Imaging for Women Offers Artificial Intelligence Solution for Digital Breast Tomosynthesis

Challenges:

- Responsible for reading nearly 35,000 mammograms annually
- Screening and diagnostic mammogram images increased significantly with the implementation of breast tomosynthesis

Solution:

 PowerLook® Tomo Detection (developed by iCAD, Inc.)

Results:

- Improved workflow with real time reads
- Higher level of confidence in findings

"Our radiology team is thrilled with the unique capabilities and improved workflow iCAD's tomosynthesis breast cancer detection technology provides," said Mark Malley, M.D., Chief of Radiology, Imaging for Women. "I have a higher level of confidence that I haven't missed any significant findings with the iCAD for digital breast tomosynthesis. This is now an important and helpful tool in our diagnostic toolbox."

Summary

Imaging for Women opened its doors in 1997 as Kansas City's first stand-alone women's imaging center because Dr. Mark Malley envisioned a better way for women to experience healthcare.

Its philosophy has always been to offer patients the best possible experience when visiting the facility. To accomplish this, Imaging for Women utilizes the most innovative technology on the market today including digital breast tomosynthesis (DBT) or 3D mammography and whole breast ultrasound that is performed by highly-skilled, certified technologists that make patient comfort and compassion a top priority.

Innovative by design, Imaging for Women's board-certified physicians have specialty training in breast imaging. Each patient examination is read in real-time. If additional exams are necessary, they can be performed on the same day, allowing patients to leave with their results in-hand versus waiting on a call-back. In some cases, even biopsies can be conducted same-day.



Mark Malley, M.D., Chief of Radiology, Imaging for Women

Taking the Leap

To maintain its unique offerings and elevate its patient-centric approach, Imaging for Women knew they needed to make the transition from 2D to 3D mammography. However, like many radiologists, they were concerned about workflow issues and fatigue, as 3D mammography requires reviewing hundreds of images per examination – a dramatic shift from reading 2D mammograms, which typically produces only four images. With nearly 35,000 mammograms read annually, this was a valid concern.

In order to take this next crucial step, the facility needed to find a right-fit solution that would benefit both patients and providers. In June 2017, Imaging for Women adopted iCAD's PowerLook Tomo Detection, which supports their GE Senographe Pristina 3D Mammography System. An FDA-approved concurrent-read cancer detection solution for DBT, PowerLook Tomo Detection utilizes a unique deep learning algorithm that rapidly scans each tomosynthesis plane searching for suspicious areas. The algorithm findings are then blended into a 2D synthetic image to provide radiologists with a single enhanced image. Each finding in the enhanced image is linked to the plane where it was detected.

iCAD's tomosynthesis solution is clinically proven to optimize radiologists' image reading and interpretation by reducing read-time by an average 29.2 percent. Clinical tests have demonstrated that the algorithm will detect over 92% of malignant soft tissue densities.



Phyllis Fulk, Administrator, Imaging for Women

Optimized Workflow, Detection with Confidence

"Breast tomosynthesis generates a vast number of images for radiologists to sift through and this can be daunting. Our radiology team is thrilled with the unique capabilities and improved workflow iCAD's Tomosynthesis breast cancer detection technology provides," said Mark Malley, M.D., Chief of Radiology, Imaging for Women. "I have a higher level of confidence that I haven't missed any significant findings with the iCAD for digital breast tomosynthesis. This is now an important and helpful tool in our diagnostic toolbox."

Since implementing PowerLook Tomo Detection, Imaging for Women has optimized its reading efficiency. To address an increase in demand for screening services, the practice was able to add an additional tomosynthesis exam room without increasing the radiologist staff.

"At Imaging for Women, we are dedicated to bringing our patients and our community the most advanced technologies available today to support breast cancer detection," said Phyllis Fulk, Administrator, Imaging for Women. "With iCAD's PowerLook Tomo Detection, we are now able to take screening and diagnostic mammography to a new level, making it possible to improve detection with greater accuracy and more efficiency, without compromising clinical performance."

About iCAD, Inc.

Headquartered in Nashua, NH, iCAD is a global leader in medical technology providing innovative cancer detection and therapy solutions. For more information, visit www.icadmed.com.

