# User Release Notes

# for eRAD RIS
# Version 2
# Build 44.6

# Table of Contents

# 1. Purpose

This document describes some of the new features and changes implemented in eRAD RIS as of the end of Sprint 44.6 and subsequent server releases.  This version of eRAD RIS is referred to as Build 2.44.6

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 RIS Development team for the RadNet /eRAD RIS implementation teams.

# 3. Installing/Accessing the Application

The installation guide for the eRAD RIS 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 2.44.6 is considered a new release of the application. It does not  require a reinstallation of eRAD RIS.  If users choose to reinstall, this is accomplished by navigating to the eRAD RIS 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 Settings for B2.44.6

## Access strings

| Setting | Default | Purpose / Controls Access to |
|---|---|---|
| Clinical.CreateReminder | None | Controls access to the create reminder feature from patient folder. |
| Clinical.EditReminder | None | Controls access to the edit reminder feature from patient folder. |
| Clinical.PreviewTerminatedReport | None | Controls access to previewing reports that have been terminated for voided or discontinued exams. |
| Config.LookupEditor.Complication | None | Grants access to the Complication lookup table located under the Mammography folder from the Configure option under Administration menu |
| Config.LookupEditor.PrepInstructionType | None | Grants access to the PrepInstructionType lookup table located under the Procedure folder from the Configure option under Administration menu |

## System Config

| Setting | Default | Purpose / Controls Access to |
|---|---|---|
| BreastBodyPartCode | N/A | The code for the breast body part. May be used to activate mammo related functionality (e.g. Create Reminder) |

# 5. New Features and Enhancements

## Breast Imaging Updates

**Feature 11221 – Biopsy Window Re-Design**

The General section of the Add Mammo Biopsy window has been re-designed to make various labels more intuitive and add additional data collection fields. As displayed in Figure 5.1, Concordance and Complications sections have been added. These additions allow the user to collect additional information that can be made available for future Management Reports or database queries. Also a new option for a Lesion Classification of High Risk Malignant has been added.  This allows for the flexibility of categorizing High Risk pathology findings as either Malignant or Benign, while still maintaining their "High Risk" designation. The database was updated to consider the selection of "High Risk Malignant" as Malignant when calculating statistics for MQSA-related management reports (e.g. True/False Positives, Sensitivity, Specificity, etc.).  As before, the "High Risk Benign" category is treated as Benign for MQSA statistics.



**Figure 5.1 – Biopsy window changes**

The following labels have also been updated to more accurately and precisely identify various data to be collected:

- Performing surgeon → Performing physician
- Biopsy location → Biopsy facility
- Additional surgery → Additional pathology results
- Follow up → Imaging follow up
- Create Follow Up (button available after selecting Follow Up Required) → Create Reminder

Selecting Required for Additional Pathology Results will allow the exam to remain on the ACR Category 4/5 Follow Up WL after saving the pathology results. This allows the Mammo Tracking personnel to continue to monitor the case for outstanding pathology results that may be forthcoming for a repeat biopsy, a biopsy of an additional site that was recommended in the same report, or simply additional surgical pathology if desired. This behavior has not changed, but the terminology has been updated to Additional *Pathology* Results Required/Not Required, as the previous label of Additional *Surgery* Required/Not Required sometimes mislead Mammo Tracking personnel who believed that the purpose was to record whether the patient would be having surgery as a result of the biopsy results.

The Complications list box is populated with values from the new lookup table titled Complications which can be found at Administration menu>Configure>Mammography>Complication.

This new lookup table's access is controlled by access string: "**Config.LookupEditor.Complication**" which has a default of None.

| Complication Code | Description | Display Order | Last Updated ▼ | Active |
|---|---|---|---|---|
| Contains: ▽ | Contains: ▽ | Equals: ▽ | Equals: ▽ | Contains: ▽ |
| Click here to add a new row | | | | |
| HT | Hematoma | 0 | 10-02-2015 11:39 AM | Y |
| IS | Insufficient Sample | 0 | 10-02-2015 11:39 AM | Y |
| PI | Post-procedure Infection | 0 | 10-02-2015 11:39 AM | Y |

**Figure 5.2 – Complication lookup table**

Additional improvements have also been made to the Breast History grid at the top of the Add Mammo Biopsy window, as outlined in the description for Feature 11418 beginning on the following page.

