

Carestream

Vue Motion

UK & I Healthcare IT User Group
September 2014

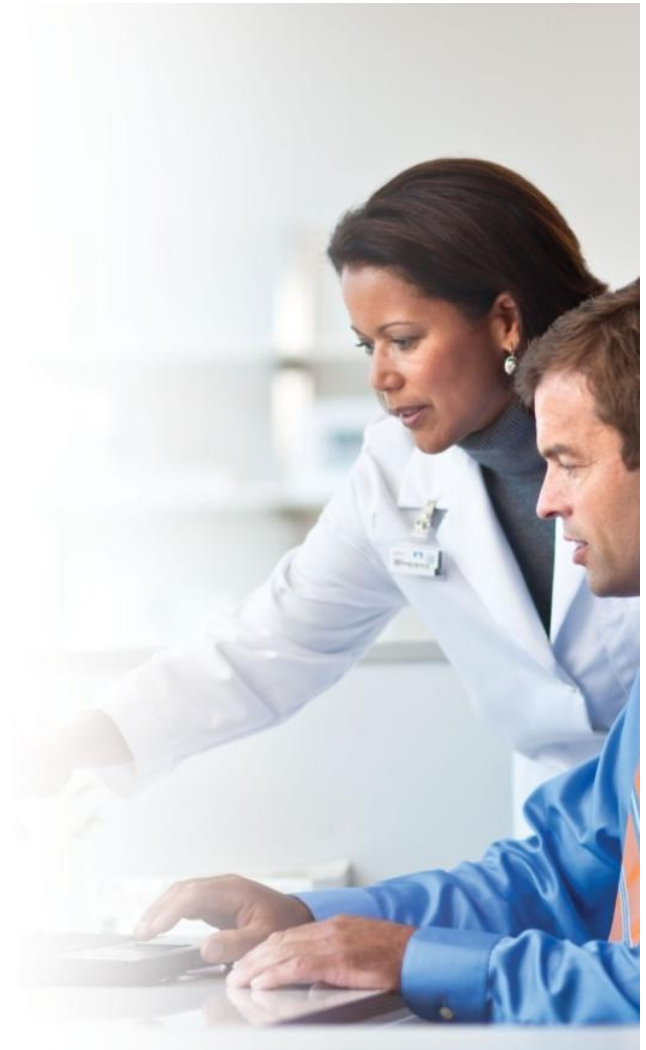
Enterprise Review and Collaboration

The Industry

- Ad-hoc and on-demand access to comprehensive patient records by referring physicians
- Consolidated results and image display as part of the EMR

The Need

- Speed and performance
- Simple, easy to adopt, intuitive design, requires no dedicated applications training



Introducing Vue Motion

Light

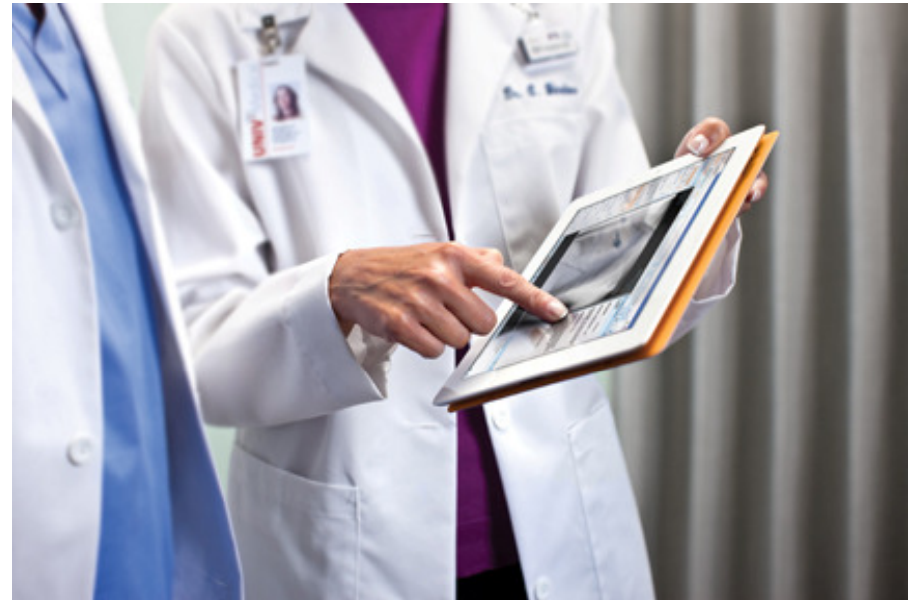
- Pure Web HTML5 technology to run on various OS and devices using only a Web browser
- Zero overhead, no installation required

