

# HALIFAX HEALTH



**Live your life well.**

[halifaxhealth.org](http://halifaxhealth.org)

# **RADIOLOGY**

## ***NEW* IMAGE & REPORT VIEWER**

### **PACS ZDA**



**(Zero Download Ambassador)**

January 2015

# WHAT is ZDA ?

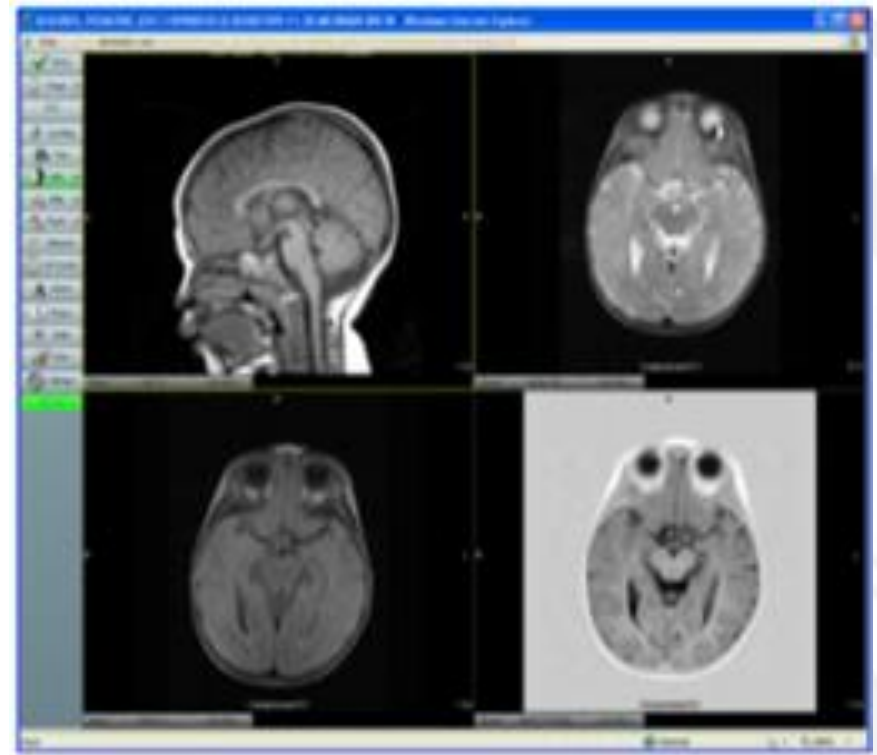
## (Zero Download Ambassador)

The ZDA is a web based image review solution for both:

Halifax Health and  
Radiology Associates Images

It provides a robust, intuitive, secure  
viewer.

For access to images and reports, and  
Requires no download or setup.



# WHY?

- Web Ambassador will be phased out soon, for both Halifax and Radiology Associates (old technology, not web based, etc...)



- Mobile device support



# WHEN?

All hospital pcs will soon have two new icons deployed in order to access these websites for both  
Halifax ZDA and Rad Assoc ZDA:



# ZDA Requirements

## Operating system

- Microsoft Windows
- Mac
- Linux
- Other operating systems that support Flash 10

## Internet browser

- Browser must support Adobe Flash 10
- Microsoft Internet Explorer
- Firefox, Safari, Chrome, and other popular browsers

## Third party software

- Adobe Flash 10
- Adobe Reader

# How do I access the ZDA? (pc, mac, iPhone, iPad, Android...)

For Halifax Health – <https://pacs.halifax.org>



HMC ZDA

For Radiology Associates Images (TLI, POI, PCI, SAI, TCI, etc...)  
<https://pacs.radresults.org>



Rad Assoc ZDA

# Login using existing PACS username and password



DR SYSTEMS  
ENTERPRISE IMAGING EXCELLENCE

POWERED BY DR SYSTEMS



**HALIFAX  
HEALTH**

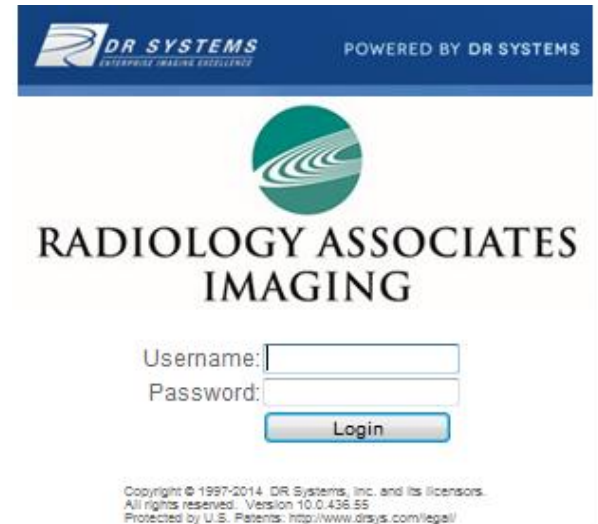
Please log in to HALIFAX HEALTH IMAGING

Username:

Password:


Login

Copyright © 1997-2014 DR Systems, Inc. and its licensors.  
All rights reserved. Version 10.0.436.55  
Protected by U.S. Patents: <http://www.drsys.com/legal/>



DR SYSTEMS  
ENTERPRISE IMAGING EXCELLENCE

POWERED BY DR SYSTEMS



**RADIOLOGY ASSOCIATES  
IMAGING**

Username:

Password:

Login

Copyright © 1997-2014 DR Systems, Inc. and its licensors.  
All rights reserved. Version 10.0.436.55  
Protected by U.S. Patents: <http://www.drsys.com/legal/>

Message from webpage

**WARNING!**

The patient records available through this data source are only for the use of authorized physicians, nurses, employees, students, or staff who have signed confidentiality agreements on file with the entity from which these records are obtained. These records contain information which is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. Browsing for information regarding patients that are not under your immediate care is strictly prohibited, as is tampering or otherwise interfering with the electronic information delivery system.

Patient care decisions should not be based solely on the medical images or audio report summaries that can be accessed here. Integration of clinical and laboratory information, review of the final radiology report, and, when appropriate, consultation with the radiologist(s) are recommended.

Your viewing of these records is tracked.

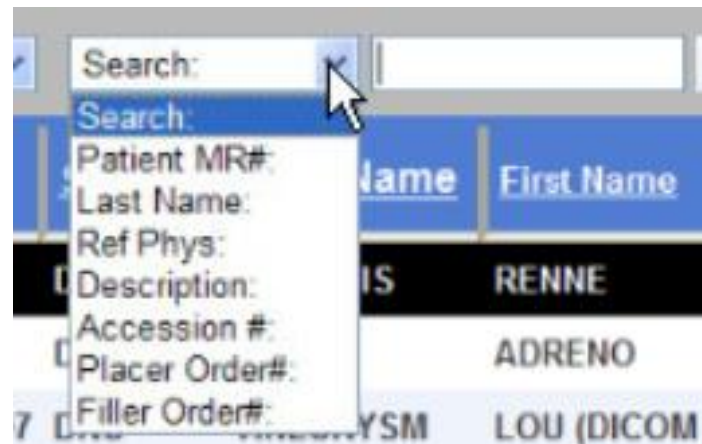
Do you wish to proceed while agreeing to view only those patient's records for which you have a clinical need?

OK Cancel



# Searching for Exams

- Select the SEARCH criteria using dropdown menu... system searches by Last Name by default



# Patient Search

Enter last name, first name (or part of name) and click the arrow to search



The image shows a patient search interface. It features a search bar with the text "DOE, JO" entered. To the right of the search bar is a red arrow pointing to a search button (a blue square with a white right-pointing arrow). Further right are icons for home, refresh, and a green circular arrow. To the right of these icons is a "Filter: (All)" dropdown menu. To the right of the filter is a "View: All Patients" dropdown menu. The entire interface is set against a light gray background with a faint building illustration.

Search:     Filter: (All)

# Sort by any column by clicking on column headings

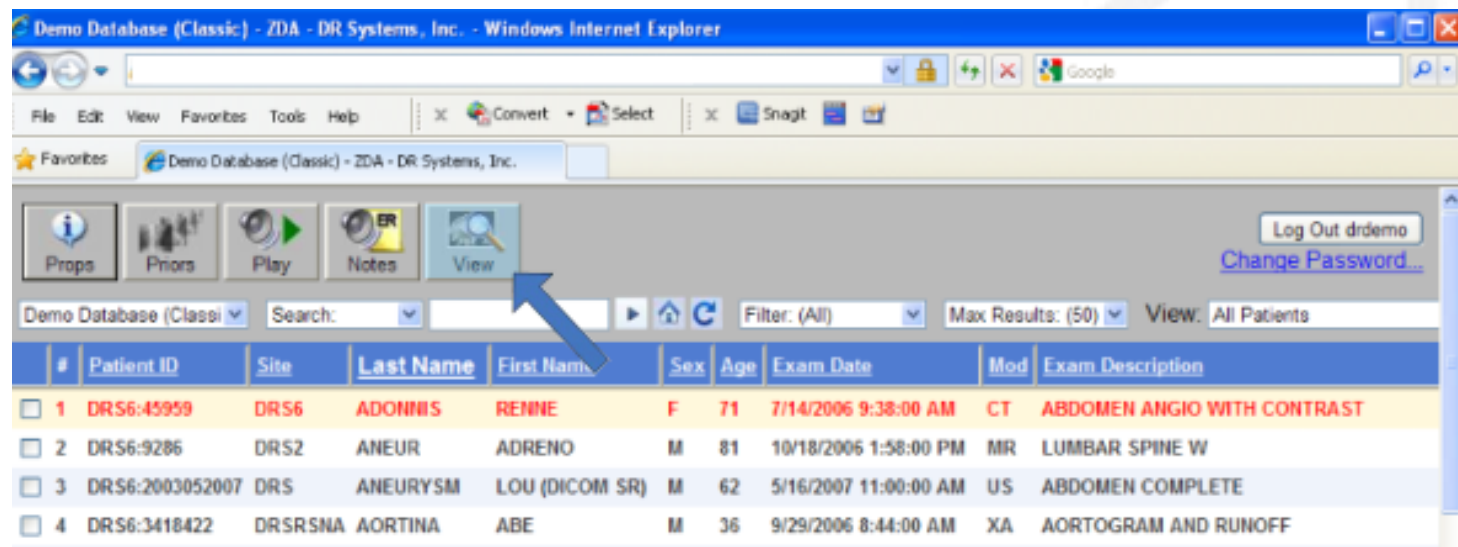
AX MEDICAL CEI Search: DOE, JO Filter: (All) View: All Patients

