

THE POWER OF **01ne**



# Improving the Speed and Efficiency of Breast Imaging Workflows

Centricity™ Universal Viewer with Native Breast Imaging



# Experience the Power of One viewer for all modalities, removing barriers to efficiency, while helping radiologists achieve their goal of high quality patient care



Supports a rapid mammography reading workflow throughout your enterprise with mammography-specific toolsets



Increase workflow efficiency and support a more confident diagnosis by utilizing patient priors including Ultrasound, MRI, and DBT as well as clinical and pathology reports<sup>2</sup>



Reduce IT resources and associated costs needed to configure and maintain as no separate mammography dedicated ecosystem required

Centricity Universal Viewer provides native access to breast imaging workflows and tools to support screening and diagnostic workflows and the display of multi-vendor images, reducing the costs associated with procuring/maintaining dedicated mammography workstations.<sup>1</sup>

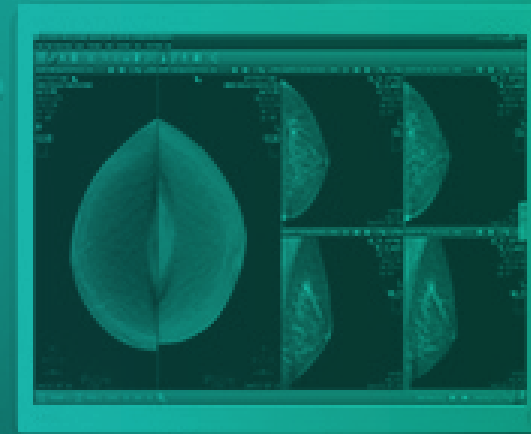
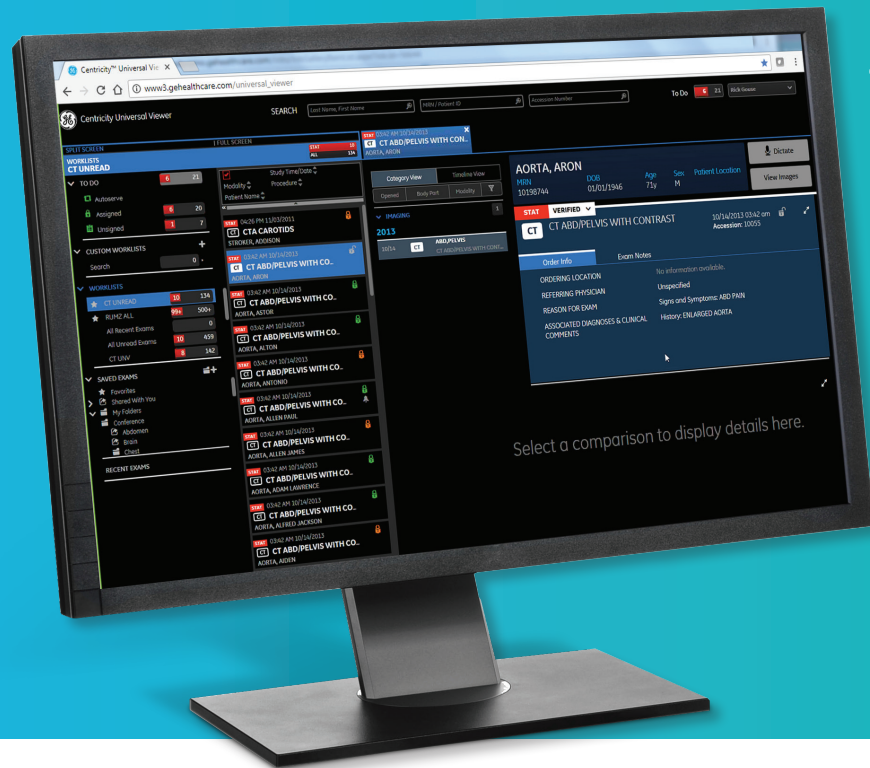
These breast imaging capabilities provide the radiologist with access to and the ability to read multi-ology image types available for the patient on the same workstation, helping reduce the need to maintain separate, stand-alone workstations and separate specialized systems.

