

User Release Notes

for RADNET rRIS
Version 1.0
Build 27

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1. Purpose

This document describes some of the new features and changes implemented in rRIS as of the end of Sprint 27. This version of rRIS is referred to as Build 1.27.

Only features which can be visually demonstrated to the user will be outlined in this document.

2. Intended Audience

This document is created by the rRIS Development team for the RadNet RIS management team.

3. Installing/Accessing the Application

The installation guide for the rRIS client have been posted to the RadNet Wiki page at <http://mdbal01rdtweb/Wiki/>

Under the RIS menu, click on the rRIS page. The credentials to access the page are:

Username: rRIS

Password: Summerside

Please note that Build 1.27 is considered a new core release of the application and will require a reinstallation of rRIS. This is accomplished by navigating to the rRIS shared installation drive and running the CoreInstall.bat file (ex: I:\RISDeployment\CoreInstall.bat)

If you experience difficulties accessing the application, please do not hesitate to contact Darcy Noye with the PEI RIS Development Team.

4. New Features and Enhancements

Advanced Beneficiary Notice (ABN) Flag

In build 27 the ability to mark patient studies with ABN flag has been added. A drop down list box was added to the billing code information data pane. During Registration, the ABN list box is adjacent to the procedure picker row.

Available options

The screenshot shows the 'Registration' window with the 'Exam' tab selected. The 'Studies' section displays a study for 'CT Ankle Arthrogram(Ankle joint, Right)' with a duration of 30 minutes and a scheduled date of 12-02-2011 9:03 AM. Below the study details, there are dropdown menus for 'Body Part' (Ankle joint) and 'Laterality' (Right). To the right of the study details, there is a table with columns: ABN, PreCert #, Expiry Date, and Billable item. The 'ABN' column has a dropdown menu open, showing two options: 'Signed ABN on File' and 'Refused ABN'. The 'Billable item' column shows '73701 (COMPUTED TO...)'.

Figure 4.1 – ABN list box displayed from the Registration window.

The ABN flag is also available to Technologists from Perform Exam window.

The screenshot shows the 'Perform Exam' window with the 'Billing Codes' tab selected. The 'Billing Code Information' section displays a table with columns: ABN, PreCert #, Expiry Date, Billing Code, CPT Modifier 1, CPT Modifier 2, Units, and Change Reason. The 'ABN' column has a dropdown menu open, showing two options: 'Signed ABN on File' and 'Refused ABN'. The 'Billing Code' column shows '(71260) COMPUTED TOMOGRAPHY, THORAX; WITH CONTRAST MATERIAL(S)'.

Figure 4.2 – ABN list box from Perform Exam window.

Lastly the ABN flag is available in the IVT data window.

RADNET, Inc. – rRIS Pre-Release Notes

Patient | Insurance Verification PreCert | Attachments

Insurance Policies

| Note | Carrier Code | Carrier Name | Policy Number | Group Name | Group Number | Phone | Priority |
|------|--------------|--------------|---------------|------------|--------------|-------|----------|
|------|--------------|--------------|---------------|------------|--------------|-------|----------|

Manage Policies

Verification REQUIRED ☐ Insurance verified Amount to collect:

Verification and PreCert Notes

12-02-11 dtn -

Billing Code Information

| ABN | PreCert # | Expiry Date | Billing Code | PreCert Status |
|--|-----------|-------------|---|----------------|
| <div><div>Signed ABN on File</div><div>Refused ABN</div></div> | | | (73701) COMPUTED TOMOGRAPHY, LOWER EXTREMITY; WITH CONTRAST MATERIAL(S) | Not Required |

☐ Show inactive CPT codes

Figure 4.3 – ABN list box from IVT data window

Outside Read Sites Insurance Required

Insurance policies can now be specified for outside reads. At the site level, a flag was added to indicate if the particular site required insurance.

