# Breast Imaging Provider Streamlines Workflow With Carestream Health's PACS, Multi-Modality Workstations

#### Integration with Existing RIS, PowerScribe, CADstream Systems Delivers Highly Productive Workflow

It's a familiar challenge for breast imaging providers: the need to link multiple vendors' FFDM systems with a PACS that can deliver highly productive reading for FFDM, CR, MR, ultrasound and other types of breast exams from a single workstation.

But the staff at Park Nicollet Jane Brattain Breast Center (St. Louis Park, Minn) wanted even more. They were determined to implement a PACS that interfaced seamlessly with existing RIS, voice dictation and CAD systems while offering a fully featured multi-modality workstation with specialized mammography reading tools.

"When we evaluated PACS systems, we were looking for an efficient, integrated workflow that would increase productivity and convenience for radiologists and other users," notes Kathy Wilson, Supervisor of the Breast Center.

"Carestream Health demonstrated that its PACS could support a smooth integration with our existing Centricity RIS, PowerScribe and CADstream systems. In addition, its fully featured multi-modality workstations offered a strong set of tools and exceptional ease of use."



Supervisor Kathy Wilson, RTRM, talks with Monica Schiller, Manager of the Park Nicollet Jane Brattain Breast Center.





Barbara Luikens, MD, medical director of the Jane Brattain Breast Center, examines patient images using the Carestream Health multi-modality breast imaging workstation.

After implementing a CARESTREAM PACS and six multi-modality breast imaging workstations, a streamlined workflow now serves the center's five locations that perform 400 mammography imaging exams a day. Significantly enhanced radiologist productivity

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Kathy Wilson, Supervisor, Park Nicollet Jane Brattain Breast Center enables same day reporting for all diagnostic and screening exams. In the past, reports on screening exams from remote clinics often took several days.

### **Five Locations Perform 400 Studies a Day**

The main diagnostic center performs 240 exams a day with five FFDM systems, three ultrasound, two stereotactic biopsy systems and a breast-specific gamma imaging system. An additional 40 screening exams are performed each day at four remote screening centers. The center has both GE and Hologic FFDM systems. All exams conducted at the main center—along with screening exams from remote clinics and breast MRI exams conducted at Park Nicollet Methodist Hospital—are read by radiologists at the center.

Prior exams are digitized to eliminate couriering film exams from remote clinics. Paper has been completely eliminated from the reading process.

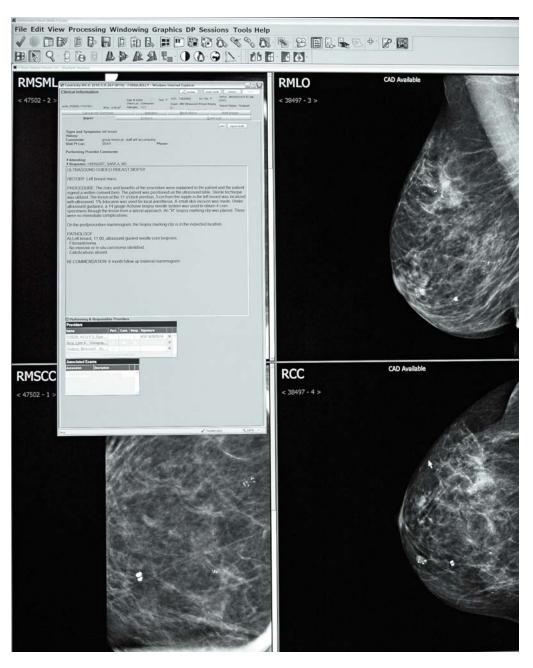
"Creating a smooth mammography throughput is complicated because of the diverse modalities now used for breast imaging. The CARESTREAM PACS offers an exceptional workflow through its smooth integration with existing RIS, VR and CAD systems," Wilson explains.

This tight integration enables radiologists to log in once and have instant electronic access to patient history as well as prior imaging exams and reports.

"These workstations allow our radiologists to quickly and easily read exams from all modalities and vendors at a single workstation," reports radiologist Barbara Luikens, M.D., the center's Medical Director. "Every aspect of the workflow is at our fingertips, from prior exams and reports to one-touch voice recognition and specialized tools. Personalized hanging protocols then enable each radiologist to achieve maximum productivity and ease of use. From a radiologist's perspective, this is an ideal reading environment."

## **Innovative Workstation Tools Enhance Productivity**

Radiologists throughout the system praise the mammography tools delivered by the multi-modality PACS workstations. "After we click on an icon to launch PowerScribe, patient information is automatically entered into the report. Structured reporting



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The Carestream Health multimodality breast imaging workstation's integrated display shows data from the RIS (at left) along with images of related procedures.

allows us to dictate the case quickly and efficiently. When we close the report, the system automatically brings up the patient worklist for us to read the next exam," notes radiologist Kelly Furda, M.D.

A single click also activates CADstream for use with MR exams.

The PACS workstation also "right sizes" studies by fitting the tissue to the window and displaying comparisons at the same physical size whether they are coming from GE or Hologic FFDM systems. "This tool is one of the biggest time savers for our radiologists because it eliminates manual adjustments," says Dr. Luikens.

The multi-modality breast imaging workstations also deliver specialized mammography reading tools, including intelli-zoom, view in full resolution, activate/deactivate CAD, chest wall justification, tissue invert and many others. An innovative eight-button

programmable controller reduces hand movements and delivers better ergonomics.

"The tools we use frequently are programmed into the controller so we can activate any of them with a single click," Dr. Furda adds. "For example, the intellizoom tool is vital to detecting small microcalcifications. Being able to click a button allows us to activate it and other tools in just a second."

For years, breast imaging has been cumbersome. Few technologies were available to ease the transition to an all-digital workflow.

"The use of new modalities and procedures for breast imaging has created tremendous advances in patient care, but it definitely complicated the delivery of those services," said Wilson. "With implementation of CARESTREAM PACS, we have finally achieved a fully functional environment in which our radiologists and staff are able to deliver excellent care while simultaneously achieving maximum productivity."

#### More information

For more information about Carestream Health's digital mammography solutions, please visit:





Carestream Health, Inc. 150 Verona Street Rochester, NY 14608