

# RAPTOR User Manual

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## RAPTOR Clinical Functions

### Worklist Data

The worklist shows all the available orders for a user to protocol. The user can customize the order of the worklist columns to suit their needs.

View mode is for non-clinical users, such as department executive. There are no edits in view mode.

The lock icon is to designate that the record is being worked on. When multiple users are in the system, this visual aide helps to avoid the users duplicating work.

Tracking ID	Patient	Date/Time Desired	Date Ordered	Modality	Study	Urgency	Transport	Patient Category / Location	Anatomy Imaging Subspecialty	Workflow Status	Assignment
987654111	Doe5, John	2013-08-10 @1530	2013-08-05	CT	CT GUIDANCE FOR CYST ASPIRATION S&I	STAT	Transport	Inpatient	Cervical Spine	Active	Open
987654114	Doe3, John	2013-08-07 @1100	2013-08-03	CT	CT GUIDANCE FOR NEEDLE BIOPSY CP	STAT	Transport	Inpatient	Cervical Spine	Active	Open
987654116	Doe4, John	2013-08-07 @1000	2013-08-03	MRI	MRI BRAN WITHOUT CONTRAST	STAT	Transport	Inpatient	Brain	Active	Open
987654118	Doe3, John	2013-08-07 @1000	2013-08-03	NUCLEAR	RADIONUCLIDE ABLATION OF THYROID GLAND FOR THYROID CARCINOMA	STAT	Transport	Inpatient	Radiation Oncology	Active	Open
987654120	Doe5, John	2013-08-08 @1000	2013-08-03	MRI	MAGNETIC IMAGE THORACIC SPINE	STAT	Transport	Outpatient	Thoracic Spine	Active	Open

Figure 1- Worklist Data

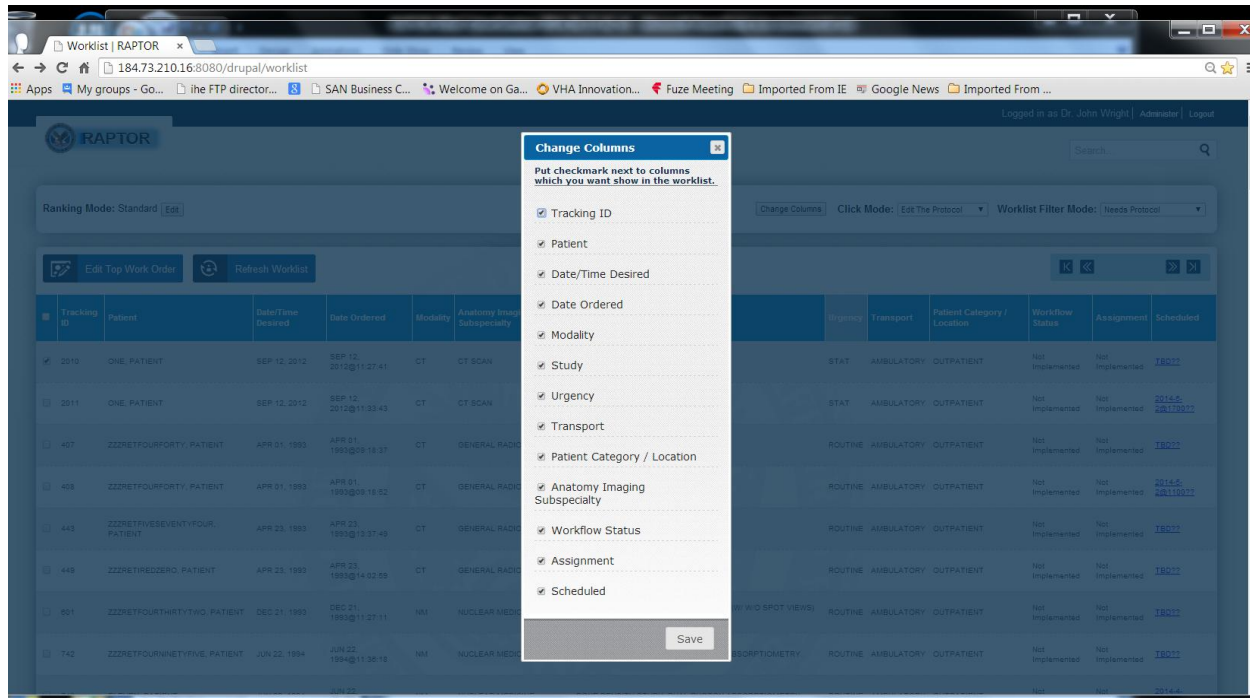


Figure 2 Customize Column Sequence within Worklist

## Pass Box

The Pass Box screen allows the user to assign work, note the status of room scheduling and track utilization. It also allows the user to comment on the cancel/replace status of an order.

---

*NOTE: Pass Box can be used to facilitate the communications between radiologists and schedulers.*

---

## URL

<http://184.73.210.16/RSITE500/raptor/worklist>

## Sample

Below is a sample Pass Box page

**Pass Box for ONEZEROONEONEONESEVEN, PATIENT**

<b>Tracking ID</b>	500-2028	<b>Patient Name</b>	ONEZEROONEONEONESEVEN, PATIENT
<b>Study</b>	CT HEAD W&WO CONT	<b>Patient DOB</b>	01/03/1948
<b>Requested Date</b>	DEC 02, 2013@16:53	<b>Urgency</b>	ROUTINE

Scheduling Details (Not Integrated With Enterprise Scheduling System)

**Location**

[Labs Notified](#) [Nurse Notified](#) [Patient Notified](#) [Provider Note](#) [RM 158](#) [RM 250](#) [RM 255](#) [RM 390](#)

**Event Date**

**Start Time**  [Use Current Time](#) **Duration (minutes)**  [10](#) [15](#) [20](#) [30](#) [45](#) [60](#)

**Confirmed by patient** ☐ No ☒ Yes (2015-07-26 12:07:00)  
Has the patient confirmed this appointment?

Request Cancel Or Replace (Moves In RAPTOR But Does Not Change VISTA Attributes)