## Feature 11418 – Manually Create Mammo Tracking Reminders

Previously, eRAD RIS did not have a method to manually create breast imaging Reminders, unless pathology results are being entered as follow-up to a BI-RADS® 4 or 5 exam. It is sometimes desirable to create Reminders at other times, particularly for patients who have come to our facilities for biopsies that had been recommended elsewhere and are therefore not on the ACR Category 4/5 Follow Up WL.

### From the Patient Folder:

A new context menu item (right-click menu) titled Create Reminder has been added in the Patient Folder. Selecting this option will open the Create Reminder window. This new context menu item is controlled by access string "**Clinical.CreateReminder**" with a default of none. The Create Reminder option will be available for procedures that have the body part that is specified in the new system config setting "**BreastBodyPartCode**." This would include both BI-RADS® enabled exams, as well as other breast procedures and biopsies.

Options in the Create Reminder window are: Type of Reminder (Annual, Short Term or Callback), Site and Target Date.
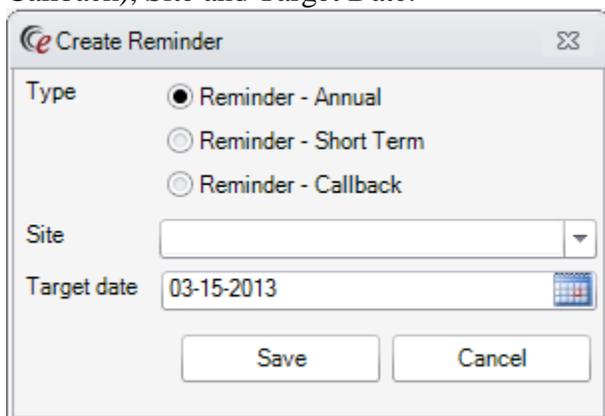


**Figure 5.3 – Create Reminder window accessed from Patient Folder**

The procedure used for a Reminder is determined by the pre-existing system config setting of DefaultMammoFollowUpOrderProcedureCode. The referring physician assigned will be that from the original study that was used to create the Reminder.

Another new context menu item added to the Patient Folder is Edit Reminder. This new context menu option is controlled by access string "**Clinical.EditReminder**" which has a default of None. This option will be available for statuses of Reminder – Annual, Reminder – Short Term, and Reminder – Callback. The purpose is to edit the details for an existing Reminder.
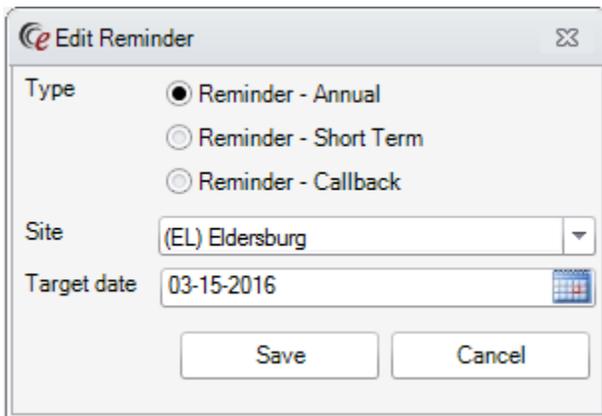
**Figure 5.4 – Edit Reminder window**

## From the Add Mammo Biopsy Window

It is also possible to Create or Edit Reminders from the Add Mammo Biopsy window.

The Breast History grid at the top of this window has been updated in order to provide a comprehensive view of all BI-RADS® enabled exam in any status other than Cancelled or Discontinued, as well as outstanding Reminders.
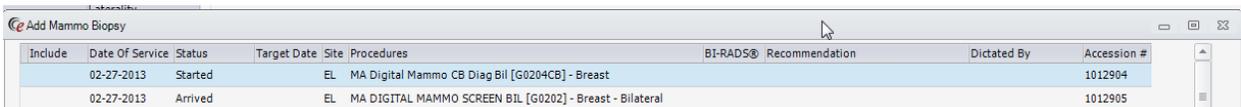


**Figure 5.5 – Add Mammo Biopsy window history**

The "Include" column is used for correlating pathology results with multiple exams; the behavior of this column has not changed, though the checkbox is only displayed for rows that are in the Signed status. The columns displayed in this Breast History grid have also been adjusted to display the most relevant details in a logical order.

