop • Configuration and administration tool
Corporate Data Center Operations (CDCO)	Federal data center within the Department of Veterans Affairs (VA). As a franchise fund, or fee-for-service organization, CDCO-Austin provides cost-efficient IT enterprise solutions to support the information technology needs of customers within the Federal sector. *Formerly* the Austin Automation Center (AAC); *formerly* the Austin Information Technology Center (AITC). *See* http://www.aac.va.gov/index.php.
CPRS	*See* Computerized Patient Record System
CPT	*See* Current Procedural Terminology
CQM	*See* Center for Quality Management in Public Health
CSV	*See* Comma-Separated Values
Current Procedural Terminology (CPT)	CPT® is the most widely accepted medical nomenclature used to report medical procedures and services under public and private health insurance programs. CPT codes describe a procedure or service identified with a five-digit CPT code and descriptor nomenclature. The CPT code set accurately describes medical, surgical, and diagnostic services and is designed to communicate uniform information about medical services and procedures among physicians, coders, patients, accreditation organizations, and payers for administrative, financial, and analytical purposes. The current version is the CPT 2009. *Note:* CPT® is a registered trademark of the American Medical Association.

BACK to Glossary Contents

Term or Acronym	Description
	D
Database Integration	**M** code is not "compiled and linked," so any code is open to anyone to call. The same is true

Term or Acronym	Description
Agreement (DBIA)	for the data. This permits an incredible level of integration between applications, but it is "too open" for some software architects' liking. The VA has instituted Database Integration Agreements to enforce external policies and procedures to avoid unwanted dependencies.
Data Dictionary	A data structure that stores meta-data, i.e. data about data. The term "data dictionary" has several uses; most generally it is thought of as a set of data descriptions that can be shared by several applications. In practical terms, it usually means a table in a database that stores the names, field types, length, and other characteristics of the fields in the database tables.
DBIA	*See* Database Integration Agreement
Delphi	Borland® Delphi® is a software development package that allows creation of applications which allow manipulation of live data from a database. Among other things, Delphi is an object-oriented, visual programming environment used to develop 32-bit applications for deployment in the Windows environment. This is the software that was used to produce the Query Tool application. *See also* http://www.borland.com/us/products/delphi/index.html.
DFN	File Number—the local/facility patient record number (patient file internal entry number)

BACK to Glossary Contents

Term or Acronym	Description
	E
Epoetin	Epoetin Alfa is used for treating anemia in certain patients with kidney failure, HIV, or cancer.
Extensible Mark-up Language (XML)	An initiative from the W3C defining an "extremely simple" dialect of SGML suitable for use on the World-Wide Web.
Extract Data Definition	A set of file and field numbers which identify the data that should be retrieved during the extraction process.
Extract Process	This process is run after the update process. This function goes through patients on the local registry and, depending on their status, extracts all available data for the patient since the last extract was run. This process also updates any demographic data held in the local registry for all existing patients that have changed since the last extract. The extract transmits any collected data for the patient to the national database via HL7.

BACK to Glossary Contents

Term or Acronym	Description
	F
FDA	*See* **Food and Drug Administration**
FileMan	FileMan is a set of M utilities written in the late 1970s and early 1980s which allow the definition of data structures, menus and security, reports, and forms. Its first use was in the development of medical applications for the Veterans Administration (now the Department of Veterans Affairs). Since it was a work created by the government, the source code cannot be copyrighted, placing that code in the public domain. For this reason, it has been used for rapid development of applications across a number of organizations, including commercial products.

Term or Acronym	Description
firewall	A firewall is a part of a computer system or network that is designed to block unauthorized access while permitting authorized communications. It is a device or set of devices configured to permit, deny, encrypt, decrypt, or proxy all (in and out) computer traffic between different security domains based upon a set of rules and other criteria.
Food and Drug Administration (FDA)	FDA is an agency of the United States Department of Health and Human Services and is responsible for regulating and supervising the safety of foods, dietary supplements, drugs, vaccines, biological medical products, blood products, medical devices, radiation-emitting devices, veterinary products, and cosmetics. The FDA also enforces section 361 of the Public Health Service Act and the associated regulations, including sanitation requirements on interstate travel as well as specific rules for control of disease on products ranging from pet turtles to semen donations for assisted reproductive medicine techniques.
Function key	A key on a computer or terminal keyboard which can be programmed so as to cause an operating system command interpreter or application program to perform certain actions. On some keyboards/computers, function keys may have default actions, accessible on power-on. For example, **<F1>** is traditionally the function key used to activate a help system.