**Reason for cancellation or replace order request**   
Select reason for requesting cancellation of this procedure.

**Protocol attention of**   
Suggested for the attention of a specific Resident or Radiologist (Needs Attention)

Figure 3 Pass Box

**Schedule for ZZZRETFFIVESEVENTYFOUR, PATIENT**

<b>Tracking ID</b>	443	<b>Patient Name</b>	ZZZRETFFIVESEVENTYFOUR, PATIENT
<b>Study</b>	CT THORAX W/O CONT	<b>Patient DOB</b>	04/07/1935
<b>Requested Date</b>	APR 23, 1993	<b>Urgency</b>	ROUTINE

**Location**  [RM 120](#) [RM 121](#) [RM 130](#) [RM 155](#) [RM 158](#) [RM 250](#) [RM 255](#) [RM 390](#)

**Event Date**

**Start Time**  **Duration (minutes)**  [10](#) [15](#) [20](#) [30](#) [45](#) [60](#)

**Confirmed by** ☐ No ☒ Yes (2014-08-12 23:09:00)  
Has the patient confirmed this appointment?

**Reason for cancelation (If canceled)**   
Select reason for canceling this procedure.

**Attention of suggestion**   
Suggested for the attention of a specific Resident or Radiologist

**Scheduler Notes**

**Notes contain patient care information?** ☒ No ☐ Yes  
Should system ask Radiologist and Technologist to confirm reading the note?

[Save Settings](#) [Save these Settings and Add Another Schedule Event for Same Ticket](#) [Cancel](#)

Figure 4 Pass Box Calendar Feature

## Protocol Page

The Protocol page allow users to be able to view and select protocol options for the order and links to patient medical history extracted from VistA. The Privileged user can approve, reserve, cancel or replace the order.

*NOTE: The header of the page includes patient and order information. The left side of the page is a dashboard of VistA patient status. The right side of the page is the action space where the Privileged user can enter pre-medication information. The bottom of the page has the workflow buttons.*

## URL

<http://184.73.210.16/RSITE500/raptor/protocol>

## Sample

Below is a sample Protocol Tab.

The screenshot displays the RAPTOR Protocol Tab interface. At the top, a dark blue header bar contains the RAPTOR logo and the text "Logged in as Demo Vehu (Radiologist) | Administer | Logout". Below the header, a yellow box highlights the "Active" status. The main content area is divided into two sections: a patient header table and a medication status table. The patient header table includes fields for Tracking ID, Procedure, Image Type, Requested By, Submit Request To, and Category of Exam. The medication status table includes fields for Med, At Risk?, and Status. Below the medication status table, there are two dropdown menus for selecting protocol names. The first dropdown is labeled "PROTOCOL NAME" and the second is labeled "SECONDARY PROTOCOL NAME".

Tracking ID	Procedure	Image Type	Requested By	Submit Request To	Category of Exam
500-2925	ARTHROGRAM ANKLE S&I	GENERAL RADIOLOGY	PROVIDER.FIVEHUNDREDTHREE	CHEST ROOM	OUTPATIENT

Ordered/Due Date	Requesting Location	Reason for Study	SSN	PCP	Transport	Urgency
APR 21, 2014@09:30 / APR 21, 2014	RADIOLOGY	TEST	666-00-0012	Unknown	AMBULATORY	ROUTINE

Patient Name	Age	Clinical History	DOB	Ethnicity	Attending	Gender
TWELVE, PATIENT	80		04/07/1935	WHITE, NOT OF HISPANIC ORIGIN	Unknown	M

• Age risk  
• Renal risk

Protocol Medications Vitals Allergies Labs Rad Watch Clin rpts Problem List Notes Rad rpts Library

**Medications**

Med	At Risk ?	Status
ASPIRIN TAB,EC	no	Active

(see medications detail )

**Vitals**

**PROTOCOL NAME\***

CT Abdomen and pelvis with IV and oral contrast  
A standard protocol from the hospital's radiology notebook.

**SECONDARY PROTOCOL NAME**

CT Abdomen and pelvis with IV and oral contrast  
Select a second protocol only if more than one is needed for this study.

Figure 5 Protocol Tab - Patient Header, Medication Status, Protocol Name Options

**TWELVE, PATIENT**

**Medications**

Med	At Risk ?	Status
ASPIRIN TAB,EC	no	Active

(see medications detail)

**Vitals**

Date	Vital	Value
03/05/2010 09:00 am	Temperature	98.5 F
03/05/2010 09:00 am	Blood Pressure	134/81 mmHg
08/24/2009 02:00 pm	Height	71 in (180.3 cms)
03/05/2010 09:00 am	Weight	178 lb (80.7 kgs)
03/05/2010 09:00 am	Body Mass Index	25

**PROTOCOL NAME\***

CT Abdomen and pelvis with IV and oral contrast  
A standard protocol from the hospital's radiology notebook.

**SECONDARY PROTOCOL NAME**

CT Abdomen and pelvis with IV and oral contrast  
Select a second protocol only if more than one is needed for this study.

**CONTRAST\***

☐ None

☐ Enteric  CUSTOMIZE

☒ IV  CUSTOMIZE

**RESET**

**CONSENT REQUIRED\***

☒ Unknown

☐ No

☐ Yes

Figure 6 Protocol Tab - Vitals Status, Contrast and Consent Options

**TWELVE, PATIENT**

(see vitals detail)

**Allergies**

Allergy Reactant	Allergy Type	O/H
CHOCOLATE	DRUG, FOOD	
PENICILLIN	DRUG	

(see allergies detail)

**Labs**

RENAL PANEL		
Date	Creatinine	eGFR
03/16/2010 10:23 am	1.3 mg/dL	56 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:21 am	1.1 mg/dL	68 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:20 am	1.3 mg/dL	56 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:18 am	II 1.5 mg/dL II	48 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:17 am	1.2 mg/dL	62 mL/min/1.73 m <sup>2</sup>

(see labs detail)