From the Breast History grid, the user can now right-click on an existing Reminder and choose Edit Reminder to change the type of Reminder, the site, or the target date.
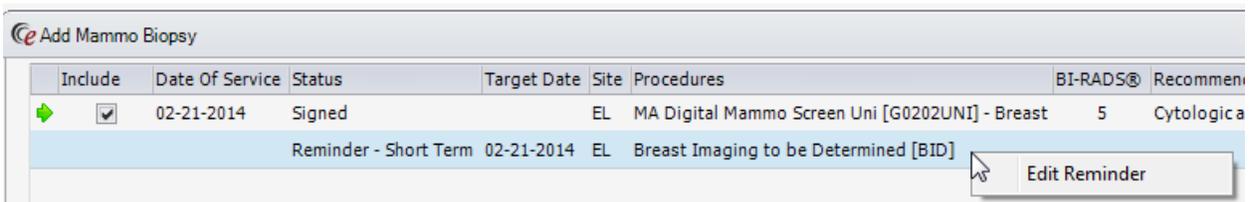


**Figure 5.6 – Edit reminder on existing reminders**

Reminders can also be created in the same manner as before from the Add Mammo Biopsy screen, though some of the terminology has been updated, as described above. The Create Reminder button (previously labeled Create Follow up) becomes available after selecting Additional Pathology Results = Not Required *and* Imaging Follow Up = Required. After clicking the Create Reminder button, the user can enter the type of Reminder, the Site, and the Target Date.

One additional improvement to the Breast History section has been added. To help the user determine what follow-up is necessary, there is a new context menu option available, "Show Report," to display the report on a signed exam.
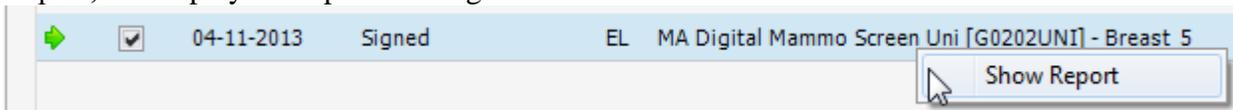


**Figure 5.7 – Show report option on signed exam**

Select Show Report to open a quick loading view of the report that is similar to the Data Nugget report view.
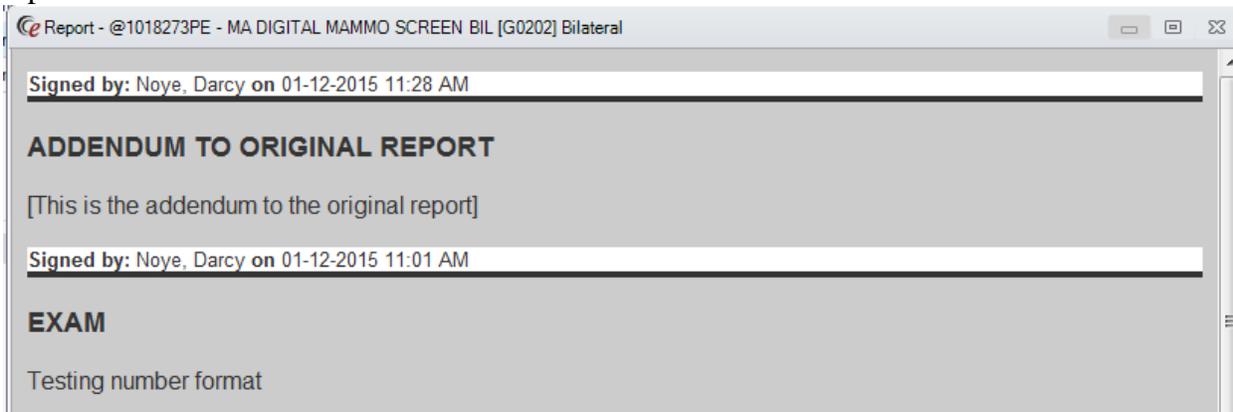


**Figure 5.8 – Show report window**

## Insurance Eligibility

**Feature 7852 - Reduce number of calls to Eligible API**

This feature will reduce the number of redundant eligibility checks. We will omit the day-of-service auto eligibility check for the following scenarios:

- The remaining deductible is 0 or not provided and a previous request was valid in the same calendar month.

- More than one insurance policy is selected. In these cases, we don't calculate the amount to collect using deductible, so there is no need to retrieve an up-to-date deductible amount.

- The status or remaining deductible has been overridden. Manual overrides do not require updated deductible amounts for the calculation of the amount to collect.

# Radiologist

### Feature 11277 – Automate Logging into PowerScribe Immediately After Logging into eRAD RIS

eRAD RIS is now launching and logging into PowerScribe immediately after successful login to eRAD RIS if the reporting mode is PowerScribe. eRAD RIS maintains full functionality during this initial login process. If a user opens a case before the PowerScribe login is complete, eRAD RIS will wait for the login process to complete and display the message "Waiting for PowerScribe."