Search limited to 250 exams. [Show Quick Start Help](#)

Patient ID	Site	Last Name	First Name	MI	Sex	Age	Exam Date	Mod	Exam Description	Status	Pri	Referring Ph
HMC:H0955345	HMC	DOE	JOHN	O	M	105	03/27/05 23:18	CT	CT BRAIN W/O CONTRAST	R		DIMAYUGA, ,
HMC:H0955345	HMC	DOE	JOHN	O	M	105	03/27/05 23:37	CT	CT THORAX W CONTRAST	R		DIMAYUGA, ,
HMC:H0899699	HMC	DOE	JOHN	S	M	105	03/28/05 04:34	CT	CT BRAIN W/O CONTRAST	R		DIMAYUGA, ,
HMC:H0899699	HMC	DOE	JOHN	S	M	105	03/28/05 04:34	CT	CT FACIAL BONES W/O...	R		DIMAYUGA, ,
HMC:H0690346	HMC	DOEXRAY1	JOHN		M	105	05/07/05 00:00	XA	F/U THRU EXISTING C...	R		FABIAN, MIC
HMC:H0690346	HMC	DOEXRAY1	JOHN		M	105	05/07/05 00:00	XA	F/U THRU EXISITING ...	R		FABIAN, MIC
HMC:H0690346	HMC	DOEXRAY1	JOHN		M	105	05/07/05 00:00	XA	TRANSCATH IV OCCLUS...	R		FABIAN, MIC
HMC:H0690346	HMC	DOEXRAY1	JOHN		M	105	05/07/05 00:00	XA	TRANSCATH IV OCCLUS...	R		FABIAN, MIC
HMC:H0690346	HMC	DOEXRAY1	JOHN		M	105	05/07/05 00:00	XA	ANGIOGRAM, PELVIC, ...	R		FABIAN, MIC
HMC:H0690346	HMC	DOEXRAY1	JOHN		M	105	05/07/05 00:00	XA	F/U THRU EXISITING ...	R		FABIAN, MIC

# Viewing Exams

- To view an exam, select the exam and choose VIEW, or double-click exam to open



Demo Database (Classic) - ZDA - DR Systems, Inc. - Windows Internet Explorer

File Edit View Favorites Tools Help

Convert Select Snagit

Favorites Demo Database (Classic) - ZDA - DR Systems, Inc.

Props Priors Play Notes View

Log Out drdemo  
[Change Password...](#)

Demo Database (Classi Search: Filter: (All) Max Results: (50) View: All Patients

#	Patient ID	Site	Last Name	First Name	Sex	Age	Exam Date	Mod	Exam Description
<input type="checkbox"/> 1	DRS6:45959	DRS6	ADONNIS	RENNE	F	71	7/14/2006 9:38:00 AM	CT	ABDOMEN ANGIO WITH CONTRAST
<input type="checkbox"/> 2	DRS6:9286	DRS2	ANEUR	ADRENO	M	81	10/18/2006 1:58:00 PM	MR	LUMBAR SPINE W
<input type="checkbox"/> 3	DRS6:2003052007	DRS	ANEURYSM	LOU (DICOM SR)	M	62	5/16/2007 11:00:00 AM	US	ABDOMEN COMPLETE
<input type="checkbox"/> 4	DRS6:3418422	DRSRNA	AORTINA	ABE	M	36	9/29/2006 8:44:00 AM	XA	AORTOGRAM AND RUNOFF

# Viewing Images

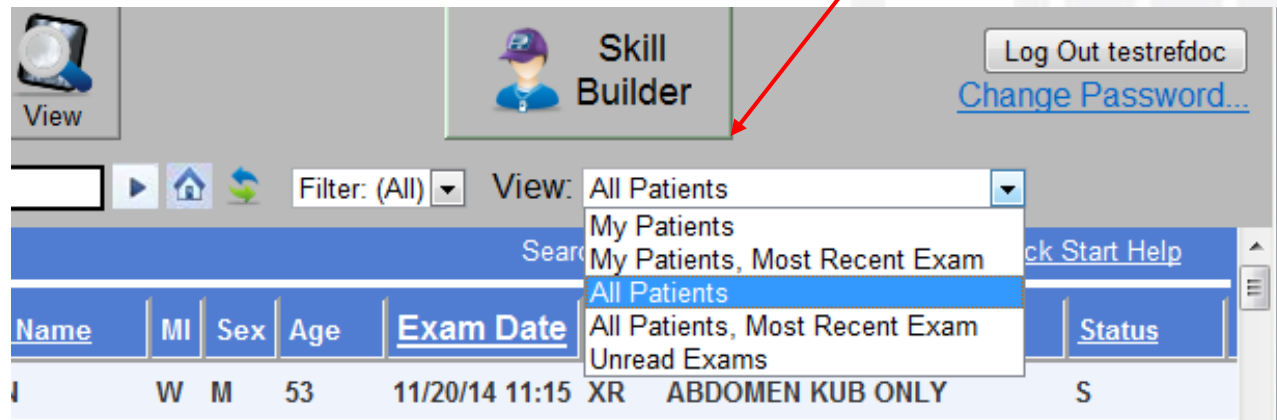
- Select exam, and click VIEW icon, or simply double click the exam



# Select Exams to View

You can choose to see:

- My Patients
- All Patients or
- Unread Exams



# ZDA Filters

Choose a filter as below if desired...

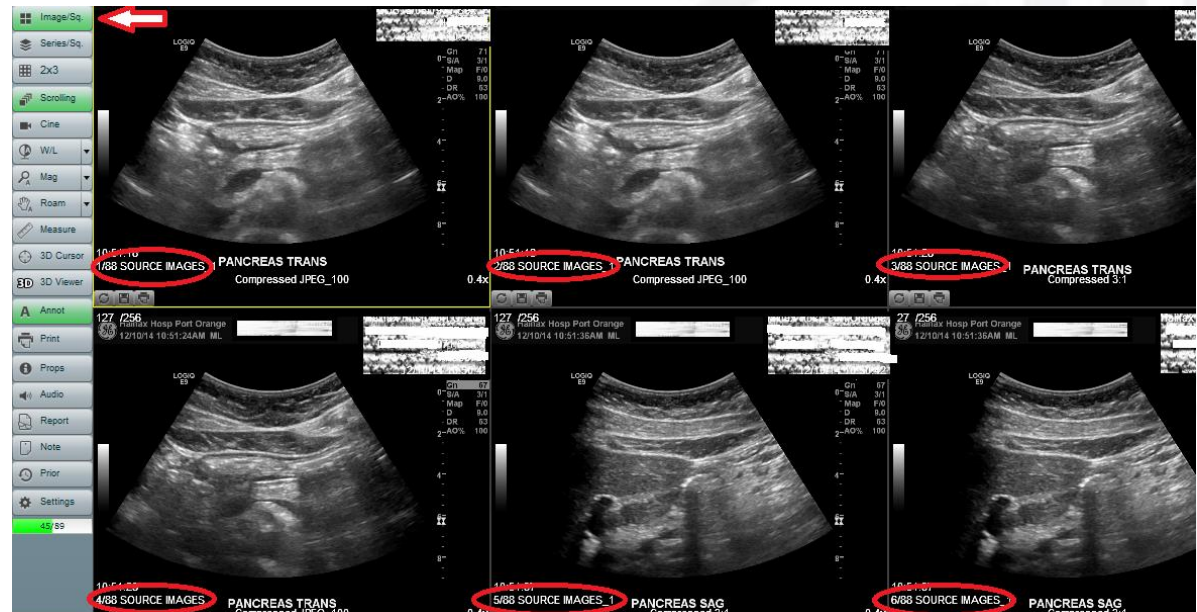
Filter: (All) View: All Exams

- Filter: (All)
- ZDA - ALL
- ZDA - CT
- ZDA - MR
- ZDA - NM
- ZDA - US
- ZDA - XA
- ZDA - XR

Exam Date	Mod	Exam Description
12/10/14 10:50	US	US ABDOMEN - GALLBL...
12/10/14 10:43	XR	GASTROGRAFIN GI SERIE

