

RELEASE NOTES FOR CPRS GUI VERSION 23 PATCH# OR*3.0*187

INSTALLATION REQUIREMENTS

Before you can install OR*3.0*187, you must install the following patches:

- OR*3.0*206
- SD*5.3*316

NOTE: Internet Explorer 4.0 (IE4) or later is REQUIRED in order for GUI version 23 to run. However, IE 5.5 or later with 128-bit encryption is required for PKI functionality.

This patch includes JAWS configuration files that replace the file in “informational” patch OR*3.0*126. These configuration files will need to be copied to the <JAWS>\SETTINGS\ENU\ file on all workstations using JAWS. JAWS power users will likely want to install and customize these files themselves. These JAWS scripts files will be found in the main ZIP file with this release (as a separately-zipped file labeled “JAWS_Scripts.zip”).

NEW FUNCTIONALITY

Clinical Reminders

Added GEC Functionality - The Geriatric Extended Care (GEC) project consists of four Reminder Dialogs that health care providers must fill out to complete a referral. After the referral process is started, new functionality in this release evaluates the dialogs and displays a message listing which of the four dialogs must still be completed. This functionality is currently in test and will not be seen in the CPRS GUI until PXR*2.0*2 is released.

Patient Selection

The selection of patients based on appointments at one or more clinics has been modified to utilize new Scheduling API's to allow for smooth changeover when scheduling data moves to COTS software and data storage. This change is behind-the-scenes; there should be small visible change to users, with the exception that hovering the mouse over a patient name will display the full line, at the end of which the user will see one of three entries indicative of the status of the patient involved:

- Ipt Inpatient
- Opt Outpatient
- <Blank> <not determinable>

Inpatient Medication for Outpatients

In isolated cases, users may see messages implying that Inpatient Medications for Outpatients (IMO) functionality is available in this version of the CPRS GUI. (IMO functionality enables providers in authorized hospital locations to place inpatient [unit dose] medication orders for outpatients. IMO orders are saved as inpatient unit dose orders and are processed by inpatient pharmacy.) However, IMO functionality is, and will remain, dormant pending installation of patches SD*5.3*285 and PSJ*5.0*111. Additional IMO functionality is under development and is scheduled for a future release of the CPRS GUI.

Provider/User Selection

The following E3R and NOIS messages relate to the display and selection of providers/users when duplicate names exist.

E3Rs 14259
15178
15847
17043
17555
17743

NOIS ATG-0701-32085
HAM-1100-20360
PUG-1001-52064
BRX-1003-11098
LEX-0302-40449

PSI 03-051

Many sites have reported a desire to eliminate RDV (Remote Data Views) providers/users from the provider/user-selection lists in the CPRS GUI. Sites have also reported difficulty identifying the correct provider/user when using the CPRS GUI to select a provider/user for an encounter, or as the signer/co-signer of a note, etc. Based on this feedback, new functionality has been added to enhance the provider/user-list display.

To make it easier to identify the correct provider/user, CPRS now displays:

1. The title of each provider/user (if available)
2. When two or more providers/users have the same given and surname, CPRS also displays service/section and division information for these providers/users. For multidivisional sites, CPRS uses the following rules to determine which, if any, division entry is valid and, therefore, displayed:
 - a. If no division is listed, CPRS does not display a division.
 - b. If only one division is listed, CPRS displays this division.
 - c. If more than one division is listed and one of these divisions is marked as Default, CPRS displays the default division.
 - d. If more than one division is listed and none is marked Default, CPRS does not display division information.

3. CPRS screens out (does not display) providers/users who were created as Visitors in the New Person file. (Visitor entries are created in connection with RDV activities.)

Patient Safety Issues

This section lists the patient safety issues resolved by this patch. These items are listed elsewhere as well, but are placed here together for users to review all patient safety issues together.