**Radiology Reports**

Title	Date
CHEST-SINGLE VIEW	04/21/2014 09:29 am
THYROID CA METASTASES IMAGING, LIMITED AREA ONLY	04/18/1994 02:15 am

**HYDRATION\***

☒ None

☐ Oral  CUSTOMIZE

☐ IV

**SEDATION\***

**RADIONUCLIDE\***

**ALLERGY (PATIENT HAS)\***

☐ Unknown ☐ No ☐ Yes

**CLAUSTROPHOBIC (PATIENT IS)\***

☐ Unknown ☐ No ☐ Yes

Figure 7 Protocol Tab - Hydration Options, Allergy, Labs and Radiology Reports Status



**Labs**

RENAL PANEL		
Date	Creatinine	eGFR
03/16/2010 10:23 am	1.3 mg/dL	56 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:21 am	1.1 mg/dL	68 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:20 am	1.3 mg/dL	56 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:18 am	!! 1.5 mg/dL !!	48 mL/min/1.73 m <sup>2</sup>
03/16/2010 10:17 am	1.2 mg/dL	62 mL/min/1.73 m <sup>2</sup>

(see labs detail)

**Radiology Reports**

Title	Date
CHEST-SINGLE VIEW	04/21/2014 09:29 am
THYROID CA METASTASES IMAGING, LIMITED AREA ONLY	04/18/1994 02:15 pm
BONE DENSITY STUDY, DUAL PHOTON ABSORPTIOMETRY	04/15/1994 08:00 am

(see radiology detail)

**TWELVE, PATIENT**

**SEDATION\***

☒ None

☐ Oral

☐ IV

Adavant  
Midazolam  
Valium 10mg PO 20 min before scan  
Other (See protocol notes)

**RADIONUCLIDE\***

☒ None

☐ Enteric

☐ IV

**ALLERGY (PATIENT HAS)\***

☐ Unknown ☒ No ☐ Yes

**CLAUSTROPHOBIC (PATIENT IS)\***

☐ Unknown ☒ No ☐ Yes

Figure 8 Protocol Tab - Sedation, Allergy and Claustrophobic Options

**BONE DENSITY STUDY, DUAL PHOTON ABSORPTIOMETRY** 04/15/1994 08:00 am **TWELVE, PATIENT**

(see radiology detail)

**ALLERGY (PATIENT HAS)\***

☐ Unknown ☒ No ☐ Yes

**CLAUSTROPHOBIC (PATIENT IS)\***

☐ Unknown ☒ No ☐ Yes

**PROTOCOL NOTES BOILERPLATE TEXT HELPERS**

General

Labs Needed Mass Markers On Table Check Unauthorized Provider

Hydration

IV Inpatient IV Outpatient Oral

Premedication

Diphenhydramine Emergency Methylprednisolone Prednisone

**Protocol Notes**

Application/Chief Complaint: R/O abscess, FUO, Abdominal Pain, Diverticulitis, Cancer staging. Image Order: Dome of the diaphragm through the pubic symphysis IV: Scan delay 65 sec.

Figure 9 Protocol Tab – Protocol Notes Boilerplate Text Helpers

**TWELVE, PATIENT**

**CONTRAINDICATIONS NOT REQUIRING ACKNOWLEDGEMENT**

Notification: Age risk

- Patient age of 60 years or older carries increased risk for IV contrast complications. Consider noncontrast exam or alternate imaging modality.

**CONTRAINDICATIONS REQUIRING ACKNOWLEDGEMENT\***

☐ Acknowledgement of Renal risk

- Patient medication use increases risk for IV contrast complications.
- Impaired renal function, consider non-contrast study or alternative imaging modality
- Impaired renal function, consider pre and post-exam hydration for renal protection if IV contrast will be administered.
- Impaired renal function, consider reduced dose of IV contrast if IV contrast will be administered

☐ Acknowledgement of Age risk

- Patient is over age 60

Figure 10 Protocol Tab - Contraindications Requiring Acknowledgement

## Medication Tab

The Medication Tab allows users to be able to view the status of known medications the patient is taking extracted from VistA patient record information. This table can be sorted, searched and expanded by the user.

*NOTE: At-risk medication is searched and visually highlighted when matched to the medications list.*

## Sample

Below is a sample Medication Tab

Protocol Medications Vitals Allergies Labs Rad Watch Clin rpts Problem List Notes Rad rpts Library

Searched for at risk meds: Aldesleukin, Aspirin, Avandamet, Clopidogrel, Coumadin, Dalteparin, Enoxaparin, Fragmin, Glucophage, Glucovance, Heparin, Lovenox, Metaglys, Metformin, Plavix, Proleukin, Sample, Warfarin

Show  entries

Search:

Medication	At Risk ?	Status
ASPIRIN TAB,EC	no	Active

Showing 1 to 1 of 1 entries

[Back to Protocol](#)

Previous  Next

Figure 11 Medication Tab

## Vitals Tab

The Vitals Tab allow users to be able to view the status of key vital signs taken from all recorded patient encounters stored in VistA. This table can be sorted, searched and expanded by the user.

*NOTE: The temperature and pulse is graphed to assist the user to understand the condition of the patient.*