With the ability to utilize other patient priors, in the diagnosis as well as other patient reports such as clinical notes, pathology reports, Centricity Universal Viewer supports a more confident diagnosis while speeding up your reading time.<sup>2</sup>

Supported image types include mammography, tomosynthesis, breast MR, breast ultrasound, and Contrast Enhanced Spectral Mammography (CESM). Non-breast images available in the system can be displayed to help provide more information on the patient.

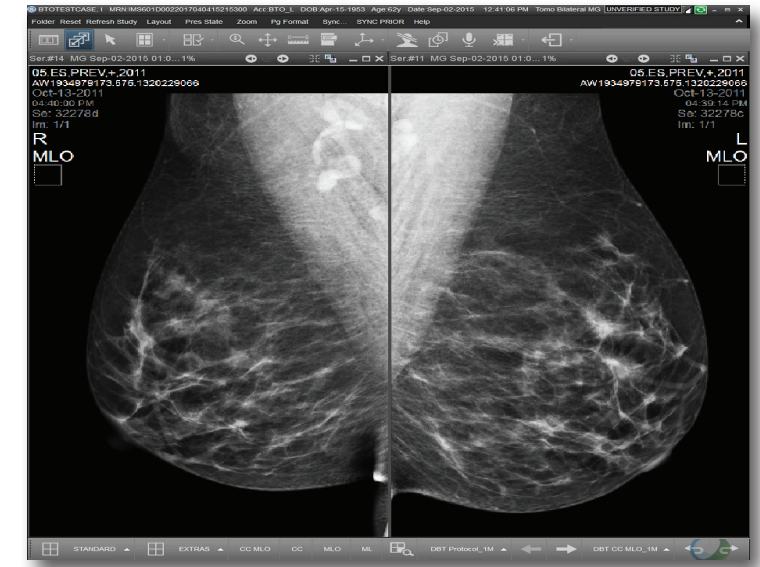
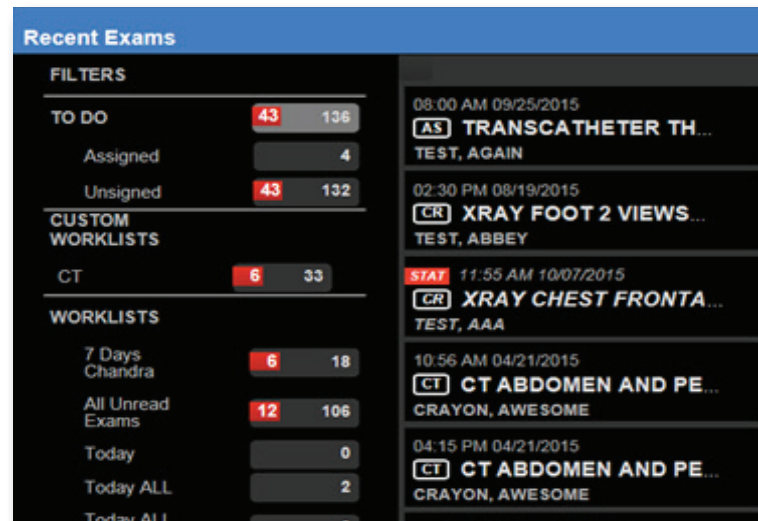
# Breast Imaging Workflows

and easy access  
to multimodality  
analysis tools now  
available throughout  
your enterprise.



