

MammoPad to Please Patients and Improve Clinical Outcomes



Dartmouth-Hitchcock Medical Center,
Lebanon, New Hampshire

The Dartmouth-Hitchcock Medical Center found a way to please its breast imaging patients and improve the clinical value of its mammograms

In any medical setting, you hope to make your patients as happy as possible. But their satisfaction can't come at the expense of clinical benefits. Fortunately, Dartmouth-Hitchcock Medical Center in Lebanon, New Hampshire, has found a way to please its breast imaging patients and improve the clinical value of its mammograms at the same time – with a combination of digital mammograms and the MammoPad breast cushion.

The Medical Center serves the northern New England region, including three hospitals and Dartmouth Medical School. In 2006, the Center began replacing its analog mammography equipment with Hologic Selenia digital mammography systems. The conversion is now complete, with four Selenia units in place.

The switch was made to improve Dartmouth's mammography services, says Lin Polen, the Medical Center's administrative director of radiology. "Digital mammography produces a better image than analog film," she says. "Plus, you can manipulate a digital image. You can't do that with film.

"By adjusting the contrast on the Selenia system, which is easy to do, our radiologists and technologists can do a better job with certain patients – especially women with dense breast tissue or implants. In the analog days, it was harder to see what we needed to see with these patients. The Selenia equipment has really improved that situation."

With digital mammography units, the Medical Center feels they offer a safer mammogram. Digital equipment exposes patients' breasts to a lower level of radiation than analog does, while still delivering a high-quality image.

It wasn't just the clinical staff that valued the difference with digital mammograms, though. Patients found they were having a whole new experience with mammography, too – one which they heartily applauded.

For one thing, patients don't have to wait for results like they did with film because the images are ready in seconds, and available right in the examination room. "Patients who come in for mammograms are nervous," Polen notes. "They're worried they might get bad news. A long wait for results just makes it worse. Our digital systems have saved our patients a lot of anxious wait time, and they really appreciate it. Plus, the technologists can stay right by the patients' side the whole time. They don't have to leave to deal with film processing. That makes patients more comfortable, too."

Digital mammograms have another advantage over film. Errors sometimes occur with film that causes patients to be called back for retakes. Digital isn't plagued with those errors, so patients are rarely brought back for repeat imaging.

"Retakes obviously inconvenience patients," says Polen. "But more than that, they prolong the time for patients to get results. Our Selenia system has enabled us to really reduce that anxiety factor."

All these elements are important in a system where Dartmouth-Hitchcock operates several facilities: Mary Hitchcock Memorial Hospital, the Dartmouth-Hitchcock Clinic, Dartmouth Medical School, the Veterans Affairs Medical Center in White River Junction, V.T., the Norris Cotton Cancer Center, and the Children's Hospital at Dartmouth.

MammoPad Helps the Patient and Improves Imaging

While digital mammograms made things better for patients, that was just the beginning. In 2006, the Medical Center upgraded its mammography services once again by adding the MammoPad breast cushion. For that, it owes a big thank-you to its asset and facilities manager, Paul Roy. A former x-ray technician, Roy has been in the medical field for 35 years. He learned about MammoPad in 2005 at the annual conference of

the Radiological Society of North America (RSNA).

MammoPad is a soft, foam cushion that adheres to the imaging detector. The cushion covers the cold, hard surfaces of the equipment, providing a softer, warmer, more comfortable experience. MammoPad has been proven to reduce mammography-related discomfort by 50 percent for three out of four women.

Research also shows the cushion can improve breast tissue acquisition and mammogram compression. The cushion is invisible to x-rays, does not harm image quality, and can be used on all commercially available mammography machines, whether analog or digital.

Any man can understand how a woman would appreciate MammoPad. But Roy had more empathy than most, because he was a breast cancer survivor who'd had his own experience with mammograms.

Roy was diagnosed in 2001 after his wife noticed an abnormality on his nipple. He then discovered a lump, and went for an exam later that day at his workplace. The exam confirmed that he was one of those rare men who had breast cancer. After surgery and chemotherapy, he has been cancer-free since. But along the way, he's undergone his share of mammograms and learned first-hand what the mammography experience is like.

"We men don't have a lot of breast tissue for the machine to compress and that adds even more discomfort," Roy says. "My mammograms before MammoPad were very uncomfortable. I also understood from personal experience what women said about the cold, hard parts of the machine."

Excited about the difference that MammoPad could make for the Medical Center's patients, Roy suggested that the facility give MammoPad a try. The technologists were initially concerned the cushion might take too much time to apply, though it actually takes just seconds. At first, Roy's proposal just languished. MammoPad got a second

hearing when the Medical Center hired Lin Polen as the new administrative director of radiology.

"I knew MammoPad's reputation for making mammograms softer and warmer," recalls Polen. "I also had seen the additional research."

Polen is referring to independent studies that show that MammoPad, when combined with technologist training on breast positioning, improves positioning. The cushion creates a grip-like surface that holds the breast in place.

Studies also show that MammoPad plus training can increase tissue acquisition – that is, more breast tissue is included in the mammogram, which is essential in producing the highest quality images. The most recent study, at Mercy Medical Center in Baltimore, found that when women had

mammograms with MammoPad, they were also able to tolerate more breast compression.

Polen agreed with Roy that MammoPad should be tried with patients. Patient response was overwhelmingly positive – about 10 to one reporting greater comfort, Roy recalls.

Shortly thereafter, the Medical Center became a certified Softer Mammogram Provider, providing every woman – and man – with a softer, warmer, more comfortable mammogram. Roy, who still gets annual mammograms, couldn't be more pleased.

"Our patients always come first," he says. "That's been my watchword since I entered this field. But I can't deny that I'm one of the big beneficiaries of this policy."

The technologists have seen patients' enthusiasm for MammoPad, and found the cushion simple to use. They've been especially gratified to see how it makes their overall job easier.

"It turns out that when women are more relaxed and comfortable, they are more

cooperative when technologists try to position and compress them," says Polen. "No surprise there. Everybody is a winner with this: patients, radiologists, technologists, and Dartmouth-Hitchcock."

MammoPad and Selenia: A Perfect Match

The combination of Selenia and MammoPad has helped further the Dartmouth-Hitchcock Medical Center's mission in multiple ways. First knowing they have the latest in imaging technology combined MammoPad may increase the chances of the Center's patients returning for their annual screening mammograms. Second, the exams are more convenient, less anxiety-provoking, and more

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comfortable. Finally, these return visits – plus the good word-of-mouth that draws new patients – can help the Medical Center overcome the financial hurdle created by the low reimbursement rate for mammography.

The Dartmouth-Hitchcock Medical Center wasn't the only one to notice that Selenia and MammoPad made an excellent match. In September 2007, Hologic acquired the MammoPad business from BioLucent, Inc., the maker of the cushion. "It's wonderful to see mammography progressing in a technological sense," says Polen. "Selenia and MammoPad certainly represent that progress, both separately and together. It's just as gratifying to see that the improved technology is also improving the mammography experience for our patients and staff. We are so pleased."