- **PSI: 03-026 New Error Message Created to Explain What Happened to DC'd Order that Was Put on "Hold until Signed" (NOIS: HIN-0503-41731)**
– If a nurse DC'd an order, made it "Hold until Signed" and then left CPRS, and a pharmacist meanwhile finished the original order via the backdoor with a service correction change, when the nurse returned to CPRS and tried to release the DC'd order to service, a confusing message appeared without indicating that the order had already been finished and activated by pharmacy. This has been remedied.
- **PSI-03-051 Provider/User Selection**
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 - iv. If more than one division is listed and none is marked Default, CPRS does not display division information.
 3. CPRS screens out (does not display) providers/users who were created as Visitors in the New Person file. (Visitor entries are created in connection with RDV activities.)
- **PSI: 03-056 Pregnant Check for Radiology Orders Made Mandatory for Female Patients (HEH-1103-40959)** - For female patients, the pregnant check box in radiology order dialog was not mandatory. It's fixed in this version. Now, to place a radiology order for a female patient, the provider has to select one option from "YES", "NO", or "UNKNOWN" for the pregnant field.
 - **PSI: 04-004 Renewed Order Not Updating on the Meds Tab (NOIS TUA-0104-31320)** – If a user changed an unsigned, unreleased inpatient renewed medication order, the new order did not get updated on Meds tab. It's been fixed: CPRS will no longer allow a user to change unreleased or pending renewal inpatient medication order.
 - **PSI: 04-006 Medication Route Now Required for Copying Outpatient Pharmacy Orders for a Delayed Admission (NOIS: MAD-0903-41330, ASH-0104-31242)** - Upon selecting outpatient pharmacy orders from the "copy active orders for selected event" for a delayed admission, the orders will now present the ordering dialog. The user must then enter a medication route before the order will be accepted.

BUG FIXES

Windows Messaging

NOIS ANN-0102-42499
POR-0302-51449
NJH-0402-20654
HUN-0602-21532
SFC-1202-61344
HWH-0203-41237
AMA-0403-71729
SLC-0603-51011
ECH-0603-51641

- **CPRS Logon Problem** - Many sites have reported that CPRS sometimes hangs between the time of logon and the time the patient selection screen appears. When this occurs, the user's only recourse is to kill CPRS and try logging on again. The cause is the misbehavior of low-level Windows messaging that occurs between CPRS and other desktop applications. A fix for this issue has undergone preliminary testing by both CPRS and VistA Imaging developers, but needs to be tested thoroughly in this release. First, sites running VistA Imaging in conjunction with CPRS should insure that no loss of functionality has occurred as a result of this change. And CPRS and Imaging should continue to remain synchronized as always when Imaging is started via the CPRS Tools menu. Second, sites experiencing the aptly named "grey screen of death" should determine whether this fix provides a solution to that problem.

Developers added a change to improve performance for this fix. The change was originally slated for a later version of CPRS but has now been included in this release.

Orders

- **Correction of Display of Inpatient Medications Ordered for Outpatients (NOIS LEX-0302-40065 and FGH-0202-32201)** - When a patient has been checked into an outpatient location, such as ER, a clinician can order certain inpatient medications (injectables for IVs). If a clinician is writing orders on a patient and the patient is admitted by an appropriate person during that same time frame, the ordering location is not changed until the clinician signs the orders (a pop-up box actually appears and tells the clinician that there is now a new patient location and should the orders to print to it?). If this scenario occurs, the medication shows as an inpatient med on the meds tab but as an outpatient med on the orders tab. This has been fixed. The medication now shows as an inpatient med on both the Meds and Orders tabs.
- **Users without Specific Keys Can Sign Selected Notes (NOIS SUX-0103-42340)** - CPRS users with no OR nor PROVIDER keys are unable to sign a new note when using the File | Review/Sign Changes option. A change in this version will allow no-key users to sign the selected notes.