- 01** View your cases for the day using the INTELLIGENT WORKLIST
- 02** Click on a exam to see patient details, history and clinical content from EHR in DIAGNOSTIC HUB
- 03** On starting an exam, Images are automatically aligned to the chest wall. Prior images and other viewports are same-sized for easy comparison
- 04** Create, apply and share custom step protocols which can include CT, MRI, Ultrasound and advanced visualizations
- 05** Mammography-specific toolbar and shortcuts put all relevant tools at your fingertips. DBT, Cine and breast orientation tool controls the level of each plane
- 06** Optional Advanced Image Diagnostic tools can be utilized to support Computer Aided Detection (CAD)
- 07** Key images or bookmarks can be easily created for communicating out findings
- 08** Unique INTERRUPTED WORKFLOW DESIGN makes managing interruptions easy
- 09** Dictate report then be instantly in your next case with AUTO NEXT WORKFLOW

# Breast Imaging Workflow



## 01 View your cases

Intelligent Worklist with Autoserve provides smart allocation of work, using rules to fit to diagnostician, business and patient care priorities, with the ability to redirect exams when you're not available. Worklist Sorting with full screen visuals and patient context for each exam allow easy and quick identification and prioritization of work.

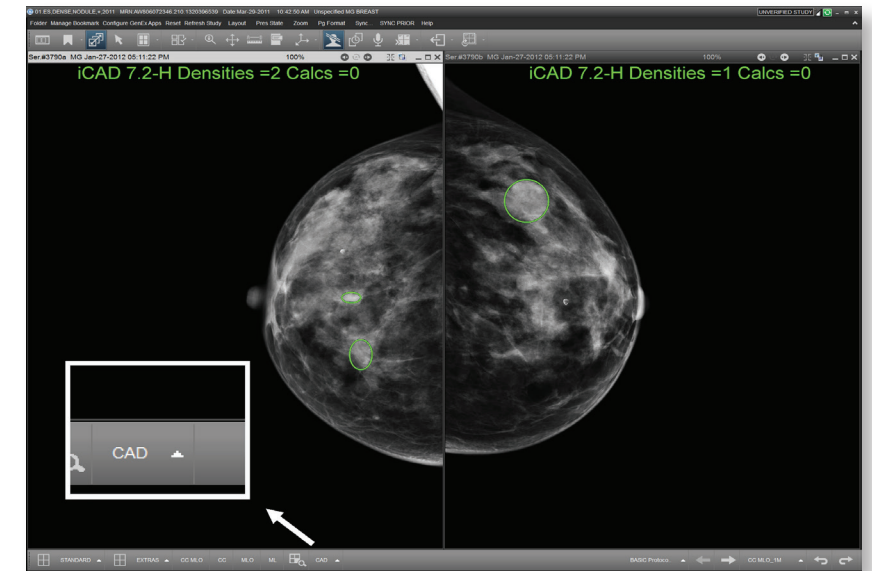
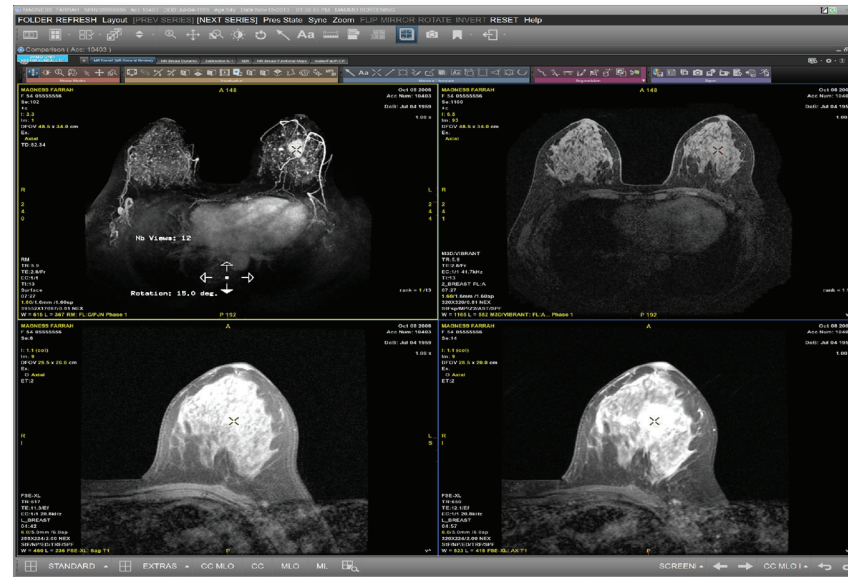
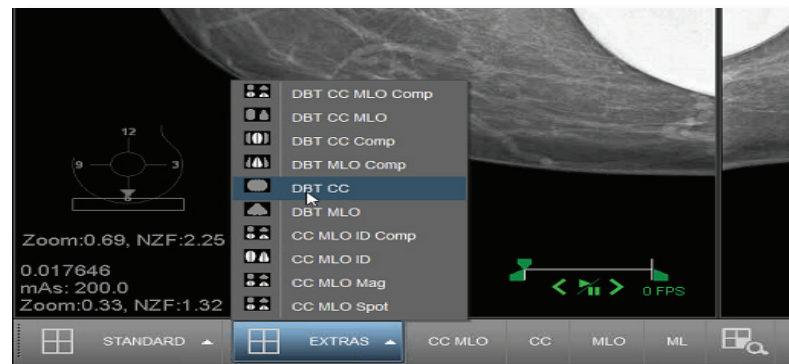
## 02 Click on a patient and view exam notes and history