Connected

- Independent or embedded within EMR or HIS, eliminating multiple logins
- LDAP and built-in auditing support ensure compliance with security and safety regulations

Integrated

- Intuitive user interface to view enterprise patient data, including: DICOM, non-DICOM and other supporting file types
- Access data from third-party PACS or any other DICOM archive
- Collaborate with other users using sticky notes and email messages with embedded links to the relevant studies



**Vue Motion is FDA cleared for iPad use.*

Benefits of Enterprise Access with Motion

On-demand and Ad-hoc

- Referring physicians can access enterprise imaging patient portfolios, including comparison of images, reports and other supporting data
- Enables real-time collaboration between clinical users



****Vue Motion is FDA cleared for iPad use.***

Simple to deploy and maintain

- Zero overhead for high-speed performance
- Latest enterprise-access technology without replacing your legacy PACS or archive

Easy to Use

- Simplify workflow as an independent viewer or embedded within EMR or HIS, eliminating multiple log-ins
- Intuitive user design doesn't require dedicated training

Clinical Data Access on Devices

Clinical application should be part of an enterprise security architecture that ensures confidentiality, data integrity and availability.

Additional considerations

- Compliance with government regulations (i.e. FDA)
- Personal device versus corporately issued
- Theft and data loss
- Data retained on device (ex. dedicated app) or centralized on server (ex. zero footprint)
- Physical security “screens”



Motion Implementation Options

1. Vue Motion with CARESTREAM Vue PACS or Archive

- Enterprise access and viewing as an independent viewer
- DICOM, HL7 and other data types supported

2. Vue Motion with NON-CARESTREAM PACS or Archive

- PACS- and archive-agnostic, local cache to improve performance
- Complement legacy PACS with Motion as the universal enterprise-access viewer

3. Integrated Viewer with EMR or HIS

- URL activation without separate login
- Separate window launch or directly embedded inside application frame
- Direct access through Web services

Home Page

Easy-to-Search, Privileged-Based Access

iPad 6:28 PM 90%

Carestream Vue Motion

cs-vuemotiondemo-us.carestreamhealth.com/portal/ Google

Carestream Search for patient (16) WOLF SARA Hello Christine Kao Sign out

Free Search | Last Viewed

Last name: First name: Patient ID: Accession #: Quick search

Filter by: Date - All | Patient Location - All | Studies with - All | Status - All | Modality - All

Patient Search Results (16) Page 1 of 2

Patient name	Patient ID	Date of birth	Gender	Patient's Most Recent Study	Report	Note	Key
BLACK, DONNA	10011	10/14/1961 (47Y 6...)	F	5/13/2009 10:59 AM XA 1001199			
CEARLEY, WILMA	DIT2240319...	10/30/1919 (89Y 8...)	F	7/13/2009 8:49 AM XA DIT1465790965			
DEMODRX1C	DIT1472313...	6/2/1947 (63Y 9M)	O	3/21/2011 8:05 PM DX CHEST DIT4223179076			
HATCHER, AMY	2009679843...	9/11/1932 (78Y 2M)	F	11/28/2010 10:39 AM CT ANGIOABD 927500...			
HOPKINS, MARY A	2009354867...	10/19/1928 (76Y 8...)	F	7/11/2005 3:00 PM MR NECK 9275000039526			
JENKINS, SARA	2009346546...	2/6/1942 (65Y 10M)	F	1/1/2008 10:10 AM CT CT BRAIN 927500003...			
JONES, COLLEEN A	2009546546...	12/19/1963 (43Y 2...)	F	2/26/2007 7:54 PM CR CHEST 9275000039541			
LEARY, ALLAN	10008	11/14/1948 (60Y 4...)	M	4/8/2009 12:52 PM US 987			
SCHULTZ, HELEN V	1002772	12/15/1928 (77Y 3...)	F	3/22/2006 8:05 AM XA 30564981			
STORY, SUSAN	DR20001	2/10/1985 (26Y 2M)	F	5/8/2011 12:00 AM DX SHOULDER 20040210...			
STORY, SUSAN	7A6	2/10/1985 (19Y 5M)	F	7/30/2004 11:54 AM MR LUMBAR 3020005601			
TAYLOR, CHRIS	121778	10/5/1942 (62Y 7M)	M	5/12/2005 11:59 AM NM NKSZ 782683			
VERMEIRE, EDGARDO A	2009008578...	2/11/1950 (59Y 3M)	M	5/19/2009 7:05 AM ECG CARDIAC 001046VRB			
WAYNE, JOHN	R119204	2/19/1945 (63Y 11...)	M	1/27/2009 4:33 PM CR CHEST 1004206301			
WHITE, KEN	3512562	2/26/1942 (68Y 3M)	M	6/20/2010 11:37 AM CT CHEST 6789			