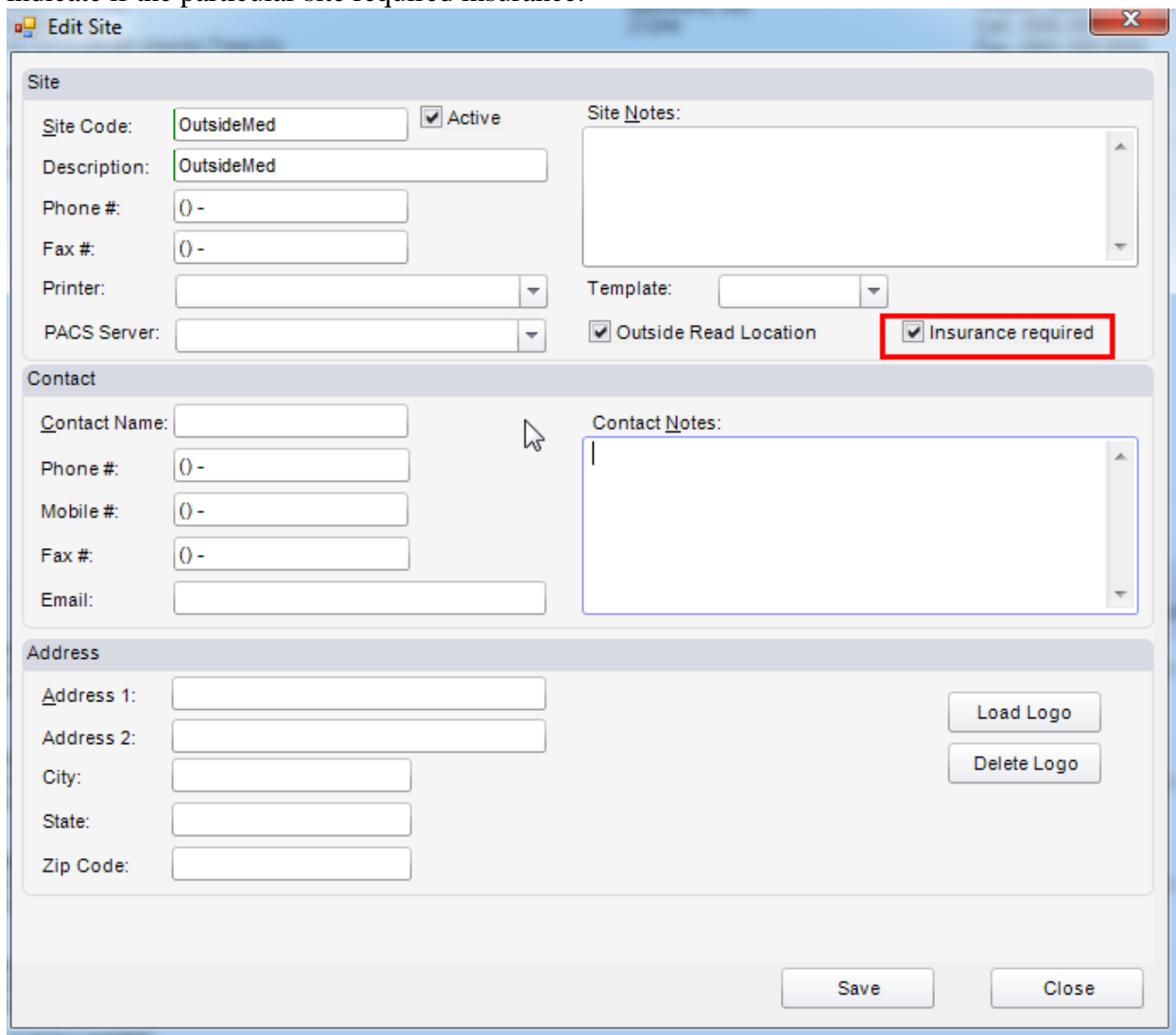
The image is a screenshot of a software window titled "Edit Site". The window is divided into three main sections: "Site", "Contact", and "Address". In the "Site" section, there are fields for "Site Code" (containing "OutsideMed"), "Description" (containing "OutsideMed"), "Phone #", "Fax #", "Printer", and "PACS Server". There are also checkboxes for "Active" and "Insurance required", with the latter being highlighted by a red rectangle. A "Site Notes" text area is also present. In the "Contact" section, there are fields for "Contact Name", "Phone #", "Mobile #", "Fax #", and "Email", along with a "Contact Notes" text area. In the "Address" section, there are fields for "Address 1", "Address 2", "City", "State", and "Zip Code". At the bottom right of the "Address" section are buttons for "Load Logo" and "Delete Logo". At the bottom of the window are "Save" and "Close" buttons.