## Sample

Below is a sample Vitals Tab

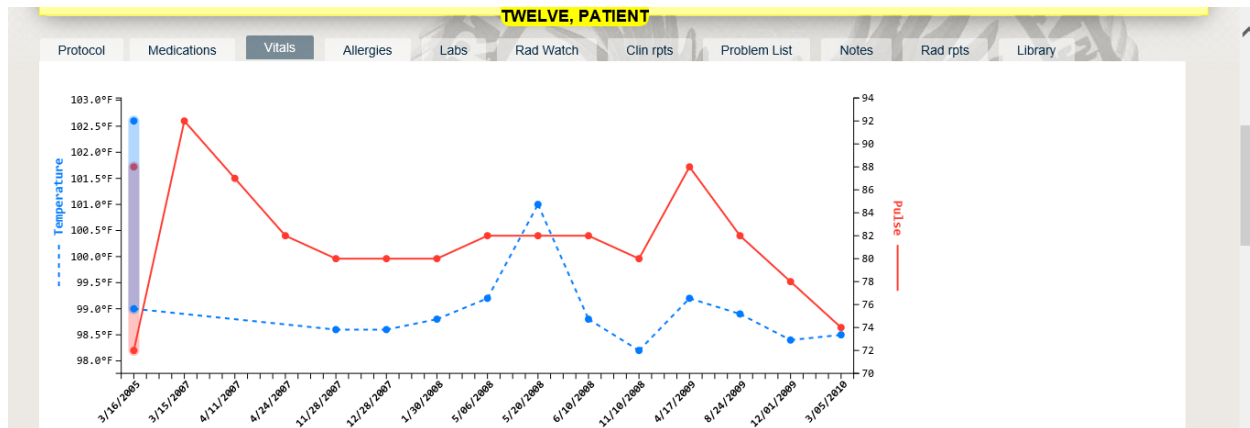


Figure 12 Vitals Tab Graphical Display

TWELVE, PATIENT												
Show 10 entries		Search:										
Date	Temp	Height	Weight	BMI	Blood Pressure	Pulse	Resp	Pain	C/G	Pox	CVP	Blood Glucose
03/05/2010 09:00 am	98.5 F		178 lb (80.7 kg)	25	134/81 mmHg	74 /min		1				
12/01/2009 08:53 am	98.4 F		182 lb (82.6 kg)	25	143/87 mmHg	78 /min		2		98 % SpO2		
08/24/2009 02:00 pm	98.9 F	71 in (180.3 cm)	190 lb (86.2 kg)	27	154/90 mmHg	82 /min	18 /min	6		97 % SpO2		
04/17/2009 12:00 pm	99.2 F		185 lb (83.9 kg)	26	143/90 mmHg	88 /min	17 /min	4		97 % SpO2		
11/10/2008 08:00 am	98.2 F		180 lb (81.6 kg)	25	135/86 mmHg	80 /min	18 /min	2		97 % SpO2		
06/10/2008 11:00 am	98.8 F	71 in (180.3 cm)	172 lb (78 kg)	24	124/80 mmHg	82 /min		0		98 % SpO2		
05/20/2008 11:00 am	101 F	71 in (180.3 cm)	170 lb (77.1 kg)	24	158/104 mmHg	82 /min		3		98 % SpO2		
05/06/2008 10:00 am	99.2 F	71 in (180.3 cm)	174 lb (78.9 kg)	24	156/96 mmHg	82 /min		3		98 % SpO2		
01/30/2008 11:00 am	98.8 F				145/94 mmHg	80 /min		2		98 % SpO2		

Figure 13 Vital Tab - Table Display

## Allergy Tab

The Allergy Tab allows users to be able to view the status of known allergies the patient has based on extracted VistA patient record information. This table can be sorted, searched and expanded by the user.

---

*NOTE: A short list of patient's allergies is displayed on the protocol page and a full list is displayed on the allergy page.*

---

## Sample

Below is a sample Allergy Tab

Date Reported	Item	Causative Agent	Signs/Symptoms	Observed/Historical
12/17/2007	CHOCOLATE	DRUG, FOOD	DIARRHEA	
03/20/2005	PENICILLIN	DRUG	ITCHING, WATERING EYES	

Showing 1 to 2 of 2 entries

[Back to Protocol](#)

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Figure 14 Allergy Tab

## Laboratory (Labs) Tab

The Labs Tab allows users to be able to view the status of key laboratory test results extracted from VistA patient record information. This table can be sorted, searched and expanded by the user. Creatinine values out of reference range are visually highlighted.

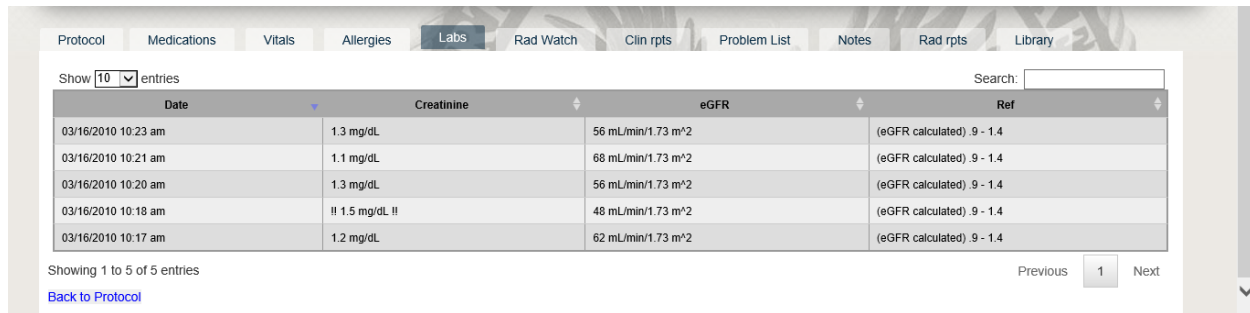
---

*NOTE: A patient's eGFR is calculated and graphed to assist the user to understand the condition of the patient.*

---

## Sample

Below is a sample Lab Table



The screenshot shows the 'Labs' tab in the RAPTOR interface. At the top, there are navigation tabs: Protocol, Medications, Vitals, Allergies, Labs (selected), Rad Watch, Clin rpts, Problem List, Notes, Rad rpts, and Library. Below the tabs, there is a 'Show 10 entries' dropdown and a search bar. The main content is a table with four columns: Date, Creatinine, eGFR, and Ref. The table contains five rows of data. Below the table, it says 'Showing 1 to 5 of 5 entries' and has 'Previous', '1', and 'Next' buttons. A 'Back to Protocol' link is at the bottom left.

