

# Clinical Case Registries (CCR)

Version 1.5



## Release Notes

July 2018

Patch ROR\*1.5\*33

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

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# Revision History

Date	Description	Author	Role
July, 2018	Final release for Patch ROR*1.5*33. See <a href="#">Table 1</a> for details.	<p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p>	<p>Project Manager</p> <p>M Developer</p> <p>M Developer</p> <p>Software QA Analyst</p> <p>Delphi Developer</p>
April, 2018	Final release for Patch ROR*1.5*32. See <i>User Manual</i> for details.	<p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p>	<p>Project Manager</p> <p>M Developer</p> <p>Software QA Analyst</p> <p>Delphi Developer</p>
November, 2017	Final release for Patch ROR*1.5*31. See <i>User Manual</i> for details.	<p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p>	<p>Project Manager</p> <p>M Developer</p> <p>M Developer</p> <p>Software QA Analyst</p> <p>Software QA Analyst</p> <p>Delphi Developer</p>
May, 2017	Final release for Patch ROR*1.5*30. See <i>User Manual</i> for details.	<p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p>	<p>Project Manager</p> <p>M Developer</p> <p>SQA Analyst</p> <p>Delphi Developer</p>
December, 2016	Final release for Patch ROR*1.5*29. See <i>User Manual</i> for details.	<p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p>	<p>Project Manager</p> <p>Harris Project Manager</p> <p>SQA Analyst</p> <p>M Developer</p> <p>Delphi Developer</p>
May, 2016	Final release for Patch ROR*1.5*28. See <i>User Manual</i> for details.	<p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p> <p>REDACTED</p>	<p>Project Manager</p> <p>M Developer</p> <p>SQA Analyst</p> <p>Delphi Developer</p>
November, 2015	Final release for Patch ROR*1.5*26. See <i>User Manual</i> for details.	<p>REDACTED</p> <p>REDACTED</p>	<p>Project Manager</p> <p>Harris Project Manager</p>

Date	Description	Author	Role
		REDACTED REDACTED REDACTED	M Developer SQA Analyst Delphi Developer
September, 2015	Final release for Patch ROR*1.5*25. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED	Project Manager M Developer Delphi Developer
April, 2015	Final release for Patch ROR*1.5*27. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED	Project Manager M Developer Delphi Developer
October, 2014	Final release for Patch ROR*1.5*24. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer
August, 2014	Final release for Patch ROR*1.5*22. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer
April, 2014	Final release for Patch ROR*1.5*21. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer
March, 2013	Final release for Patch ROR*1.5*20. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer Tech Writer
August, 2014	Final release for Patch ROR*1.5*19. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED REDACTED REDACTED	VA Project Manager HP Project Manager M Developer SQA Analyst Delphi Developer Tech Writer

<b>Date</b>	<b>Description</b>	<b>Author</b>	<b>Role</b>
August, 2012	Final release for Patch ROR*1.5*18. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer Tech Writer
April, 2012	Final release for Patch ROR*1.5*17. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer Tech Writer
September, 2011	Final release for Patch ROR*1.5*15. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer Tech Writer
March, 2011	Patch ROR*1.5*14. See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Project Manager M Developer SQA Analyst Delphi Developer
September, 2010	Final release for Patch ROR*1.5*13. See <i>User Manual</i> for details.	REDACTED	Project Manager
April, 2010	Final release for Patch ROR*1.5*10: See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED	Delphi Developer M Developer SQA Analyst Technical Writer
July, 2009	Patch ROR*1.5*8: See <i>User Manual</i> for details.	REDACTED REDACTED REDACTED REDACTED REDACTED REDACTED	Project Manager Delphi Developer M Developer M Developer Technical Writer Software Quality Assurance Analyst
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)	

<b>Date</b>	<b>Description</b>	<b>Author</b>	<b>Role</b>
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.	REDACTED	
February 2006	Completely updated for CCR Version 1.5	REDACTED	
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 44 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” or *International Statistical Classification of Diseases and Related Health Problems*, tenth edition—commonly abbreviated as “ICD-10”—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 CCRHL7 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.

## 1.1 Purpose

These Release Notes cover the new features provided to Clinical Case Registries (CCR) users in patch ROR\*1.5\*33.

## 1.2 Audience

This document targets users and administrators of the Clinical Case Registries (CCR) product and applies primarily to the changes made between this newest release and previous release packages of the software.