Diagnostic Hub provides rapid access to the patient's demographics and primary exam information, including order information and report text if available, along with comparison, imaging history, prior exam information with reports and Imaging Related Clinical Context (IRCC) such as EMR notes.

## 03 Auto image alignment and sizing

Same Sizing provides stable scaling of images to fit viewport and maintain the same sizing across viewports, priors and even other vendor's images. Images are automatically aligned to the chest wall and Smart Invert and Window Level is used to maintain high contrast against background in case of contrast and brightness change of the image.

# Breast Imaging Workflow



## 04 Mammography-specific toolbar & shortcuts put all relevant tools at your fingertips

Enhances the speed of your read with intuitive tomo scrolling, quadrant zoom and zoom+pan combined mouse action. You can use one or more high resolution displays – Color is supported to provide color enabled overlays, CAD marks, labels and other clinical information for increased readability/detectability.

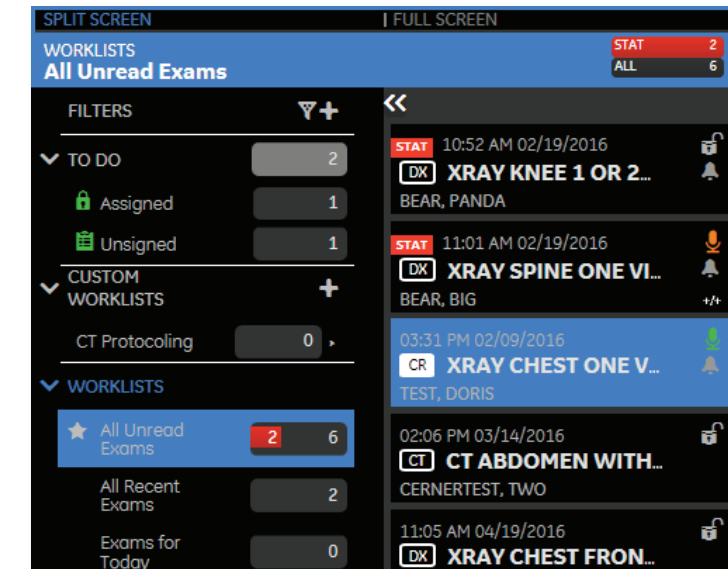
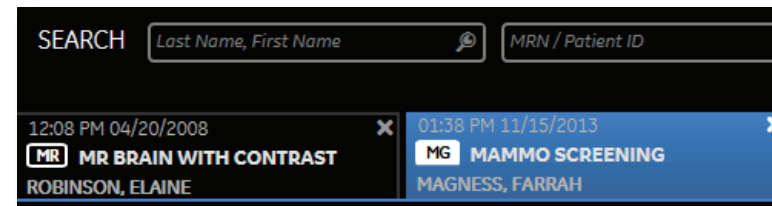
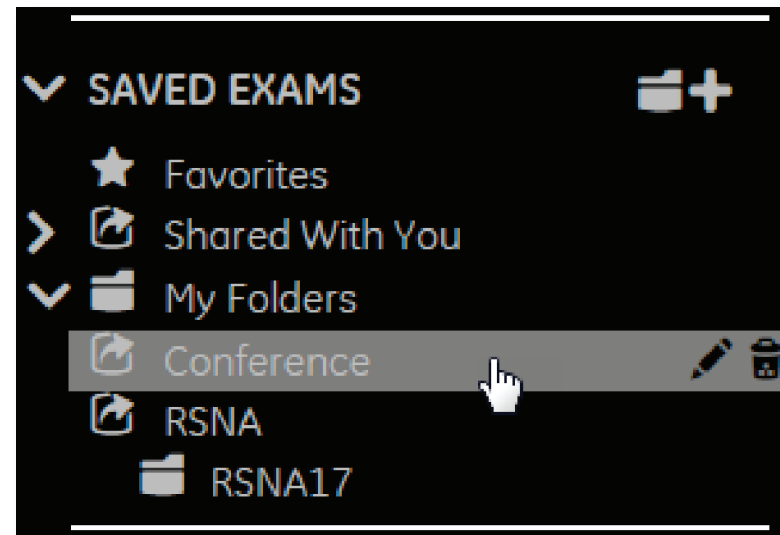
## 05 Create, apply and share custom step protocols