Date	Creatinine	eGFR	Ref
03/16/2010 10:23 am	1.3 mg/dL	56 mL/min/1.73 m <sup>2</sup>	(eGFR calculated) 9 - 1.4
03/16/2010 10:21 am	1.1 mg/dL	68 mL/min/1.73 m <sup>2</sup>	(eGFR calculated) 9 - 1.4
03/16/2010 10:20 am	1.3 mg/dL	56 mL/min/1.73 m <sup>2</sup>	(eGFR calculated) 9 - 1.4
03/16/2010 10:18 am	!! 1.5 mg/dL !!	48 mL/min/1.73 m <sup>2</sup>	(eGFR calculated) 9 - 1.4
03/16/2010 10:17 am	1.2 mg/dL	62 mL/min/1.73 m <sup>2</sup>	(eGFR calculated) 9 - 1.4

Figure 15 Lab Tab

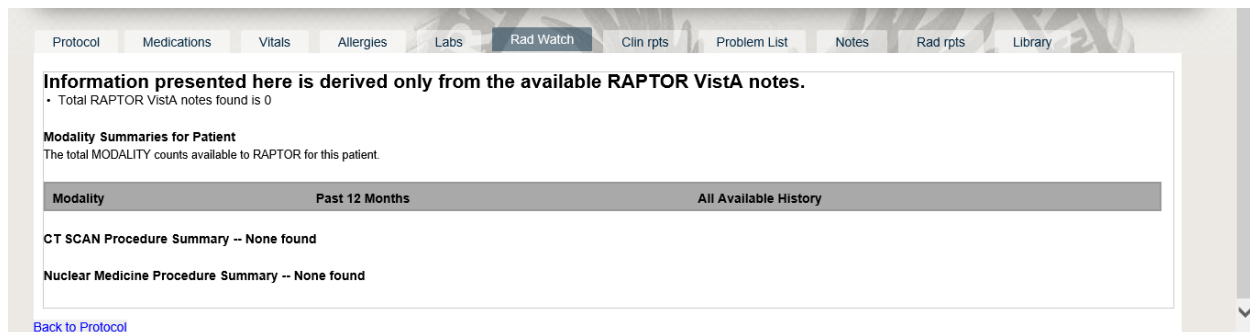
## Rad Watch Tab

The Rad Watch Tab provides a summarized history of the radiology tests performed on the patient in order to conduct radiation exposure surveillance for patient safety. This tab can be sorted, searched and expanded by the user.

*NOTE: Rad Watch summarizes historical RAPTOR notes for patients.*

## Sample

Below is a sample Rad Watch Tab.



The screenshot shows the 'Rad Watch' tab in the RAPTOR interface. At the top, there are navigation tabs: Protocol, Medications, Vitals, Allergies, Labs, Rad Watch (selected), Clin rpts, Problem List, Notes, Rad rpts, and Library. Below the tabs, there is a message: 'Information presented here is derived only from the available RAPTOR VistA notes.' followed by a bullet point: 'Total RAPTOR VistA notes found is 0'. Below this is a section titled 'Modality Summaries for Patient' with the text 'The total MODALITY counts available to RAPTOR for this patient.' Below this is a table with three columns: Modality, Past 12 Months, and All Available History. Below the table, there are two sections: 'CT SCAN Procedure Summary -- None found' and 'Nuclear Medicine Procedure Summary -- None found'. At the bottom left, there is a 'Back to Protocol' link.

Modality	Past 12 Months	All Available History
CT SCAN Procedure Summary	None found	None found
Nuclear Medicine Procedure Summary	None found	None found

Figure 16 Rad Watch Tab

## Clin Reports Tab

The Clin Reports Tab displays the information extracted from the VistA patient record that pertains to clinical services and procedures such as Pathology and Surgery reports. These tables can be sorted, searched and expanded by the user.

*NOTE: Users can search for note contents via the search box in the upper right corner of each table.*

## Sample

Below is a sample Clinical Reports Tab.

The screenshot displays the 'Clinical Reports' tab in the software interface. At the top, a navigation bar includes tabs for Protocol, Medications, Vitals, Allergies, Labs, Rad Watch, Clin rpts (selected), Problem List, Notes, Rad rpts, and Library. Below this, the 'Pathology Reports' section is active, showing a table with columns for Title, Date, and Details. A single entry is visible: 'Surgical Pathology Report' with 'No Date' and 'TISSUE'. Below the table, it indicates 'Showing 1 to 1 of 1 entries' and provides 'Previous' and 'Next' navigation buttons. The 'Surgery Reports' section is also visible, showing a table with columns for Title, Date, and Details. A single entry is visible: 'LEFT INGUINAL HERNIA REPAIR WITH MESH' with '12/31/1969 07:00 pm' and 'LOCAL TITLE: OPERATION REPORT ...'. Below this table, it also indicates 'Showing 1 to 1 of 1 entries' and provides 'Previous' and 'Next' navigation buttons. A 'Back to Protocol' link is located at the bottom left of the Surgery Reports section.

Figure 17 Clinical Report Tab - Report List

This screenshot shows a detailed view of a 'Surgery Report' from the 'Clinical Reports' tab. The report is titled 'LEFT INGUINAL HERNIA REPAIR WITH MESH' and dated '12/31/1969 07:00 pm'. The 'Details' column contains the following information:

- LOCAL TITLE: OPERATION REPORT
- DATE OF NOTE: DEC 08, 2006@07:30 ENTRY DATE: DEC 08, 2006@14:15:56
- SURGEON: PROVIDER, ONE ATTENDING: TDPROVIDER, ONE
- URGENCY: STATUS: COMPLETED
- SUBJECT: Case #: 10018
- SURGEON: PROVIDER, ONE
- 1ST ASST: PROVIDER, TWO
- ATTENDING: TDPROVIDER, ONE
- PROCEDURE: LEFT INGUINAL HERNIA REPAIR WITH MESH
- HISTORY: Essentially patient underwent preop evaluation for left inguinal mass noted since September 2004. Recently PT became more symptomatic with increased size and tenderness. Patient denied any history of melena or bloody stools. Denied a history of constipation or diarrhea. No recent fevers or chills. He was admitted on December 7, 2006, for an elective left inguinal hernia repair.
- SUMMARY OF PROCEDURES: After consent was obtained, the patient was prepped and draped in sterile fashion. Lidocaine 1% was used to anesthetize the skin and a 5-cm incision was made in the left groin. The skin and subcu was dissected down to the external oblique fascia. The fascia was incised to the external ring and the spermatic cord and all its contents were isolated with a Potts bag. The hernia was

Figure 18 Clinical Reports - Surgery Report

## Problem List Tab

The Problem List Tab provides a list of the clinical problems extracted from the VistA patient record. This table can be sorted, searched and expanded by the user.