- **Provider Comment Not Displaying for IV Quick Orders (NOIS: BEC-0103-22364)** - For an IV quick order with VERIFY and AUTO-ACCEPT set to YES, the provider comment on the verify window did not display because of the length limitation of 40 characters. This has been fixed so that if the comment is less than 40 characters, the entire comment is displayed. If it is more than 40 characters, the first 40 characters are displayed.
- **New Error Message Created to Explain What Happened to DC'd Order that Was Put on "Hold until Signed" (PSI: 03-026, NOIS: HIN-0503-41731)** – If a nurse DC'd an order, made it "Hold until Signed" and then left CPRS, and a pharmacist meanwhile finished the original order via the backdoor with a service correction change, when the nurse returned to CPRS and tried to release the DC'd order to service, a confusing message appeared without indicating that the order had already been finished and activated by pharmacy. This has been remedied.
- **Copied DC'd Inpatient Order Now Correctly Displays on Both Meds and Orders Tabs (NOIS: MAN-0403-12285)** - For an outpatient, when copying previously DC'd inpatient medication orders for immediate release, the new orders show as inpatient med orders on the Meds tab and as outpatient med orders on the Orders tab. Such orders now show as outpatient med orders on both tabs.
- **Users Not Authorized to Write Medication Orders Stopped Before They Get to Med Order Dialog (NOIS: AMA-0403-71198)** - For CPRS users lacking authorization to write medication orders, when these users selected—on the Meds tab—med orders for copy/transfer for a delayed event, after creating the event-default order the copy/transfer process was terminated because the user was not authorized to write med orders. In addition, the previously created event-default order was canceled automatically. This has been fixed. Before the Med order dialog displays, CPRS displays a dialog that the user is not authorized to write medication orders.
- **Editing Unreleased, Unsigned Renewal Orders (NOIS WPB--0798-30276)** - In version 23, CPRS allows users to change the number of refills and pickup location for unreleased, unsigned renewal orders.
- **Entering Outpatient Medication Orders Without Schedules (NOIS ERI-0603-21900)** - In previous CPRS versions, providers were able to place orders for outpatient medications without specifying a schedule; this problem is fixed in CPRS version 23. The providers must now enter a schedule before the order can be accepted.
- **Signed on Chart No Longer Required Electronic Signature (NOIS UNY-0703-10023)** - In previous versions, when a nurse placed a med order and tried to sign it by "Signature on Chart," there was an inconsistency based on how this was done. If it was signed under the "Review/Sign Changes" window, an electronic signature code was required. If it was signed under Action | Signature on Chart, no electronic signature code was required. In CPRS version 23, no electronic signature code is required for the "Signature on Chart" sign action.

- **Patient Instructions Problem Fixed (NOIS CLE-0603-40182)** - In previous versions of CPRS, when users placed outpatient medication orders without entering patient instructions for the order, the patient instruction field was set to an empty string. This caused some problems when the orders were sent to the pharmacy side. This is fixed with CPRS version 23 by not sending anything if no patient instructions are entered.
- **Fix for Duplication of Patient Instructions on Renewal (NOIS TUA-0303-31418)** - Patient instructions were duplicating on renewal for outpatient medication orders. This problem is fixed with CPRS version 23.
- **Screening Out of Inactive Diet Components (NOIS RIC-0203-21581)** - Diet components designated inactive were still available on personal quick orders for diet. This problem is fixed in CPRS version 23. CPRS now screens out inactive components.
- **NOIS LOM-0501-61545** – The Mumps undefined error at the “OP+5^ORWDXM2” is now fixed.
- **Correct Medication Order Dialog Now Displays when Copying an Inpatient Medication to an Outpatient (NOIS HIN-0803-41027)** - For a discharge event, when copying an inpatient medication order to an outpatient medication order, the order dialog presented was the inpatient medication order dialog instead of the outpatient dialog. This has been fixed.
- With font sizes of 10 or higher, the OK or Cancel buttons were invisible in the order Renewal dialog box. This has been fixed.
- **Pregnant Check for Radiology Orders Made Mandatory for Female Patients: Patient Safety Issue (HEH-1103-40959)** - For female patients, the pregnant check box in radiology order dialog was not mandatory. It's fixed in this version. Now, to place a radiology order for a female patient, the provider has to select one option from “YES”, “NO”, or “UNKNOWN” for the pregnant field.
- **Corrections to Quick Orders Used in Event Delayed Orders (NOIS DUR-1003-31180)** - For event delay orders, if a quick order is created with “Verify” set to **yes** and “Auto accept” set to **no**, the order dialog window did not display; instead, a verify window displayed with Accept, Edit or Cancel choices. Also, if a quick order did not have a predefined dosage, the order could have been placed. Both items have been fixed.
- **Renewed Order Not Updating on the Meds Tab (NOIS TUA-0104-31320)** – If a user changed an unsigned, unreleased inpatient renewed medication order, the new order did not get updated on Meds tab. It's been fixed: CPRS will no longer allow a user to change unreleased or pending renewal inpatient medication order.

