

# Introducing Our New Image Viewing and Sharing System

Image Resource Center  
Department of Radiology

# Goals

lifeIMAGE™

- ❖ Create image exchange platform to incorporate external images into VCU Health's medical imaging archives from any location
- ❖ Improve provider workflow
- ❖ Eliminate non-productive time for clinical and clerical staff
- ❖ Unified access to all outside imaging content
- ❖ Immediate CD return to patient
- ❖ Invite patients to upload images from home
- ❖ Improve compliance of management of PHI data across the organization
- ❖ Eliminate outside CDs coming to IRC
- ❖ Save storage space on medical imaging archiving system

# System

lifeIMAGE™

## ❖ LifeIMAGE

- ❖ Streamlines incoming CD management
- ❖ Easy interface for uploading images from CD
- ❖ Fast image upload for immediate imaging viewing
- ❖ Share images among all users within VCU health
- ❖ Robust image viewer tool set for providers
- ❖ Ability to connect with outside facilities (phase 2)

# Workflow

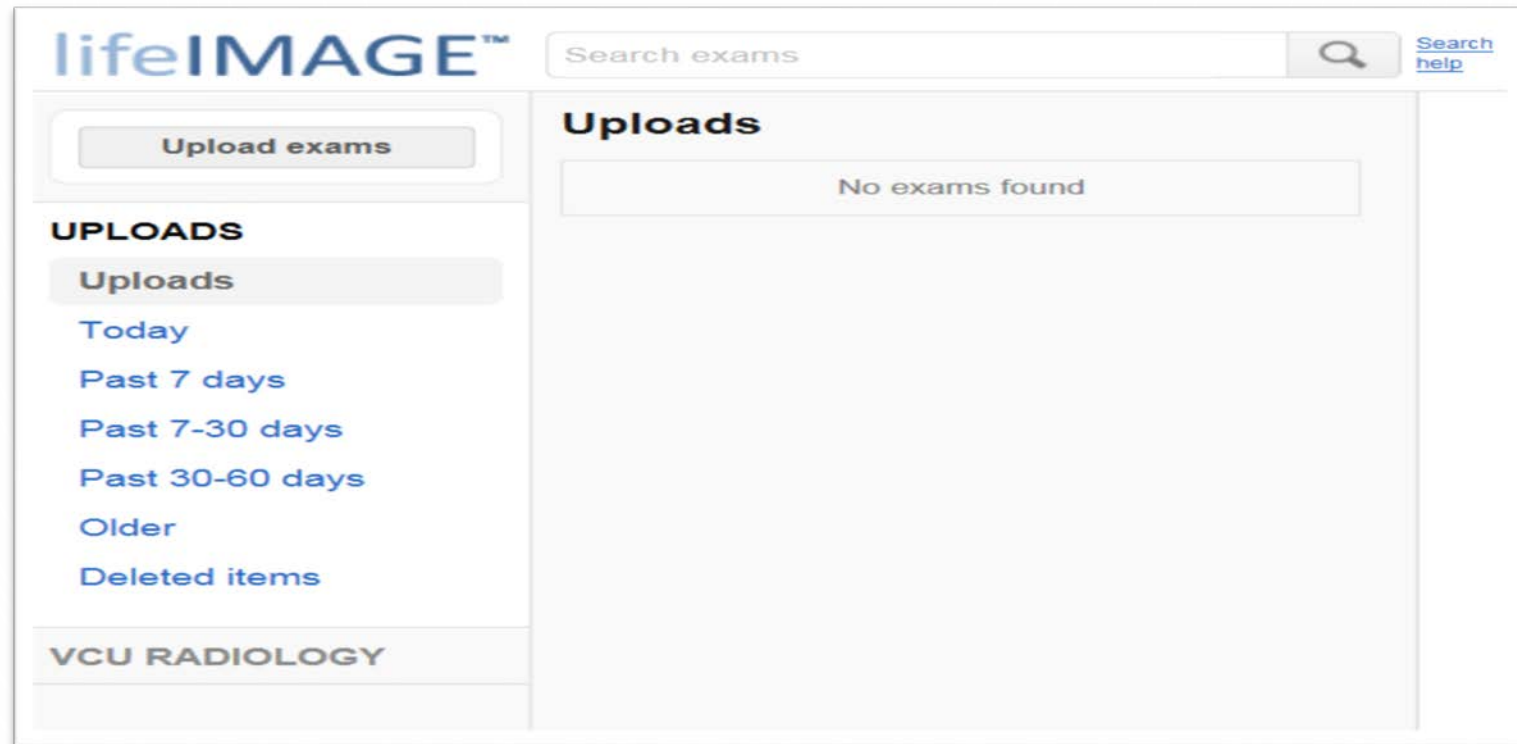
lifeIMAGE™

- ❖ Available on all hospital PCs
  - ❖ Click radiology icon on desktop OR from Cerner internal links
  - ❖ Choose lifelImage
  - ❖ Active directory sign on (first sign in confirms personal information)

