User Release Notes

for RADNET rRIS
Version 1.0
Build 26

Table of Contents

1. Purpose

This document describes some of the new features and changes implemented in rRIS as of the end of Sprint 26. This version of rRIS is referred to as Build 1.26.

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 instructions 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 1.26 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

Problem List – Requirement MU 170.302.c

A new data pane was added to the Visit History tab of the Registration data window. The Problem List data pane is a grid view that will display an historical list of "problems" recorded in previous visits.
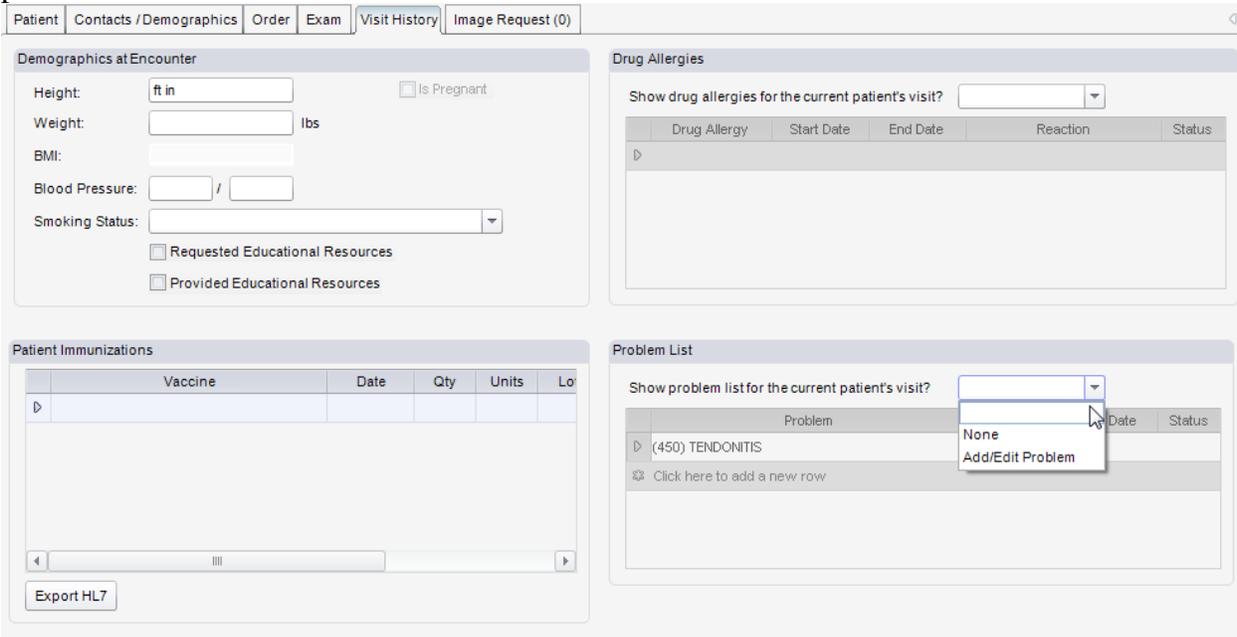
Figure 4.1 – Problem List Grid

The list box has 2 hard coded values of "None" and "Add/Edit Problem". Selecting the Visit History tab, the Problem list grid will be disabled. Selecting "None" will capture the current visit as not having a problem associated with it. Selecting "Add/Edit Problem" will enable the grid. If there is a problem from a previous visit, the user can edit the entry or can add a new problem.