BACK to Glossary Contents

Term or Acronym	Description
	G
Globals	M uses globals, variables which are intrinsically stored in files and persist beyond the program or process completion. Globals appear as normal variables with the caret character in front of the name. For example, the **M** statement… `SET ^A("first_name")="Bob"` …will result in a new record being created and inserted in the file structure, persistent just as a file persists in an operating system. Globals are stored, naturally, in highly structured data files by the language and accessed only as **M** globals. Huge databases grow randomly rather than in a forced serial order, and the strength and efficiency of **M** is based on its ability to handle all this flawlessly and invisibly to the programmer. For all of these reasons, one of the most common **M** programs is a database management system. FileMan is one such example. **M** allows the programmer much wider control of the data; there is no requirement to fit the data into square boxes of rows and columns.
Graphical User Interface (GUI)	A graphical user interface (or GUI, often pronounced "gooey") is a graphical (rather than purely textual) user interface to a computer. A GUI is a particular case of user interface for interacting with a computer which employs graphical images and widgets in addition to text to represent the information and actions available to the user. Usually the actions are performed through direct manipulation of the graphical elements. A GUI takes advantage of the computer's graphics capabilities to make the program easier to use. *Sources:* http://en.wikipedia.org/wiki/GUI http://www.webopedia.com/TERM/G/Graphical_User_Interface_GUI.html *See also* User Interface
GUI	*See:* Graphical User Interface

BACK to Glossary Contents

Term or Acronym	Description
	H
HAART	*See* Highly Active Antiretroviral Treatment
Health Level 7 (HL7)	One of several American National Standards Institute (ANSI)–accredited Standards Developing Organizations operating in the healthcare arena. "Level Seven" refers to the highest level of the International Standards Organization's (ISO) communications model for Open Systems Interconnection (OSI)— the application level. The application level addresses definition of the data to be exchanged, the timing of the interchange, and the communication of certain errors to the application. The seventh level supports such functions as security checks, participant identification, availability checks, exchange mechanism negotiations and, most importantly, data exchange structuring. HL7 focuses on the interface requirements of the entire health care organization. Source: http://www.hl7.org/about/.
Hep C; HEPC	Hepatitis C; the Hepatitis C Registry
Hepatitis C	A liver disease caused by the hepatitis C virus (HCV). HCV infection sometimes results in an acute illness, but most often becomes a chronic condition that can lead to cirrhosis of the liver and liver cancer. *See* http://www.cdc.gov/hepatitis/index.htm
Highly Active Antiretroviral Treatment (HAART)	Antiretroviral drugs are medications for the treatment of infection by retroviruses, primarily HIV. When several such drugs, typically three or four, are taken in combination, the approach is known as highly active antiretroviral therapy, or HAART. The American National Institutes of Health and other organizations recommend offering antiretroviral treatment to all patients with AIDS.
HIV	*See* Human Immunodeficiency Virus
HL7	*See* Health Level 7
HTML	*See* Hypertext Mark-up Language
Human Immunodeficiency Virus (HIV)	HIV is a lentivirus (a member of the retrovirus family) that can lead to acquired immunodeficiency syndrome (AIDS), a condition in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections. HIV is different from most other viruses because it attacks the immune system. The immune system gives our bodies the ability to fight infections. HIV finds and destroys a type of white blood cell (T cells or CD4 cells) that the immune system must have to fight disease. See http://www.cdc.gov/hiv/topics/basic/index.htm.
hypertext	A term coined around 1965 for a collection of documents (or "nodes") containing cross-references or "links" which, with the aid of an interactive browser program, allow the reader to move easily from one document to another.
Hypertext Mark-up Language (HTML)	A hypertext document format used on the World-Wide Web. HTML is built on top of SGML. "Tags" are embedded in the text. A tag consists of a "<", a "directive" (in lower case), zero or more parameters and a ">". Matched pairs of directives, like "<title>" and "</title>" are used to delimit text which is to appear in a special place or style.