# Image Per Square

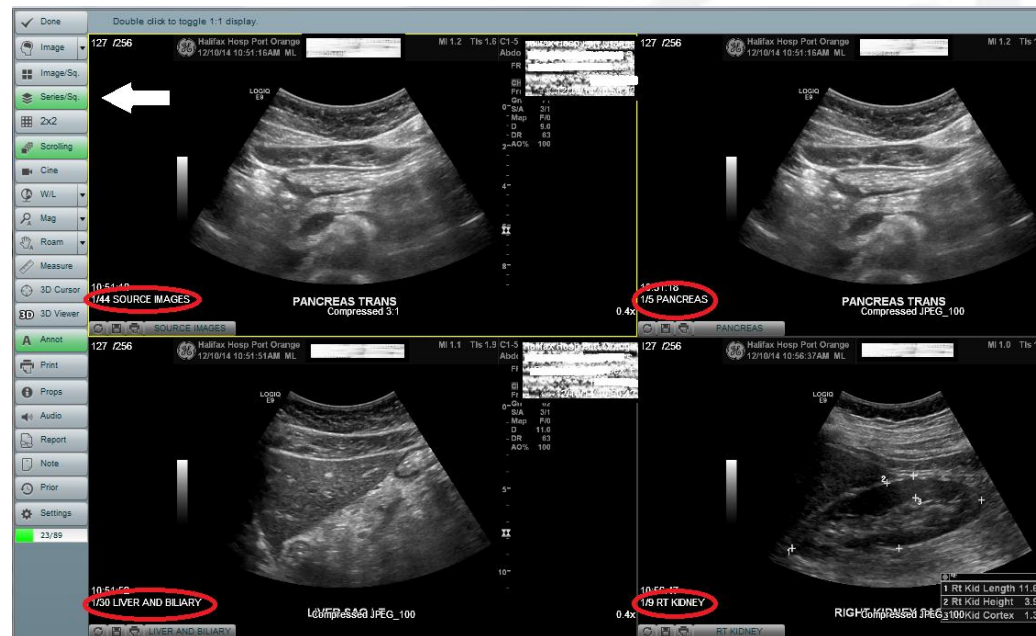
Click 'Image Per Square' button to put each image within a series, on the viewing panels





# Series Per Square

Click 'Series Per Square' button to put each image within a series, on the viewing panels



# Toolbar

You can use the toolbar to access exam-related information without having to view the exam. Just select the exam, and associated icon.

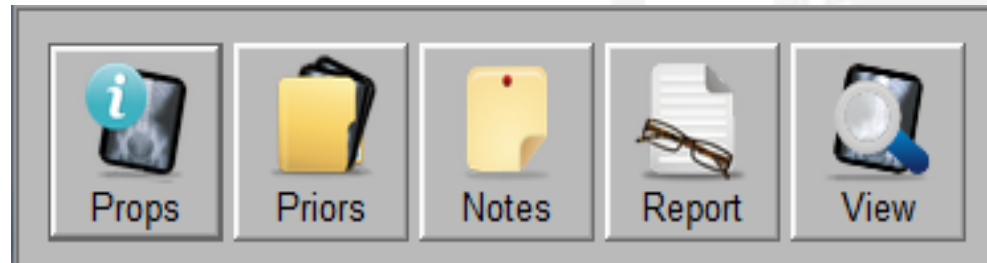
From the toolbar, you can access:

Exam properties

Prior exams

Notes

Report



# Montage

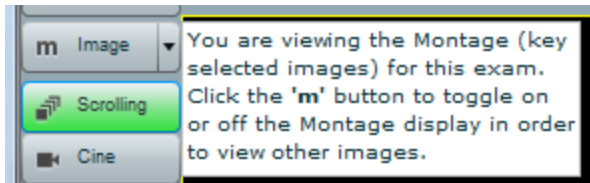


If the exam has a montage, it will display first.

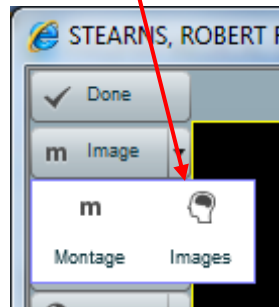
The montage is a collection of key images created by the Radiologist.

# Montage (cont.)

To close the montage, click “M” on the keyboard,  
or click ‘IMAGE’

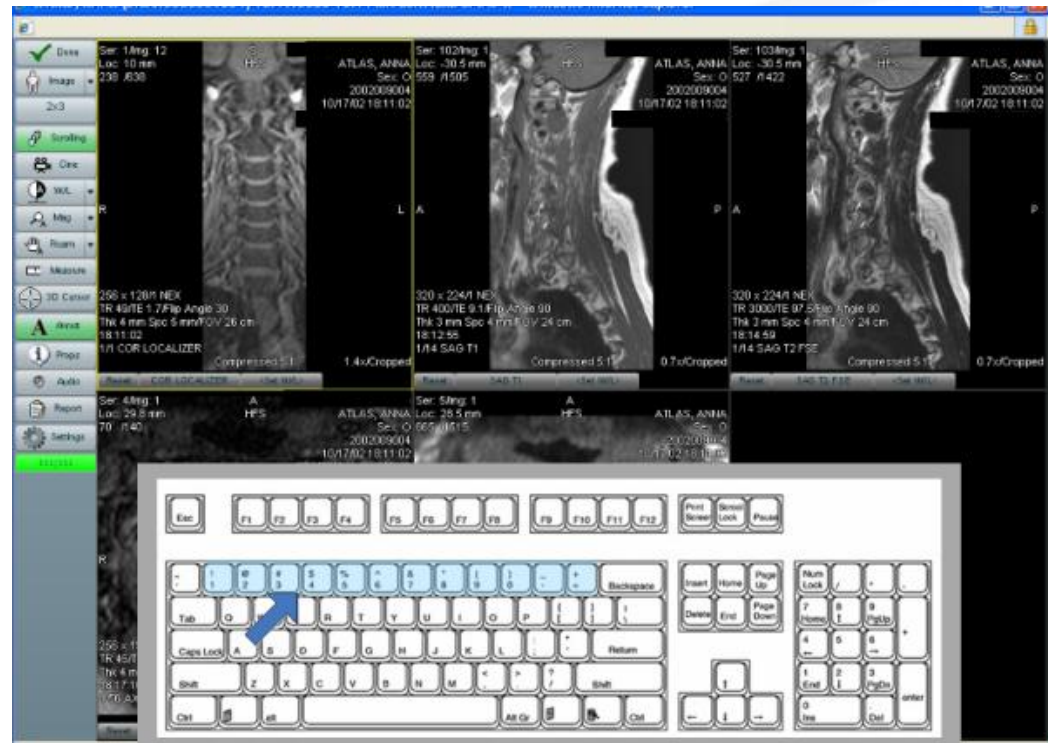


And select ‘IMAGES’



# Formatting Your Display

- You can use the number keys on your keyboard to adjust your display
- 1 = 1 image
- 2 = 2 images
- 3 = 3 images
- Etc...

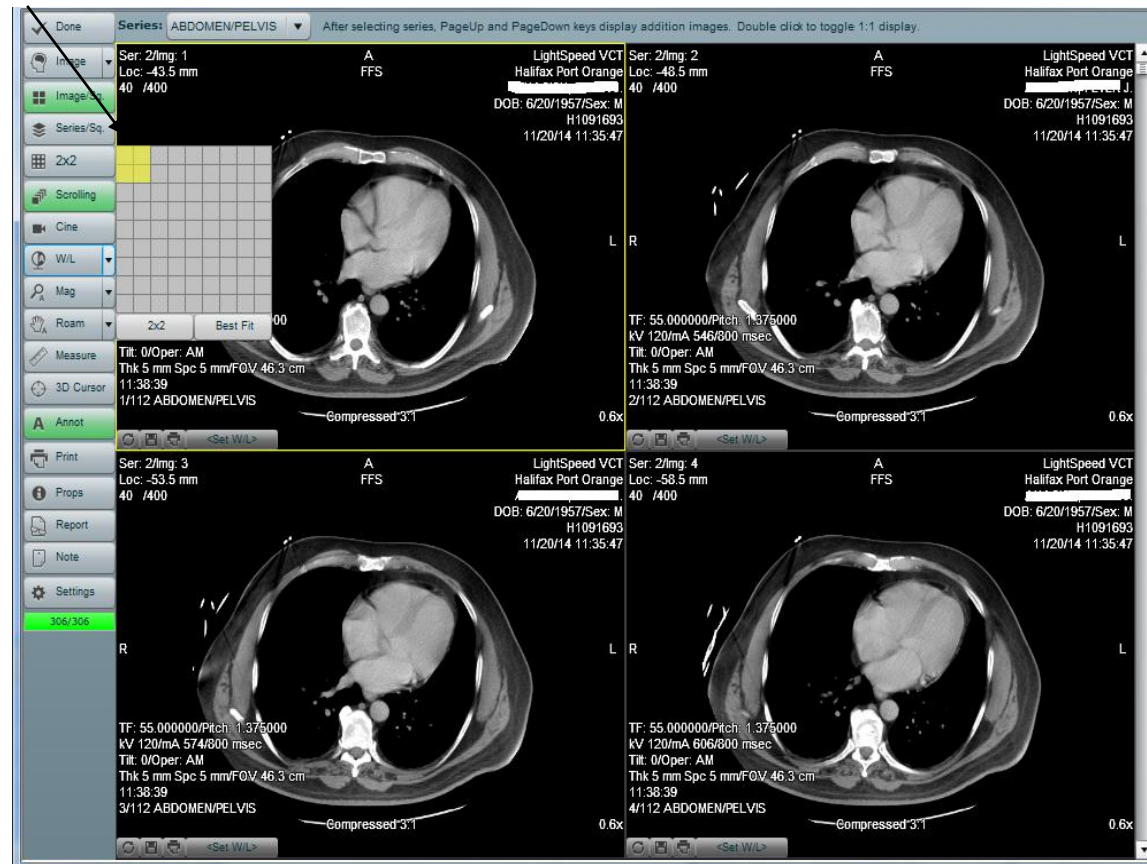


# Formatting Your Display

You can also use the grid...