Figure 4.2 – Problem List enabled showing available problems (ICD-9)

Electronic Prescribing (ePrescribing) – Requirement MU 170.304.b

A new button available on the Patient window titled eRx. This button does some data validation to compile an xml message into a format that New Crop requires to get access to their ePrescription application.
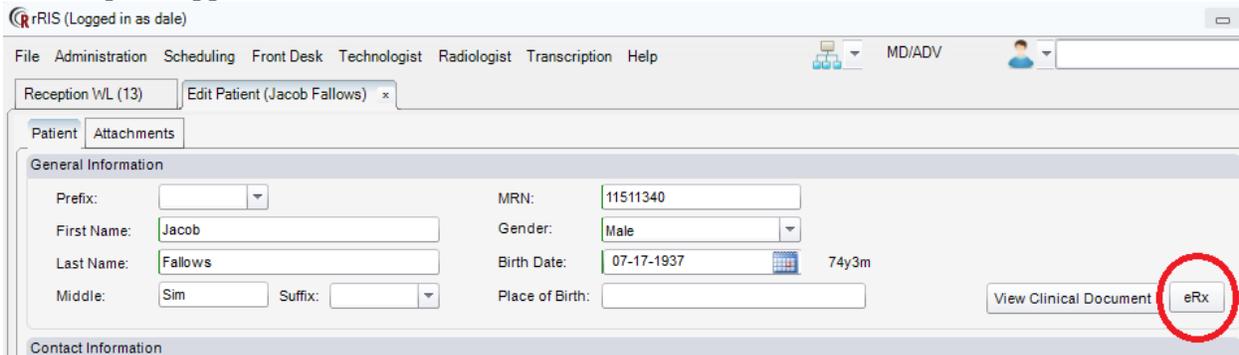
Figure 4.3 – eRx button on patient tab

If the user is not presented with any validation errors a web browser object will launch and they will be logged into the New Crop System and taken directly to their Compose Rx screen. This object will close with the application.
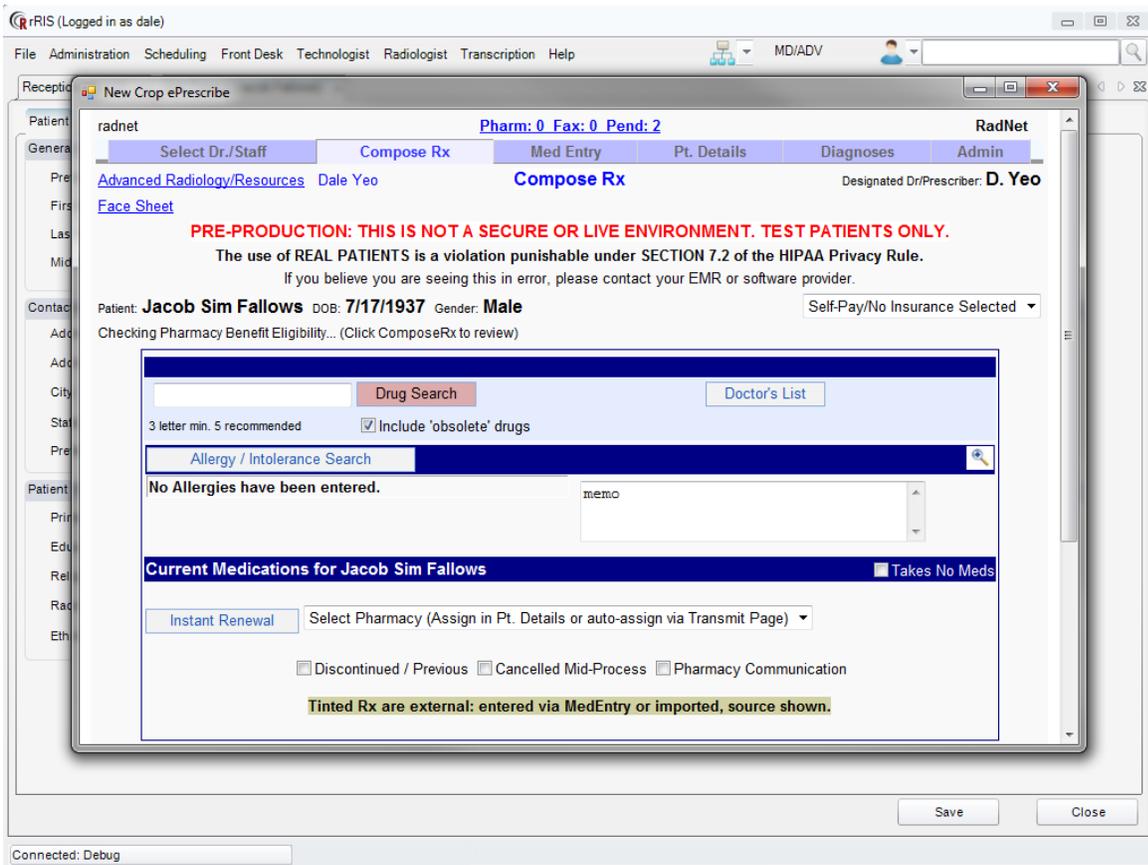
Figure 4.4 – New Crop ePrescribe window

