

Clinical Case Registries (CCR)

Version 1.5



Release Notes

April 2015

Patch ROR*1.5*27

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

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Revision History

Date	Description	Author	Role
April, 2015	Final release for Patch ROR*1.5*27. See Table 1 for details.	John Sanders Terry Kopp Edward Micys	Project Manager M Developer Delphi Developer
December, 2014	Final release for Patch ROR*1.5*25. See <i>User Manual</i> for details. NOTE: This Patch has NOT been released yet.	John Sanders Terry Kopp Edward Micys	Project Manager M Developer Delphi Developer
October, 2014	Final release for Patch ROR*1.5*24. See <i>User Manual</i> for details.	John Sanders Terry Kopp Lori Torrance Edward Micys	Project Manager M Developer Software Quality Assurance Analyst Delphi Developer
August, 2014	Final release for Patch ROR*1.5*22. See <i>User Manual</i> for details.	John Sanders Terry Kopp Lori Torrance Edward Micys	Project Manager M Developer Software Quality Assurance Analyst Delphi Developer
April, 2014	Final release for Patch ROR*1.5*21. See <i>User Manual</i> for details.	John Sanders Terry Kopp Lori Torrance Edward Micys	Project Manager M Developer Software Quality Assurance Analyst Delphi Developer
March, 2013	Final release for Patch ROR*1.5*20. See <i>User Manual</i> for details.	John Sanders Connie Ray Steven Baxter Edward Micys Karen Jocius	Project Manager M Developer Software Quality Assurance Analyst Delphi Developer Tech Writer
August, 2014	Final release for Patch ROR*1.5*19. See <i>User Manual</i> for details.	Taraiza Bennett Dave Getman Matt Dill /Ferdie Frankson Brenda Johnson Jeff Swesky Ellen Phelps	VA Project Manager HP Project Manager M Developer Software Quality Assurance Analyst Delphi Developer Tech Writer
August, 2012	Final release for Patch ROR*1.5*18. See <i>User</i>	John Sanders	Project Manager

Date	Description	Author	Role
	<i>Manual</i> for details.	Connie Ray Linda Berry Edward Micyus Dan Zaudtke	M Developer Software Quality Assurance Analyst Delphi Developer Tech Writer
April, 2012	Final release for Patch ROR*1.5*17. See <i>User Manual</i> 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 <i>User Manual</i> 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 VJ McDonald Linda Berry	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)	
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)	

Date	Description	Author	Role
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 25 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 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*27

Patch ROR*1.5*27 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*27 contains the following enhancements (E), modifications (M) and fixes (F):

Table 1 – Changes for Patch 27

#	Description	Type
1	<p>This patch adds the following new medications:</p> <ul style="list-style-type: none"> VA Product: ABC/DOL/3TC VA Generic: ABACAVIR/DOLUTEGRAVIR/LAMIVUDINE VA Product: LED/SOF VA Generic: LEDIPASVIR/SOFOBUVIR VA Product: OBV/PTV/r+DSV VA Generic: DASABUVIR/OMBITASVIR/PARITAPREVIR/RITONAVIR <p>These 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.</p>	E
2	Modifications to the Potential DAA Candidate report to remove exclusion of patients who received Boceprevir or Telaprevir. Direct Acting Antivirals (DAAs) are medications that interact directly with viral proteins to inhibit viral replication	M
3	Modifications to the Potential DAA Candidate report to remove exclusion of patients who do not have genotype 1.	M
4	Correct the definition of Sustained virologic response (SVR) by removing the criteria that patients whose lab results starts with ">" have SVR.	F
5	Correct the List of Patients Report selection screen by disabling the Registry Status Pending Comment check box if Pending is not checked. (GUI)	F
6	Update Help Files Copied to Local Drive for Network Installations (GUI)	M
7	This patch brings the Clinical Case Registries (CCR) application into Section 508 compliance in many areas.	E
8	Modified the global lock logic in routine RORLOCK to utilize the minimum default lock time system variable DILOCKTM rather than 3 seconds. This is a correction for a SACC violation reported in Remedy ticket #968114 (DILOCKTM not being utilized).	F

#	Description	Type
9	Resolved a problem involving a maxstring error occurring in the nightly job. This was reported in Remedy tickets # 1228316 and 1227499. The workaround for the sites was to inactivate some or all of the 8 registries added by patch ROR*1.5*24. The post install for this patch will reactivate any of these 8 registries that have been marked as inactive.	F
10	Added entries to the ROR LIST ITEM file (#799.1) to make sure the proper Result Ranges panels appear on the BMI by Range, Liver Score by Range and Renal Function by Range reports.	F
11	The version of the CCR software is updated to 1.5.27	M

Table 2 – Global Updates for Patch ROR*1.5*27

File Name and Number	Update
ROR GENERIC DRUG #799.51	<p>Added entries for</p> <ul style="list-style-type: none"> VA Product: ABC/DOL/3TC VA Generic: ABACAVIR/DOLUTEGRAVIR/LAMIVUDINE VA Product: LED/SOF VA Generic: LEDIPASVIR/SOFOBUVIR VA Product: OBV/PTV/r+DSV VA Generic: DASABUVIR/OMBITASVIR/PARITAPREVIR/RITONAVIR
ROR LIST ITEM #799.1	<p>Added entries for</p> <ul style="list-style-type: none"> TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA ALS TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA APNEA TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA COLORECTAL CANCER TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA HCC

