

situations where the areas of focus have to be adjusted," says Blumenthal.

Adds Faulkner, "The tag line we're using is 'It's like having a BMD expert inside your computer.'" And that BMD expert is available to answer questions. If the operator receives a warning message about a potentially deformed or fractured vertebral body, for example, the CAD program will ask if he or she wants help on the issue. If so, CAD can launch a video that walks the user through the process of excluding the vertebral body. "All the help information is embedded into our software, so it's real time," says Faulkner. "You don't have to reference a manual every time you have a question."

Bringing Technology to the Masses.

The ease of use has opened up BMD to an entirely new type of user - primary-care physicians who may not have much experience with imaging equipment. "They're really not used to doing this kind of detailed imaging, acquisition, and analysis, so we're trying to give them as much help as we can," says Faulkner. He estimates that more than half of current CAD-equipped machines are finding homes in primary-care offices - a very different audience, and one that GE Lunar purposely sought out.

Since three quarters of women with osteoporosis are still undiagnosed and untreated, GE Lunar knew it was important to make BMD measurement more widely available. But doing so meant understanding why BMD technology wasn't more widespread to begin with. "We honestly went out to the physicians and said, 'What is it? Why aren't you doing this? This makes a lot of sense,'" says Faulkner. "There were two concerns: 'I don't have space to put the equipment in,' which is a valid concern, and 'It's too hard to do.' We've addressed both issues."



But that doesn't leave GE Lunar's traditional audience, radiology specialists, out of the picture. The CAD program is customizable, allowing the more experienced and knowledgeable operator to configure different parameters and preferences. Those who don't want computer assistance can turn off the CAD features entirely - or they can turn off only some of the features and leave others on. In some cases the operator can even change the threshold at which they receive warning messages from CAD.

"Computers do what you program them to do," explains Blumenthal, who worked with bone densitometry machines before using CAD. "It's actually doing work that we would have to do later on, but it gets ahead of us and points out things we've programmed into it. And that's the whole basis with CAD, that you can focus on these types of things and give a better analysis. I think it's definitely a plus in the evolution of smart scanning."

Making Scans Faster

GE Lunar has come up with yet another innovation to increase patient throughput. By combining both spine and hip scans into a single automatic process from one patient position, OneScan simplifies BMD measurements. No need to ask patients to change position between measurements. Not only does this increase patient comfort, it also

saves the operator time. OneScan is nearly 70 percent faster than other BMD machines. Says Faulkner, "I used to work in a clinic, and we did three patients an hour, one every 20 minutes. The majority of the time was just talking to them." Blumenthal also uses OneScan and agrees. "You can be done in about three and a half minutes. It's really great ease of use."

Duo and Bravo Platforms Increase Productivity by Efficiently Conserving Floor Space

To address their customers concerns about office space, GE Medical Systems Lunar recently introduced the world's first DEXAM system, the DPX Duo. The new Duo combines a full-featured exam table with a bone densitometer. When not in use, the scan arm easily pivots aside for regular patient care. The system offers all of the advanced clinical functions mentioned earlier for high efficiency, consistently accurate results and high diagnostic confidence.

Along with the Duo system, GE Lunar also introduced the Bravo, a compact bone densitometer that will fit in almost any exam room or alcove. Specifically designed for easy installations, the Bravo incorporates a pivoting scan arm, low table height and Windows-based enCORE software requiring minimal operator training.

"When you add CAD with OneScan to these smaller, dedicated spine-hip systems, that's the whole solution," says Faulkner. "And it really was based upon going to the customer and addressing their needs. We knew there was a smarter, faster, and better way to do bone measurement."

Our Prodigy system remains our flagship product, but these new products will increase availability of this important diagnostic test and aid in the fight against osteoporosis.