*NOTE: Users can search for note contents via the search box in the upper right corner of the table.*

## Sample

Below is a sample Problem List tab.

Title	Onset Date	Details
Hyperlipidemia	04/07/2005 12:00 am	Hyperlipidemia
Hypertension	04/07/2005 12:00 am	Hypertension
Acute myocardial infarction, unspecified...	03/17/2005 12:00 am	Acute myocardial infarction, unspecified...
Chronic Systolic Heart failure	03/09/2004 12:00 am	Chronic Systolic Heart failure
Diabetes Mellitus Type II or unspecified	12/07/1997 12:00 am	Diabetes Mellitus Type II or unspecified

Showing 1 to 5 of 5 entries

[Back to Protocol](#)

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Figure 19 Problem List Tab

Title	Onset Date	Details
Hyperlipidemia	04/07/2005 12:00 am	<p>Type of Note: Problem</p> <p>Provider Narrative: Hyperlipidemia</p> <p>Note Narrative:</p> <p>Status: A</p> <p>Observer: ZZVEHU, ONEHUNDRED</p> <p>Comment:</p> <p>Facility: CAMP MASTER</p>
Hypertension	04/07/2005 12:00 am	Hypertension
Acute myocardial infarction, unspecified...	03/17/2005 12:00 am	Acute myocardial infarction, unspecified...
Chronic Systolic Heart failure	03/09/2004 12:00 am	Chronic Systolic Heart failure
Diabetes Mellitus Type II or unspecified	12/07/1997 12:00 am	Diabetes Mellitus Type II or unspecified

Showing 1 to 5 of 5 entries

Previous 1 Next

Figure 20 Problem List - Problem Details

## Notes Tab

The Notes Tab provides a list and details of the notes extracted from the VistA patient record. This table can be sorted, searched and expanded by the user.

*NOTE: By default, the most recent 10 table entries are displayed. The user can display additional entries by selecting the desired number of entries in the upper left hand corner of the table.*

## Sample

Below is a sample Notes Tab.

Title	Date	Details
ADVANCE DIRECTIVE COMPLETED	05/16/2007 09:59 am	ADVANCE DIRECTIVE COMPLETED
AUDIOLOGY - HEARING LOSS CONSULT	04/01/2004 11:12 pm	AUDIOLOGY - HEARING LOSS CONSULT
GENERAL MEDICINE NOTE	03/31/2004 03:22 pm	GENERAL MEDICINE NOTE
DIABETES	03/31/2004 12:11 pm	DIABETES
Zzcamper02	05/23/2001 03:50 am	Zzcamper02
21 DAY CERTIFICATION	05/23/2001 03:49 am	21 DAY CERTIFICATION
ADVANCE DIRECTIVE	10/18/2000 04:04 pm	ADVANCE DIRECTIVE
ADVANCE DIRECTIVE	10/18/2000 04:04 pm	ADVANCE DIRECTIVE
CRISIS NOTE	05/21/2000 12:04 pm	CRISIS NOTE
CRISIS NOTE	05/21/2000 11:56 am	CRISIS NOTE

Showing 1 to 10 of 14 entries

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Figure 21 Notes Tab - List of Notes

Title	Date	Details
ADVANCE DIRECTIVE COMPLETED	05/16/2007 09:59 am	<p>Type of Note: ADVANCE DIRECTIVE COMPLETED</p> <p>Author:</p> <p>Note Text: LOCAL TITLE: ADVANCE DIRECTIVE COMPLETED STANDARD TITLE: ADVANCE DIRECTIVE DATE OF NOTE: MAY 16, 2007@09:59 ENTRY DATE: MAY 16, 2007@09:59:21 AUTHOR: ZZLABTECH,FIFTYNINE EXP COSIGNER: URGENCY: STATUS: COMPLETED</p> <p>VistA Imaging - Scanned Document</p> <p>/es/ GuE?dW02[_hw&amp;])</p> <p>Signed: 05/16/2007 09:59</p> <p>Facility:</p>
AUDIOLOGY - HEARING LOSS CONSULT	04/01/2004 11:12 pm	AUDIOLOGY - HEARING LOSS CONSULT
GENERAL MEDICINE NOTE	03/31/2004 03:22 pm	GENERAL MEDICINE NOTE
DIABETES	03/31/2004 12:11 pm	DIABETES
Zzcamper02	05/23/2001 03:50 am	Zzcamper02

Figure 22 Notes Tab - Notes Detail

## Radiology Reports Tab

The Radiology Reports Tab provides a list and details of the radiology reports extracted from the VistA patient record. This table can be sorted, searched and expanded by the user.



*NOTE: When an image thumbnail is displayed, an image may be selected to view with an embedded viewer.*

## URL

[http://184.73.210.16/RSITE500/raptor/protocol?rawrtid=\[2028\]](http://184.73.210.16/RSITE500/raptor/protocol?rawrtid=[2028])

## Sample

Below is a sample Radiology Reports Tab.

Title	Date	Details	Existing Images
CHEST-SINGLE VIEW	04/21/2014 09:29 am	<a href="#">CHEST-SINGLE VIEW...</a>	No Images Available
THYROID CA METASTASES IMAGING, LIMITED AREA ONLY	04/18/1994 02:15 pm	<a href="#">THYROID CA METASTASES IMAGING, LIMITED A...</a>	No Images Available
BONE DENSITY STUDY, DUAL PHOTON ABSORPTIOMETRY	04/15/1994 08:00 am	<a href="#">BONE DENSITY STUDY, DUAL PHOTON ABSORPTI...</a>	No Images Available

Showing 1 to 3 of 3 entries

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Figure 23 Radiology Report List