- **Medication Route Now Required for Copying Outpatient Pharmacy Orders for a Delayed Admission (PSI: 04-006, NOIS: MAD-0903-41330, ASH-0104-31242)** - Upon selecting outpatient pharmacy orders from the "copy active orders for selected event" for a delayed admission, the orders will now present the ordering dialog. The user must then enter a medication route before the order will be accepted.

Labs

Problem with Lab Collect Future Fixed NOIS (STX-0203-70826, MAC-1103-61285, UNY-1003-11396) - The LR LAB COLLECT FUTURE apparently stopped working in the GUI—evidently with CPRS GUI v.20. This has been fixed.

Medication Order Dialog

- User sizing of the medication order dialog was not honored cross sessions. This has been fixed.
- The size of the dosage box in medication order dialog did not remain the same across multiple CPRS sessions. This has been fixed.
- For the order dialog, the information box did not disappear by selecting any field. Users had to specifically click on the information icon to make it disappear. This has been fixed.
- Order text had been reported as not keeping the mixed case of original entry. This has been fixed.

Meds Tab

ORCH Context Meds Date Range Function Disabled (NOIS: CHA-0603-31953) - Due to allocation errors reported by sites, the ORCH CONTEXT MEDS date range function for displaying active medication orders on Meds tab was disabled. This functionality will be returned in a subsequent release.

Problems Tab

- As a result of an inadvertent change to CPRS version 22, the Problem Editor screen stopped filling up available room in the Problems tab. This has been fixed in CPRS version 23.
- **Problems with Changing CSV Problem List Items with Inactive Codes (NOIS WAS-1003-20405)** - If editing a problem shown as having an inactive code, and selecting a problem via the Lexicon lookup with the same text but a new code, it was impossible to save this change since the new problem was seen as a duplicate of the old. This has been corrected.
- **Fix for Changing a Problem to a Different Problem with Code 799.9 (WAS-1003-20405)** - A solution for changing a Problem List item with a currently inactive code to a problem resulting in a code of 799.9 that was originally projected for CPRS GUI v24, has been added to this release.

Spelling and Grammar Checking

Two issues that were reported late in the CPRS version 22 testing cycle have been corrected in this version: Apostrophes were sometimes converted to question marks, and documents having a blank first line behaved incorrectly during grammar checks. Both of these issues should now be corrected.

Access Violations

Several miscellaneous access violation errors that were reported late in the CPRS version 22 testing cycle have been corrected in this release. These access violations were mostly related to the encounter form and new-patient selection.

Clinical Context Management (CCOW)

Previously, if a user had set his/her preferences to open to the last tab CPRS was on when changing to a different patient record, this preference was not always being respected, especially on a patient change induced via CCOW in another application. This has been corrected.

Patient Record Flag

PRF Error and Duplicate Flags (NOIS PUG-0903-52299) - When a user selected the same PRF patient several times in a single CPRS session, there was a MUMPS server-side error generated, and sometimes, the user might see duplicated patient record flags. This has been fixed.

Cover Sheet

Immunizations Display & Functionality - Bryan Volpp reported in CPRS GUI v.22 that the immunization display dates were confusing and should include the full year. Also, if a user clicked on an item in the immunizations box, CPRS displayed an empty detail box. This has been fixed so that if users click on an item no box is displayed, and the dates now include the full year.

Cover Sheet, Encounter Panel

Encounter locations weren't being kept when a Clinic was the default patient selection source. This has been fixed.

