Breast Imaging

Integrated breast health workflow with BIRADS® tracking.

eRAD’s Breast Imaging solution is optimized for high-volume reading, supported by effective pre-fetching of priors and automatic display protocols that require minimal manual intervention.

eRAD Breast Imaging features solutions for high-volume screening and advanced diagnostic mammography, eliminating the need for dedicated mammography workstations. The patient’s priors—US, MR or any modality—and the full patient record can be viewed from any mammography reading station and easily compared to current results. Our web-based solution ensures fast image distribution and data retrieval, even over high-latency networks and in remote environments—freeing mammographers from dedicated, monolithic workstations. Login once to access an integrated workflow that includes breast imaging tools and is tailored to individual preferences—no additional applications to learn.

A closed-loop follow-up workflow is driven by BIRADS coding and tissue density, ensuring clinician productivity and fostering patient relationships.

An ergonomic external keypad is customized per user and provides the necessary reading functions (i.e., CAD display, mirrored synchronization), making the most commonly used tools easily accessible. Digital breast images, regardless of modality vendor, automatically display in the same size with correct orientation and alignment, facilitating comparison of current and prior images. Integrated report creation tools in the diagnostic viewer make this a powerful workflow combination.

**Complete breast health workflow.**
Integration across the eRAD platform means that—beyond breast imaging—the system can capture biopsy results, pre-fetch based on today’s appointments, send follow-up letters and patient prep instructions and alert referring physicians. The eRAD workflow improves patient outcomes.

**Multi-modality support.**
Cut the cost of a dedicated workstation by reading multiple modalities—MR, mammography, tomosynthesis, ultrasound—from the same workstation. Sophisticated pre-staging of priors, even from distributed sites or third-party systems, keeps radiology productive.

**Auto-positioning and custom multi-views.**
eRAD not only auto-positions for mammo viewing, it also can auto-fit a full resolution image by anatomy (skin-line detection) or image area. Custom layouts can be set to initialize together, so that users can quickly toggle between them for alternate views of a study. HL7, DICOM and IHE conformance maintained.

**BIRADS®-driven tracking.**
eRAD complies with the American College of Radiology’s (ACR) codes for Breast Imaging Reporting and Data System (BIRADS). A closed-loop follow-up workflow is driven by BIRADS coding and tissue density, so patient throughput and follow-up is improved.

“We have been very impressed to date with the intuitiveness of the products, the ease of implementation, the product and professional services support teams from eRAD and the pace at which we are seeing this new platform evolve.”

Dr. Brent Mainwaring
Medical Director
The Outpatient Diagnostic Center (ODC) of Beaumont

**Tomosynthesis**
Breast tomosynthesis (3D Mammography) helps clinicians find early curable breast cancers via multiple slices of each breast from multiple projection views. eRAD technology is optimized to handle the storage capacity, archive costs and distribution infrastructure necessary to support tomosynthesis, and our Mammography Module delivers 3D mammo features (like tomo synchronization, annotation and cine), enabling our customers to provide this innovative modality to their patients.

**AIE Image Enhancement**
AIE’s proprietary image enhancement software leverages signal processing technology originally developed from Navy research to locate undersea mines. In an expanded application, this technology enables physicians to extract more information from medical images. AIE’s processing algorithms enhance digital mammography images to create visually sharp and detailed images. Clinical trials have demonstrated this technology improves the conspicuity and detail of abnormalities and the clarity of detail in dense breasts. eRAD has integrated the AIE image enhancement toolkit as an advanced image processing option in the Mammography Module.