A new field has been added to the personnel editor to capture the DEA# that will need to be completed for the Radiologist to access the New Crop ePrescribe website.
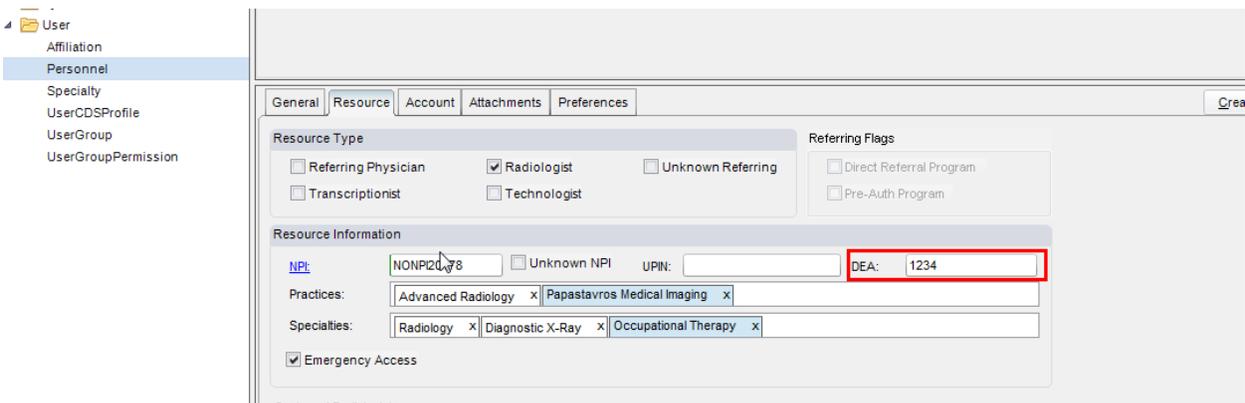
Figure 4.5 – DEA number field in personnel editor

There are 3 types of validation checks
First is to verify ePrescribing the account fields are configured
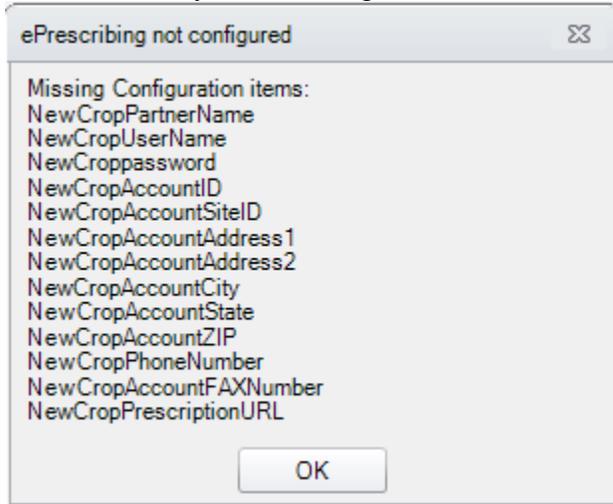
Figure 4.6 – Validation on ePrescribe fields