Step through your reading protocols with Mammography specific layouts including priors, CT, MRI, and Ultrasound. You can even include Advanced Visualizations such as GE Healthcare's Ready View Breast MR to help with interpretation by allowing you to do post processing, often with one click.

## 06 Optionally use advanced Image Diagnostic tools such as Computer Aided Detection

A dedicated CAD button supports DICOM6000 overlays for CAD (Computer Aided Detection) to indicate areas of interest preprocessed by a separate CAD server. CAD display is turned off on initial load of any mammogram exam to avoid biased interpretation.

# Breast Imaging Workflow



## 07 Easily create key images or bookmarks for communicating out findings

User Defined Foldering, email integration and send to GE Health Cloud makes it easy to share imaging studies with bookmarks to collaborate on clinical workflows, communicate results and support seamless multi-disciplinary exam reviews.

## 08 Interruptions are easily managed

A unique Interrupted Workflow Design makes switching exams as easy as tabbing in a browser – exams can be held in mid review to as address urgent cases, then quickly re-opened later. When dictating, the system automatically saves dictation and image annotation and reopens where you left off.

## 09 Dictate report then be instantly in your next case with AUTO NEXT WORKFLOW

Auto Dictation Launch starts dictation when you launch an unlocked exam. Optional Auto Next Workflow takes you to your next case after saving, dictating or finalizing an exam. Any stat exam is automatically served next to take the risk of missing an urgent exam out of the equation.

# Single or Multiple Monitors

A significant benefit of the Universal Viewer native breast imaging capability is that the solution can be deployed on just two monitors, saving space and cost: A normal resolution monitor to support the workflow application, dictation or voice reporting systems and the EMR, and up to four high resolution monitors to display mammogram-specific modality images as well as the other relevant comparison images such as breast ultrasound images or breast MR images. Centricity Universal Viewer also takes full advantage of color displays to provide color enabled overlays, CAD marks, labels and other clinical information for increased readability/detectability.



## A User Experience designed to optimize breast imaging diagnosis workflows:

Same Sizing – Stable scaling algorithms provide stable scaling of images to fit viewport and maintain the same sizing across viewports, priors and even other vendor's images.