Consults/Procedures Ordering (CSV)

Free-Text Diagnosis with Quick Orders Getting Flagging for Inactive Code (NOIS: HUN-1003-21015) - If a free-text provisional diagnosis was included in a quick order, then when trying to place that quick order, this diagnosis would be flagged as having an inactive ICD code, despite there being no code involved. This has been corrected.

Notes, Consults, Discharge Summary, and Surgery Tabs

- On the Notes tab, when beginning a new note, the "unresolved consults" reminder screen was not always being displayed if "Verify Note Titles" was set to FALSE and/or if the user had a default non-consults title. This has been fixed.

- Double-clicking the "New Note" button, or clicking more than once before the visit or title selection screens appeared, could sometimes result in multiple notes being edited simultaneously and signed blank notes. These have been corrected by disabling (graying out) the "New Notes" button after the user's initial click. Subsequent clicks are ignored until the button is re-enabled normally by other actions.

Templates, Template Dialogs

- Reworked code that was added in v21.6 that caused a significant degradation in template dialog performance.
- If CPRS attempts to timeout while a template dialog is open, the warning message about loss of changes should NOT appear, because it requires a response and prevents CPRS from shutting down, leaving patient information visible on the screen. This was discovered in testing and has been corrected.

TIU

Additional Boolean logic was added to the TIU Object Refresh button that should decrease the number of calls to the RPC "TIU GET LIST OF OBJECTS" and increase performance.

Visit Selection

- A circumstance was discovered where the encounter date/time being passed to TIU on document creation was "-1". This value resulted in an error that the user did not have an "active person class" as of the date, the Episode Began Date/Time got filed as "-1" or "1699" in the TIU document, which was incorrect, and prevented a visit pointer from being filed with the TIU document. The validation logic in the Visit Selection screen has been tightened up to prevent this from happening. Additionally, if this is somehow found to be the case when beginning a new document or entering a new order for a patient, the user will be asked to reselect a visit as if none currently exists. This will ensure that the correct visit information is filed with these items.
- When selecting a visit location for a new outpatient visit, hospital locations of type "WARD" will no longer be included in the list. Selection of these locations was causing a variety of problems downstream and was not consistent with List Manager selection options. Selection of existing visits and existing admissions remains unchanged.

Patient Selection / Encounter Data

- Users reported that they did not want "Cancelled" or "No-Show" patients appearing in Patient Selection for Clinic lists; they preferred the previous listing practice of omitting such appointments/patients from the list. This was fixed.

- When patients were selected from a clinic, whether set as the “Default” for patient selection or not, the Encounter data was not holding when different patients were selected. This was fixed. An unreported but similar problem where the Encounter data was not updated when the same patient was on a list (such as appointments in two different clinics), and then selected twice, was also fixed.
 - **Change of Wording to Similar Patients from Duplicate Patients (E3R: #18461)** - When two patients with the same last names and last four numbers in their social security numbers were selected, a dialog box labeled “Duplicate Patients” appeared and required the user to select the desired patient. E3R #18461 requested that the wording be changed to “Similar Patients” instead. This was done.
 - It was reported that from the Patient Selection screen, when a user selected a Clinic and then used the “Save Patient List Settings” to make that Clinic the Default Patient Selection setting – and if the user then selected a patient that was NOT listed for that default clinic, that the information for that default clinic that was just set would appear as the Encounter location. This has been corrected.
 - When a Clinic was set as the default source for patient selection and a patient was selected by means of the “Last5” functionality – i.e., by entering the last 4 digits of the Social Security Number (SSN) or an initial with the last 4 SSN digits – the encounter information was not refreshing on the encounter panel across the top of the cover sheet with the inpatient data (as it used to do). This has been fixed.
- Note:** Other changes in this patch now re-set the encounter panel data whenever a patient is selected—even if the patient is on the list more than once or twice: A patient might be on the list with one or more appointments, on the list in a Ward as well as in a “combination” list that shows clinics and that ward, and then also as a patient in the bottom part of the box where “all” patients are shown. With the new functionality, the patient’s encounter data is updated from wherever his or her name might be selected on that list, so that
- If selected from the clinic listing, the clinic visit information should populate.
 - If selected from a ward, the inpatient data should populate (unless the patient is not an inpatient, in which case the common “Visit not selected” message will appear).