BACK to Glossary Contents

Term or Acronym	Description
	I

Term or Acronym	Description
ICD-9	*International Statistical Classification of Diseases and Related Health Problems*, ninth edition (commonly abbreviated as "ICD-9") provides numeric codes to classify diseases and a wide variety of signs, symptoms, abnormal findings, complaints, social circumstances and external causes of injury or disease. Every health condition can be assigned to a unique category and given a code, up to six characters long. Such categories can include a set of similar diseases. The "-9" refers to the ninth edition of these codes; the tenth edition has been published, but is not in widespread use at this time. *See also* Current Procedural Terminology
ICN	*See* Integration Control Number
ICR	See Immunology Case Registry
IEN	*See* Internal Entry Number
Immunology Case Registry (ICR)	Former name for Clinical Case Registries HIV (CCR:HIV).
Information Resources Management (IRM)	The service which is involved in planning, budgeting, procurement and management-in-use of VA's information technology investments.
Integration Control Number	The national VA patient record number.
Interface	An interface defines the communication boundary between two entities, such as a piece of software, a hardware device, or a user.
Internal Entry Number (IEN)	The number which uniquely identifies each item in the VistA database.
IRM	*See* Information Resources Management

BACK to Glossary Contents

Term or Acronym	Description
J	
JAWS	*See* Job Access with Speech
Job Access with Speech (JAWS)	Acronym for *Job Access with Speech*. Refers to a software product for visually impaired users. The software is produced by the Blind and Low Vision Group of Freedom Scientific. See http://en.wikipedia.org/wiki/JAWS_%28screen_reader%29 and http://www.freedomscientific.com/fs_products/software_jaws.asp.

BACK to Glossary Contents

Term or Acronym	Description
K	
!KEA	Terminal emulation software. No longer in use in VHA; replaced by *Reflection*.

Term or Acronym	Description
Keys	*See* Security Keys

BACK to Glossary Contents

Term or Acronym	Description
	L
Laboratory Information Manager (LIM)	Manager of the laboratory files in VistA. Additional duties include creation of new tests, interface set-up and maintenance of instruments, coordination with staff outside of lab to create quick orders, order sets and other Computerized Patient Record System functions.
Local Registry	The local file of patients that were grandfathered into the registry or have passed the selection rules and been added to the registry.
Local Registry Update	This process adds new patients (that have had data entered since the last update was run and pass the selection rules) to the local registry.
Logical Observation Identifiers Names and Codes (LOINC)	LOINC© is designed to facilitate the exchange and pooling of clinical results for clinical care, outcomes management, and research by providing a set of universal codes and names to identify laboratory and other clinical observations. The Regenstrief Institute, Inc., an internationally renowned healthcare and informatics research organization, maintains the LOINC database and supporting documentation. *See* http://loinc.org/
LOINC	*See* Logical Observation Identifiers Names and Codes

BACK to Glossary Contents

Term or Acronym	Description
	M
M	**M** is a procedural, interpreted, multi-user, general-purpose programming language designed to build and control massive databases. It provides a simple abstraction that all data values are strings of characters, and that all data can be structured as multiple dimensional arrays. MUMPS data structures are sparse, using strings of characters as subscripts. **M** was formerly (and is still commonly) called MUMPS, for *Massachusetts General Hospital Utility Multiprogramming System*.
Massachusetts General Hospital Utility Multi-Programming System	*See* M.
MDI	*See* Multiple Document Interface
Medical SAS Datasets	The VHA Medical SAS Datasets are national administrative data for VHA-provided health care utilized primarily by Veteranss, but also by some non-Veteranss (e.g., employees, research participants).
Message (HL7)	A *message* is the atomic unit of data transferred between systems. It is comprised of a group of segments in a defined sequence. Each message has a message type that defines its purpose. For example, the ADT (admissions/discharge/transfer) Message type is used to transmit portions of a patient's ADT data from one system to another. A three character code

