



**LAB PATCH# LR\*5.2\*395**  
**RELEASE NOTES**

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**SEPTEMBER 2009**

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## Installation Requirements

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### Required Patches

Below is a list of patches that you must verify are properly installed on your system before LR\*5.2\*395 can be installed:

- LR\*5.2\*286
- LR\*5.2\*312
- LR\*5.2\*344
- LR\*5.2\*364
- LR\*5.2\*372

## New Functionality

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- **Add Test Status to CPRS Lab Report APIs:** In the Lab Results report on the Labs tab, CPRS used to display only verified lab results. CPRS did not display Lab Specimens that had been collected but not verified with the results.

Resolution: Three reports on the Lab Tab in CPRS have been modified to address this issue.

The following reports now display the collection status:

- Most Recent
- All Tests by Date
- Selected Tests by Date

These reports on the Labs Tab in CPRS will call a modified Lab API that will provide the status of a specimen that has been collected and in process in the Lab. This patch modifies the Lab routines used in this API to accomplish the desired functionality.

Examples of the changes as will be seen in specified lab reports on the CPRS Labs tab.

## Most Recent

The screenshot shows the VistA CPRS interface for a user named 'Cprsprvider, Two (cprsnod1)'. The window title is 'VistA CPRS in use by: Cprsprvider, Two (cprsnod1)'. The menu bar includes 'File', 'Edit', 'View', 'Tools', and 'Help'. The main area is divided into several sections:

- Header:** 'A LAB Sep 01,09 13:56' and 'Primary Care Team Unassigned'. Below this, 'Provider: Cprsprvider, Two' is displayed.
- Lab Results:** A sidebar on the left lists various views: 'Most Recent', 'Cumulative', 'All Tests by Date', 'Selected Tests by Date', 'Worksheet', 'Graph', 'Microbiology', 'Anatomic Pathology - All Reports', 'Blood Bank', and 'Lab Status'. 'Most Recent' is selected.
- Most Recent:** A navigation bar with 'Oldest', 'Previous', 'Collected', 'Next', and 'Newest'. The 'Collected' button is active, and the date 'Sep 01, 2009 14:13' is shown.
- Table:** A table with columns 'Test', 'Result', 'Flag', and 'Units'. The first row shows 'PAIN CLINIC PANEL' with the result 'Collected - Specimen In Lab' highlighted in a red box.
- Specimen Information:** 'Specimen: URINE; Accession: BHI 0900 1; Provider: CPRSPROVIDER,TWO'. Below this, 'Report Released Date/Time:' is shown.
- Key:** 'KEY: "L" = Abnormal Low, "H" = Abnormal High, "" = Critical Value'.
- Navigation:** A row of buttons at the bottom: 'Cover Sheet', 'Problems', 'Meds', 'Orders', 'Notes', 'Consults', 'Surgery', 'D/C Summ', 'Labs', and 'Reports'.

This shows the new status “Collected”. Another possible status is “On Collection List”.

## All Tests by Date Collected and On Collection List

VistA CPRS in use by: Cprsprovider, Two (cprsnod1)

File Edit View Tools Help

Visit Not Selected      Primary Care Team Unassigned  
 Provider: Cprsprovider, Two

Lab Results

- Most Recent
- Cumulative
- All Tests by Date
- Selected Tests by Date
- Worksheet
- Graph
- Microbiology
- Anatomic Pathology - All Reports
  - Autopsy
  - Cytology
  - Electron Microscopy
  - Surgical Pathology
- Blood Bank
- Lab Status

Date Range

- Date Range...
- Today
- One Week
- Two Weeks
- One Month
- Six Months
- One Year
- Two Years
- All Results

All Tests by Date [From: Aug 25,2009 to Sep 02,2009]

----- MICROBIOLOGY -----  
 Accession: MPO 09 19      Received: Sep 01, 2009 17:28  
 Collection sample: BLOOD      Collection date: Sep 01, 2009 17:28  
 Provider: CPRSPROVIDER,TWO  
 Comment on specimen: Lab comment on Pinworm exam

Test(s) ordered: PINWORM EXAM      completed: Sep 01, 2009 17:29

\* PARASITOLOGY PRELIMINARY REPORT => Sep 01, 2009      TECH CODE: 160440

PARASITOLOGY SMEAR/PREP:  
 amo  
 AMOBARBITAL POSITIVE  
 ABO  
 \*\*\*PINWORM EXAM

Parasitology Remark(s):  
 Parasite Rpt Remark  
 \*\*\*PINWORM EXAM

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Report Released Date/Time:       
 Provider: CPRSPROVIDER,TWO  
 Specimen: SERUM.      WAX 0901 1  
 Specimen Collection Date: 09/01/2009 14:30

Test name	Result	units	Ref.	range	Site Code
MI PANEL					
					On Collection List