Second would be for missing information on both patient and practice
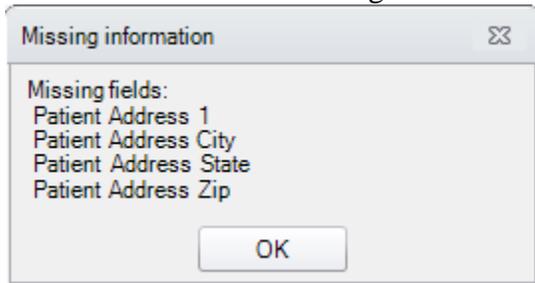
Figure 4.7 – Checks on missing information on patient / practice data

Third check validates information on both patient and practice
1. ?, & and " are not accepted by New Crop
2. State must be a valid 2 digit state
3. Zip must be 5 digits (and 4 if there is a zip extension)
4. Country must be US

Figure 4.8 – Validation on Invalid characters for patient / practice

A new access string was created, and should be granted to the Radiolgist user group

Access String Code	Description	Display Order	Default Access Level Code	Active
Contains: clinical.epre	Contains:	Equals:	Contains:	Contains:
Clinical.ePrescribe	Access ePrescription (eRx)	1	None	Y
Click here to add a new row				

Figure 4.9 – Access String

New system config Code values for New Crop

System Config Code	Value	
Contains: **newc**	Contains:	Conta
NewCropAccountAddress1	77 Evergreen Terrace	
NewCropAccountAddress2	Suite 501	
NewCropAccountCity	Baltimore	
NewCropAccountCountry	US	
NewCropAccountFAXNumber	9027243318	
NewCropAccountID	▮▮▮▮	
NewCropAccountName	▮▮▮▮	
NewCropAccountPhoneNumber	9027243317	
NewCropAccountSiteID	▮▮▮▮	
NewCropAccountState	MD	
NewCropAccountZIP	90210	
NewCropAccountZIPExt		
NewCropPartnerName	▮▮▮▮	
NewCropPassword	▮▮▮▮	
NewCropPrescriptionURL	http://preproduction.newcropaccounts.com/Int...	
NewCropUsername	▮▮▮▮	
Click here to add a new row		

Figure 4.10 – New System config values

Clinical Decision Support – MU Requirement 170.304.e

Alert framework has been added so that an alert message will fire when we meet a certain criteria. We created two alert rules in the application:

1) No Phone number which fires a message if there is no cell, home or work phone entered for a patient.
2) Rule if the modality is a MR and the patient is over 65 to fire the alert.

If both are met for a patient, the alerts will be applied in one message.
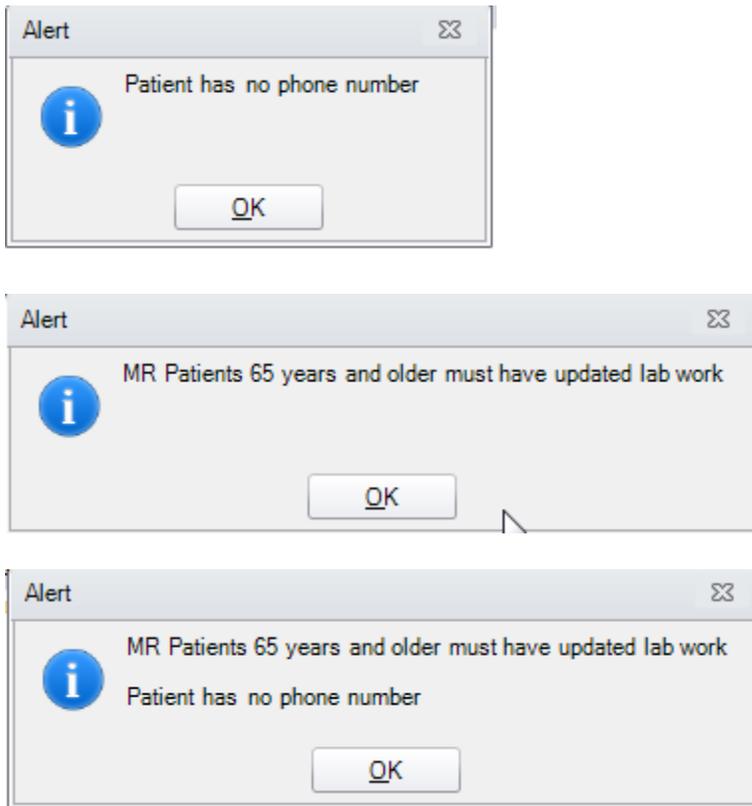
Figure 4.11 – Possible Alert Messages

A new lookup table has also been added to contain the alert codes and messages.