Access to Full Patient History

The screenshot displays the Carestream Motion PACS interface. On the left, the 'Patient History' sidebar is highlighted with an orange oval. It includes a search bar for 'RIMA EK143570' and a list of studies filtered by date and type. The main window shows two axial MRI scans of the abdomen. The right sidebar contains 'Patient Reports' with sections for 'TECHNIQUE', 'COMPARISON', 'FINDINGS', and 'MRCP'. The 'FINDINGS' section provides a detailed description of the MRI results.

Patient History

Filter studies by

Last Month (0) Last Year (0) Last 3 Years (0) All (5)

All studies (5)

- 10/24/2008 3:28 PM MR MR ABDOMEN
- 10/24/2008 2:58 PM MR MR PELVIS
- 10/22/2008 10:26 AM CR CSPINE XR CERVICAL SPINE 2 or 3 VWS
- 10/22/2008 10:20 AM CR LSPINE XR LUMBAR SPINE 2 or 3 VWS
- 10/22/2008 9:25 AM MR MR LSPINE

Patient Reports

TECHNIQUE:
MRI abdomen with and without contrast and MRCP was performed on the GE 1.5 Tesla high field scanner at the Renaissance Imaging Center. Patient was examined both before and following the uncomplicated intravenous injection of 20 cc of gadolinium. 3-D coronal rotating MIP images of the biliary tree are available for review.

COMPARISON:
None available

FINDINGS:

MRI Abdomen:

The liver is normal in size and homogeneous in signal intensity. There is normal signal intensity within the liver. No liver mass lesion or intrahepatic biliary dilatation is seen. The spleen is normal in size and homogeneous in signal intensity. The stomach is partially collapsed but grossly unremarkable. The pancreas, as visualized, is equally unremarkable. No pancreatic lesion is seen. The adrenal glands and kidneys are symmetrically normal. The aorta is of normal caliber. There is no retroperitoneal lymphadenopathy. The bowel and mesentery, as visualized, are all unremarkable.

MRCP.:

Image Review

Reports and Notes

iPad 6:23 PM 90%

Carestream Vue Motion

cs-vuemotiondemo-us.carestreamhealth.com/portal/ Google

Carestream Search for patient (16) **STORY SUSAN** Hello Christine Kao Sign out

Patient ID: **7A6** Date of birth: **2/10/1985 (19Y 5M)** Gender: **F**

Patient history (2)

STORY SUSAN, 7A6
Acc: 3020005601
Series Desc: T1w COR with gad
107 - 1

R

I

Patient reports

1/1 Dr. Dr. Radiologist
7/20/2004

MRI of the Spine as of 30.07.2004

Indication:

Emergency MRI of the lower thoracic and lumbar spine to evaluate a suspected SOL (space occupying lesion) of the conus medularis by CT.

Technique:

T1w and T2w without and with gadolinium in the axial coronal and sagittal views.

Findings:

Notes

1/1 Kiran Krishnamurrthy

Purpose: Of Interest

Findings were reported to the referring physician.