This feature is enabled by default, but users can change this behavior by changing the "Launch on login" user preference on the "Reporting" tab in the "PowerScribe" section.
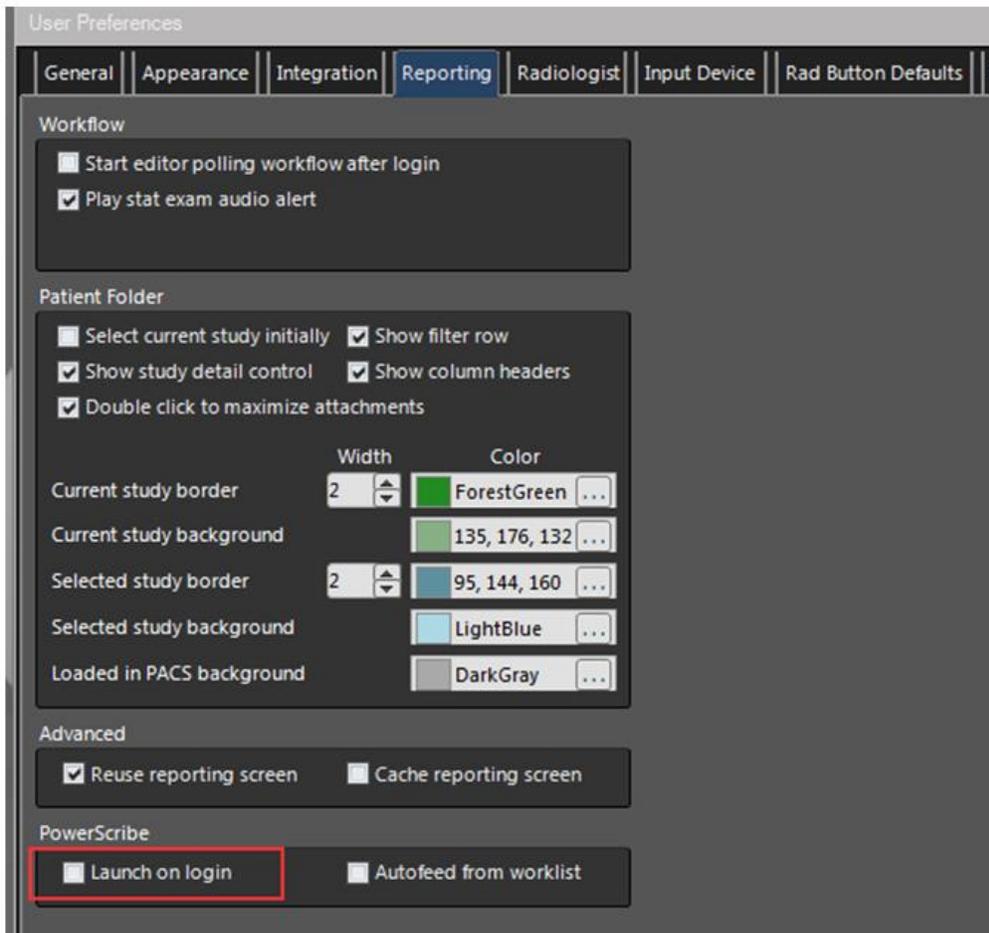


**Figure 5.9 – New user preference for PowerScribe "Launch on login"**

## Outbound Messaging

**Feature 10564 – Support ICD Data in RIS Outbound Messages**

eRAD RIS needs to support sending each ICD9 or ICD10 entered in RIS in its own field in the DG1 segment of the HL7 message.

For customers who enter this information on the front end of RIS, they expect that information to be transferred to the billing system without the need to re-enter it in that system.

The problem is a limitation in the XML RIS sends to Mirth. The messages sent did not expand to include the ICD9 or ICD10 codes.