Highlight the format you want and click

The images display in the format chosen

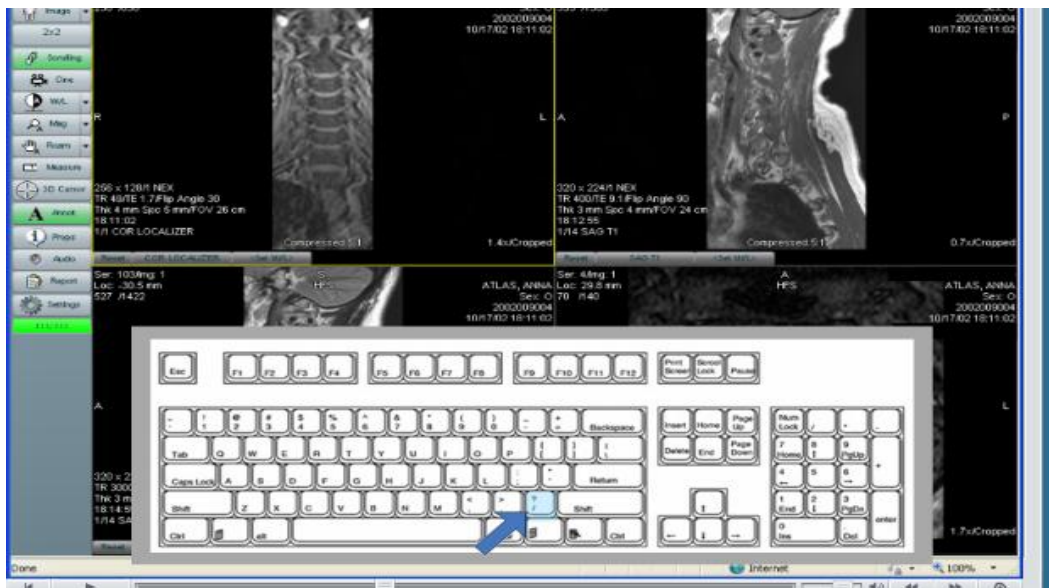




# Best Fit

You can use 'Best Fit' to allow the system to display the images in which they Display best.

To do so, click the Forward Slash “ / ” on your keyboard, or choose BEST FIT in the grid



# Annotations

To View or HIDE annotations, click “A” on the keyboard, or click **ANNOTATIONS**

Image WITH annotations

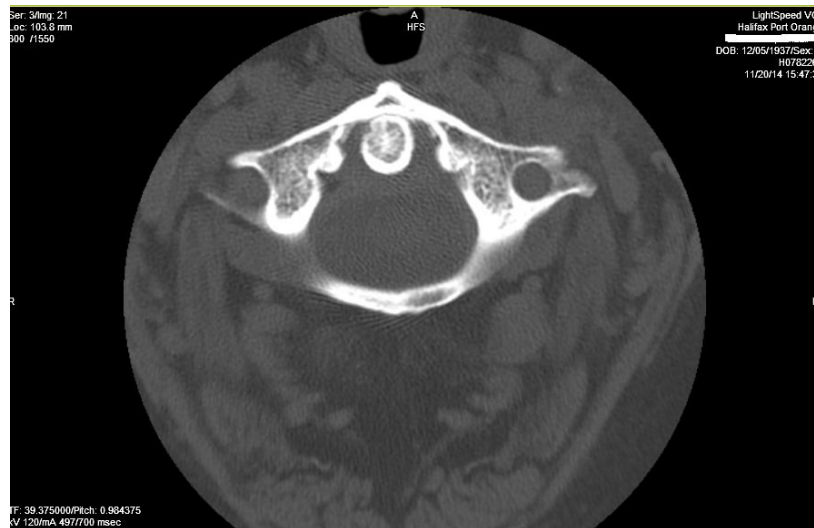


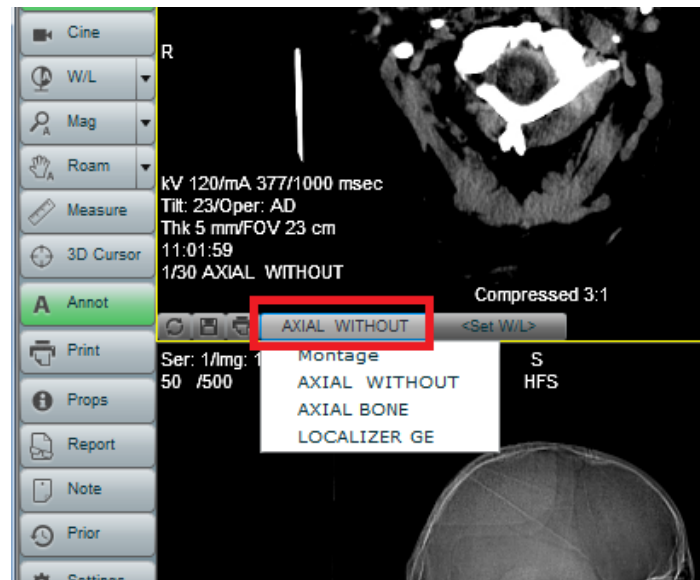
Image WITHOUT annotations



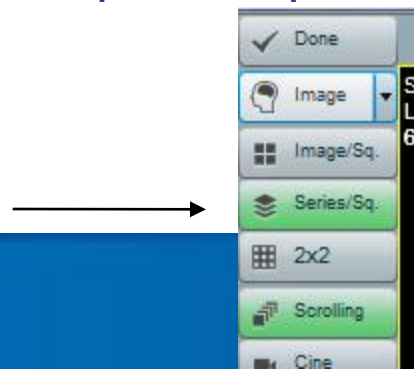


# Series Images

- To view different Series of Images, you can click the series name, and the other series available will be displayed – OR –

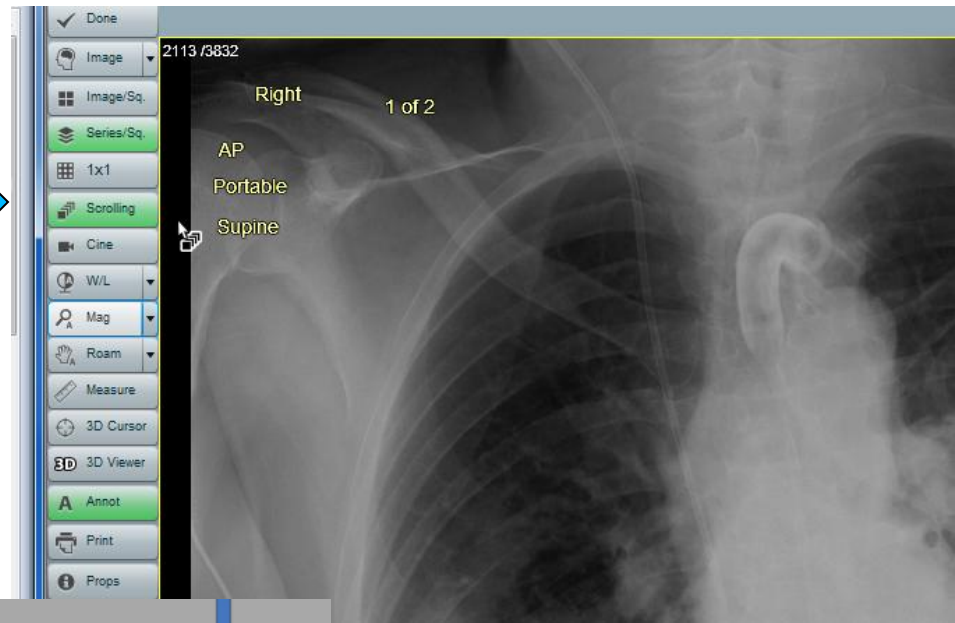


- choose Series Per Square to put one series in each viewing panel



# Scrolling thru a series of images

With the scrolling tool selected, press and hold the left mouse button. Drag up to page forward, drag down to go backward thru the images



You can also use the up and down arrow keys on the keyboard, or the mouse wheel



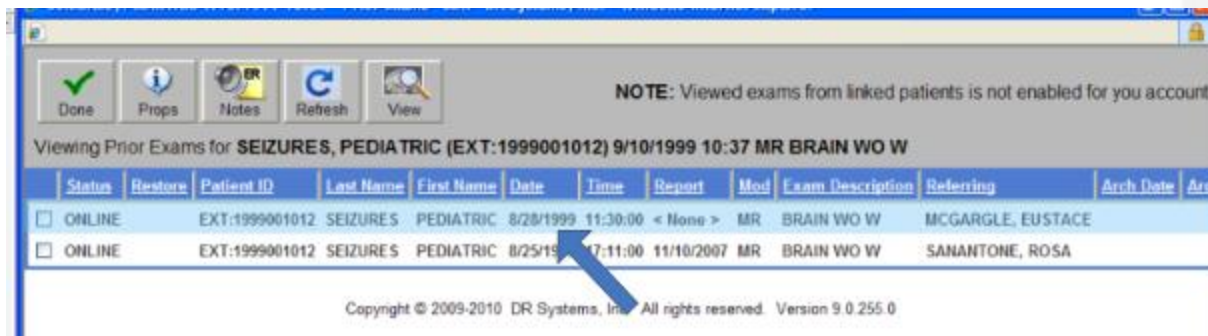
OR



# Viewing Comparison Exams

You can use the ZDA to view the current exam and a comparison exam simultaneously – click “PRIOR”

A list of prior exams displays. Double-click an exam



# Comparison Exams cont.

ZDA displays the current exam on the left, and the comparison exam on the right.



# Viewing Tools

Tools are available such as:

Window/Level

Magnify

Roam

Measurement

3D cursor

**NOTE:** Image edits made with the viewing tools apply only to the current session, and are NOT saved after the exam is closed.

# Window/Level Tool

Allows you to adjust the brightness and contrast of an image.