# Pre Clinician Workflow

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- ❖ Upload exams
  - ❖ Place disk in PC and select upload exams button



# Pre Clinician Workflow

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- ❖ Select VCU RADIOLOGY From drop down click next
- ❖ Once selected will remain Default

## Upload exams

1. Destination	2. Find Exams	3. Select exams	4. Confirm
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Where would you like to upload your exams to?

Destination:

[Next](#)

# Pre Clinician Workflow

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- ❖ Select location of exams
  - ❖ 99% will be CD/DVD
  - ❖ Gives ability to take other forms of media such as usb drives

### Upload exams

1. <u>Destination</u>	<b>2. Find Exams</b>	3. Select exams	4. Confirm
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Place a CD/DVD in your computer's drive and click to detect exams <b>Find exams on CD/DVD</b>	Find exams to upload on a CD or find exam folders on your computer and select them <b>Browse for exams</b>
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# Pre Clinician Workflow

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- ❖ Shows exams on disk
- ❖ Can select all or some

### Upload exams

1. <a href="#">Destination</a>	2. <a href="#">Find Exams</a>	<b>3. Select exams</b>	4. <a href="#">Confirm</a>
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Confirm the patient info and specify what to upload by checking or unchecking the boxes next to each exam.

NAME	DOB	GENDER		
Hancock, Edward H	12/05/1956	M		
EXAMS	<input type="checkbox"/>	MODALITY	DESCRIPTION	DATE
	<input checked="" type="checkbox"/>	MR	MRI BRAIN W W/O CONTRAST	01/13/2012



# Pre Clinician Workflow

- ❖ Input VCU HEALTH MRN
  - ❖ Allows in house staff to search system by mrn
  - ❖ Auto fills MRN to PACS form

### Upload exams

1. <u>Destination</u>	2. <u>Find Exams</u>	3. <u>Select exams</u>	4. <b>Confirm</b>
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**Patient**

DOB: 12/05/1956

**Exams**

1 exam is available for upload

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**PATIENT'S MRN FOR THIS FACILITY**

MRN:

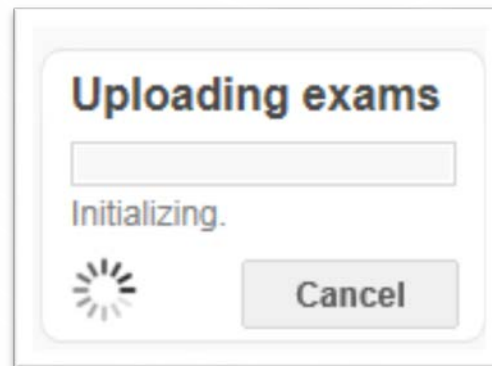
Please ensure MRN is accurate

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# Pre Clinician Workflow

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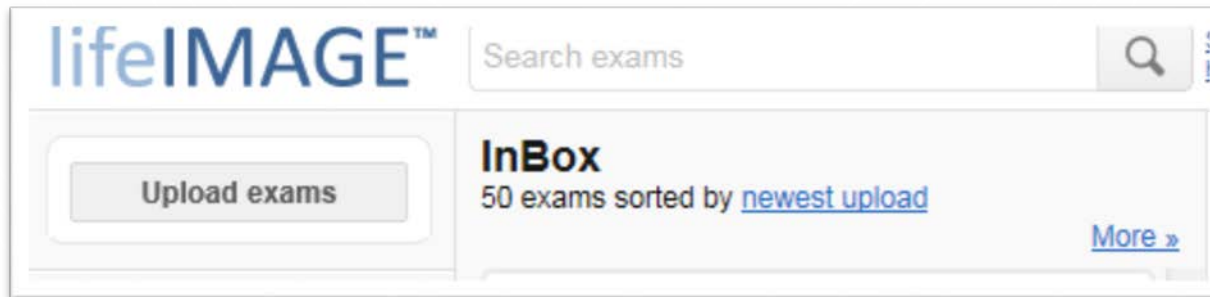
- ❖ Upload button turns into progress bar
  - ❖ Turns back to upload button as soon as upload completes
  - ❖ All studies upload at same time
  - ❖ Average upload time less than 2 minutes
  - ❖ CD can now be given back to patient