Title	Date	Details	Existing Images
CHEST-SINGLE VIEW	04/21/2014 09:29 am	<p>Procedure Name: CHEST-SINGLE VIEW</p> <p>Report Status: No Report</p> <p>CPT Code:</p> <p>Reason For Study:</p> <p>Clinical HX:</p> <p>Impression:</p> <p>Report: CHEST-SINGLE VIEW</p> <p>Proc Ord: ARTHROGRAM ANKLE S&amp;I Exm Date: APR 21, 2014@09:29 Req Phys: PROVIDER.FIVEHUNDREDTHREE Pat Loc: RADIOLOGY (Req'g Loc) Img Loc: MAIN FLOOR Service: Unknown</p> <p>(Case 53 WAITING ) CHEST-SINGLE VIEW (RAD Broad ) CPT: Reason for Study: TEST</p>	No Images Available

Figure 24 Radiology Report Details

Tracking ID	Case ID	Procedure	Image Type	Requested By	Patient Location	Category of Exam
2010	Not Implemented	CT ABDOMEN W/O CONT	CT SCAN	ZZLABTECH.FORTYEIGHT		OUTPATIENT
Ordered/Due Date	Patient Category/Location	Reason for Study	SSN	PCP	Transport	Urgency
SEP 12, 2012@11:27:41	Inpatient		666-00-000	Unknown		STAT
Patient Name	Age	Clinical History	DOB	Ethnicity	Attending	Gender
ONE, PATIENT	79		04/07/1935	BLACK, NOT OF HISPANIC ORIGIN	Unknown	M

Protocol Medications Vitals Allergies Labs Dose Hx Clin rpts Problem List Notes **Rad rpts** Library

Figure 25 Radiology Report - X-ray Image

### Library Tab

The Library Tab provides a list and details of Radiology protocol procedure documentation in electronic format, which has been provided by the Radiology Department for reference when conducting the ordered study for the patient. This table can be sorted, searched and expanded by the user.

---

*NOTE: Each entry can be selected from the library. This selection is populated on the protocol page.*

---

### Sample

Below is a sample Library Tab.

ONEZEROONEONEONESEVEN, PATIENT

Protocol	Medications	Vitals	Allergies	Labs	Rad Watch	Clin rpts	Problem List	Notes	Rad rpts	Library
----------	-------------	--------	-----------	------	-----------	-----------	--------------	-------	----------	---------

Show 10 entries

Search:

Short Name	MS	Select Protocol for Order	Long Name	Modality	Radiation Dose	Consent Required	Keywords	Hydration Settings	Sedation Settings	Contrast Settings	Radionuclide Settings
RPID159	8	<a href="#">select</a>	CT HEAD-POSTERIOR FOSSA (3mm) with Contrast (axial) A	CT	None found	unknown	1. HEAD, NEURAL			• Ultravist 300	
RPID160	8	<a href="#">select</a>	CT HEAD-POSTERIOR FOSSA (3mm) Non-Contrast (axial) B	CT	None found	yes	1. HEAD, NEURAL	• 500cc H2O over 2hr pre-scan + post-scan			
RPID22	8	<a href="#">select</a>	CT HEAD Non-Contrast (axial)	CT	None found	yes	1. HEAD, NEURAL	• 500cc H2O over 2hr pre-scan + post-scan			

Figure 26 Library Tab - List and Links to Radiology Protocol Procedures

### Contraindication Alerts

Contraindication alerts are displayed once the patient is selected. Alerts are viewed on the Protocol page in the yellow frame at the top of the tab and at the bottom of the page under the **"CONTRAINDICATIONS REQUIRING ACKNOWLEDGEMENT"**.

---

*NOTE: Users can view the Contraindications engine in the Admin area. Alerts must be acknowledged to move the workflow forward.*

---

### Sample

Below is a sample of Contraindication alerts, highlighted in the in yellow region of this screen.

The screenshot shows the RAPTOR web application interface. At the top, there is a header with the RAPTOR logo and a user status bar indicating 'Logged in as Demo User (Radiologist) | Administer | Logout'. Below the header, there is a table displaying patient information and a yellow alert box for contraindication alerts.

Tracking ID	Procedure	Image Type	Requested By	Submit Request To	Category of Exam
500-2028	CT HEAD W&WO CONT	CT SCAN	DOCTOR, ONE	CT SCAN	OUTPATIENT

Ordered/Due Date	Requesting Location	Reason for Study	SSN	PCP	Transport	Urgency
DEC 02, 2013@16:53 / 2015-07-26 12:06:00	PRIMARY CARE	Stroke	666-00-1059	Unknown	AMBULATORY	ROUTINE

Patient Name	Age	Clinical History	DOB	Ethnicity	Attending	Gender
ONEZEROONEONEONESEVEN, PATIENT	67		01/03/1948		Unknown	F

- Age risk
- Renal risk
- Duplicate order risk

Below the alert box, there is a navigation bar with tabs: Protocol, Medications, Vitals, Allergies, Labs, Rad Watch, Clin rpts, Problem List, Notes, Rad rpts (selected), and Library. Below the navigation bar, there is a search bar and a table with columns: Title, Date, Details, and Existing Images. The table currently displays 'No data available in table'.

Figure 27 Contraindication Alerts

## Timer Warning

Timer Warnings will be displayed at the worklist to notify the user to confirm if they want to remain logged into the system before being automatically logged off.

---

*NOTE: The user can select addition time when the warning is displayed, "Yes, keep me signed in".*

---

## Sample

Below is a sample of a Timer Warning outlined in the red-lined box.

The screenshot shows the RAPTOR web application interface. At the top, a browser window displays the URL <http://184.73.210.16/RSite500/RAPTOR/protocol?rawtid=12375>. The application header includes the RAPTOR logo and a status bar indicating "You will be logged out in 104 seconds" with options to "Yes, keep me signed in" or "No, sign me out".

Below the header, a table displays patient and study information:

Tracking ID	Procedure	Image Type	Requested By	Submit Request To	Category of Exam
500-2375	CT THORAX W/O CONT	CT SCAN	PROVIDER,SEVENTYFIVE	CT SCAN	OUTPATIENT

Additional fields include: Ordered/Due Date (DEC 02, 2013 @ 17:15 / DEC 10, 2012), Requesting Location (PRIMARY CARE), Reason for Study (Hypertension), SSN (666-00-109), PCP (Unknown), Transport (AMBULATORY), Urgency (ROUTINE), Patient Name (ONEZEROONEONEFIVEONE, PATIENT), Age (67), Clinical History, DOB (01/03/1948), Ethnicity, Attending (Unknown), and Gender (M).