## 2.0 What's New with ROR\*1.5\*33

Patch ROR\*1.5\*33 includes 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\*33 contains the following enhancements (E), modifications (M) and fixes (F):

**Table 1 – Changes for Patch 33**

#	Description	Type
1	Create six new Local Registries; Transplant Heart, Transplant Intestine, Transplant Kidney, Transplant Liver, Transplant Lung and Transplant Pancreas. The new local registries will be defined using ICD-9 and ICD-10 codes.	E
2	This patch adds the following new medications: <ul style="list-style-type: none"><li>• HIV registry: BICTEGRAVIR/EMTRICITABINE/TENOFOVIR ALAFENAMIDE</li><li>• HIV registry: EFAVIRENZ/LAMIVUDINE/TENOFOVIR DISOPROXIL FUMARATE</li><li>• HIV registry: LAMIVUDINE/TENOFOVIR DISOPROXIL FUMARATE</li></ul> The new 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

#	Description	Type
3	<p>In the CCR GUI, a new “Future Appointments” panel has been added to the following reports for all registries:</p> <ul style="list-style-type: none"> <li>• BMI by Range</li> <li>• Combined Meds and Labs</li> <li>• Hepatitis A Vaccine or Immunity</li> <li>• Hepatitis B Vaccine or Immunity</li> <li>• Liver Score by Range</li> <li>• Registry Lab Tests by Range</li> <li>• Renal Function by Range</li> </ul> <p>It has also been in the Hepatitis C registry to the following report:</p> <ul style="list-style-type: none"> <li>• Potential DAA Candidates</li> </ul> <p>The new panel has been added after the “Additional Identifiers” panel and a new “Next Appt” column has been added to the report data columns. If the user selects “All patients” then no “Next Appt” column is added.</p>	E
4	New LOINC codes have been added to the ROR LAB SEARCH file (#798.9) to add patients to the HIV pending patient list	M
5	On the Combined Meds and Labs, DAA Lab Monitoring, Hepatitis A Vaccine or Immunity and Hepatitis B Vaccine or Immunity reports, it was discovered sorting on the ICN, PACT or PCP columns was not working. The reports have been updated to sort properly on the ICN, PACT or PCP columns.	F
6	The version of the CCR software is updated to 1.5.33	E

**Table 2 – Global Updates for Patch ROR\*1.5\*33**

File Name and Number	Update
DIALOG (#.84)	<p><i>Entries modified:</i></p> <p>7981010.001 Registry Lab Tests by Range (HTML)  7981010.002 Registry Lab Tests by Range (CSV)  7981012.001 Combined Meds and Labs (HTML)  7981012.002 Combined Meds and Labs (CSV)  7981018.002 BMI Report by Range (CSV)  7981019.002 Liver Score by Range (CSV)  7981020.002 Renal Function by Range (CSV)  7981021.002 Potential DAA Candidates (CSV)  7981022.001 DAA Lab Monitoring (HTML)  7981024.001 Hepatitis A Report (HTML)  7981024.002 Hepatitis A Report (CSV)</p>

File Name and Number	Update
	7981025.001 Hepatitis B Report (HTML) 7981025.002 Hepatitis B Report (CSV) 7981997.001 Patient data templates (HTML) 7981999.001 Common XSL templates (HTML) 7981999.002 Common XSL templates (CSV)
ROR REGISTRY PARAMETERS (#798.1)	<i>Entries New:</i> VA TRANSPLANT HEART VA TRANSPLANT INTESTINE VA TRANSPLANT KIDNEY VA TRANSPLANT LIVER VA TRANSPLANT LUNG VA TRANSPLANT PANCREAS
ROR SELECTION RULE (#798.2)	<i>Entries New:</i> VA TRANSPLANT HEART PROBLEM VA TRANSPLANT HEART PROBLEM (ICD10) VA TRANSPLANT HEART PTF VA TRANSPLANT HEART PTF (ICD10) VA TRANSPLANT HEART VPOV VA TRANSPLANT HEART VPOV (ICD10) VA TRANSPLANT INTESTINE PROBLEM VA TRANSPLANT INTESTINE PROBLEM (ICD10) VA TRANSPLANT INTESTINE PTF VA TRANSPLANT INTESTINE PTF (ICD10) VA TRANSPLANT INTESTINE VPOV VA TRANSPLANT INTESTINE VPOV (ICD10) VA TRANSPLANT KIDNEY PROBLEM VA TRANSPLANT KIDNEY PROBLEM (ICD10) VA TRANSPLANT KIDNEY PTF VA TRANSPLANT KIDNEY PTF (ICD10) VA TRANSPLANT KIDNEY VPOV VA TRANSPLANT KIDNEY VPOV (ICD10) VA TRANSPLANT LIVER PROBLEM VA TRANSPLANT LIVER PROBLEM (ICD10) VA TRANSPLANT LIVER PTF VA TRANSPLANT LIVER PTF (ICD10) VA TRANSPLANT LIVER VPOV VA TRANSPLANT LIVER VPOV (ICD10) VA TRANSPLANT LUNG PROBLEM VA TRANSPLANT LUNG PROBLEM (ICD10) VA TRANSPLANT LUNG PTF