Term or Acronym	Description
	contained within each message identifies its type. *Source:* Health Level Seven, Health Level Seven, Version 2.3.1, copyright 1999, p. E-18., quoted in http://www.va.gov/vdl/VistA_Lib/Infrastructure/Health_Level_7_(HL7)/hl71_6p93sp.doc.
Middleware	In computing, middleware consists of software agents acting as an intermediary between different application components. It is used most often to support complex, distributed applications. The software agents involved may be one or many.
Multiple Document Interface (MDI)	MDI is a Windows function that allows an application to display and lets the user work with more than one document at the same time. This interface improves user performance by allowing them to see data coming from different documents, quickly copy data from one document to another and many other functions. These files have the .MDI filename extension.
MUMPS	*See* M

BACK to Glossary Contents

Term or Acronym	Description
	N
Namespace	A logical partition on a physical device that contains all the artifacts for a complete M system, including globals, routines, and libraries. Each namespace is unique, but data can be shared between namespaces with proper addressing within the routines. In VistA, namespaces are usually dedicated to a particular function. The **ROR** namespace, for example, is designed for use by CCR.
National Case Registry (NCR)	All sites running the CCR software transmit their data to the central database for the registry.
National Patient Care Database (NPCD)	The NPCD is the source data for the VHA Medical SAS Datasets. NPCD is the VHA's centralized relational database (a data warehouse) that receives encounter data from VHA clinical information systems. It is updated daily. NPCD records include updated patient demographic information, the date and time of service, the practitioner(s) who provided the service, the location where the service was provided, diagnoses, and procedures. NPCD also holds information about patients' assigned Primary Care Provider and some patient status information such as exposure to Agent Orange, Ionizing Radiation or Environmental Contaminants, Military Sexual Trauma, and Global Assessment of Functioning.
NPCD	*See* National Patient Care Database

BACK to Glossary Contents

Term or Acronym	Description
	P
peginterferon	Peginterferon alfa-2b is made from human proteins that help the body fight viral infections. Peginterferon alfa-2b is used to treat chronic hepatitis C in adults, often in combination with another medication called ribavirin.
protocol	A protocol is a convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints. In its simplest form, a

Term or Acronym	Description
	protocol can be defined as the rules governing the syntax, semantics, and synchronization of communication. Protocols may be implemented by hardware, software, or a combination of the two.

BACK to Glossary Contents

Term or Acronym	Description
R	
Reflection	**Terminal emulation software** used to connect personal computers to mainframe servers made by IBM, Hewlett Packard and other manufacturers running UNIX, VMS and other operating systems.
Registry	The VHA Registries Program supports the population-specific data needs of the enterprise including (but not limited to) the Clinical Case Registries, Oncology Tumor Registry, Traumatic Brain Injury Registry, Embedded Fragment Registry and Eye Trauma Registry.
Registry Medication	A defined list of medications used for a particular registry.
Remote Procedure Call (RPC)	A type of protocol that allows one program to request a service from a program located on another computer network. Using RPC, a system developer need not develop specific procedures for the server. The client program sends a message to the server with appropriate arguments and the server returns a message containing the results of the program executed. In this case, the GUI client uses an RPC to log the user on to **VistA**. And to call up, and make changes to, data that resides on a **VistA** server. *See also* Remote Procedure Call (RPC) Broker
Remote Procedure Call (RPC) Broker	A piece of middleware software that allows programmers to make program calls from one computer to another, via a network. The RPC Broker establishes a common and consistent foundation for client/server applications being written under the VistA umbrella. The RPC Broker acts as a bridge connecting the client application front-end on the workstation (in this case, the Delphi Query Tool application) to the M –based data and business rules on the server. It serves as the communications medium for messaging between VistA client/server applications. Upon receipt, the message is decoded, the requested remote procedure call is activated, and the results are returned to the calling application. Thus, the RPC Broker helps bridge the gap between the traditionally proprietary VA software and other types of software. *See also* Remote Procedure Call (RPC)
Retrovirus	Any of a family of single-stranded RNA viruses having a helical envelope and containing an enzyme that allows for a reversal of genetic transcription, from RNA to DNA rather than the usual DNA to RNA, the newly transcribed viral DNA being incorporated into the host cell's DNA strand for the production of new RNA retroviruses: the family includes the AIDS virus and certain oncogene-carrying viruses implicated in various cancers.
ribavirin	Ribavirin is an antiviral medication. Ribavirin must be used together with an interferon alfa product (such as Peginterferon)to treat chronic hepatitis C.
Roll-and-scroll, roll'n'scroll	"Scrolling" is a display framing technique that allows the user to view a display as moving behind a fixed frame. The scrolling action typically causes the data displayed at one end of the screen to move across it, toward the opposite end. When the data reach the opposite edge of the screen they are removed (i.e., scroll off of the screen). Thus, old data are removed from one end while new data are added at the other. This creates the impression of the display page being on an unwinding scroll, with only a limited portion being visible at any time from the screen; i.e., the display screen is perceived as being