	Alert Configuration Code	Description	Alert Generator	Display Order	Active
General	Contains:	Contains:	Contains:	Equals:	Contai...
AbortedStudyReason					
AccessString					
AddressDescription	▷ GetLabWork	MR Patients 65 years and older must have updated lab w...	MRIPatients65PlusMustHaveLabW...	1	Y
AlertConfiguration	NoPhone	Patient has no phone number	PatientMissingPhoneInfo	2	N

Figure 4.11 – Alert Configuration lookup table

Exchange Clinical Information and Patient Summary Record – MU Requirement 170.304.i

We added a button on the Patient General tab which will allow the user the ability to import a validate CCR or CCD document and display in human readable format.

To successfully show the imported xml file we loaded two xls stylesheets into the resources part of the application for each type CCR.xsl and CDA.xsl. The stylesheet transforms the xml to a html document which we store on the local users workstation where the user is running the application from. After closing the web browser we remove the results file from the users workstation. Finally we do some low level validation when importing the file,

1) We do a quick check to make sure the file location exists on both types and throws an exception error message if one or both don't exists in the location specified.
2) `TODO: remove the results.html file when closing the webbrowers`

We display the SHA-1 value of the imported document (used to verify that the document is not modified by an outside force).

Figure 4.12 – View Clinical Document button

The example below is a sample displaying an imported CCR document opened in rRIS internal web browser.

Continuity of Care Record — Sha-1 Hash: 2DD44E1444A20EABB233B8ED20A19C2F2EFE468A

Continuity of Care Record

Date Created:	Thu Mar 25, 2010 at 01:15 PM UTC-05:00
From:	John Q Doe Jr. MD (Primary Physician)
To:	Long Term Care Facility of America (Long Term Care Facility)
Purpose:	consult/ referral

Patient Demographics

Name	Date of Birth	Gender	Identification Numbers	Address / Phone
John D. Smith	Jul 04, 1960	Male	999999999	355 Maple Street Williamsport, PA17701 +1-570-837-8364

Alerts

Type	Date		Code	Description	Reaction	Source
Allergy	Adverse Event Date:	Jun 27, 1996	416098002 (SNOMED-CT)	**Drug Allergy (disorder)**	Drug-induced hypotension (disorder)	John D. Smith

Problems

Type	Date		Code	Description	Status	Source
Diagnosis	Date Diagnosed:	Sep 16, 2009	44054006 (SNOMED-CT)	**Diabetes mellitus type 2 (disorder)**	Active	
Diagnosis	Date Diagnosed:	May 05, 2002	55822004 (SNOMED-CT)	**Hyperlipidemia (disorder)**	Resolved	John D. Smith
Diagnosis	Date Diagnosed:	Sep 16, 2009	53741008 (SNOMED-CT)	**Coronary arteriosclerosis (disorder)**	Active	John D. Smith
Diagnosis	Date Diagnosed:	Sep 16, 2009	59621000 (SNOMED-CT)	**Essential hypertension (disorder)**	Active	John D. Smith

Medications

Medication	RxNorm Code	Date		Status	Form	Strength	Quantity	SIG	Indications	Instruction	Refills	Source
glyburide (Diabeta)	205875	Date Started:	Sep 16, 2009	Active		2.5 MG		1 tablet PO				John D. Smith
Atorvastatin Calcium	617314	Date Started:	May 05,	Active		10 MG		1 tablet				John D. Smith

Figure 4.13 – Imported Sample CCR document.