Figure 4.3 – Insurance Required flag at site level

When creating an Outside Read, once the site is selected for the order, the Insurance Policies data pane appears allowing the user to add a new or select a previous Insurance Policy.

The screenshot displays the 'Add Outside Read' form in the rRIS system. The form is divided into several sections: 'Patient' and 'Order' tabs at the top; 'Study(s):' with a dropdown menu showing 'CT Chest W Abdomen W'; 'Body Part:' with a dropdown menu showing 'Chest'; 'Laterality:' with a dropdown menu; 'Exam Date:' with a date picker showing '12-20-2011'; 'Tech Notes:' with a text area; 'Referring Details' with 'Referring:' dropdown showing 'Piled, Jerry T' and 'Visited at:' dropdown showing '123 MileHigh Dr., Mountain View, CO, 12345'; 'CC Physicians:' with a dropdown menu; 'Visit Location for CC' with a dropdown menu; 'Chief Complaint' with a text area; 'Performed Location' with 'Practice:' dropdown showing 'Advanced Radiology' and 'Site:' dropdown showing 'Outsidemed'; 'Flags' with checkboxes for 'STAT Read', 'STAT Precert', and 'Outside Read' (checked); 'Order Notes' with a text area showing '12-02-11 dtn -'; and 'Insurance Policies' at the bottom. The 'Insurance Policies' section includes a table with columns: Note, Carrier Code, Carrier Name, Policy Number, Group Name, Group Number, Phone, and Priority. Below the table is a 'Manage Policies' button. At the bottom right, there are fields for 'Verification REQUIRED' (checked), 'Insurance verified' (unchecked), and 'Amount to collect:' with a text input field.

Figure 4.4 – Add Outside Read displaying Insurance Policies data pane

Outside reads that require insurance can also be added to the Billing Exception work list. If the outside read site does not have the “Insurance Required” flag, it will not be added to the Billing Exception work list.

Clinical Decision Support – MU Requirement 170.304.e

On the MU tab where medications are located a grid for lab results has been added under the grid there are buttons for adding and editing lab results. There is also a right click context menu for add/edit and delete. The delete warns the user asking them to confirm the delete.

The grid only shows the fields that are critical to the technician for example the lab's name and address information isn't critical to their decision making and is only available on the right click edit menu.

In the edit screen most fields are free text data entry. The main exception being the test name, which is combo box entry based on the LabTest lookup table. Only the active tests in the LabTest lookup are returned with the patient recorded for display in the UI. This is to limit bandwidth usage, to speed performance and make it easier for techs and rads to see the critical items they are concerned with. Note if we were to receive the values via an HL7 feed, the system would enter all test items but only the active tests would display and download to the clients. Later if a test is activated the history of all past retrievals for that test will be displayed. For the entry of a lab result the only required fields are the observation date which is the date the test was collected on in all cases where there is a specimen (such as blood work – according to the HL7 spec). The other required fields include observation_value and the name of the test aka lab_test_code.