Term or Acronym	Description
	stationary while the displayed material moves (scrolls) behind it. Displays may be scrolled in the top-bottom direction, the left-right direction, or both. Traditionally, VistA data displays have been referred to as "roll-and-scroll" for this reason.
ROR	The ROR namespace in M, used for the CCR application and related **VistA** data files.
Routine	A set of programming instructions designed to perform a specific limited task.
RPC	*See* Remote Procedure Call (RPC)
RPC Broker	*See* Remote Procedure Call Broker

BACK to Glossary Contents

Term or Acronym	Description
S	
screen reader	"Screen reader" software is designed to make personal computers using Microsoft Windows® accessible to blind and visually impaired users. It accomplishes this by providing the user with access to the information displayed on the screen via text-to-speech or by means of a braille display and allows for comprehensive keyboard interaction with the computer. It also allows users to create custom scripts using the JAWS Scripting Language, which can alter the amount and type of information which is presented by applications, and ultimately makes programs that were not designed for accessibility (such as programs that do not use standard Windows controls) usable through JAWS.
Section 508	Section 508 of the Rehabilitation Act as amended, 29 U.S.C. Section 794(d), requires that when Federal agencies develop, procure, maintain, or use electronic and information technology, they shall ensure that this technology is accessible to people with disabilities. Agencies must ensure that this technology is accessible to employees and members of the public with disabilities to the extent it does not pose an "undue burden." Section 508 speaks to various means for disseminating information, including computers, software, and electronic office equipment. The Clinical Case Registry must be 508 compliant, able to extract data as needed including SNOMED codes.
Security Keys	Codes which define the characteristic(s), authorization(s), or privilege(s) of a specific user or a defined group of users. The VistA option file refers to the security key as a "lock." Only those individuals assigned that "lock" can used a particular VistA option or perform a specific task that is associated with that security key/lock.
Selection Rules	A pre-defined set of rules that define a registry patient.
Sensitive Information	Any information which requires a degree of protection and which should be made available only to authorized system users.
Server	In information technology, a server is a computer system that provides services to other computing systems—called clients—over a network. The server is where VistA M-based data and Business Rules reside, making these resources available to the requesting server.
SGML	*See* Standardized Generic Markup Language
Single Sign On	Single Sign On is the process that enables the secure access of disparate applications by a user through use of a single authenticated identifier and password.

Term or Acronym	Description
Site Configurable	A term used to refer to features in the system that can be modified to meet the needs of each local site.
SNOMED	*See* Systematized Nomenclature of Medicine
Standardized Generic Markup Language (SGML)	A generic markup language for representing documents. SGML is an International Standard that describes the relationship between a document's content and its structure. SGML allows document-based information to be shared and re-used across applications and computer platforms in an open, vendor-neutral format.
Systematized Nomenclature of Medicine (SNOMED)	SNOMED is a terminology that originated as the systematized nomenclature of pathology (SNOP) in the early 1960s under the guidance of the College of American Pathologists. In the late 1970s, the concept was expanded to include most medical domains and renamed SNOMED. The core content includes text files such as the concepts, descriptions, relationships, ICD-9 mappings, and history tables. SNOMED represents a terminological resource that can be implemented in software applications to represent clinically relevant information comprehensive (>350,000 concepts) multi-disciplinary coverage but discipline neutral structured to support data entry, retrieval, maps etc.