Now messages sent will be expanded to include all of the ICD9 and ICD10 codes.  Below is an example of the message with multiple ICD codes being sent.  Implementations will need to configure mappings to handle the new nodes.

```
<c_study_item_indication>
<indication_key><indication_key>2844</indication_key><indication_code>257</indication_code><description>TESTICULAR HYPERFUNCTION
</description><display_order>1</display_order><last_updated>7/21/2011 12:22:35 PM
00:00</last_updated><last_updated_by_user_id>darcy</last_updated_by_user_id><active_flag>Y</active_flag><bloodwork_required_flag>N</bloodwork_required_flag><coding_scheme>ICD9</coding_scheme><code_effective_date>1/1/2001 12:00:00 AM</code_effective_date></indication_key>
   <study_item_key>3</study_item_key>
   <last_updated_by_user_id>deuce</last_updated_by_user_id>
   <last_updated>2015-09-29T12:15:40.6573928-03:00</last_updated>
 </c_study_item_indication>
 <c_study_item_indication>

<indication_key><indication_key>11556</indication_key><indication_code>39.4</indication_code><description>MADURA FOOT ACTINOMYCOTIC INFECTION
</description><display_order>1</display_order><last_updated>7/21/2011 12:22:35 PM
00:00</last_updated><last_updated_by_user_id>darcy</last_updated_by_user_id><active_flag>Y</active_flag><bloodwork_required_flag>N</bloodwork_required_flag><coding_scheme>ICD9</coding_scheme><code_effective_date>1/1/2001 12:00:00 AM</code_effective_date></indication_key>
   <study_item_key>3</study_item_key>
   <last_updated_by_user_id>deuce</last_updated_by_user_id>
   <last_updated>2015-09-29T14:43:59.5980514-03:00</last_updated>
 </c_study_item_indication>
```