Smart Invert and Window Level is used to maintain high contrast against background in case of contrast and brightness change of the image

Enhances the speed of your read with prior and current image layouts for quick comparisons, intuitive tomo scrolling, quadrant zoom and zoom+pan combined mouse action

Mammography imaging specific toolbar with Cine and DBT tools

Ability to program user, group or system level preferences

Customizable annotation overlays

Color monitor support

Reports can be shown on screen

User customizable key and mouse shortcuts

Quadrant zoom

Chest wall to chest wall alignment

Customizable step protocols with Mammography specific layouts including priors

Ability to use Advanced Image Diagnostic tools to support Computer Aided Detection

Custom layouts based on user profiles

Save Annotations and Key images

# Centricity Universal Viewer Workflow Manager

is an intuitive workspace uniquely designed for radiologists and trained professionals to organize, prioritize, and manage exams for interpretation. It provides access to clinical information and images along with connectivity to third party information and reporting systems, presenting images and information in an intuitive format and supporting them with clinical relevance.



## Key Benefits

**Custom User Worklists** reduce dependency on system administrators by allowing users to create their own worklists.

**Worklists Filtering and Sorting** with full screen visuals and patient context for each exam allow easy and quick identification and prioritization of work.

**PIX Based Multi-Domain** support enables single or multi-facility worklist.

**Case Assignment and Locking** with auto-unlocking rules.

**Recent Exam List** with reverse chronological ordering of opened cases, reports and other items makes it easier to find read exams to review against the transcription.

**User Defined Folders** provides the ability to create hierarchical folders and save exams for future reference such as teaching/academia and peer/quality review.



# Centricity Universal Viewer

helps remove barriers to efficiency, while helping radiologists achieve their goal of high quality patient care. With advanced efficiency tools, it ensures that valuable time is spent solving diagnostics challenges, not navigating software. A customizable, intuitive user interface and optimized layout reduce the steps required to view and interpret studies and helps you focus on the images, rather than the software. These features help to increase the efficiency of your reading workflow and can help support more confident diagnoses.



**Adaptive Streaming Engine** doesn't keep you waiting – First image is displayed in under three seconds. It anticipates study content needed to prioritize fetches and adjusts for network conditions, device compute power, and image compression to provide the most efficient way to deliver images.

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**Cross Enterprise Display (XED)** provides radiologists and cardiologists with seamless access to a patient's historical imaging data, discovering patient information in affiliated systems and presenting it in the patient timeline. Comparison images are streamed directly from the source to the client, reducing the need to transfer images, alleviating the creation of uncontrolled copies, and minimizing the challenges of data synchronization.

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**Integrated Advanced Visualization** eliminates the need to switch to separate workstations and automatically loads and hangs 3D post processing results such as such as GE Healthcare's Ready View Breast MR Advanced Application.

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**Send to GE Healthcloud** makes it easy to share imaging studies with bookmarks to collaborate on clinical workflows, communicate results and support seamless Multi-Disciplinary exam reviews.

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**Patient Timeline with Smart Relevancy** provides multiple options to locate priors and easily identify similar body parts and modalities with imaging history quick filters.



GE Healthcare is a leading provider of medical imaging, monitoring, biomanufacturing, and cell and gene therapy technologies. GE Healthcare enables precision health in diagnostics, therapeutics and monitoring through intelligent devices, data analytics, applications and services. With over 100 years of experience and leadership in the healthcare industry and more than 50,000 employees globally, GE Healthcare helps healthcare providers, researchers and life sciences companies in their mission to improve outcomes for patients around the world” Follow us on Facebook, LinkedIn, Twitter and The Pulse for latest news, or visit our website [www.gehealthcare.com](http://www.gehealthcare.com) for more information.

## Imagination at work

1 Through simplification of IT infrastructure

2 Rafferty EA, Park JM, Philpotts LE, et al. Assessing Radiologist Performance Using Combined Digital Mammography and Breast Tomosynthesis Compared with Digital Mammography Alone: Results of a Multicenter, Multireader Trial. *Radiology*. 2013;266(1):104-113. doi:10.1148/radiol.12120674.

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