BACK to Glossary Contents

Term or Acronym	Description
T	
Technical Services Project Repository (TSPR)	The TSPR is the central data repository and database for VA Health IT (VHIT) project information. *See* http://tspr.VistA.med.va.gov/tspr/default.htm
Terminal emulation software	A program that allows a personal computer (PC) to act like a (particular brand of) terminal. The PC thus appears as a terminal to the host computer and accepts the same escape sequences for functions such as cursor positioning and clearing the screen. Attachmate *Reflection* is widely used in VHA for this purpose.
Tool tips	Tool tips are "hints" assigned to menu items which appear when the user "hovers" the mouse pointer over a menu.
TSPR	*See* Technical Services Project Repository

BACK to Glossary Contents

Term or Acronym	Description
U	
User Interface	A user interface is the means by which people (the users) interact with a particular machine, device, computer program or other complex tool (the system). The user interface provides one or more means of: • Input, which allows the users to manipulate the system • Output, which allows the system to produce the effects of the users' manipulation The interface may be based strictly on text (as in the traditional "roll and scroll" IFCAP interface), or on both text and graphics. In computer science and human-computer interaction, the user interface (of a computer program) refers to the graphical, textual and auditory information the program presents to the

Term or Acronym	Description
	user, and the control sequences (such as keystrokes with the computer keyboard and movements of the computer mouse) the user employs to control the program. *See also* Graphical User Interface

BACK to Glossary Contents

Term or Acronym	Description
	V
VERA	*See* Veterans Equitable Resource Allocation
Vergence	*Vergence*® software from Sentillion provides a single, secure, efficient and safe point of access throughout the healthcare enterprise, for all types of caregivers and applications. *Vergence* unifies single sign-on, role-based application access, context management, strong authentication and centralized auditing capabilities into one fully integrated, out-of-the box clinical workstation solution. *See* http://www.sentillion.com/solutions/datasheets/Vergence-Overview.pdf.
Verify Code	With each sign-on to VistA, the user must enter two codes to be recognized and allowed to proceed: the *Access Code* and *Verify Code*. Like the Access Code, the Verify Code is also generally assigned by IRM Service and is also encrypted. This code is used by the computer to verify that the person entering the access code can also enter a second code correctly. Thus, this code is used to determine if users can verify who they are. *See also* Access Code
Veterans Equitable Resource Allocation (VERA)	Since 1997, the VERA System has served as the basis for allocating the congressionally appropriated medical care budget of the Department of Veterans Affairs (VA) to its regional networks. A 2001 study by the RAND Corporation showed that "[in] spite of its possible shortcomings, VERA appeared to be designed to meet its objectives more closely than did previous VA budget allocation systems." *See* http://www.rand.org/pubs/monograph_reports/MR1419/
Veterans Health Information Systems and Technology Architecture (VistA)	VistA is a comprehensive, integrated health care information system composed of numerous software modules. *See* http://www.va.gov/VistA_monograph/docs/2008VistAHealtheVet_Monograph.pdf and http://www.virec.research.va.gov/DataSourcesName/VISTA/VISTA.htm.
Veterans Health Administration (VHA)	VHA administers the United States Veterans Healthcare System, whose mission is to serve the needs of America's Veteranss by providing primary care, specialized care, and related medical and social support services.
VHA	*See* Veterans Health Administration
Veterans Integrated Service Network (VISN)	VHA organizes its local facilities into networks called VISNS (VA Integrated Service Networks). At the VISN level, VistA data from multiple local facilities may be combined into a data warehouse.
VISN	*See* Veterans Integrated Service Network
VistA	*See* Veterans Health Information Systems and Technology Architecture

BACK to Glossary Contents

Term or Acronym	Description

Term or Acronym	Description
	X
XML	*See* Extensible Mark-up Language

BACK to Glossary Contents

Index

A

Access rights. *See* Security Keys
Activity Detail
  view in Technical Log, 104
Activity log
  window, 102
Add
  a CDC report, 122
  a Pending patient to registry, 43
  lab tests to Registry, 63
  Local Fields, 70
  medications to Registry, 66
  notifications, 68
ADMIN security key, 35
Adult HIV/AIDS Confidential Case Report, 122
AIDS-OI
  Clinical Status, 119, 133
application shortcut
  target field, 199