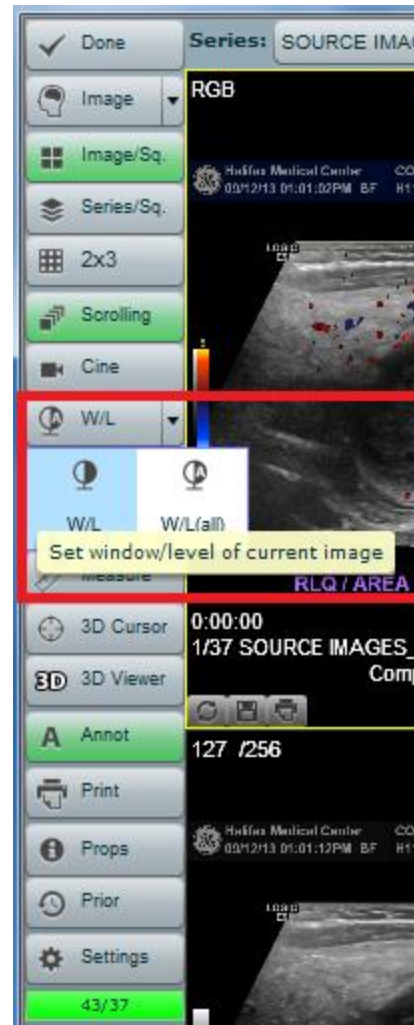
You can window and level to a single image, or apply to all images.

Move the pointer over the image.

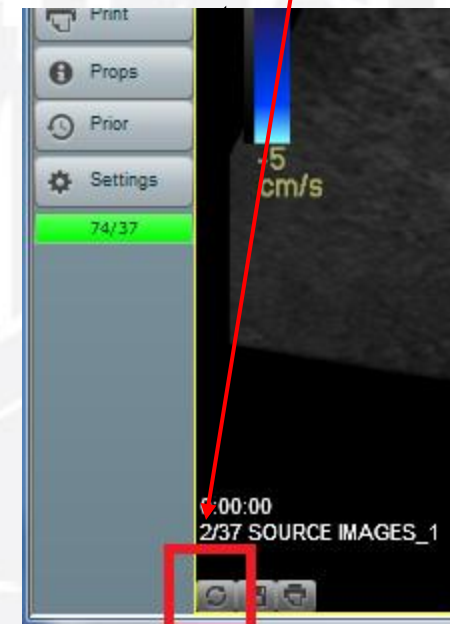
Click and hold the left mouse button

Drag the mouse forward and backward to adjust the brightness.

Drag the mouse left and right to adjust the contrast.



Click reset button to restore to original state



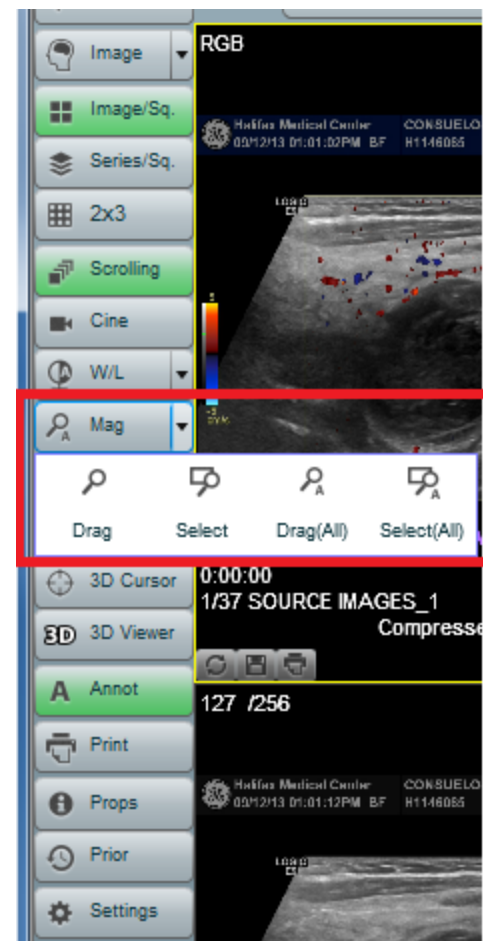


# Magnify Tool

You can use the Magnify tool to magnify an image.

The Magnify tool provides the following options:

- **Drag**  
This option allows you to set the magnification and focus by clicking and dragging the mouse.
- **Select**  
This option allows you to select an area to magnify. The area is magnified to completely fill the display.

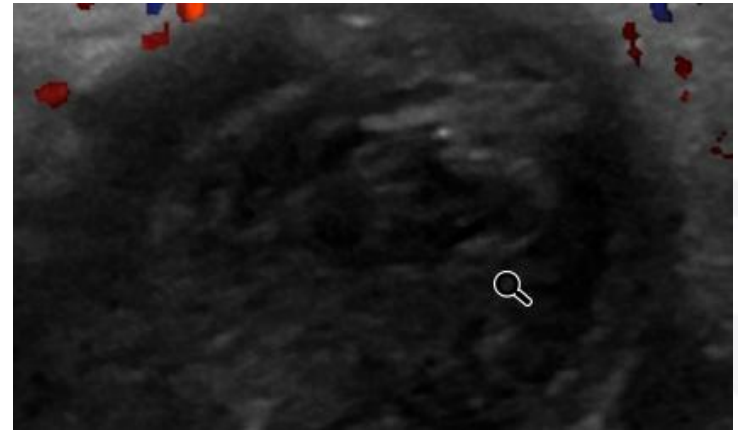


# Magnify DragTool

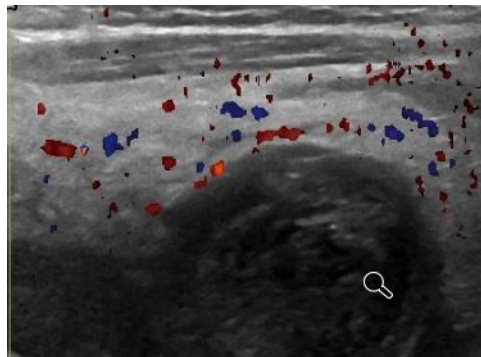


Click and hold the left mouse button...  
Drag up to **Zoom In**

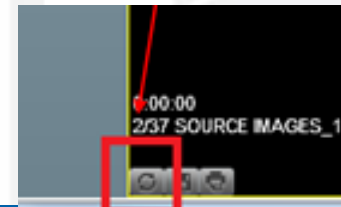
The magnified image is centered on the area  
where you clicked.



Drag down to Zoom Out



Click reset to restore the original magnification



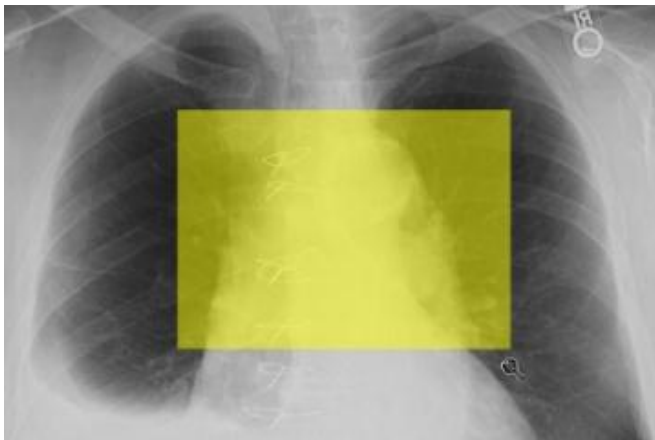


# Magnify Select Tool

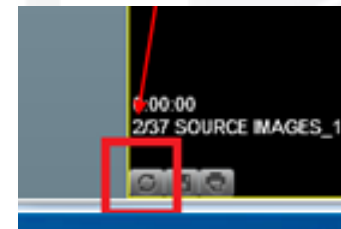


Click and drag to highlight the area you want to magnify

The area you selected is magnified to fill the display



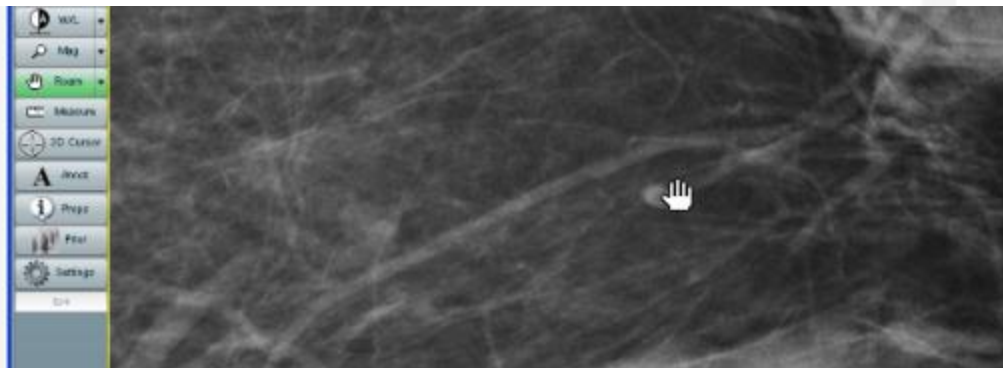
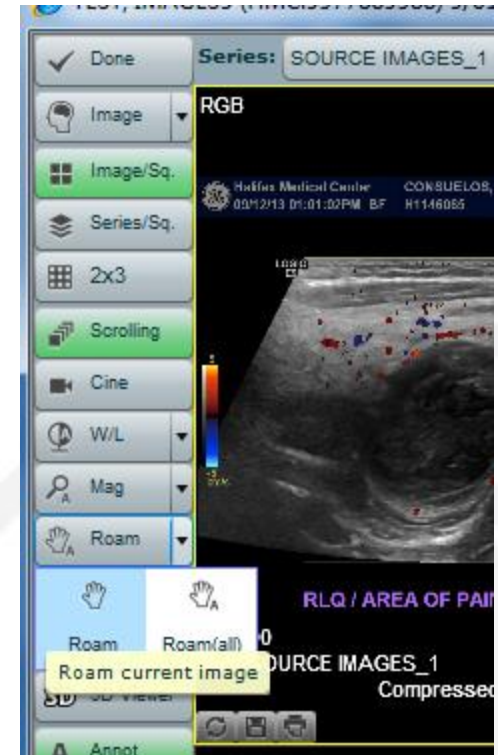
Click RESET to restore the original magnification



# Roam

You can use the ROAM tool to move the image within the square if the image is magnified so that it is larger than the square.