# 6. Code Stream
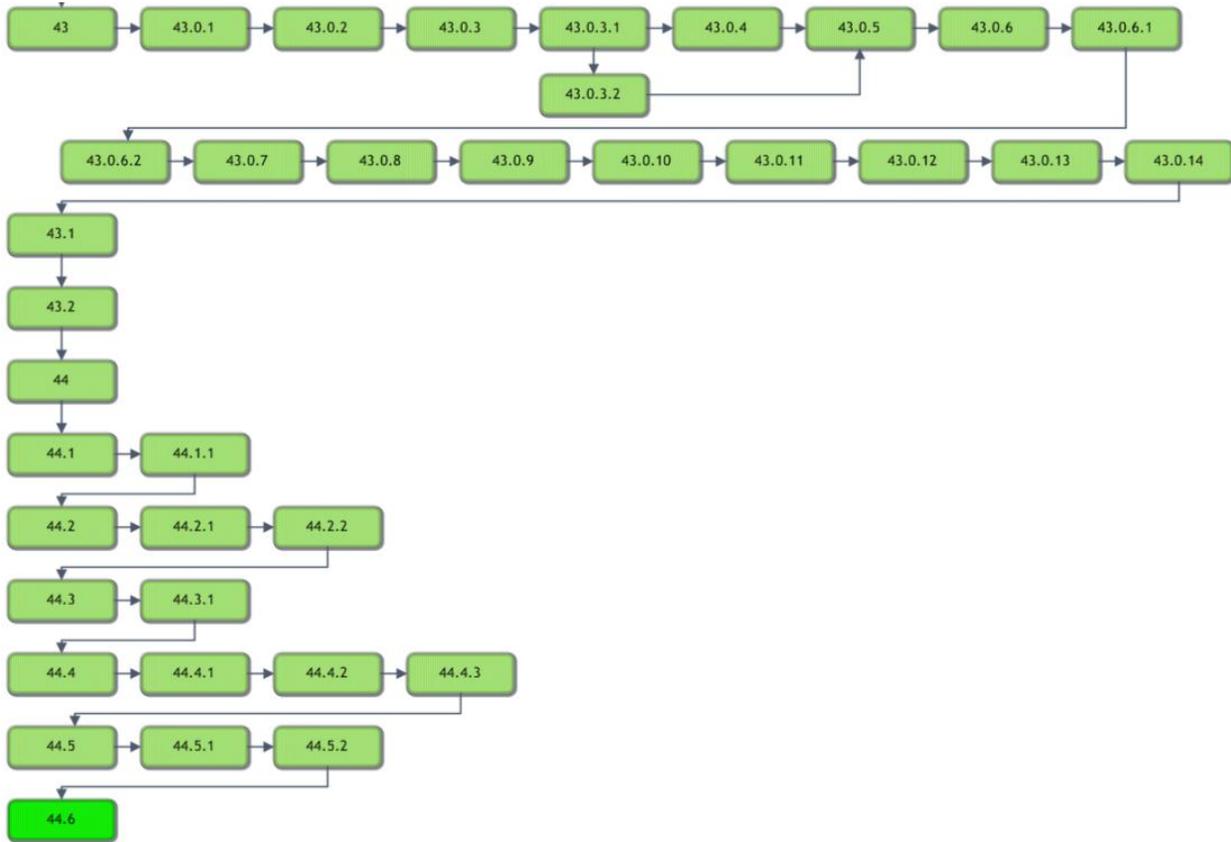


**Legend:**

Light Green = Released software

Gray = Will not be released

**Bright Green = Current Release**

# 7. eRAD RIS Release Version Numbers

| Build | Patch | UI Version | Core Version | WS Version | DB Version | Notes |
|---|---|---|---|---|---|---|
| 43 | - | 2.43.0.0.23715(3GB) | 2.43.0.0.23171 | 2.43.0.0.23715 | 2.43.0.0.23743 | Full Version Release |
| 43 | 1 | 2.43.0.1.23798(3GB) | 2.43.0.0.23171 | 2.43.0.1.23798 | 2.43.0.1.23770 | GUI.zip, Web Service, DB updates |
| 43 | 2 | 2.43.0.2.24017(3GB) | 2.43.0.0.23171 | 2.43.0.2.24017 | 2.43.0.2.24023 | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 43 | 3 | 2.43.0.3.24298(3GB) | 2.43.0.0.23171 | 2.43.0.3.24298 | 2.43.0.3.24283 | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 43 | 3.1 | 2.43.0.3.24450(3GB) | 2.43.0.0.23171 | 2.43.0.3.24298 | 2.43.0.3.24421 | GUI.zip, and DB updates |
| 43 | 3.2 | 2.43.0.3.24450(3GB) | 2.43.0.0.23171 | 2.43.0.3.24298 | 2.43.0.3.24421a | DB updates |
| 43 | 4 | 2.43.0.4.24447(3GB) | 2.43.0.0.23171 | 2.43.0.4.24447 | 2.43.0.4.24442 | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 43 | 5 | 2.43.0.4.24632(3GB) | 2.43.0.0.23171 | 2.43.0.4.24632 | 2.43.0.4.24560 | GUI.zip, Web Service and DB updates |
| 43 | 6 | 2.43.0.4.24(3GB) | 2.43.0.0.23171 | 2.43.0.4.24 | 2.43.0.4.24 | GUI.zip, Web Service and DB updates |
| 43 | 6.1 | 2.43.0.6.24937(3GB) | 2.43.0.0.23171 | 2.43.0.6.24937 | 2.43.0.6.24914 | GUI.zip, Web Service |
| 43 | 6.2 | 2.43.0.6.24970(3GB) | 2.43.0.0.23171 | 2.43.0.6.24970 | 2.43.0.6.24914 | GUI.zip, Web Service |
| 43 | 7 | 2.43.0.7.25258(3GB) | 2.43.0.0.23171 | 2.43.0.7.25258 | 2.43.0.7.25226 | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 43 | 8 | 2.43.0.8.25440(3GB) | 2.43.0.0.23171 | 2.43.0.8.25440 | 2.43.0.8.25425 | GUI.zip, Web Service, DB updates and Management Report Deployment |
| 43 | 9 | 2.43.0.9.25477(3GB) | 2.43.0.0.23171 | 2.43.0.9.25477 | 2.43.0.8.25425 | GUI.zip and Web Service |
| 43 | 10 | 2.43.0.9.25477(3GB) | 2.43.0.0.23171 | 2.43.0.10.25477 | 2.43.0.8.25425 | Web Service |
| 43 | 11 | 2.43.0.11.25512(3GB) | 2.43.0.0.23171 | 2.43.0.11.25512 | 2.43.0.8.25425 | GUI.zip and Web Service |
| 43 | 12 | 2.43.0.12.25554(3GB) | 2.43.0.0.23171 | 2.43.0.12.25554 | 2.43.0.12.25536 | GUI.zip Web Service and DB Updates |