B

Break the Clinical Link, 53
Broker Timeout settings, 79

C

CCOW
  break the clinical link, 53
  check status, 61
  rejoin the clinical context, 52
CCR
  access rights, 34
  downloading software, 23
  features of, 5
  identify patients, 43
  intranet Home Page, 24
  overview of, 5, 203
  recommended users of, 1
  run a report, 142
  sign on, 45
CDC Form
  Section VIII, 133
CDC report
  about the, 121
  Print, 125
  Update, 125
  View, 124
Change
  report output appearance, 94
  screen colors, 36, 79
  system settings, 77
Clinic Follow-Up report, 148
Clinical Status
  AIDS-OI, 119
Combined Meds and Labs report, 148
command line switches, 199
Confirm/Edit
  menu option, 54
context management
  disable, 199
Copy
  text from a report, 92
Current Inpatient List report, 149

D

Data Quality message, 101
Database Error, 101
Deceased check, 43
Delete
  report from the Task Manager, 99
Diagnoses report, 150
disable
  single sign-on, 199
Documentation
  in VistA Document Library, 24
Download CCR software, 23

E

Edit Site Parameters. *See* Site Parameters
Error messages, 101

F

Features of CCR, 203
File Menu options, 49

G

General Utilization and Demographics report, 150
GUI
  parts of the screen, 27
  restore default settings, 82
  right-click menu options, 32

H

HCCR. *See* CCR:HEPC
Help menu options, 59
Hepatitis C Registry. See CCR:HEPC
HIV Registry. See CCR:HIV

I

ICD-9 codes

used to identify registry patients, 43
ICR. *See* CCR:HIV, *See* CCR:HIV
Inpatient Utilization report, 151
IRM
security key, 35

L

Lab Tests
add to Registry, 63
Registry report, by range, 156
remove from Registry, 65
Lab Utilization report, 151
List of Registry Patients report, 152
Local Fields
add, 70
reactivate, 75
remove, 73
Login. *See* Sign on to CCR

M

Medications
add to Registry, 66
Registry report, 157, 158
remove from Registry, 67
Menu
File, 49
Help, 59
Registry, 53
Reports, 57
Window, 59
message
Data Quality, 101
Database Error, 101
Error, 101
Warning, 101

N

nonstandard port number, 199
Notifications
add, 68
list of users receiving, 69
remove, 69

O

Outpatient Utilization report, 153

P

Parts of the screen, 28
Patient
confirm a, 114
deceased, 43
delete a, 121
edit a, 117
identify a Pending, 43
list of all in registry, 152
list of all inpatients, 149
Medication History report, 154
update a CDC Report, 125
Patient Data Editor
window, 112
Patient List Display
Selected column, 109
Selection Rule column, 110
Pending
add patient to registry, 43
Pharmacy Prescription Utilization report, 154
port number
nonstandard, 199
Preferences, setting, 77
Print
report output, 98

R

Registry Coordinator, 57
Registry Lab Tests report, 156
Registry Medications
add, 66
remove, 67
Registry Medications report, 157, 158
Registry Menu options, 53
registry name, 199
Rejoin Clinical Context, 52
Report
change sort order in the output, 94
Clinic Follow-up, 148
Combined Meds & Labs, 148
copy results to another application, 92
create a, 142
Current Inpatient List, 149
delete from Task Manager list, 99
Diagnoses, 150
General Utilization and Demographics, 150
Inpatient Utilization, 151
Lab Utilization, 151
List of Registry Patients, 152
Outpatient Utilization, 153
Pharmacy Prescription Utilization, 154
print a, 98
Registry Lab Tests, 156
Registry Medications, 157, 158
VERA Reimbursement, 159
view from Task Manager screen, 90
Report parameters
Mode field, 141
Reports menu options, 57
Right-Click menus, 33

S

Save
  report output to a file, 95
  search parameters as a template, 141
Search
  for a patient, 110
  for text in a report, 94
Security Keys, 34
ARV drugs, 67
Select a Registry. *See* Sign on to CCR
server
  host name, 199
  IP address, 199
Setting Preferences, 77
shortcut
  target field, 199
Show Registry Users, 54
Sign on to CCR, 45
single sign-on
  disable, 199
Site Parameters
  add Lab Tests, 63
  add Local Fields, 70
  add Notifications, 68
  add Registry Medications, 66
  menu option, 55
Start. *See* Sign on to CCR
switches
  command line, 199
System Profile. See Site Parameters
System Settings. *See* Preferences