Click and hold the left mouse button, move the mouse to move the image

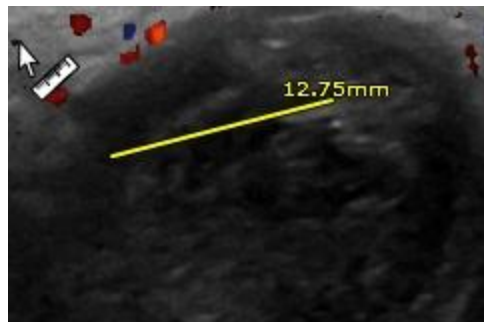


# Measurement

You can use the Measurement tool to add measurements to an image.

Most the pointer to the start of the measurement.

Click and drag to measure



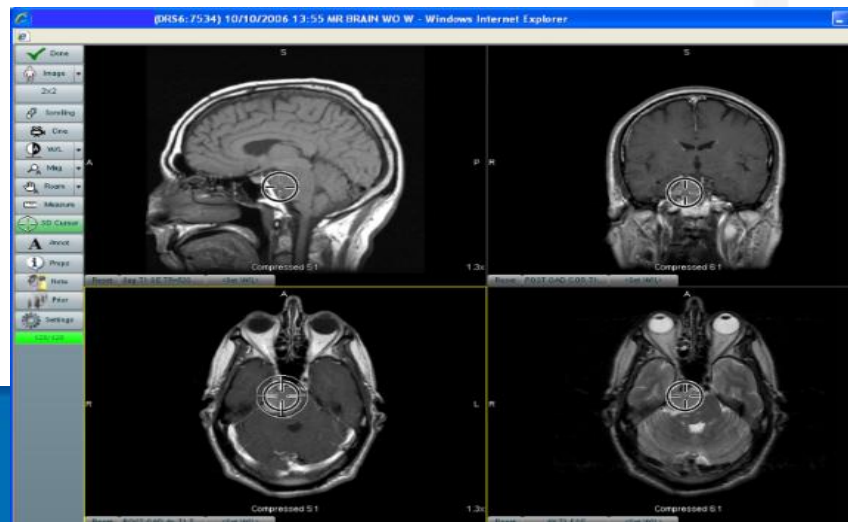
# 3D Cursor Tool

The 3D cursor tool targets an area in the primary series and the same area in all displayed series.

Click an area on an image.

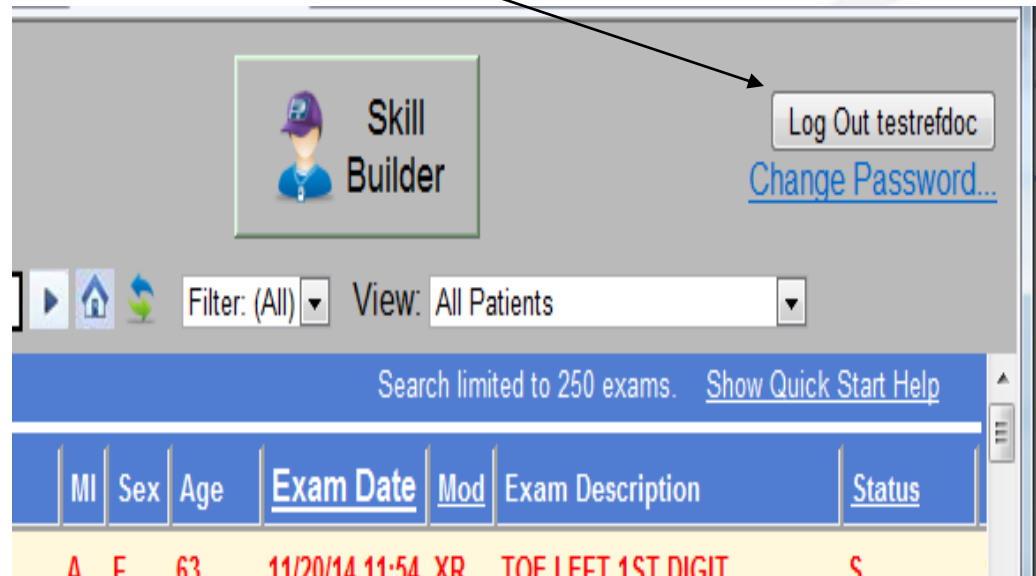
The system targets the same area in all the other displayed Series.

If you move the cursor on one image, the cursor moves to Target the corresponding area on the other series.



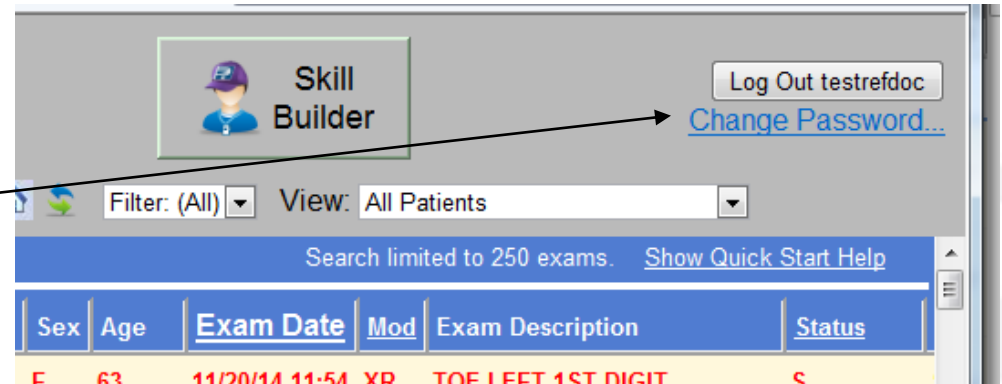
# Logging Out

When finished viewing exams, you can log out using the LOGOUT button on the top right of the screen



# Changing Password

You may change your password at any time by simply clicking on the Change Password link.



You will then be prompted to enter your:  
OLD pswd,  
NEW pswd,  
and CONFIRM the NEW pswd

A screenshot of the password change form. At the top, there is a blue header with the 'DR SYSTEMS' logo and the text 'POWERED BY DR SYSTEMS'. Below the header, the text 'Please enter your new password:' is displayed. The form contains three input fields: 'Username:' with the value 'testrefdoc', 'Old Password:', and 'New Password:'. Below these is a 'Confirm Password:' field. At the bottom, there are two buttons: 'Set Password' and 'Cancel'.

# Online Tutorial w/in ZDA

The screenshot shows the ZDA interface with several callouts:

- Skill Builder:** A green button with a person icon, highlighted with a red box.
- Log Out jrusso:** A button in the top right corner.
- Change Password...:** A link in the top right corner.
- HALIFAX MEDICAL C:** A dropdown menu for selecting the data source.
- Search:** A text field containing the word "TEST".
- Filter: (All):** A dropdown menu for selecting search criteria.
- View: All Exams:** A dropdown menu for selecting filter criteria.
- Search limited to 250 exams:** A message above the table.
- Show Quick Start Help:** A button highlighted with a red box.
- Table:** A table with columns: #, Last Name, First Name, Age, Exam Date, Mod, Exam Description, Status, Pri, Ref. The table contains 6 rows of exam data.
- Callouts:** Several yellow boxes with arrows pointing to specific elements: "Select the data source" (points to HALIFAX MEDICAL C), "Select search criteria" (points to Search), "Select filter criteria" (points to Filter), "Click on any underlined column heading to sort, click again to reverse sort order" (points to Last Name), "Double click on any line item to view an exam" (points to row 1), "Click here for more help and a complete tutorial" (points to Show Quick Start Help), and "Select your preference. You can show all exams, the most recent exam for each patient (then click Priors for others), or just unread exams." (points to View).

#	Last Name	First Name	Age	Exam Date	Mod	Exam Description	Status	Pri	Ref
1	HMC:02202002	HMC TEST	ALISA	M	23 mos	06/19/07 13:18 NM	BONE SCAN (WHOLE BO...	R	TES
2	HMC:02202002	HMC TEST	ALISA	M	18 mos	02/14/07 17:45 CT	CT 3D/SPECIAL RECON...	R	RADIOLOGY ASSOC
3	HMC:02202002	HMC TEST	ALISA	M	11 m		PARATHYROID IMAGING	R	YUSCHOK, THOMAS J..
4	HMC:02202002	HMC TEST	ALISA	M	11 m		BONE SCAN (WHOLE BO...	R	TEST, FULLNAMEK
5	HMC:02202002	HMC TEST	ALISA	M	11 m		BONE SCAN (WHOLE BO...	R	TEST, FULLNAMEK
6	HMC:02202002	HPC TEST	ALISA	M	21 wks	12/13/05 11:05 MM	MAMMOGRAPHY, SCREEN...	R	RADIOLOGY ASSOC