| 43 | 13 | 2.43.0.12.25610(3GB) | 2.43.0.0.23171 | 2.43.0.12.25610 | 2.43.0.12.25536 | GUI.zip and Web Service |
| 43 | 14 | 2.43.0.14.25644(3GB) | 2.43.0.0.23171 | 2.43.0.13.25610 | 2.43.0.12.25536 | GUI.zip |
| 43.1 | - | 2.43.1.0.25850(3GB) | 2.43.0.0.23171 | 2.43.1.0.25850 | 2.43.1.0.25771 | GUI.zip Web Service and DB Updates |
| 43.2 | - | 2.43.2.0.26864(3GB) | 2.43.0.0.23171 | 2.43.2.0.26864 | 2.43.1.0.25771 | GUI.zip and Web Service |
| 44 | - | 2.44.0.0.26570(3GB) | 2.44.0.0.26405 | 2.44.0.0.26570 | 2.44.0.0.26475 | Full Version Release |
| 44.1 | - | 2.44.0.0.26984(3GB) | 2.44.0.0.26405 | 2.44.0.0.26984 | 2.44.0.0.26906 | Gui.zip, Web Service, and DB |
| 44.1 | 1 | 2.44.1.1.27093(3GB) | 2.44.0.0.26405 | 2.44.1.0.26984 | 2.44.1.0.26906 | Gui.zip |
| 44.2 | | 2.44.2.0.27410(3GB) | 2.44.0.0.26405 | 2.44.2.0.27410 | 2.44.2.0.27365 | Gui.zip, Web Service, and DB |
| 44.2 | 1 | 2.44.2.1.27959(3GB) | 2.44.0.0.26405 | 2.44.2.1.27959 | 2.44.2.1.27909 | Gui.zip, Web Service, and DB |
| 44.2 | 2 | 2.44.2.1.27959(3GB) | 2.44.0.0.26405 | 2.44.2.2.28094 | 2.44.2.1.27909 | Web Service |
| 44.3 | - | 2.44.3.0.28292 | 2.44.0.0.26405 | 2.44.3.0.28277 | 2.44.3.0.28138 | Gui.zip, Web Service, and DB |
| 44.3 | 1 | 2.44.3.1.28535(3GB) | 2.44.0.0.26405 | 2.44.3.1.28535 | 2.44.3.0.28138 | Gui.zip and Web Service |
| 44.4 | - | 2.44.4.0.28762(3GB) | 2.44.0.0.26405 | 2.44.4.0.28762 | 2.44.4.0.28676 | Gui.zip, Web Server, DB, Management Report Deployment |
| 44.4 | 1 | 2.44.4.1.28953(3GB) | 2.44.0.0.26405 | 2.44.4.1.28953 | 2.44.4.0.28676 | Gui.zip and Web Service |
| 44.4 | 2 | 2.44.4.2.29327(3GB) | 2.44.0.0.26405 | 2.44.4.2.29327 | 2.44.4.0.28676 | Gui.zip and Web Service |
| 44.4 | 3 | 2.44.4.2.29722(3GB) | 2.44.0.0.26405 | 2.44.4.2.29327 | 2.44.4.0.28676 | Gui.zip and Web Service |
| 44.5 | - | 2.44.5.0.30022(3GB) | 2.44.0.0.26405 | 2.44.5.0.30022 | 2.44.5.0.29976 | Gui.zip, Web Server, DB |
| 44.5 | 1 | 2.44.5.1.30451(3GB) | 2.44.0.0.26405 | 2.44.5.1.30451 | 2.44.5.1.30449 | Gui.zip, Web Server, DB |
| 44.5 | 2 | 2.44.5.2.30705(3GB) | 2.44.0.0.26405 | 2.44.5.1.30705 | 2.44.5.1.30554 | Gui.zip, Web Server, DB |
| **44.6** | **-** | **2.44.6.0.31341(3GB)** | **2.44.0.0.26405** | **2.44.6.0.31341** | **2.44.6.0.31182** | **Gui.zip, Web Server, DB** |

