Summit Medical Group Adopts PowerLook[®] Density Assessment to Provide More Objective, Accurate Breast Density Reporting

Challenges:

- There was considerable inter- and intra-observer variability in breast density results each year.
- Patients are more informed and proactively ask radiologists and technicians about their breast density, including why their density results may have changed from year to year.
- Effective May 1, 2014, all women who have a mammogram must have information in their lay letter about dense breasts. This would allow them to raise the topic with their doctors.

Solution:

PowerLook® Density
 Assessment (developed by iCAD, Inc.)

Results:

- The automatic, appearancebased approach allows radiologists to make more informed decisions regarding which patients may benefit from supplementary screening.
- Inter- and intra-observer variability has decreased; radiologists are able to provide more consistent and reliable results.
- PowerLook® Density
 Assessment better correlates to the BI-RADS standards.

"Since the New Jersey breast density law passed in 2014, both patients and physicians have become very aware of the issue of breast density. With PowerLook® Density Assessment we can provide an automated method of determining breast density resulting in more accurate and objective results,"

Summary

Summit Medical Group is the largest and oldest physician-owned multispecialty practice in New Jersey. In addition to its 250,000-square-foot campus in Berkeley Heights, New Jersey, Summit Medical Group has several offices in northern and central New Jersey with Breast Imaging services also at Westfield, Livingston, and Florham Park. Summit Medical Group employs more than 550 practitioners and 2,000 employees who support more than 80 medical specialties and services. The Summit Medical Group Breast Care Center offers comprehensive support and care of benign breast health conditions and all stages of breast cancer. In addition to expert breast exams, diagnosis, and treatment, Summit empowers patients with education so that they can partner with their physicians to make informed decisions. They have nurse navigators that follow patients from diagnosis through treatment.

Summit Medical Group has been listed yearly in NJBIZ's "Top 50 Fastest Growing Companies in New Jersey" from 2008 through 2014. Also, Summit Medical Group Breast Care Center is one of the few breast centers in the United States and one of only two centers in New Jersey designated a National Consortium of Breast Centers Certified Quality Breast Center of Excellence.

Reader Variability Leads to Inconsistent Results

Summit Medical Group is a highly accredited healthcare facility not only because it provides comprehensive breast cancer services, but it offers the latest technology such as digital breast tomosynthesis that helps deliver the most accurate mammogram results to patients. This allows radiologists to better detect breast cancer, especially in its earlier stages when it is



Dr. Sue Jane Rivas Grosso, MD., Lead Interpreting Physician at The American College of Radiology Mammography Accreditation Program at Summit Medical Group, NI

often more easily treated. In 2016, Summit Medical Group performed a total of approximately 20,000 mammograms.

Without technology for assessing breast density the radiologists would notice both inter- and intra-observer variability in reporting density results.

"We have had calls from patients asking why their breast density category changed from the year before. We have many educated patients in our community and we need to be able to provide them with an accurate and consistent density report," said Dr. Grosso.

It became clear that Summit Medical Group would benefit from a standardized system for determining breast density to provide more objective and consistent results and therefore possibly decrease the variability in reporting of density.

Investing in an Appearance-Based Solution

In July of 2014 Summit Medical Group adopted PowerLook Density Assessment to take some of the guesswork out of determining breast density. While some radiologists were initially hesitant to rely on software to make decisions about breast density, after working with PowerLook they found that it produced accurate results and even helped them make decisions about a density category when they were on the fence. "The response is overall positive," Dr. Grosso added. "I believe I am more consistent in my density reporting. There are also times when I will determine that a patient has dense breasts when I would not have in the past. This is important given that it may suggest that the patient would benefit from supplementary imaging."

PowerLook Density Assessment takes a unique approach to determining breast density in that it is appearance-based rather than volume-based, like other breast density solutions currently available. It automatically analyzes digital mammograms, calculates the patient's breast density, and determines the appropriate density category corresponding to BI-RADS standards. The American College of Radiology (ACR) recommends the use of the BI-RADS lexicon as a standardized system to categorize breast density when reading mammography. By measuring breast density according to BI-RADS standards, PowerLook provides accurate, reliable and reproducible results while saving time for radiologists and enhancing patient care.

In addition, New Jersey state law also requires healthcare facilities to send notifications to women following mammography including information about breast density and the importance of discussing this topic with their doctors. Though it is not required by law in New Jersey to include a patient's density category in these notifications, Dr. Grosso recognizes the benefit of keeping women informed and chooses to provide their results in mammography reports.

"We have to do a better job at talking about breast density with patients," said Dr. Grosso.

Better Clinician Satisfaction, Importance of Education

Radiologists understand that they have the ultimate decision of determining breast density for their patients, but at Summit Medical Group they now rely on PowerLook Density Assessment in their decision-making process. They also save this information in their PACS for reference when interpreting future mammograms.

"If the PowerLook Density Assessment software goes down for some reason when reading mammography, I realize that I am looking for the information. I feel that I have become somewhat dependent on it," Dr. Grosso noted. "I like having reliable and reproducible technology that is automated and that we can save to support the density category we choose."

Not only are radiologists at Summit Medical Group satisfied with PowerLook Density Assessment, but referring physicians including breast cancer surgeons also note that they are glad to have more consistent breast density reporting.

While New Jersey has a dense notification law to help better educate patients about breast density, it's still important for clinicians to initiate an active dialogue with their patients about breast density, how it may impact the development of breast cancer, and if additional screening is needed. Summit Medical Group continues to educate patients about breast density and even offers pamphlets from the ACR about the topic in their waiting rooms.

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.