7/4/2011 9:25 AM

Image Review

Access to All Series and Key Images, and the Ability to Synchronize Multiple Series, Even from Different Datasets

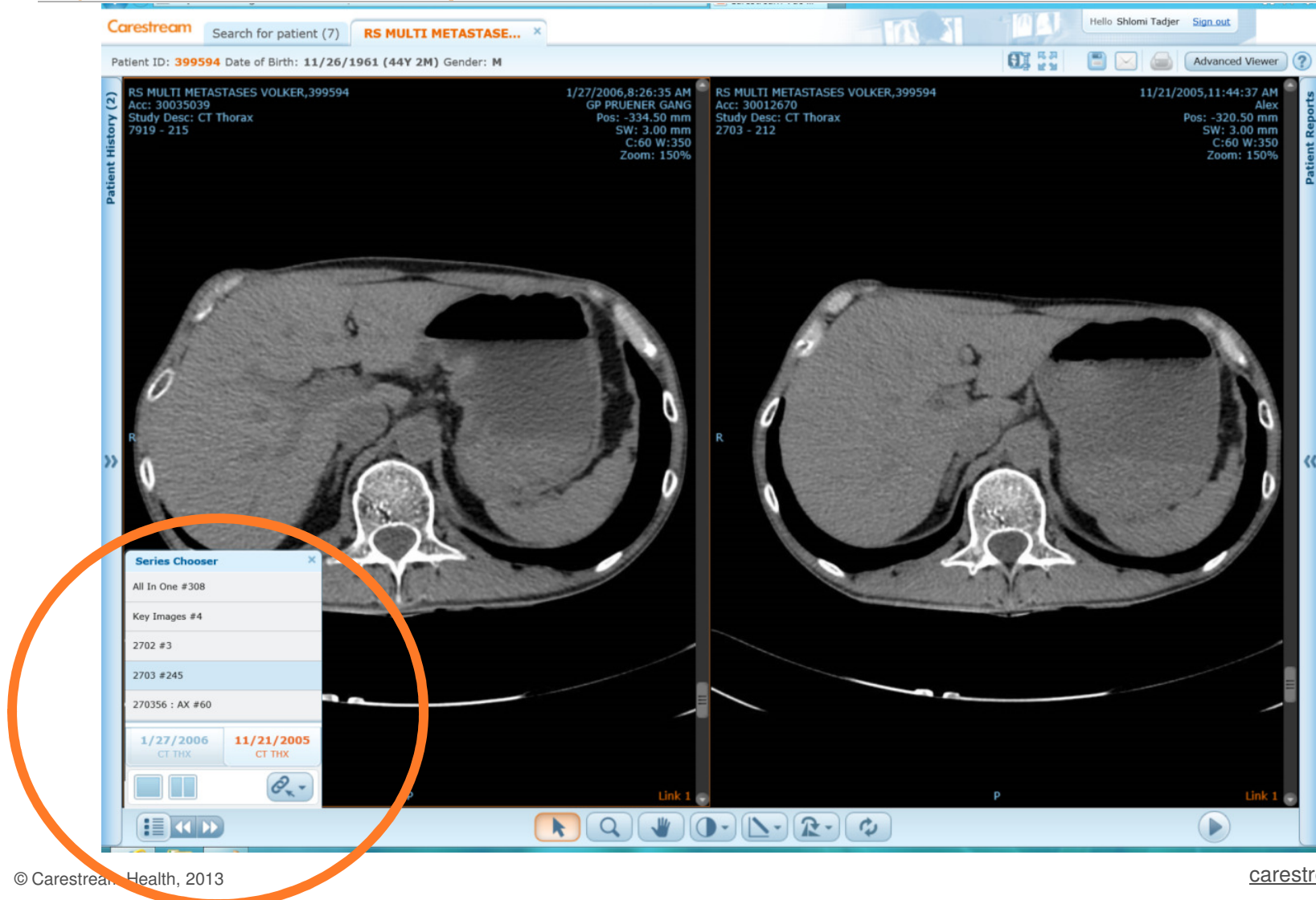


Image Review

Access to All Series and Key Images, and the Ability to Synchronize Multiple Series, Even from Different Datasets