## 8. Resolved Defects

Bugs, Suggested Features and Support Issues resolved in build 2.44.6. The extract is taken from Redmine bug tracking system and only displays defects resolved in 2.44.6.

| Bug # | Priority | Subject | Category | Found Version |
|-------|----------|---------|----------|---------------|
| 11167 | Urgent | Contacts/Demographics info not resetting on changing patients | Scheduling | 2.44.4.3 |
| 11044 | Urgent | Enhance wedge to support when a rad occupies or vacates a primary chair | Interfaces | |
| 11579 | High | Lab Work Request WL (CPOE) - Addendum Signed Bug | Meaningful Use | 2.44.5.0 |
| 11292 | High | RIS incorrectly stores PACS bookmark after logout from PACS | PACS (eRAD) Int - RIS only | 2.44.4.2 |
| 11288 | High | Users can print/preview unsigned reports without permission. | Radiology Reporting | 2.44.2 |
| 11197 | High | Missing access string for new lookup table PrepInstructionType | Access strings | 2.44.5 |
| 11187 | High | Patients that have the same Patient Flag set cannot be merged | Patient Merge | 2.44.5 |
| 11186 | High | Insurance Eligibility - Medicare DBNull parsing error on address line 2 | Insurance Eligibility | 44.4 |
| 11182 | High | Removing Patient Flag and it's corresponding notes only removes the notes | Scheduling | 2.44.5 |
| 10777 | High | CA - Error adding billing codes | Billing | 2.44.4.1.28953 |
| 10748 | High | Error created when trying to do a confirmation on an exam. | Confirmation | 44.2 |
| 11904 | Normal | Next workflow can open the exact same report that was just closed causing exceptions | Radiology Reporting | 2.44.x |
| 11902 | Normal | Closing PowerScribe 360 after initial sync willl require two attempts from RIS to open a report | Powerscribe Integration | 2.44.x |
| 11889 | Normal | Insurance Eligibility - WL Flag calculation is looking at cancelled studies. | Insurance Eligibility | 44.4 |
| 11887 | Normal | Insurance Eligibility - RIS loops updating the c_eligibilityrequest table | Insurance Eligibility | 44.4 |
| 11840 | Normal | Insurance Eligibility - We need to prevent accepting insurances if 3 of the 4 demographics do not match | Insurance Eligibility | 44.4 |
| 11775 | Normal | Same study can be opened multiple times from pending dictation WL | PACS (eRAD) Integration | 2.44.5.2 |
| 11751 | Normal | CD Import - fails to import all images. | | 44.4 |

| 11572 | Normal | Clean up trace table is cost higher db resources than is needed | DB | 2.44.5 |
|---|---|---|---|---|
| 11568 | Normal | Remove collations from database DDL files | DB | 2.44.5 |
| 11557 | Normal | Missing indexes that affect RIS performance | DB | 2.44.5 |
| 11497 | Normal | The 'minutes since cache requested' and 'cached by Name' columns should be synced up to update at the same time | Worklists | 2.44.5.1 |
| 11421 | Normal | billing codes not added for outside reads | Billing | 2.44.5 |
| 11362 | Normal | Height not Required on Scheduling when auto-entered from previous visit as <empty string> | Meaningful Use | 2.44.5 |
| 11346 | Normal | failed to enable constraint error when using the schedule button on the follow up screen | Mammography | 2.44.4.3 |
| 11307 | Normal | Powerscribe closing open report in eRAD RIS | Powerscribe Integration | 2.43.0.6 |
| 11306 | Normal | Waiting for PowerScribe 360 message box is hiding other focused applications | Powerscribe Integration | 2.43 |
| 11305 | Normal | Reporting Radiologist - PowerScribe initial dictation will open PS but not the report to dictate | Powerscribe Integration | 2.44.2 |
| 11304 | Normal | Reporting Radiologist - PowerScribe addendum interuption cases getting mismatched error with RIS | Powerscribe Integration | 44.2 |
| 11303 | Normal | Reporting Radiologist - PowerScribe issues with fix #7908 and #8143 one is reverting the other to fix different issues. | Powerscribe Integration | 44.2 |
| 11267 | Normal | align patient portal v1.0.x db views to RIS release | Connect Portal 4.x | 2.44.5 |
| 11266 | Normal | Missing access string to prevent a voided exam from having the report previewed and printed | Radiology Reporting | 2.44 |
| 7969 | Normal | Reporting Radiology - RTF to CDA converter bolding text when not bolded in source system | Powerscribe Integration | 2.42.1 |
| 6333 | Normal | Attachments Screen:  fails to save for pre-scheduled studies. | Scanning | 1.42 |

# 9. Known Limitations

The following are Bugs Suggested Features and Support Issues found in build 2.44.6. Bugs reported in previous versions are not captured as Known Limitation in this document.

| # | Status | Priority | Subject |
|---|--------|----------|---------|
| 11980 | New | Normal | BI-RADS picker is editable - causes Index out of range error |
| 11978 | New | Normal | Appointment book allows any procedure to be scheduled in a room |
| 11966 | New | Normal | Mammo Biopsies Window - Cancel and ESC Key functionality |
| 11948 | New | Normal | PowerScribe - approving an addendum also saves a 2nd exam that is opened. |
| 11934 | New | Normal | Study/Order locks not clearing on closing multi-orders from Walk-In window |
| 11960 | New | Low | Confirmation - Administered checkbox under Medications is always unchecked (visually) |
| 11937 | New | Low | Error on filtering Calculated Time Severity column (Confirmation/Closed Rooms/Reception WL) |
| 11935 | New | Low | Study/Order locks not clearing on closing multi-orders from Schedule Order>Existing Orders prompt |