

Clinical Case Registries (CCR)

Version 1.5



Release Notes

Documentation Revised August 2012
For Patch ROR*1.5*18

**Department of Veterans Affairs
Office of Enterprise Development
Health Data Systems – Registries**

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Revision History

| Date | Description | Author | Role |
|-----------------|--|---|---|
| August, 2012 | Final release for Patch ROR*1.5*18. See Table 1 for Details. | John Sanders Connie Ray Linda Berry Edward Micyus Dan Zaudtke | Project Manager M Developer Software Quality Assurance Analyst Delphi Developer Tech Writer |
| April, 2012 | Final release for Patch ROR*1.5*17. See Table 1 for Details. | John Sanders Connie Ray Linda Berry Edward Micyus Dan Zaudtke | Project Manager M Developer Software Quality Assurance Analyst Delphi Developer Tech Writer |
| September, 2011 | Final release for Patch ROR*1.5*15. See Table 1 for Details. | John Sanders Connie Ray Linda Berry Edward Micyus Dan Zaudtke | Project Manager M Developer Software Quality Assurance Analyst Delphi Developer Tech Writer |
| March, 2011 | Patch ROR*1.5*14. See <i>User Manual</i> for details. | Vida Dunie Angela Saunders Linda Berry Ed Micyus | Tech Writer M Developer Software Quality Assurance Analyst Delphi Developer |
| September, 2010 | Final release for Patch ROR*1.5*13. See <i>User Manual</i> for details. | Kenneth Rikard | Project Manager |
| April, 2010 | Final release for Patch ROR*1.5*10: See <i>User Manual</i> for details. | Edward Micyus Angela Saunders Linda Berry VJ McDonald | Delphi Developer M Developer Software Quality Assurance Analyst Technical Writer |
| July, 2009 | Patch ROR*1.5*8: See <i>User Manual</i> 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 |

| Date | Description | Author | Role |
|----------------|--|------------------|-------------|
| July, 2008 | Patch ROR*1.5*7: See <i>User Manual</i> for details. | (unknown) | |
| May, 2008 | Patch ROR*1.5*6: See <i>User Manual</i> for details. | (unknown) | |
| March, 2008 | Patch ROR*1.5*5: See <i>User Manual</i> for details. | (unknown) | |
| December, 2007 | Patch ROR*1.5*4: See <i>User Manual</i> for details. | (unknown) | |
| November, 2007 | Patch ROR*1.5*3: See <i>User Manual</i> for details. | (unknown) | |
| October, 2007 | Patch ROR*1.5*2: See <i>User Manual</i> for details. | (unknown) | |
| October 2006 | Patch ROR*1.5*1: See <i>User Manual</i> 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) | |

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1.0 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 at the local and national level as well as 16 local, generic registries.

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.

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—commonly abbreviated as “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.

Each night a background process transmits a set of predefined data via [Health Level 7 \(HL7\)](#) message to the national CCR database at the [Corporate Data Center Operations](#) (CDCO). Data from both the Hepatitis C and HIV registries, and the local registries, are aggregated in the same message. If there is more new data than is allowed by the registry parameter for a single CCR HL7 batch message (the current limit is 5 megabytes), the software will send several messages during a single night. The CCR software creates a limited set of database elements to be stored locally in the [Veterans Health Information Systems and Technology Architecture \(VistA\)](#) 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.

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

CCR provides these key features:

- Automates the development of a local list of patients with evidence of HIV or Hepatitis C infection.
- Automatically transmits patient data from the local registry lists to a national database.
- Provides robust reporting capabilities.

CCR also provides the following functions:

- Facilitates the tracking of patient outcomes relating to treatment.
- Identifies and tracks important trends in treatment response, adverse events, and time on therapy.
- Monitors quality of care using both process and patient outcome measures.

2.0 What's New with ROR*1.5*18

Patch ROR*1.5*18 includes maintenance and enhancement modifications to version 1.5 of the Clinical Case Registries (CCR) application that correct inherent shortcomings in the existing software and enhance other existing capabilities. ROR*1.5*18 contains the following enhancements (E), modifications (M) and fixes (F):

Table 1 – Changes for Patch 18

| # | Description | Type |
|---|---|------|
| 1 | <p>This patch is designed to allow reporting tools used with the national Hepatitis C and HIV registries to be used with local registries. Sixteen new local registries are added based on ICD9 codes provided by the national Office of Public Health/Population Health. The new registries represent patient diagnostic groups for:</p> <ul style="list-style-type: none"> Alzheimer's Disease Amputation Breast Cancer Cerebrovascular Disease (CVD) Chronic Obstructive Pulmonary Disease (COPD) Chronic Renal Disease (CRD) Congestive Heart Failure (CHF) Diabetes Dyslipidemia Hypertension Ischemic Heart Disease (IHD) Low Vision/Blind Mental Health Multiple Sclerosis Osteoarthritis Rheumatoid Arthritis | E |
| 2 | <p>An option, Initialize new registries (one time) is provided to schedule the initial build of the new registries. The option is locked with the ROR VA IRM security key. It is run one time and will search for patients with qualifying ICD9 codes linked to outpatient visits, problem lists and inpatient stays back to 1/1/1985. Patients added to a local registry are automatically confirmed. The confirmation date is set to the earliest date of the qualifying ICD9 code. Registries are not available to users until they are initialized.</p> | E |
| 3 | <p>Once the registries are initialized, the nightly job (ROR TASK) searches for new patients with qualifying ICD9 codes. Patients added to one of the 16 local registries are automatically confirmed. The confirmation date is set to the date of the qualifying ICD code.</p> | E |
| 4 | <p>Only data from the national registries for HIV and Hepatitis C will be transmitted to the national database.</p> | M |