-----

Report Released Date/Time:       
 Provider: CPRSPROVIDER,TWO  
 Specimen: URINE.      BHI 0900 1  
 Specimen Collection Date: 09/01/2009 14:13

Test name	Result	units	Ref.	range	Site Code
PAIN CLINIC PANEL					
					Collected - Specimen In Lab

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Report Released Date/Time: Sep 01, 2009@14:08  
 Provider: CPRSPROVIDER,TWO  
 Specimen: SERUM.      WAC 0901 2  
 Specimen Collection Date: 09/01/2009 14:08

Test name	Result	units	Ref.	range	Site Code

Cover Sheet | Problems | Meds | Orders | Notes | Consults | Surgery | D/C Summ | Labs | Reports

On the Labs tab, the All Tests by Date report shows the status of tests as “On Collection List” and “Collected – Specimen in Lab”.

**Selected Tests by Date**

Vista CPRS in use by: Cprsprovider, Two (cprsnod1)

File Edit View Tools Help

Visit Not Selected Primary Care Team Unassigned  
 Provider: Cprsprovider, Two

Lab Results

- Most Recent
- Cumulative
- All Tests by Date
- Selected Tests by Date
- Worksheet
- Graph
- Microbiology
- Anatomic Pathology - All Reports
  - Autopsy
  - Cytology
  - Electron Microscopy
  - Surgical Pathology
- Blood Bank
- Lab Status

Selected Tests by Date [From: Aug 25,2009 to Sep 02,2009]

Report Released Date/Time:  
 Provider: CPRSPROVIDER,TWO  
 Specimen: SERUM. WAX 0901 1  
 Specimen Collection Date: 09/01/2009 14:30

Test name	Result	units	Ref.	range	Site Code
MI PANEL	On Collection List				

Report Released Date/Time:  
 Provider: CPRSPROVIDER,TWO  
 Specimen: URINE. BHI 0900 1  
 Specimen Collection Date: 09/01/2009 14:13

Test name	Result	units	Ref.	range	Site Code
PAIN CLINIC PANEL	Collected - Specimen In Lab				

Report Released Date/Time: Sep 01, 2009@14:08  
 Provider: CPRSPROVIDER,TWO  
 Specimen: SERUM. WAC 0901 2  
 Specimen Collection Date: 09/01/2009 14:08

Test name	Result	units	Ref.	range	Site Code
SODIUM	34 L*	meq/L	135 - 148		[541]

Comment: Lab comment for NA  
 Lab comment for NA - line 2

Report Released Date/Time: Sep 01, 2009@14:12  
 Provider: CPRSPROVIDER,TWO  
 Specimen: SERUM. WAC 0901 1  
 Specimen Collection Date: 09/01/2009 14:05

Test name	Result	units	Ref.	range	Site Code
UREA NITROGEN	10	mg/dL	10 - 26		[541]
POTASSIUM	12.0 H*	meq/L	3.7 - 5.0		[541]
Eval: GERIATRIC REFERENCE RANGE: 3.7- 5.7 meq/L					
DIR. BILIRUBIN	54 H	mg/dL	0 - .4		[541]

Comment: Lab comment for direct bilirubin  
 For eGFR: Race unknown, if African American multiply result by 1.210  
 \*SODIUM Not Performed: 09/01/2009 2:20 pm by 160440  
 \*NP Reason:Duplicate test

KEY: "L" = Abnormal Low, "H" = Abnormal High, "\*" = Critical Value

Other Tests

Date Range  
 Date Range...  
 Today  
 One Week  
 Two Weeks  
 One Month  
 Six Months  
 One Year  
 Two Years  
 All Results

Cover Sheet Problems Meds Orders Notes Consults Surgery D/C Summ Labs Reports

On the Selected Tests by Date report on the CPRS Labs tab shown here, the added red boxes show the status of the tests.

- **New Completed/Release Date for Reports Added**

Resolution: The date when a completed was released is now included in the report text as well. This was in response to a medical center requesting this change after an inspection.

**Completed/Release Date on Most Recent**

VistA CPRS in use by: Cprsprovider, Two (cprsnode1)

File Edit View Tools Help

**A LAB Sep 01,09 13:56** Primary Care Team Unassigned  
 Provider: Cprsprovider, Two

Lab Results

- Most Recent
- Cumulative
- All Tests by Date
- Selected Tests by Date
- Worksheet
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- Blood Bank
- Lab Status

Most Recent

Oldest Previous Collected Next Newest

<< < **Sep 01, 2009 14:05** > >>

Test	Result	Flag
GLUCOSE	pending	
UREA NITROGEN	10	
CREATININE	1.5	
POTASSIUM	12.0	H*
CHLORIDE	45	L
CO2	31.0	H
CALCIUM	4.0	L*
DIR. BILIRUBIN	54	H
LIPEMIA	32	
ICTERIC	123	
EGFR (CALCULATED)	48	L