Referring Column Added to IVT Work List

In build 1.26 the referring column has been added to the IVT work list. If the patient record is edited and the referrer is changes, the column will reflect this change on the IVT work list. As like other columns, the referring column can be pinned to the left or right or hidden from view.
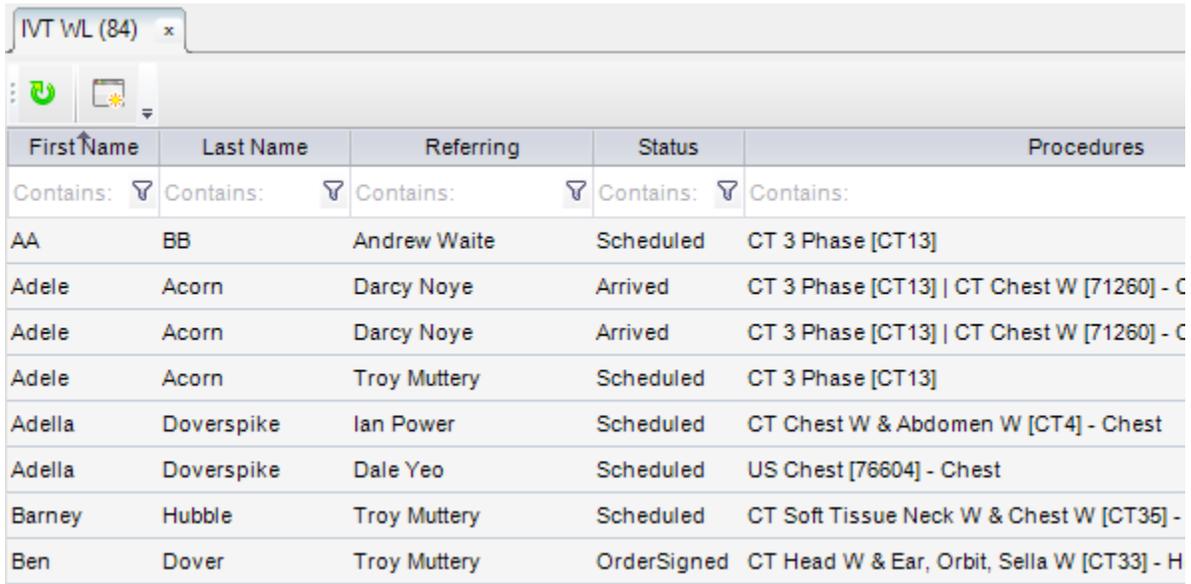
First Name	Last Name	Referring	Status	Procedures
Contains:	Contains:	Contains:	Contains:	Contains:
AA	BB	Andrew Waite	Scheduled	CT 3 Phase [CT13]
Adele	Acorn	Darcy Noye	Arrived	CT 3 Phase [CT13] | CT Chest W [71260] - C
Adele	Acorn	Darcy Noye	Arrived	CT 3 Phase [CT13] | CT Chest W [71260] - C
Adele	Acorn	Troy Muttery	Scheduled	CT 3 Phase [CT13]
Adella	Doverspike	Ian Power	Scheduled	CT Chest W & Abdomen W [CT4] - Chest
Adella	Doverspike	Dale Yeo	Scheduled	US Chest [76604] - Chest
Barney	Hubble	Troy Muttery	Scheduled	CT Soft Tissue Neck W & Chest W [CT35] -
Ben	Dover	Troy Muttery	OrderSigned	CT Head W & Ear, Orbit, Sella W [CT33] - H