The screenshot displays the Carestream RIMA EK143570 patient interface. The top navigation bar includes the Carestream logo, a search bar for patient (73), and the patient ID RIMA EK143570. The main content area is divided into three panels. The left panel, titled 'Patient History', shows a list of studies with filters for 'Last Month', 'Last Year', 'Last 3 Years', and 'All'. The middle panel displays two MRI scans: a T2 FRFSE BH ASSET (10/24/2008, 3:34:19 PM) and a COR LAVA DynaPlan BH AutoVoice (10/24/2008, 3:59:52 PM). The right panel, titled 'Patient Reports', contains a 'TECHNIQUE' section describing the MRI abdomen with and without contrast, a 'COMPARISON' section stating 'None available', and a 'FINDINGS' section detailing the MRI Abdomen results. The bottom of the interface features a toolbar with various navigation and viewing controls.

Patient History

Filter studies by

Last Month (0) Last Year (0) Last 3 Years (0) All (5)

All studies (5)

10/24/2008 3:28 PM
MR
MR ABDOMEN

10/24/2008 2:58 PM
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COMPARISON:
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FINDINGS:

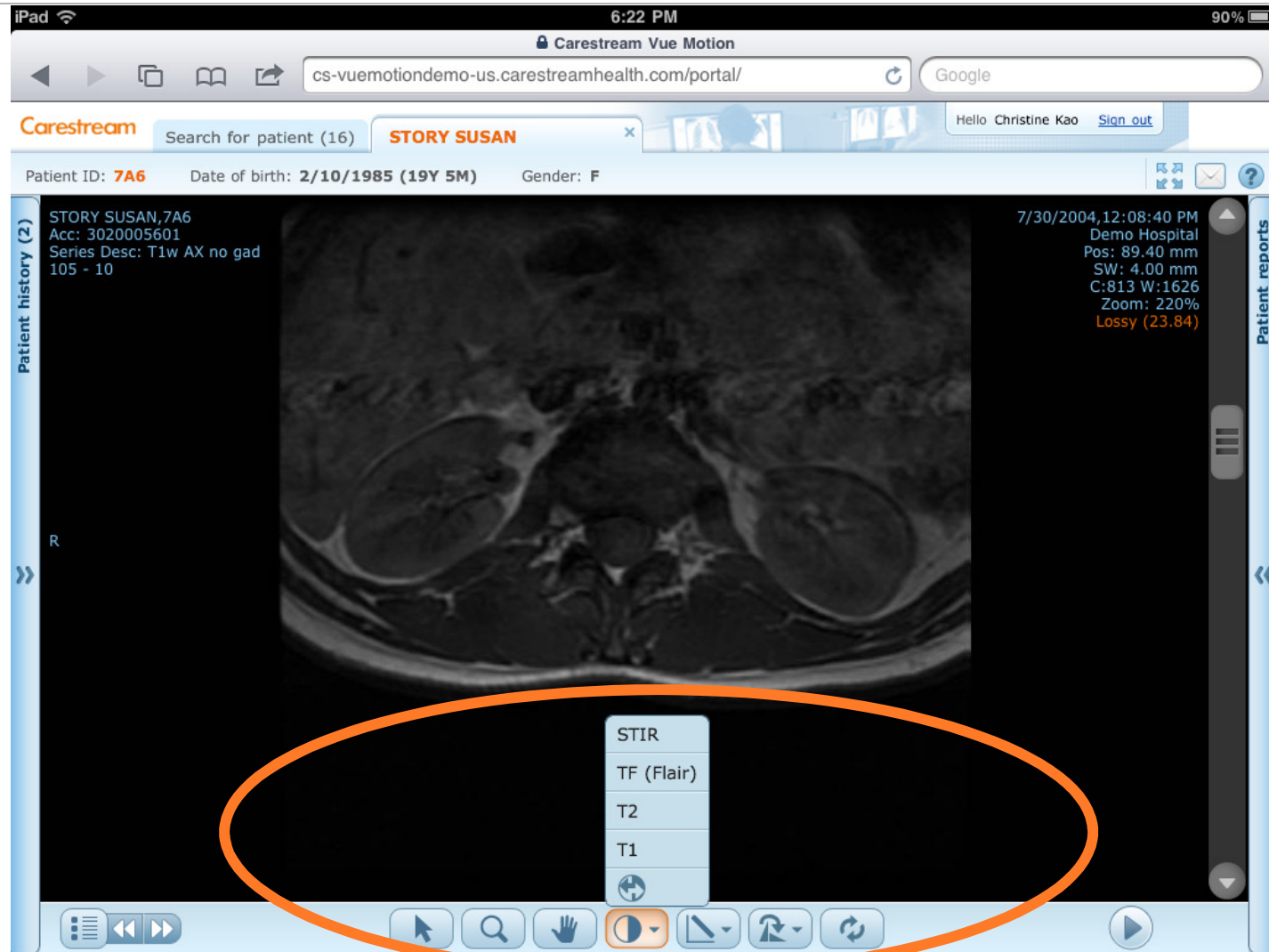
MRI Abdomen:

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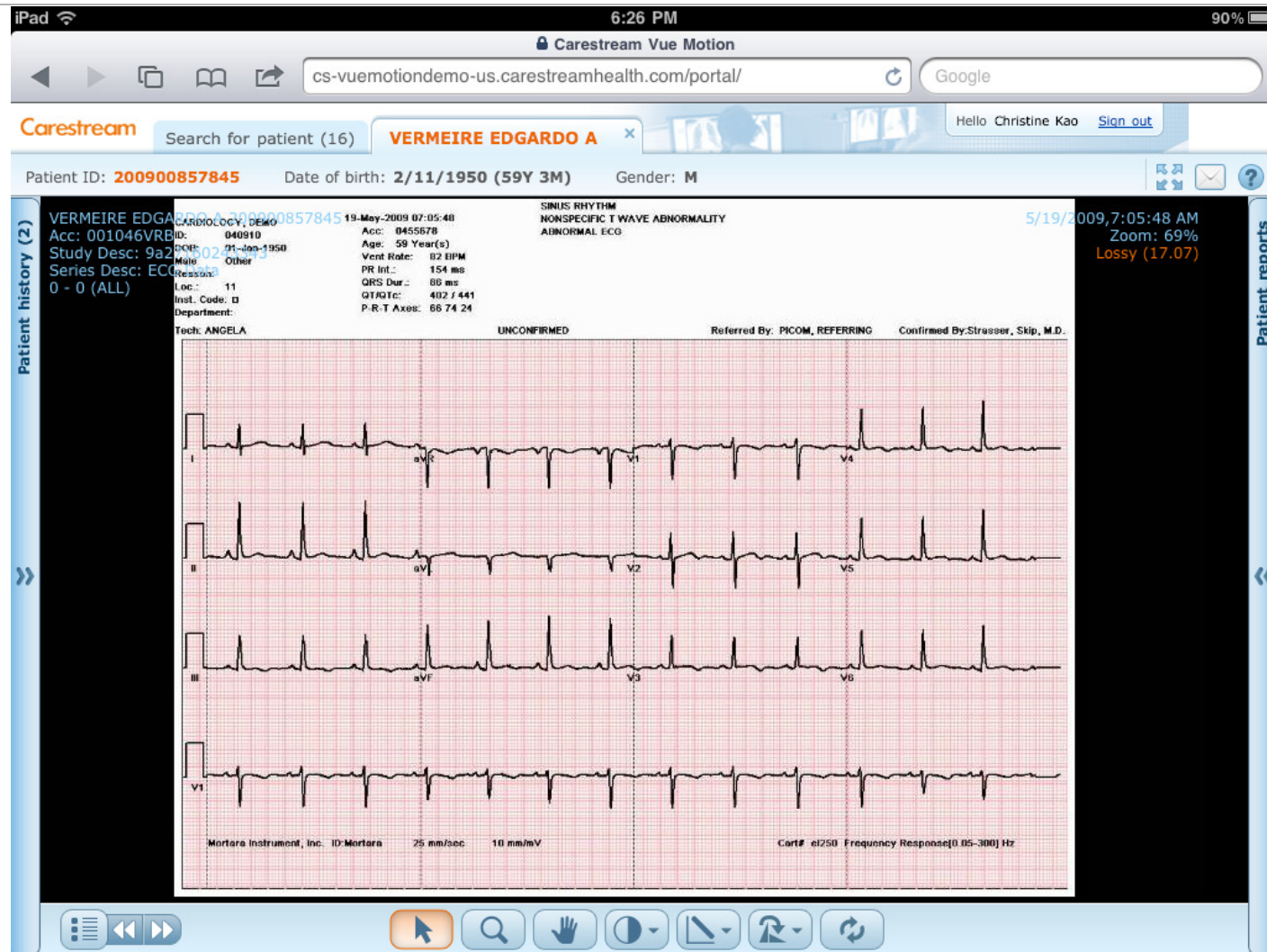
MRCP.:

Notes

Intuitive Tools Include Smart W/L Presets (Modality-Based)



Access to non-DICOM Data



Order Add-On for Referring Physicians

Convenient Collaboration

- Referring physicians can add order-related information to the exam—for added convenience within a teleradiology environment
- Information is kept within PACS and available to radiologists for reference
- Eliminates the need for manual communication, such as fax, email, multiple phone calls, etc.

The screenshot shows a 'Create Order' window with the following sections:

- Patient Information:**
 - Name: ANONYMOUS, R110748
 - Patient Id: R110748
 - Issuer: ceres_new_iss
- Order:**
 - Accession Number: 1004124301
 - Reason For Exam: * Headache
 - Procedure Code: (empty field)
 - Procedure Text: (empty field)
 - Priority: High (dropdown menu)
 - Notes: (empty text area)
- Referring Physician Details:**
 - Name: DR STEPHEN ROGERS (with an 'Update' link) Phone: (empty field)
 - Email: (empty field) Fax: (empty field)
- Clinical:**
 - Contrast not injected due to allergies\ creatinin\ etc. (empty text area)

At the bottom of the window are 'OK' and 'Cancel' buttons.

National Institute Of Health Use Case

New radiology viewer lets users securely access patient scans anywhere, anytime



With the new picture archive and communication system "lite viewer" Jacquin Jones, a research nurse coordinator in Radiology and Imaging Sciences, can take patient scans wherever there is a high-speed internet connection, even to the NIH Library for reference during research.

Clinical Center Radiology and Imaging Sciences is using an innovative new system that allows users to access scans anywhere there is a high-speed Internet connection.

The new picture archive and communication system (PACS) "lite viewer" allows users to access any patient image, anywhere, anytime, said Dr. David Bluemke, Radiology and Imaging Sciences director.

A sort of mobile viewing room, the system is designed to work with any browser-enabled device, especially portable wireless devices or tablets. The system is fast, portable, and user-friendly, allowing users to take images with them to meetings, conferences, or even to the library for reference during research. Users can search for data by patient name and open and view scans without being tied down to a desktop system, enabling efficient communication between physicians, radiologists, and patients.

The system is easy to navigate and can display massive amounts of patient image data very quickly. "Image PACS systems have previously been designed for expert radiologists, but we know that patient care occurs at the bedside, in the conference room, or clinic," said Bluemke. "We need to make NIH patient data available wherever our researchers are and whenever they need it."

Physicians and researchers can access patient images using their NIH username and login at: <http://intranet.cc.nih.gov/radiology/pacslite.html>.

New Features in V12

- **Comparison tools:**
 - Registration
 - Add priors directly from Bookmarks
- **Enhanced layout:**
 - Up to 2x2
- **3D capabilities:**
 - MPR
 - MIP
 - VOLR
- **Bookmarks:**
 - See and access bookmarks
 - Live hyperlinks in reports

Comparison Tools

- **What it is:**
 - Multi-layout (2x2)
 - Registration
 - Easily add priors
 - Add priors via bookmarks
- **What it means:**
 - Powerful tool – not “just” a viewer
 - Orthopedic surgeons can view MR studies
 - Can be a diagnostic tool (FDA approved on PC)

Carestream