| # | Description | Type |
|---|--|------|
| 5 | <p>Two new security keys have been added, ROR VA GENERIC ADMIN and ROR VA GENERIC USER. These keys only provide access to the local registries. Users assigned the new ROR VA GENERIC ADMIN key will have the ability to delete patients from any of the sixteen local registries. Patients are deleted immediately and the deletion is logged in the technical log. If the patient has a future qualifying result, the patient is added back to the appropriate registry.</p> <p>Users with the ROR VA GENERIC USER key will have the ability to run reports on all the local registries.</p> | E |
| 6 | <p>It will no longer be necessary to run the option, Re-index the ACL cross-reference manually after assigning or un-assigning a security key. The user's access privileges will be automatically updated at the time the user logs on.</p> | M |
| 7 | <p>The Select a Registry screen displayed when the user logs on, will list all the registries to which the user has keys. The national registries for Hepatitis C and HIV will be listed first. The local registries will be listed next in alphabetical order separated from the national registries by a blank line.</p> | E |
| 8 | <p>The Patient screen for local registries does not include a Pending only checkbox or a Pending Comments column because patients added to local registries are automatically confirmed.</p> | E |
| 9 | <p>Site parameters can be customized for local registries. The site parameters screen displays tabs for Lab Tests, Notifications and Local Fields. A generic tab on the right side of the screen displays laboratory tests. Select local laboratory tests under the Registry Lab tab and move them to the right. Once a laboratory test is added, it is displayed in the middle pane of the Registry Lab Patient Data Editor.</p> <p>The names of VistA users who need to receive notifications about problems in registry processes can be added under the Notifications tab.</p> <p>Local fields can also be added to individual local registries. These fields are used to include/exclude patients from reports.</p> | M |

| # | Description | Type |
|----|---|------|
| 10 | The following reports can be run for local registries: BMI by Range Report Clinic Follow Up Report Combined Meds and Labs Report Current Inpatient List Report Diagnosis Report General Utilization and Demographics Report Procedures Report Radiology Utilization Report Inpatient Utilization Report Lab Utilization Report Liver Score by Range Report Outpatient Utilization Report Patient Medication History Report Pharmacy Prescription Utilization Report Renal Function by Range Report | M |
| 11 | The List of Registry Patients can be run for local registries but has been modified for use with local registries. The Pending checkbox has been removed from the Report Status panel. Pending comments and First diagnosed at this facility checkboxes have been removed from the Report Options panel. | M |
| 12 | The following reports are not supported for local registries: DAA Lab Monitoring Report Potential DAA Candidates Report Registry Lab Tests by Range Report Registry Medications Report VERA Reimbursement Report | M |
| 13 | If the user has keys for the registries, the Other Registries selection panel will display those registries. Registries listed in this panel can be used to include/exclude patients on reports. | F |
| 14 | The Common Template for Depression has been deleted and replaced with two new Common Templates for Major Depression and Other Depression. These templates are used to filter patients based on diagnoses when running reports. | M |
| 15 | ROR TASK has been modified to automatically update all registries. It is no longer necessary to list registries in the TASK PARAMETERS field. The description of the option has been modified to reflect this change. | E |
| 16 | The Select Patient panel has been added to the DAA Lab Monitoring report. | E |

Table 2 – Global Updates for Patch ROR*1.5*18

| File Name and Number | Update |
|----------------------------------|--|
| ROR_REGISTRY_PARAMETERS (#798.1) | New entries "VA DIABETES", "VA MENTAL HEALTH", "VA CHF", "VA IHD", "VA BREAST CA", "VA HTN", "VA CVD", "VA OSTEOARTHRITIS", "VA COPD", "VA DYSLIPIDEMIA", "VA CRD", "VA ALZHEIMERS", "VA RHEUM", "VA AMPUTATION", "VA BLIND", "VA MULTIPLE SCLEROSIS." |