Provider Selection

- Visitors who once accessed data at a site remotely (using RDV functionality) were given a behind-the-scenes “VISITOR” entry in the NEW PERSON file. If such a user subsequently joined the local site staff as a Provider, his/her name would not show up on Provider selection lists due to the previously-existing RDV data entry. A work-around has been implemented.

- The “Degree” entry from the NEW PERSON file was displaying with Provider names. This has been removed.

Reports Only

The “Patient Inquiry Panel” has been re-activated. RO users may now click on the panel and it will work.

Options

Under the “Patient Selection Defaults” menu when selecting clinics for the days of the week, if the selection list exceeded 44 items (such as clinics), a previously-selected clinic over 44 names down the list would not appear. Even if a user chose, for example, XYZ clinic as their default, but XYZ was not in the first 44 items, the clinic could not be saved as a default. It also would not appear in the list of choices for a default clinic. This has been fixed.

508 ISSUES

- New JAWS scripts allow the auto-completion features of CPRS combo boxes to work without interfering with how JAWS speaks.
- New JAWS scripts enable JAWS to read the title for the Vitals list box on the CPRS cover sheet.
- New JAWS scripts fix several control labels that were either mispronounced or not spoken:
 - JAWS now correctly vocalizes Proc and Consult Orders as Provisional Diagnosis and Reason for Request.
 - The Allergies box in the Patient Postings dialog is fixed.
 - The Tree View button in Consult Orders is now captioned.
 - JAWS now correctly vocalizes the notification list on the Patient Selection Screen.
 - The Blank Lines spin box in the Template editor is now fixed.
 - Inpatient and Outpatient lists on the Meds tab are now captioned.
 - The Inpatient Meds order dialog now vocalizes titles of the Priority combo box and the contents of the Comments editing field.
 - JAWS text for the reminders button on the main toolbar now reflects the icon or animation that is displayed there.
- Several edit fields were adding tab characters to text when <Shift-Tab> or <Ctrl-Tab> were used to navigate out of these edit fields. This problem has been fixed in the following:
 - Proc and Consult Orders
 - Proc and Consult Editors
 - Template Editor.
- Graphics for the following have been labeled in JAWS:
 - Notes and Consult tree views
 - Template Editor dialog
 - Info box in order dialogs

- JAWS now vocalizes the value of the Then/And pop-up button on the complex-orders screen, rather than the less-useful title of this button
- The Refill dialog had sizing problems with large fonts, and did not cancel out of the form when users pressed the <Esc> key. These problems have been fixed in CPRS version 23.

Clinical Reminders

- **Fixed Problem of No “Active Person Class”** - A problem was discovered with a Reminder saying that a user did not have an “active Person class”. This was causing the Reminder dialog to go into an infinite loop, and the only way out was to stop CPRS by using Windows Task Manager. This problem was only happening when trying to evaluate a Reminder for an addendum. The parent note’s bad Episode Begin Date caused the problem. With this correction, if CPRS tries to process a Reminder that receives a bad encounter date from the progress note, CPRS will display a warning message advising the user to contact IRM to fix the parent Episode Begin Date, and CPRS will not process the reminder until the date is fixed because the reminder will not know what encounter date to store in the encounter data.
- **Fixed Window Size/Position Problem** – Developers added a change to reminder dialogs to save the window size/position between dialogs/CPRS sessions.
- **Corrected Hyperlink Template Fields Problem (DUR-0903-30815, PUG-0104-51275, NOP-1003-11865)** Developers fixed hyperlink template fields at the Reminder dialog element level to activate the link when clicked on. Because of time constraints, developers will fix hyperlinks at the Reminder dialog group level in v24.

Reminders / PCE

When processing reminders, the PCE Primary Diagnosis designation was incorrectly assigned, or not assigned at all. This has been corrected.