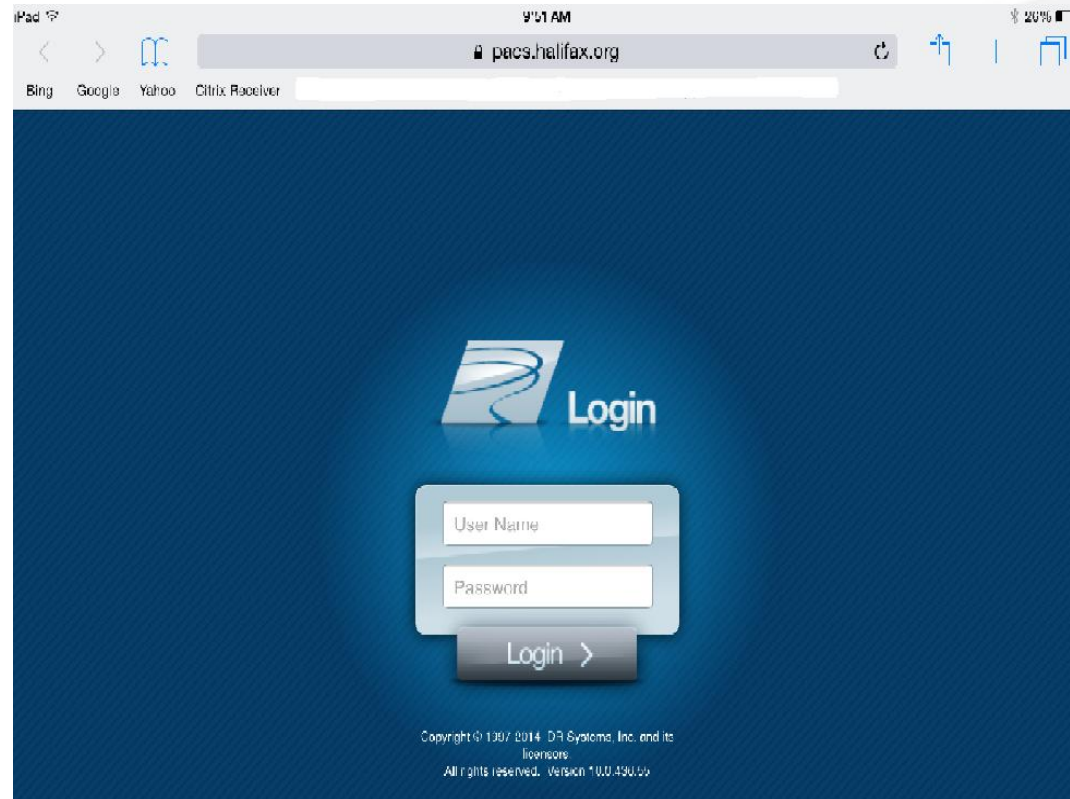
**Quick Start**

- Search: Enter patient in Search field and click Go
- Clear search: Click Home
- Get updated results: Click Refresh
- Limit search: Select options in Filter and View
- Learn more: [View the ZDA tutorial](#)



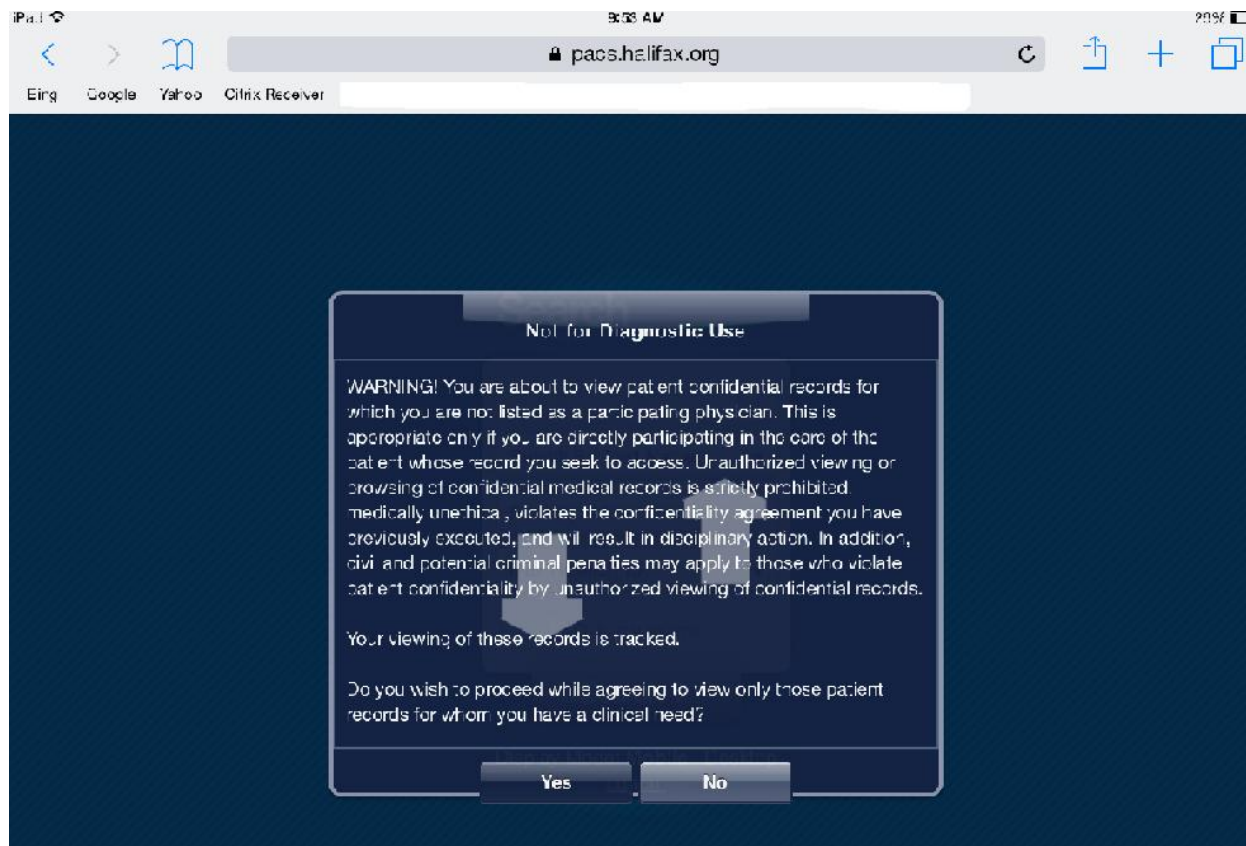
# ZDA Mobile (iPad/iPhone/Android)

Same functionality as when used on pc or Mac, but slightly different look and feel





# HIPPA agreement must choose 'Yes'



# Search for Patient

## Last Name by default

(or change criteria as needed)

9:52 AM

🔒 pacs.halifax.org

rtx Receiver

### Search

🔍

Search By: Last Name ▼

Filter By: All ▼

Max Results: 10 ▼

☒ Only my exams

Search >

Display Mode: **Mobile** | [Desktop](#)  
[Logout](#)

# If needing to search the entire database

uncheck the 'only my exams' checkbox

9:52 AM  
pacs.halifax.org

Search

SEARCH TERMS

Search By: Last Name

Filter By: All

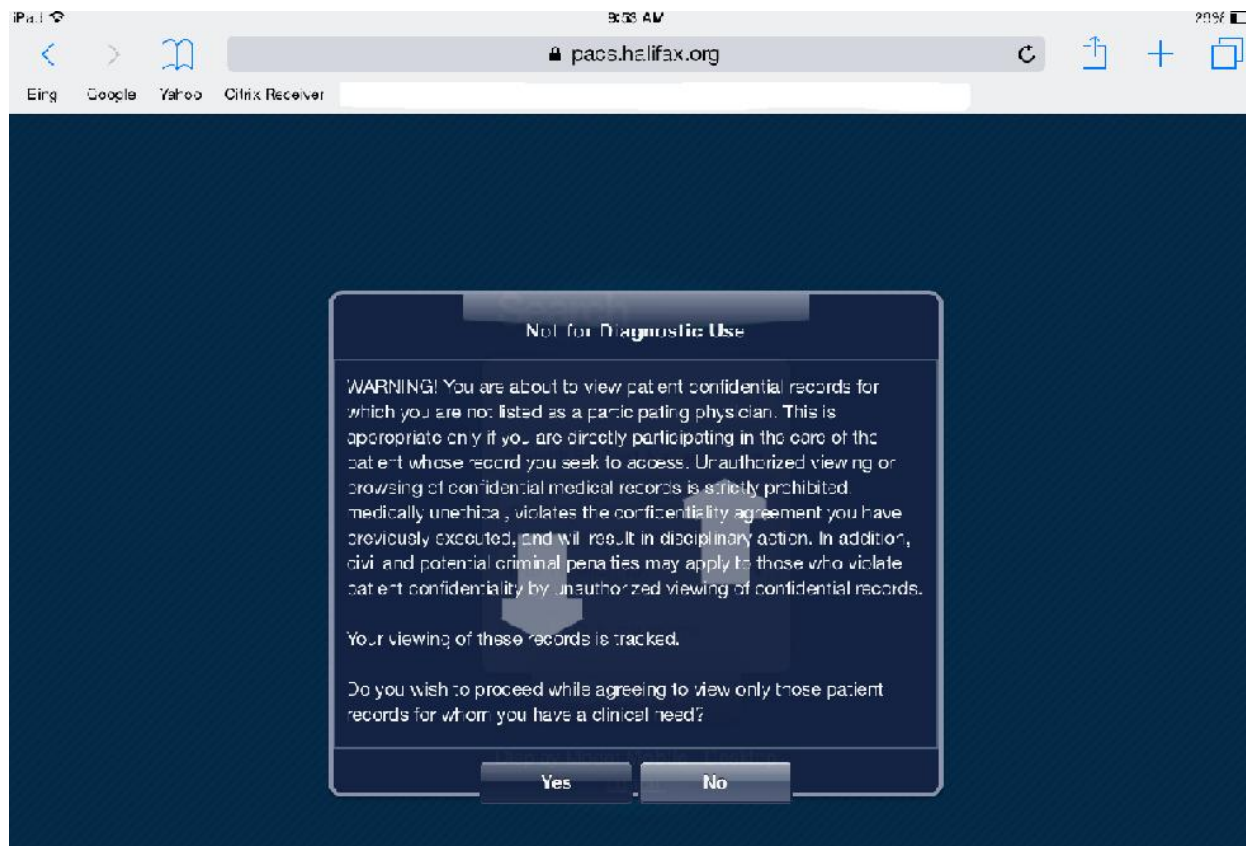
Max Results: 10

☒ Only my exams

Search >

Display Mode: **Mobile** | [Desktop](#)  
[Logout](#)