The screenshot displays the RADNET rRIS interface with the following components:

- Navigation Tabs:** Patient, MU, Contacts / Demographics, Order, Exam, Visit History, Image Request (0).
- Medications Section:** A message box states "Failed to update patient medications." with a "Sync/Refresh" button.
- Lab Results Section:** A table with columns: Date, Test, Result, Abnormal, Range, Units. It contains one entry: 12-02-2011, Test 1, test, H.
- Patient Immunizations Section:** A table with columns: Vaccine, Date, Q.
- Add Lab Results Dialog Box:** A modal window with the following fields:
 - Observation Date: 12-02-2011 (with a calendar icon)
 - Test Name: Test 1 (dropdown)
 - Value: test (text input)
 - Abnormality: H^Above high normal (dropdown)
 - Reference Range: (empty text input)
 - Units: (empty text input)
 - Specimen Source: (empty text input)
 - Specimen Quality: (empty text input)
 - Specimen Condition: (empty text input)
 - Lab Name/Address: home (text input)Buttons: OK, Cancel.
- Export HL7:** A button located to the right of the dialog box.

Figure 4.5 – Possible Alert Messages

Please note that this feature is incomplete. The sync refresh button does nothing at this time because NewCrop has not yet released WS methods for receiving lab results. HL7 portion of the solution still needs work if we are to receive lab results via HL7.

Lab Results – MU Requirement 170.306.g

The medications grid is located on the MU tab, next to the patient tab in most content screens. In addition to the auto sync feature the user can click on the “Refresh/Sync” button just below the grid. This refresh will query NewCrop on a separate thread as not to slow down or lockup the main workflow in the case where the intranet connection is unavailable, failing or slow.

The screenshot shows the eRAD RIS application interface. The top menu bar includes File, Administration, Scheduling, Front Desk, Technologist, Radiologist, and a user profile for 'kevin m'. The main window has tabs for Patient, MU, and Attachments. The MU tab is active, displaying three data panes: Medications, Lab Results, and Immunizations. The Medications pane contains a table with columns: Date, Status, Medication, Physician, and SIG Text. A single entry is visible: 11-17-2011, Pending, Viagra 100mg tablet, Kevin cee Molyneaux, 10 tablet BEDTIME. Below the table is a Sync/Refresh button. The Lab Results pane has columns: Date, Test, Result, Abnormal, Range, and Units, and is currently empty. It includes Add and Edit buttons and a Sync/Refresh button. The Immunizations pane has columns: Vaccine, Date, Qty, Units, Lot #, and Manufacturer, and is also empty. It features an Encrypt File checkbox and an Export HL7 button. At the bottom of the application window are Save and Close buttons, and a status bar indicating 'Connected: Debug'.

| Date | Status | Medication | Physician | SIG Text |
|------------|---------|---------------------|---------------------|-------------------|
| 11-17-2011 | Pending | Viagra 100mg tablet | Kevin cee Molyneaux | 10 tablet BEDTIME |

| Date | Test | Result | Abnormal | Range | Units |
|------|------|--------|----------|-------|-------|
|------|------|--------|----------|-------|-------|

| Vaccine | Date | Qty | Units | Lot # | Manufacturer |
|---------|------|-----|-------|-------|--------------|
|---------|------|-----|-------|-------|--------------|

Figure 4.6 – Medication data pane on MU tab

A new system configuration setting “MUMedicationSyncFrequency” has also been created. After the sync is performed the patient.last_medication_sync is updated to reflect the change. The new medications (if any) and patient.last_medication_sync are stored when the user saves the screen. Saving the screen is guaranteed at key points in the workflow such as IVT verification, arrival, starting and completing studies.

Auto sync’s can be disabled by setting the “MUMedicationsSyncFrequency” to -1. A zero value would force an autosync every time they open a patient record. For example, a value such as 600 would force a check every 10 hours.

Drug to Drug Allergy and Drug Formulary – MU Requirements 170.302(a)(b)

A new button has been added on the Visit History tab in the Drug Allergies data pane. This button passes along the allergies entered in our grid to the New Crop application where the user will be responsible to add them to the patient within New Crop.