File Name and Number	Update
	<ul style="list-style-type: none"> • TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA LUNG CANCER • TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA MELANOMA • TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA OSTEOPOROSIS • TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA PANCREATIC CANCER • TEXT: eGFR by CKD-EPI TYPE: Renal Group CODE: 3 REGISTRY: VA PROSTATE CANCER • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA ALS • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA APNEA • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA COLORECTAL CANCER • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA HCC • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA LUNG CANCER

File Name and Number	Update
	<ul style="list-style-type: none"> • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA MELANOMA • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA OSTEOPOROSIS • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA PANCREATIC CANCER • TEXT: eGFR by MDRD TYPE: Renal Group CODE: 2 REGISTRY: VA PROSTATE CANCER • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA ALS • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA APNEA • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA COLORECTAL CANCER • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA HCC • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA LUNG CANCER • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA MELANOMA

File Name and Number	Update
	<ul style="list-style-type: none"> • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA OSTEOPOROSIS • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA PANCREATIC CANCER • TEXT: Creatinine clearance by Cockcroft-Gault TYPE: Renal Group CODE: 1 REGISTRY: VA PROSTATE CANCER • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA ALS • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA APNEA • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA COLORECTAL CANCER • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA HCC • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA LUNG CANCER • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA MELANOMA • TEXT: FIB-4 TYPE: MELD Group • CODE: 4 REGISTRY: VA OSTEOPOROSIS

File Name and Number	Update
	<ul style="list-style-type: none"> • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA PANCREATIC CANCER • TEXT: FIB-4 TYPE: MELD Group CODE: 4 REGISTRY: VA PROSTATE CANCER • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA ALS • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA APNEA • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA COLORECTAL CANCER • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA HCC • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA LUNG CANCER • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA MELANOMA • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA OSTEOPOROSIS • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA PANCREATIC CANCER

File Name and Number	Update
	<ul style="list-style-type: none"> • TEXT: APRI TYPE: MELD Group CODE: 3 REGISTRY: VA PROSTATE CANCER • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA ALS • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA APNEA • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA COLORECTAL CANCER • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA HCC • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA LUNG CANCER • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA MELANOMA • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA OSTEOPOROSIS • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA PANCREATIC CANCER • TEXT: MELD-Na TYPE: MELD Group CODE: 2 REGISTRY: VA PROSTATE CANCER

File Name and Number	Update
	<ul style="list-style-type: none"> • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA ALS • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA APNEA • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA COLORECTAL CANCER • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA HCC • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA LUNG CANCER • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA MELANOMA • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA OSTEOPOROSIS • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA PANCREATIC CANCER • TEXT: MELD TYPE: MELD Group CODE: 1 REGISTRY: VA PROSTATE CANCER • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA ALS

File Name and Number	Update
	<ul style="list-style-type: none"> • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA APNEA • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA COLORECTAL CANCER • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA HCC • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA LUNG CANCER • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA MELANOMA • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA OSTEOPOROSIS • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA PANCREATIC CANCER • TEXT: BMI TYPE: BMI Group CODE: 1 REGISTRY: VA PROSTATE CANCER • TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA ALS • TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA APNEA

File Name and Number	Update
	<ul style="list-style-type: none"> TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA COLORECTAL CANCER TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA HCC TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA LUNG CANCER TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA MELANOMA TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA OSTEOPOROSIS TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA PANCREATIC CANCER TEXT: Registry Lab TYPE: Lab Group CODE: 1 REGISTRY: VA PROSTATE CANCER

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_5P27GUI.ZIP	Zipped GUI distributive	BINARY
ROR1_5P27DOC1.ZIP	Zipped DOC distributive, which includes both .PDF and .DOCX formats: ► User Manual (ROR1_5_27UM)	BINARY
ROR1_5P27DOC2.ZIP	► Installation and Implementation Guide (ROR1_5_27IG) ► Technical Manual / Security Guide (ROR1_5_27TM) ► Release Notes (ROR1_5_27RN)	BINARY

Patch ROR*1.5*27 is available in the National Patch Module on FORUM¹ as a PackMan message.

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/>.

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.

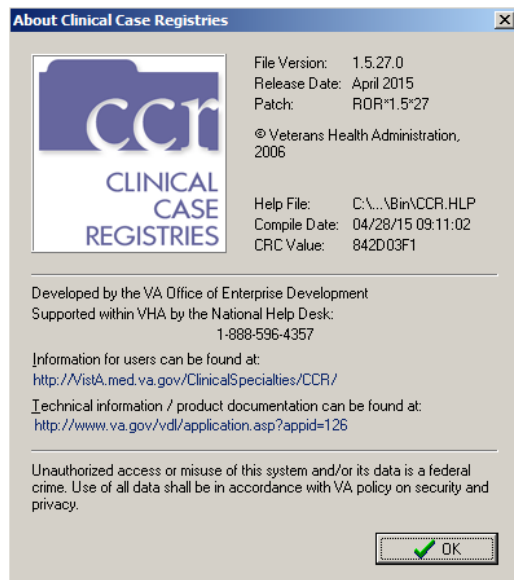
See <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.100.5551&rep=rep1&type=pdf>

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*27, users' **GUI** installations should also be at Patch level 27. Users can determine the **GUI** version by using the Help | About CCR menu option.



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 [3.0 above](#).

Figure 1 – Help | About Pane

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