Specimen: SERUM; Accession: WAC 0901 1; Provider: CPRSPROVIDER,TWO  
 GLUCOSE Eval: Geriatric: 65-135 mg/dL.  
 CREAT Eval: non-ambulatory: 0.7- 1.3 mg/dl  
 CREAT Eval: ambulatory: 0.9- 1.5 mg/dl  
 CREAT Eval: geriatric: 1.0-1.8 mg/dl  
 K Eval: GERIATRIC REFERENCE RANGE: 3.7- 5.7 meq/L  
 EGFR-C Eval: eGFR results >60 are imprecise. Many variables affect the calculated  
 EGFR-C Eval: result. Interpretation of eGFR results >60 must be monitored over time.  
 Comment:  
 Lab comment for direct bilirubin  
 For eGFR: Race unknown, if African American multiply result by 1.210  
 \*SODIUM Not Performed: 09/01/2009 2:20 pm by 160440  
 \*NP Reason:Duplicate test  
 Performing Lab: CLEVELAND VAMC 10701 EAST BLVD CLEVELAND, OH 44106  
**Report Released Date/Time: Sep 01, 2009@14:12**

KEY: "L" = Abnormal Low, "H" = Abnormal High, "\*" = Critical Value

Cover Sheet Problems Meds Orders Notes Consults Surgery D/C Summ Labs Reports

The Report Released Date/Time is now included in the Most Recent report as well (in red box).

Report Released Date on All Tests by Date

Vista CPRS in use by: Cprsprvider, Two (cprsnod1)

File Edit View Tools Help

Visit Not Selected  
Provider: Cprsprvider, Two

Primary Care Team Unassigned

Lab Results

All Tests by Date [From: Aug 25,2009 to Sep 02,2009]

----- MICROBIOLOGY -----  
 Accession: MPO 09 19 Received: Sep 01, 2009 17:  
 Collection sample: BLOOD Collection date: Sep 01, 2  
 Provider: CPRSPROVIDER,TWO  
 Comment on specimen: Lab comment on Pinworm exam

Test(s) ordered: PINWORM EXAM completed: Sep 01, 200

\* PARASITOLOGY PRELIMINARY REPORT => Sep 01, 2009 TECH CODE: 16

PARASITOLOGY SMEAR/PREP:  
 amo  
 AMOBARBITAL POSITIVE  
 ABO  
 \*\*\*PINWORM EXAM

Parasitology Remark(s):  
 Parasite Rpt Remark  
 \*\*\*PINWORM EXAM

-----

Report Released Date/Time:  
 Provider: CPRSPROVIDER,TWO  
 Specimen: SERUM. WAX 0901 1  
 Specimen Collection Date: 09/01/2009 14:30

Test name	Result	units	Ref.	range
MI PANEL	On Collection List			

-----

Report Released Date/Time:  
 Provider: CPRSPROVIDER,TWO  
 Specimen: URINE. BHI 0900 1  
 Specimen Collection Date: 09/01/2009 14:13

Test name	Result	units	Ref.	range
PAIN CLINIC PANEL	Collected - Specimen In Lab			

-----

Report Released Date/Time: Sep 01, 2009@14:08  
 Provider: CPRSPROVIDER,TWO  
 Specimen: SERUM. WAC 0901 2  
 Specimen Collection Date: 09/01/2009 14:08

Test name	Result	units	Ref.	range

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Lab Results

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Cover Sheet Problems Meds Orders Notes Consults Surgery D/C Summ Labs Reports

This screen capture shows where the Report Released Date/Time shows.

## Selected Tests by Date

VistA CPRS in use by: Cprsprovider, Two (cprsnod1)

File Edit View Tools Help

Visit Not Selected Primary Care Team Unassigned  
 Provider: Cprsprovider, Two

Lab Results Selected Tests by Date [From: Aug 25,2009 to Sep 02,2009]

Most Recent  
 Cumulative  
 All Tests by Date  
**Selected Tests by Date**  
 Worksheet  
 Graph  
 Microbiology  
 Anatomic Pathology - All Reports  
   Autopsy  
   Cytology  
   Electron Microscopy  
   Surgical Pathology  
 Blood Bank  
 Lab Status

Other Tests

Date Range  
 Date Range...  
 Today  
**One Week**  
 Two Weeks  
 One Month  
 Six Months  
 One Year  
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 All Results

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PAIN CLINIC PANEL	Collected - Specimen In Lab			

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Cover Sheet Problems Meds Orders Notes Consults Surgery D/C Summ Labs Reports

On the Selected Tests by Date report on the CPRS Labs tab shown here, the added red box shows the report's Released Date/Time.