The screenshot displays the rRIS interface with the 'Visit History' tab selected. The interface is divided into four main panes:

- Demographics at Encounter:** Contains input fields for Height (ft in), Weight (lbs), BMI, Blood Pressure, and Smoking Status. It also includes checkboxes for 'Is Pregnant', 'Requested Educational Resources', and 'Provided Educational Resources'.
- Drug Allergies:** Features a dropdown menu to 'Show drug allergies for the current patient's visit?' with an 'Add/Edit Allergy' button and an 'Upd NewCrop' button. Below is a table with columns: Drug Allergy, Start Date, End Date, Reaction, Severity, and Status.
- Problem List:** Includes a dropdown menu to 'Show problem list for the current patient's visit?' and a table with columns: Problem, Start Date, End Date, and Status.
- Clinical Summary:** Contains buttons for 'View/Print' and 'Export' under the heading 'Continuity of Care Document (CCD)', and a 'View/Print' button under 'View External Clinical Document'.

Figure 4.7 – Drug Allergies and Update NewCrop

5. Resolved Defects

Bugs, Suggested Features and Support Issues resolved in build 1.27. The extract is taken from Redmine bug tracking system and only displays defects resolved in 1.27.

| # | Status | Tracker | Priority | Subject | Category | Target version | Resolved Version |
|-----|----------|---------|----------|--|------------------|----------------|------------------|
| 701 | Resolved | Bug | High | No way to turn off ChairService | Web Services/DB | 1.27 | 1.27 |
| 706 | Resolved | Bug | Normal | Patient injury not associated with visit | Thick Client GUI | 1.26 | 1.27 |
| 699 | Resolved | Bug | Normal | CarrierType - Issue with display order | Admin Tools | 1.25 | 1.27 |
| 698 | Resolved | Bug | Normal | Organization - Couple of issues when adding sites | Admin Tools | 1.25 | 1.27 |
| 697 | Resolved | Bug | Normal | Organization - Edit Region Popup | Admin Tools | 1.25 | 1.27 |
| 695 | Resolved | Bug | Normal | Management Report > Daily Schedule copay format issue | Mgt Reports | 1.27 | 1.27 |
| 694 | Resolved | Bug | Normal | Perform Exam data window mystery list box | Thick Client GUI | 1.26 | 1.27 |
| 689 | Resolved | Bug | Normal | Lookup table Unit of Measure > Measure type is case sesitive | Admin Tools | 1.25 | 1.27 |
| 624 | Resolved | Bug | Normal | Schedule exam, selecting time from Advance tab can make available times "jump" | Thick Client GUI | 1.23 | 1.27 |

6. Known Limitations

The following are Bugs, Suggested Features, and Support Issues found in build 1.27. This build is the current QE build and testing is ongoing. The list may increase in size. This document will not be updated or re-released.

| # | Status | Subject | Category | Target version |
|-----|----------|--|------------------|----------------|
| 741 | New | Add Outside Read - can save outside read without visit selected. | Thick Client GUI | 1.27 |
| 738 | Resolved | Create outside read without insurance policy will throw error from Billing Exception | Thick Client GUI | 1.27 |
| 701 | Resolved | No way to turn off ChairService | Web Services/DB | 1.27 |
| 746 | New | Logging off application will show message "rRIS is already running." | Thick Client GUI | 1.27 |
| 744 | Resolved | Errors in Edit Billing | Thick Client GUI | 1.27 |
| 743 | Resolved | Date selected from Date / Time Picker not accepted after removing composite code. | Thick Client GUI | 1.27 |
| 740 | Resolved | Outside Read - Edit billing does not show all the billing exceptions | Thick Client GUI | 1.27 |
| 739 | Resolved | Outside Read - Edit Billing from Billing Exception and Responsible Party is required | Thick Client GUI | 1.27 |
| 736 | Resolved | DB Version in help about is not updated | Web Services/DB | 1.27 |
| 702 | Closed | Document distribution is not configurable for queue name or poll time | Web Services/DB | 1.27 |
| 695 | Resolved | Management Report > Daily Schedule copay format issue | Mgt Reports | 1.27 |