File Name and Number	Update
	VA TRANSPLANT LUNG PTF (ICD10) VA TRANSPLANT LUNG VPOV VA TRANSPLANT LUNG VPOV (ICD10) VA TRANSPLANT PANCREAS PROBLEM VA TRANSPLANT PANCREAS PROBLEM (ICD10) VA TRANSPLANT PANCREAS PTF VA TRANSPLANT PANCREAS PTF (ICD10) VA TRANSPLANT PANCREAS VPOV VA TRANSPLANT PANCREAS VPOV (ICD10)
ROR ICD SEARCH (#798.5)	<i>Entries New:</i> VA TRANSPLANT HEART VA TRANSPLANT INTESTINE VA TRANSPLANT KIDNEY VA TRANSPLANT LIVER VA TRANSPLANT LUNG VA TRANSPLANT PANCREAS
ROR LIST ITEM (#799.1)	<i>Entries New:</i> APRI (VA TRANSPLANT HEART) APRI (VA TRANSPLANT INTESTINE) APRI (VA TRANSPLANT KIDNEY) APRI (VA TRANSPLANT LIVER) APRI (VA TRANSPLANT LUNG) APRI (VA TRANSPLANT PANCREAS) BMI (VA TRANSPLANT HEART) BMI (VA TRANSPLANT INTESTINE) BMI (VA TRANSPLANT KIDNEY) BMI (VA TRANSPLANT LIVER) BMI (VA TRANSPLANT LUNG) BMI (VA TRANSPLANT PANCREAS) Creatinine clearance by Cockcroft-Gault (VA TRANSPLANT HEART) Creatinine clearance by Cockcroft-Gault (VA TRANSPLANT INTESTINE) Creatinine clearance by Cockcroft-Gault (VA TRANSPLANT KIDNEY) Creatinine clearance by Cockcroft-Gault (VA TRANSPLANT LIVER) Creatinine clearance by Cockcroft-Gault (VA TRANSPLANT LUNG) Creatinine clearance by Cockcroft-Gault (VA TRANSPLANT

File Name and Number	Update
	PANCREAS) eGFR by CKD-EPI (VA TRANSPLANT HEART) eGFR by CKD-EPI (VA TRANSPLANT INTESTINE) eGFR by CKD-EPI (VA TRANSPLANT KIDNEY) eGFR by CKD-EPI (VA TRANSPLANT LIVER) eGFR by CKD-EPI (VA TRANSPLANT LUNG) eGFR by CKD-EPI (VA TRANSPLANT PANCREAS) eGFR by MDRD (VA TRANSPLANT HEART) eGFR by MDRD (VA TRANSPLANT INTESTINE) eGFR by MDRD (VA TRANSPLANT KIDNEY) eGFR by MDRD (VA TRANSPLANT LIVER) eGFR by MDRD (VA TRANSPLANT LUNG) eGFR by MDRD (VA TRANSPLANT PANCREAS) FIB-4 (VA TRANSPLANT HEART) FIB-4 (VA TRANSPLANT INTESTINE) FIB-4 (VA TRANSPLANT KIDNEY) FIB-4 (VA TRANSPLANT LIVER) FIB-4 (VA TRANSPLANT LUNG) FIB-4 (VA TRANSPLANT PANCREAS) MELD (VA TRANSPLANT HEART) MELD (VA TRANSPLANT INTESTINE) MELD (VA TRANSPLANT KIDNEY) MELD (VA TRANSPLANT LIVER) MELD (VA TRANSPLANT LUNG) MELD (VA TRANSPLANT PANCREAS) MELD-Na (VA TRANSPLANT HEART) MELD-Na (VA TRANSPLANT INTESTINE) MELD-Na (VA TRANSPLANT KIDNEY) MELD-Na (VA TRANSPLANT LIVER) MELD-Na (VA TRANSPLANT LUNG) MELD-Na (VA TRANSPLANT PANCREAS)
ROR GENERIC DRUG (#799.51)	<i>Entries new:</i> HIV registry: BICTEGRAVIR/EMTRICITABINE/TENOFOVIR ALAFENAMIDE HIV registry: EFAVIRENZ/LAMIVUDINE/TENOFOVIR DISOPROXIL FUMARATE HIV registry: LAMIVUDINE/TENOFOVIR DISOPROXIL FUMARATE

### 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 Office (OIFO) [ANONYMOUS SOFTWARE] directory.

**Table 3 – Software and Documentation Sources**

OIFO	FTP Address	Directory
Hines	REDACTED	ANONYMOUS . SOFTWARE
Salt Lake City	REDACTED	ANONYMOUS . SOFTWARE

**Table 4 – Files Included in Distribution**

File Name	Contents	Retrieval Format
ROR1_5P33GUI.ZIP	Zipped GUI distributive	BINARY
ROR1_5P33DOC1.ZIP	Zipped DOC distributive, which includes both .PDF and .DOCX formats: <ul style="list-style-type: none"> <li>▶ User Manual (ROR1_5_33UM)</li> </ul>	BINARY
ROR1_5P33DOC2.ZIP	<ul style="list-style-type: none"> <li>▶ Installation and Implementation Guide (ROR1_5_33IG)</li> <li>▶ Technical Manual / Security Guide (ROR1_5_33TM)</li> <li>▶ Release Notes (ROR1_5_33RN)</li> </ul>	BINARY

Patch ROR\*1.5\*33 is available in the National Patch Module on FORUM<sup>1</sup> as a PackMan message.

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<sup>1</sup> 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: [REDACTED](#).

## 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\*33, users' **GUI** installations should also be at Patch level 33. Users can determine the **GUI** version by using the Help | About CCR menu option.



Figure 1 – Help | About Pane

This menu option displays the **About Clinical Case Registries** screen. 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 [0 above](#).



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