

Q&A: A Look at How Halifax Health is Increasing Throughput and Improving Patient Care with IQ•SPECT

Andrea Huffman, Nuclear Medicine Coordinator for Halifax Health Medical Center in Daytona Beach, Florida, USA, shares best practices employed by her facility to realize the value of IQ•SPECT in maximizing patient throughput, improving image quality and increasing patient comfort.

What is the clinical value of Siemens IQ•SPECT?

The turn around time is so much better with IQ•SPECT. Without IQ•SPECT, scan times took 25 minutes, and each patient had to be scanned twice. With IQ•SPECT, we do the nuclear study and the CT in just five minutes. Less scanning time means rapid turnaround and less patient movement, which reduces the need for rescanning and results in high image quality. Also, because of the cardio focused properties of IQ•SPECT, the detectors are positioned further away, allowing us to accommodate patients with claustrophobia.

Has IQ•SPECT changed staff scheduling?

It most definitely has changed staff scheduling. In the past, we would stagger shifts every hour starting at 7 am. With IQ•SPECT, we stagger shifts every half hour starting at 7 am. I have two technologists in before 8 am who are responsible for starting cardiac patients. Before IQ•SPECT, one technologist could run the cardiac room because of longer scan times and had more free time to start patients. Now that scan times have been greatly decreased, once we start scanning patients we utilize a second technologist to perform histories and stress/rest injections. IQ•SPECT has not required an increase in staff, only an adjustment to shift times.

Did you have to adjust your daily procedures to avoid losing time with constant collimator exchange?

We are mainly an inpatient facility, so scheduling is a little more difficult. However, collimator exchange is automated and takes less than five minutes, so it is not a big concern for our technologists. We have the most widely used collimators for each camera stored in the bed to eliminate the use of collimator carts for collimator exchange, which has worked very well for us. We also try to organize the schedule so we're not changing collimators back and forth.

How long did it take for your staff to be up and running with IQ•SPECT and who conducted the training?

Siemens came in two weeks prior to our move into the new building and worked with the chief technologist and me. They helped set up all of our workflows and were onsite for two weeks. The third week, the remaining staff joined us and we started scanning from day one. After about three weeks, everyone was comfortable with the technology and the transition was very smooth. Siemens provided extensive training—we had four weeks of Siemens application specialists working side-by-side with us when we went live. They provided high-quality training that facilitated a smooth transition.



Andrea Huffman,
Nuclear
Medicine
Coordinator,
Halifax
Health
Medical
Center

What about the technologists and physicians? What has been their response to the new system?

The technologists caught on really well. It was a bit of a change for us. We not only had a new vendor, but a new modality—CT was new for us. There was a learning curve because scan times were so different than what we were used to. We had to look at how we could be more efficient. It didn't take long and they really like the system now. For the physicians, we presented the images the way we did previously, and then added in the attenuation-corrected images. They were able to interpret the new scans right away. Now, we have our own way of showing the data. We have 22 radiologists, and they are all reading the studies. They are all comfortable with the technology now, and the transition was very smooth.



Halifax Health campus,
Daytona Beach, Florida, USA

How do you position a patient for the scan, to ensure the patient's heart is at the center of the field of view?

IQ•SPECT uses **SMARTZOOM** collimators that focus on the heart. When positioning patients, a small box is shown in the center of the Patient Position Monitor (PPM). All the technologist needs to do, is position the heart in this box in the center of the field of view (FOV). This accurately positions the camera's cardio-centric rotation and keeps the patient's heart in the magnification zone, or what Siemens calls the "sweetspot." Positioning using IQ•SPECT is a little different than what nuclear medicine technologists are used to in cardiac imaging, but the technique is quite easy to learn and less time consuming.

How do you position bariatric patients, is it a different process?

The positioning process for bariatric patients is just as easy as it is with any other patient. The technologist may have to raise the camera heads before positioning bariatric patients because of the light rails, but all other positioning techniques remain the same.

How many scans can you have going at one time?

We can have six or seven patients in the process of having their study done at the same time. We have two technologists and have created a workflow so patients are in and out fast. We have two scanners, and both feature IQ•SPECT. We have the option of running both scanners for cardiac scans, which we have done several times.

Why should someone consider IQ•SPECT for their facility?

Siemens onsite application training is great. After the hands-on instruction with Siemens, our transition to IQ•SPECT was flawless. By using **SMARTZOOM** collimators, you can acquire more counts faster than using parallel-hole collimators. And we get better image quality in less time.