A yellow warning box highlights the following risks:

- Duplicate order risk
- Age risk

Below the warning box, a tabbed interface shows various sections: Protocol, Medications, Vitals, Allergies, Labs, Dose Hx, Clin rpts, Problem List, Notes, Rad rpts, and Library. The "Library" tab is selected, displaying a list of protocols with columns for Short Name, MS, Select Protocol for Order, Long Name, Modality, Consent Required, Keywords, Hydration Settings, Sedation Settings, Contrast Settings, and Radionuclide Settings.

Short Name	MS	Select Protocol for Order	Long Name	Modality	Consent Required	Keywords	Hydration Settings	Sedation Settings	Contrast Settings	Radionuclide Settings
WAV042	2	select	CT NECK ANGIOGRAPHY (CTA) (helical), plus HEAD with and without Contrast (axial)	CT	yes	1. NECK 2. HEAD	• 500cc H2O over 2hr pre-scan + post-scan			
WAV044	2	select	CT NECK, ORAL, CAVITY, LARYNX, THYROID, without & with CONTRAST	CT	yes	1. CAVITY, LARYNX, NECK, ORAL, THROAT, THYROID	• 500cc H2O over 2hr pre-scan + post-scan			
RPID39	1	select	CT NECK with Contrast (helical)	CT	unknown	1. NECK	• 500cc H2O over 2hr pre-scan + post-scan		• Ultravist 300	
RPID66	1	select	CT NECK ANGIOGRAPHY (CTA) (helical) only	CT	unknown	1. NECK	• 500cc H2O over 2hr pre-scan + post-scan		• Isovue 370	
WAV037	1	select	CT LARYNX TUMOR with Contrast (helical) and axial	CT	yes	1. LARYNX, NECK, THROAT	• 500cc H2O over 2hr pre-scan + post-scan		• ProHance	

Figure 28 Timer Warning

## Collaboration Feature

The Collaboration feature can enable the user to request or recommend a peer-to-peer collaboration effort for the study in question.

---

*NOTE: Collaboration allows the ability to assign a protocol. The collaboration request note is required.*

---

## Sample

Below is a sample of a Collaboration request.

**Request Collaboration**

Total of 10 users are available for collaboration

Show  entries

Search:

Name	Role	Modality Specialties	Anatomy Specialties	Phone	Email
<input type="radio"/> Dr. Fresno Radiologist PhD	Radiologist	CT MR	BODY HEAD NM		
<input type="radio"/> Dr. Innovations Radiologist	Radiologist	CT	HEAD		
<input type="radio"/> Dr Portland Radiologist	Radiologist		CHEST MR		
<input type="radio"/> Dr Tucson Radiologist PhD	Radiologist	CT IR MR US	CT THORAX		
<input type="radio"/> Dr Seattle Radiologist	Radiologist	CT MR US	HEAD LEG THORAX	202-123-4567	radiologist@va.gov

Showing 1 to 5 of 5 entries (filtered from 10 total entries)

Previous  Next

**Collaboration Request Notes**

Figure 29 Collaboration Request

**Radiology Reports**

**ONEZEROONEONEONESEVEN, PATIENT**

**Title** **Date**

(see radiology detail)

2015-07-26 12:07:00 Scheduler (07/26/2015@12:06)

Assigned a suggested collaborator Wolff's law – increase in bone stress shifts balance to greater bone production due to microfractures.

2015-07-26 12:07:47 Collaboration request from Dr Seattle Radiologist

Needs Attention

**CONTRAINDICATIONS REQUIRING ACKNOWLEDGEMENT\***

☐ Acknowledgement of Duplicate order risk

▪ Please review potential duplicate studies in the worklist.

☐ Acknowledgement of Age risk

▪ Patient is over age 60

Figure 30 Collaboration Request Status

## Ready for Examination Worklist Filter Mode

Once approved by a privileged user, the protocol is ready for examination.

*NOTE: Technologists are entered into Ready for Examination mode by default.*

## Interpretation Worklist Filter Mode

The Interpretation Worklist is populated by protocols that have been examined. The radiologists can review and make notes regarding the work and then create the RAPTOR notes.

---

*NOTE: RAPTOR creates two notes, the complete protocol workflow and the safety checklist note. This checklist can be used to respond to Joint Commission audits.*

---

## QA Worklist Filter Mode

The QA worklist can be used by the privileged users to note the quality of protocoling workflow.

---

*NOTE: The ability to manage the QA criteria is described in the Manage Lists, Edit QA Criteria section of the Users Manual.*

---

## Needs Cancel Replace Worklist Filter Mode

The needs cancel/Replace worklist can be used by the privileged user (in example, the OREMAS key) to display orders that need to be canceled.

---

*NOTE: Technologists are entered into Ready for Examination mode by default.*

---

Tracking ID	Patient	Date Desired	Date Ordered	Modality	Image Type	Study	Urgency	Patient Category / Location	Workflow Status	Assignment	#P Pass Box
2028	ONEZEROONEONEONESEVEN.PATIENT	JAN 12, 2012	DEC 02, 2013@16:53	CT	CT SCAN	CT HEAD W&WO CONT	ROUTINE	OUTPATIENT	Needs Cancel/Replace		13 Cancel requested 2015-09-30 09:33:00 See Notes...
2051	ONEZEROONEONEONESEVENTWO.PATIENT	JAN 12, 2012	DEC 02, 2013@16:53	CT	CT SCAN	CT HEAD W&WO CONT	ROUTINE	OUTPATIENT	Needs Cancel/Replace		16 Unknown

Showing 1 to 2 of 2 entries (filtered from 918 total entries)

Figure 31- Needs Cancel/Replace Worklist

## Revision History

When	Who	Description
<b>August 2015</b>	SAN	Initial draft.
<b>September 2015</b>	SAN	Updated draft.