# Clinician Workflow

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- ❖ All clinicians now have access to the images
  - ❖ Search box at top of screen allows searching for patient by mrn or name.
  - ❖ Studies held 90 days if not nominated to pacs



# Clinician Workflow

- ❖ Clinicians can nominate to PACS
- ❖ Electronic request
- ❖ Click PACS button from study
- ❖ Form auto fills for default selections
- ❖ Report can be attached to study

Summary Viewer Reports Download **PACS** Manage Exams Attachments

### Nominate Exams to PACS

Fields marked with an asterisk \* are required.

Gatekeeper group: NOMINATED

Send to PACS: No Read View Only

If Radiologist Interpretation is requested, the patient will be billed for this service.

Urgency: Routine

Patient Location: Outpatient

\* MRN: 8031770

Modality: MR

External exam description: MRI BRAIN W W/O CONTRAST

Contact Phone or Pager Number:

A consult is being requested due to: Select

Additional Information:

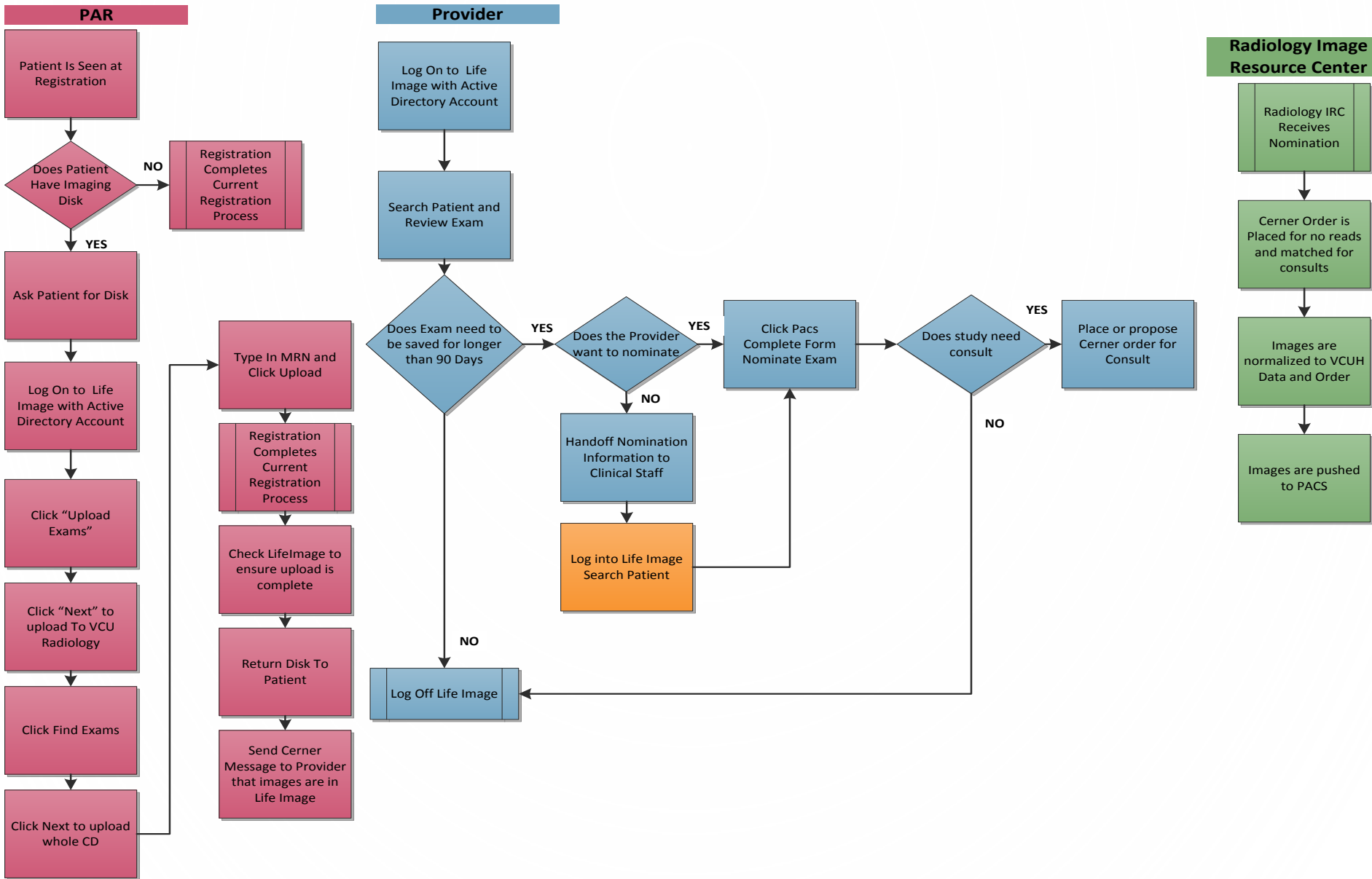
Include documents with this exam:  [MR\\_01/13/2012\\_MR MRI BRAIN W W/O CONTRAST](#)