Figure 4.14 – Displaying Referring Column on IVT Work List

Removing Study from Procedure Picker Row Must Add Cancel Reason

At the time of Registration on scheduled studies, if the user removes the procedure picker row via the large red ✗ located on the right edge of the picker row, the user will now have to enter a reason for cancelling.
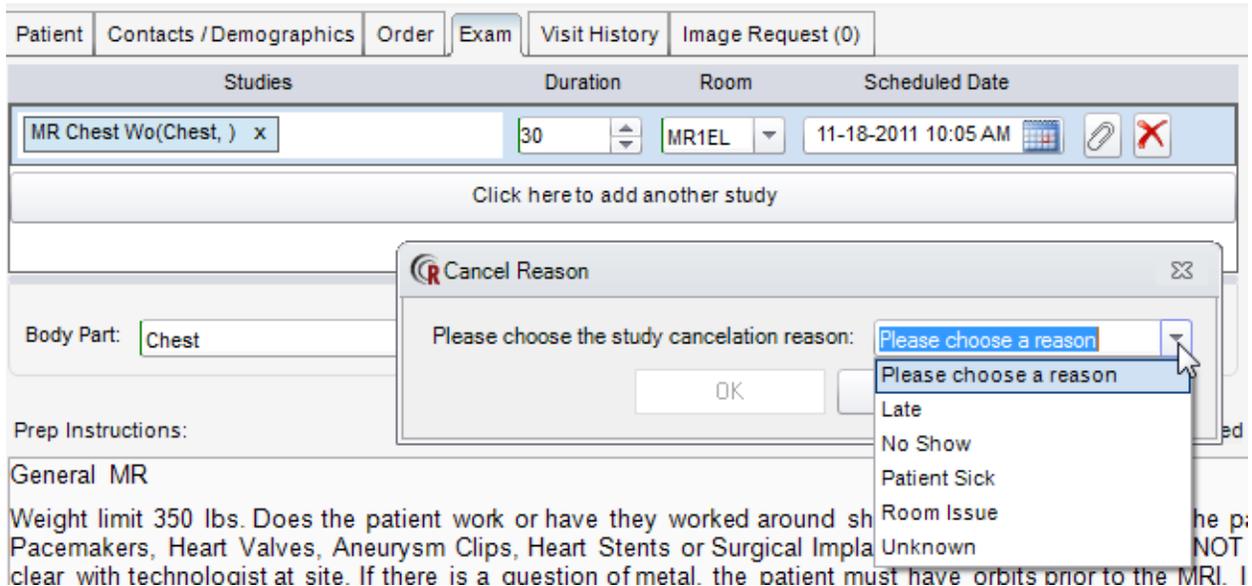

Figure 4.15 – Cancel Reason window opens when removing procedure row.

5. Resolved Defects

Bugs, Suggested Features and Support Issues resolved in build 1.26. The extract is taken from Redmine bug tracking system and only displays defects resolved in 1.26.

#	Status	Tracker	Priority	Subject	Category	Target version	Resolved Version
666	Resolved	Bug	Low	Abort exams window resize issue	Thick Client GUI	1.25	1.26
664	Resolved	Bug	Normal	error searching for appointment time when modality template key is null	Thick Client GUI	1.25	1.26
662	Resolved	Bug	High	schedule start date and performed start date null after billing edit save	Thick Client GUI	1.25	1.26
661	Resolved	Bug	High	Need to be able to edit insurance information on billing exceptions screen	Thick Client GUI	1.25	1.26
635	Resolved	Bug	Normal	Build 1.25 - new color scheme			1.26

6. Known Limitations

The following are Bugs, Suggested Features, and Support Issues found in build 1.26.

#	Status	Subject	Category	Target version
714	New	Permission - Issue with Edit Patient permission	Thick Client GUI	1.26
713	New	Management Reports - Parameter selection is not available when defaults are specified	Thick Client GUI	1.26
712	New	Report History > Show all versions throws error	Thick Client GUI	1.26
711	New	Dictation - Send To throws error	Thick Client GUI	1.26
710	New	Session History Clean up item	Thick Client GUI	1.26
709	New	Dictation / Create Edit reports - Patient Alert pop up not centered	Thick Client GUI	1.26
708	New	Action on Order that has alert criteria throws error	Thick Client GUI	1.26
707	New	Error thrown when cancel selected on reschedule and alert rule configured	Thick Client GUI	1.26
706	New	Patient injury not associated with visit	Thick Client GUI	1.26
694	New	Perform Exam data window mystery list box	Thick Client GUI	1.26
682	New	CPT Modifiers Display	Thick Client GUI	1.26
681	New	Default "Units"	Thick Client GUI	1.26