T

target field, 199
Task Manager
  delete a report, 99
  view a report, 90
Technical Log
  Activity types, 102
  tab view, 90, 100
  view activity detail, 102

U

Update
  CDC Report, 125
user context
  disable, 199
USER security key, 34
Utilization Reports
  General and Demographics, 150
  Inpatient, 151
  Lab, 151
  Outpatient, 153
  Pharmacy Prescription, 154

V

VERA Reimbursement report, 159
View
  reports from the Task Manager, 90
  Technical Log, 101

W

Warning message, 101
Window
  about the CCR GUI, 28
  Patient Data Editor, 112
Window menu options, 59
Windows
  about right-click menus, 32

THIS PAGE INTENTIONALLY LEFT BLANK

ENDNOTES
begin on next page

Endnotes

[A] Patch ROR*1.5*1 October 2006 added accessibility information for Section 508 compliance.

[B] Patch ROR*1.5*1 October 2006 added this functionality.

[C]Patch ROR*1.5*1 October 2006 updated the set of valid patient search parameters to use # followed by the patient's 11-digit coded SSN.

[D] Patch ROR*1.5*1 October 2006 added Selected and Selection Rule as columns on the list of Patients.

[E] Patch ROR*1.5*10 September 2010 removed the Date of Death and Sex columns on the list of Patients.

[F] Patch ROR*1.5*1 October 2006 added descriptions for Selected and Selection Rule columns.

[G] Patch ROR*1.5*1 October 2006 updated the set of valid patient search parameters to use # followed by the patient's 11-digit coded SSN.

[H] Patch ROR*1.5*10 June 2009 added the Comment pane on the Patient Data Editor.

[I] Patch ROR*1.5*1 October 2006 added a description of the new button on the Patient Data Editor–Delete.

[J] Patch ROR*1.5*1 October 2006 Added a description of the new button on the Patient Data Editor–Delete.

[K] Patch ROR*1.5*1 October 2006 added a note to indicate that the AIDS-OI checkbox and its date field are automatically populated when an indicator disease Def box is selected in Section VIII of the CDC form in the Clinical Status section.

[L] Patch ROR*1.5*1 October 2006 added a note to indicate that when an indicator disease Def box is selected, the AIDS-OI checkbox and the date field are automatically populated on the Patient Data Editor in the Clinical Status tab of the Registry tab.

[M] Patch ROR*1.5*1 October 2006 changed checkboxes to modes in the heading.

[N] Patch ROR*1.5*1 October 2006 added "exclude" to the sentence in Other Registries modes.

[O] Patch ROR*1.5*1 October 2006 added a description for the new button on each Report setup–Default Parameters.

[P] Patch ROR*1.5*1 October 2006 added information about the output format of the report; ROR*1.5*10 changed the input screen.

[Q] Patch ROR*1.5*1 October 2006 added information about the logic for the Diagnoses report with the modified ICD-9 panel.

[R] Patch ROR*1.5*1 October 2006 added a statement to reflect the new search parameter.

[S] Patch ROR*1.5*1 October 2006 added information about the sorting logic.

[T] Patch ROR*1.5*1 October 2006 added information about the new functionality of the modified Patient Medication History report.

[U] Patch ROR*1.5*1 October 2006 updated this step to reflect the addition of the Mode field to Other Registries.

[V] Patch ROR*1.5*1 October 2006 updated this step to reflect the addition of the Mode field to Local Fields.

[W] Patch ROR*1.5*1 October 2006 added this step to reflect the addition of the Patients checkboxes.

[X] Patch ROR*1.5*1 October 2006 added information about the modified loading of the predefined ICD-9 lists.

[Y] Patch ROR*1.5*1 October 2006 added this step to reflect the addition of the Inpatient/Outpatient checkboxes.

[Z] Document revision for Patch ROR*1.5*10, July 2010, added/expanded many definitions and much explanatory material.