| File Name and Number | Update |
|--------------------------------|---|
| ROR SELECTION RULE (#798.2) | <p>New entries "VA ALZHEIMERS PROBLEM", VA ALZHEIMERS PTF", "VA ALZHEIMERS VPOV", "VA AMPUTATION PROBLEM", "VA AMPUTATION PTF", "VA AMPUTATION VPOV", "VA BLIND PROBLEM", "VA BLIND PTF", "VA BLIND VPOV", "VA BREAST CA PROBLEM", "VA BREAST CA PTF", "VA BREAST CA VPOV", "VA CHF PTF", "VA CHF PROBLEM", VA CHF VPOV", "VA COPD PROBLEM", "VA COPD PTF", "VA COPD VPOV", "VA CRD PROBLEM", "VA CRD PTF", "VA CRD VPOV", "VA CVD PROBLEM", "VA CVD PTF", "VA CVD VPOV", "VA DIABETES PROBLEM", "VA DIABETES PTF", "VA DIABETES VPOV", "VA DYSLIPIDEMIA PROBLEM", "VA DYSLIPIDEMIA PTF", "VA DYSLIPIDEMIA VPOV", "VA HTN PROBLEM", "VA HTN PTF", "VA HTN VPOV", "VA IHD PROBLEM", "VA IHD PTF", "VA IHD VPOV", "VA MENTAL HEALTH PROBLEM", "VA MENTAL HEALTH PTF", "VA MENTAL HEALTH VPOV", "VA MULTIPLE SCLEROSIS PROBLEM", "VA MULTIPLE SCLEROSIS PTF", "VA MULTIPLE SCLEROSIS VPOV", "VA OSTEOARTHRITIS PROBLEM", "VA OSTEOARTHRITIS PTF", "VA OSTEOARTHRITIS VPOV", "VA RHEUM PROBLEM", "VA RHEUM PTF", "VA RHEUM VPOV",</p> <p>Modified entries "VA HEPC PROBLEM", "VA HEPC PTF", "VA HEPC VPOV", "VA HIV PROBLEM", "VA HIV PTF", "VA HIV VPOV"</p> |
| ROR ICD SEARCH (#798.5) | <p>New entries "VA DIABETES", "VA MENTAL HEALTH", "VA CHF", "VA IHD", "VA BREAST CA", "VA HTN", "VA CVD", "VA OSTEOARTHRITIS", "VA COPD", "VA DYSLIPIDEMIA", "VA CRD", "VA ALZHEIMERS", "VA RHEUM", "VA AMPUTATION", "VA BLIND", "VA MULTIPLE SCLEROSIS",</p> |
| ROR LIST ITEM(#799.1) | <p>New entries "BMI", "MELD", "MELD-Na", "APRI", "FIB-4", "Creatinine clearance by Cockcroft-Gault", "eGFR by MDRD", "eGFR by CKD-EPI"</p> |
| ROR METADATA (#799.2) | <p>Modified entries "45", "9000010.07", "9000011"</p> |
| PARAMETERS (#8989.5) | <p>New Entries "Other Depression", "Major Depression"</p> <p>Deleted Entries "Depression"</p> |

3.0 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 3 – Software and Documentation Sources

| 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 |

Table 4 – Files Included in Distribution

| File Name | Contents | Retrieval Format |
|-------------------|---|------------------|
| ROR1_5P18GUI.ZIP | Zipped GUI distributive | BINARY |
| ROR1_5P18DOC1.ZIP | Zipped DOC distributive, which includes both .PDF and .DOC formats: <ul style="list-style-type: none"> ▶ User Manual (ROR1_5_18UM) | BINARY |
| ROR1_5P18DOC2.ZIP | <ul style="list-style-type: none"> ▶ Installation and Implementation Guide (ROR1_5_18IG) ▶ Technical Manual / Security Guide (ROR1_5_18TM) ▶ Release Notes (ROR1_5_18RN) | BINARY |

Patch ROR*1.5*18 is available in the National Patch Module on FORUM¹ as a PackMan message.

¹ FORUM is the VA’s national-scale email system. FORUM uses the VistA mail software and provides an excellent interface for threaded messages that can take the form on ongoing discussions. The national patch module is a VistA application that helps developers to manage the numbering, inventory, and release of patches. Patches are developed in response to request submissions and an error reporting request system known as National Online Information Sharing. A process called the Kernel Installation Distribution System (KIDS) is used to roll up patches into text messages that can be sent to sites along with installation instructions. The patch builds are sent as text messages via email, and the recipient (*e.g.*, a site administrator) can run a PackMan function to unpack the KIDS build and install the selected routines.

See <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.100.5551&rep=rep1&type=pdf>

4.0 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/>.

5.0 Specific Instructions

(See the *CCR Installation and Implementation Guide* for installation instructions.)

6.0 Matching GUI Version to Patch

WARNING If the **GUI** and **VistA** software versions do not match, users may encounter problems with the application. For example, if the site has installed Patch ROR*1.5*18, users' **GUI** installations should also be at Patch level 18. Users can determine the **GUI** version by using the Help | About CCR menu option.



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, similar to the screen shown here where the Clinical Case Registries software was developed and the software compile date. Click **[OK]** or press the **< Esc >** key to close the pane.

Since CCR 1.5.10, this window meets current VA GUI Standards and Conventions requirements.

Users may download the latest GUI software as outlined in [3.0 above](#).

Figure 1 – Help | About Pane

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