# HIPPA agreement must choose 'Yes'



# Search results appear ... select exam ...

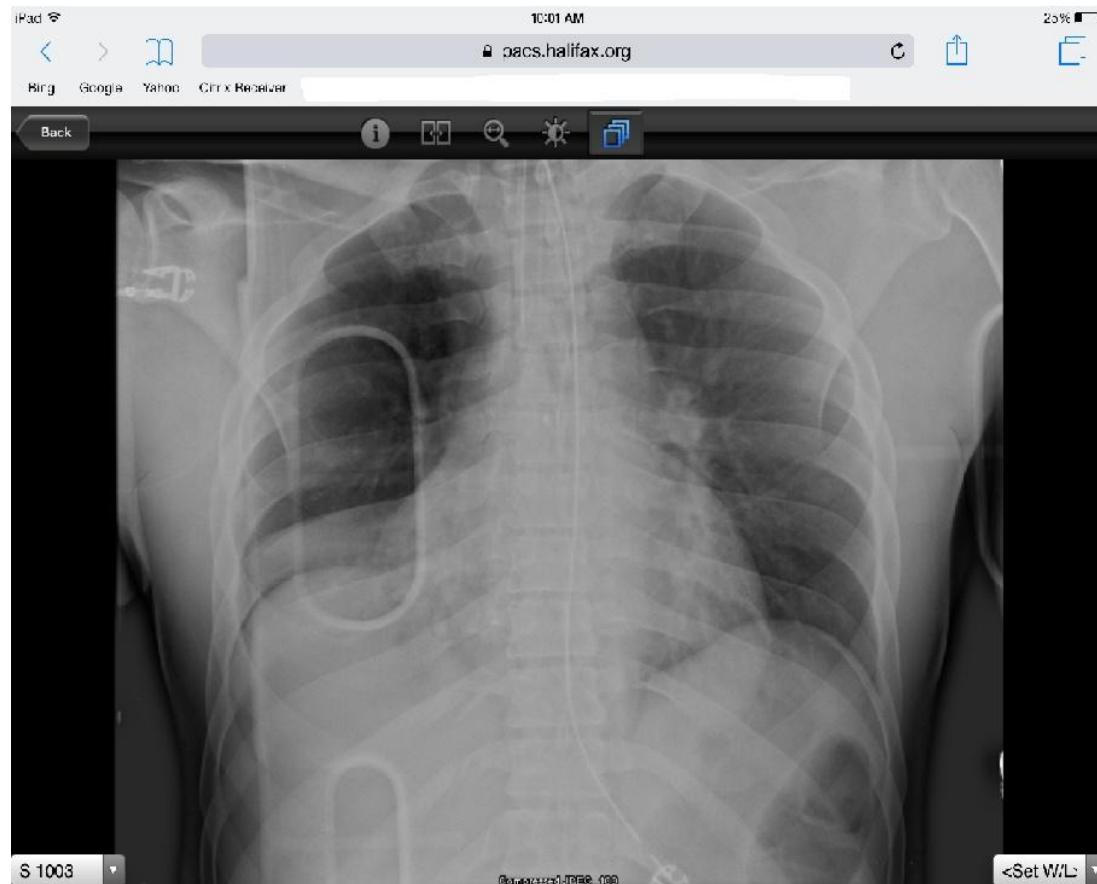
iPad	EST SINGLE AP	9:53 AM	26%
pacs.halifax.org			
DOE SEVENTYFOUR, JOHN			>
HMC: [REDACTED]		[REDACTED]	
CT: CT CERVICAL SPINE W/O CONTRAST W 3D RECON		7/25/2012	
DOE SEVENTYFOUR, JOHN			>
HMC: [REDACTED]		[REDACTED]	
XR: CHEST SINGLE AP		7/25/2012	
DOE SEVENTYFOUR, JOHN			>
HMC: [REDACTED]		[REDACTED]	
CT: CT BRAIN W/O CONTRAST		7/25/2012	

# Image Details – select Images, Report, Montage, etc...

The screenshot shows the PACS.Halifax.org web interface on an iPad. The browser address bar displays 'pacs.halifax.org'. The page has a dark blue header with 'Results' and 'Details' tabs. Below the header, patient information is displayed: **DOEWINTER**, JOHN, HMO:XXXXXXXXXX. Exam details include: Exam Date: 1/07/2015 21:06:40, Sex: M, Age: 135, Mod: XR, Exam Description: **CHEST SINGLE AP**, Status: R - Unlocked, Priority: STAT, Type: XR, and Referring Physician. A list of actions is shown at the bottom, each with an icon and a right-pointing arrow. Red arrows point to the 'Report' and 'Images' options.

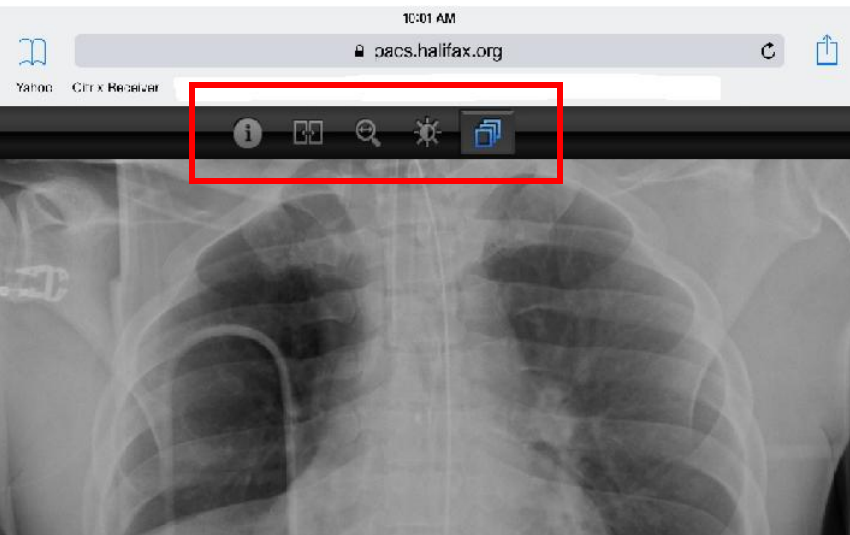
Action	Icon	Right Arrow
Report	Document icon	>
Montage	Grid icon with a red 'X' over it	>
Images	Image icon	>
Notes	Notepad icon	>
Voice Clip	Microphone icon	>
Properties	Gear icon	>

# Image view





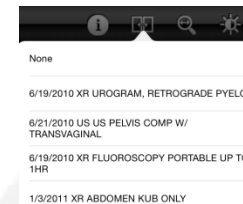
# Icon functionality



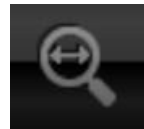
Displays or removes patient information on the image



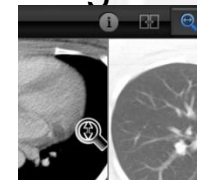
Displays prior exams for patient



Allows for adjustment of brightness and contrast of images



Allows for magnification of images



Enables scrolling thru images



# Report View

iPad 10:01 AM 25%

pacsh.halifax.org

Bing Google Yahoo Citrix Receiver

Results Details

**DOEWINTER, JOHN**  
HMC#P:000000

Exam Date	1/07/2015 21:06:40
Sex	M
Age	135
Mod	XR
Exam Description	CHEST SINGLE AP
Status	R - Unlocked
Priority	STAT
Type	XR
Referring Physician	

Report

Montage

Images

Notes


Voice Clip

Properties

iPad 11:18 AM 20%

pacsh.halifax.org

Bing Google Yahoo Citrix Receiver

 **HALIFAX HEALTH**  
**DEPARTMENT OF RADIOLOGY**  
303 N. Clyde Morris Boulevard \* Post Office Box 2830  
Daytona Beach, FL 32120-2830 \* (386) 254-4070

**RADIOLOGY CONSULTATION REPORT**

Ordering MD:	MR#:	DOB:
Copy To:	Loc: PHED	Age: 24
	Bed:	

**DOE, JOHN** June 18, 2010 10:17  
**CT ABDOMEN & PELVIS W CONTRAST**

**INDICATIONS:** Abdominal pain.

**COMPARISON:** None.

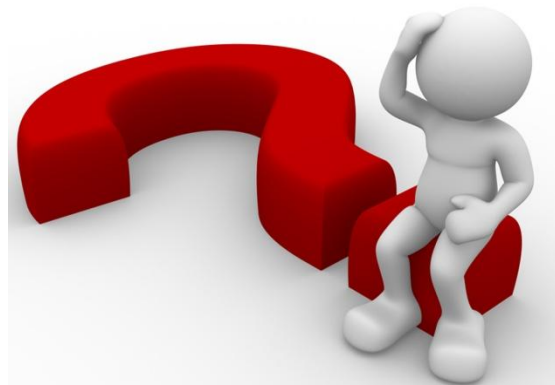
**FINDINGS:** The lung bases are clear. In the left adnexal region there is a 6.9cm complex septated mass containing mostly fluid attenuation. Differential diagnosis includes a complex left ovarian cyst or possibly a tubo-ovarian abscess with hydrosalpinx.

The right ovary has reportedly been removed. □

# QUESTIONS ?

Radiology IT is glad to help...

Just call the Radiology Dept, ext 4070 and they will get someone to assist you



If the issue is specific to Radiology Associates, please contact them at 274-5454