**Nominate exam**

# Proposed Nomination Workflow

- ❖ All users can nominate studies to PACS
  - ❖ Consults require Cerner order from provider or the provider to personally nominate the study
  - ❖ No reads only require nomination.

# Life Image Work Flow A Registration Upload (Recommended WorkFlow)



# Improvements for the Radiologist

## ❖ Additional informational thumbnails in McKesson

THIS IS AN OUTSIDE STUDY

Study ID: NR1631351  
Study acquired outside hospital series: 900

**⚠ This study was imported into PACS from Ili<sup>TM</sup>**

**Note:** This demographic information has been edited to reflect the information in our systems

**Study origin:** BSR Reynolds Crossing  
**Exam ID:** 271

	Original Information	Current Information
<b>DOB:</b>	01/14/1950	01/14/1950
<b>Name:</b>	SHRAISON^CAROLJOYCE	Shraison^Carol-Joyce
<b>Study description:</b>	CR WRIST MIN 3 VIEWS RT	ONR-Bone-upper-CR
<b>Gender:</b>	F	F
<b>MRN:</b>	009383707	1622259

Outside Study Alert with both demographics

### Outside Report

Study ID: NR1631351  
Study acquired outside hospital series: 900

**RESULTS**

DATE OF EXAM: 20160808      PHYSICIAN: AYVAN ZHENG

**XR WRIST RT**  
**AP, LAT, OBL AT 1538 HOURS.** (Report)

\*\*\*FINAL RESULT\*\*\*  
Signing Date/Time: 08/08/2016 3:26 PM  
Signed by: Susan Prizza, MD  
Interpreted/Read by: Susan Prizza, MD  
Reason for Exam:  
Patient Class:

\*\*\*Final Report\*\*\*  
ICD-Codes / Adm.Diagnoses: 719.41 V25.132 / right shoulder pain  
Examination: CR WRIST 3 VIEWS RT - 15380716 - Aug 8 2016 3:23PM  
Accession No: 13474258  
Accession right wrist pain

**RIGHT**  
EXAM: CR WRIST MIN 3 VIEWS RT  
INDICATION: right wrist pain and numbness after fall 2 weeks ago.  
COMPARISON: None.  
FINDINGS: 4 views of the right wrist demonstrate a vague horizontal sclerotic line that parallels the articular surface of the radius, 9 mm proximal to the articular surface, also confirmed on the lateral view. Distal osteopenia is noted. There is no specific cortical with tissue overlying.  
IMPRESSION: Osteopenic right wrist, subtle dorsal right distal radial impaction fracture. DKA is recommended in patient with fragility fractures.  
2 CX

Signing/Reading Doctor: SUSAN PRIZZA 00939710  
Approved: SUSAN PRIZZA 00939710; Aug 8 2016 3:28PM

Study ID: NR1631351  
ACS nomination form series: 901

### Nomination Form

Send to PACS: No Read View Only  
Urgency: Routine  
Patient Location: Outpatient  
MRN: 1622259  
Modality: CR  
External exam description: ONR-Bone-upper-CR  
Contact Phone or Pager Number: 828-3815  
A consult is being requested due to:  
Additional Information:  
Nominated by: Ilvy Cotterell

Nomination Form