DigitalDiagnost C90 X-Ray: Enhancing the Patient’s Healthcare Journey

by Claudette Lew

Digital X-ray (DXR) is the widely acknowledged workhorse system in medical imaging, but all too often, radiology departments and clinics pass DXR by when making strategic investments, which seem to go mostly to MRI, CT, and other more advanced technologies.

That is not the case at Cedar Rapids’ Physicians Clinic of Iowa (PCI), where the clinic’s leadership team recently saw the great potential in upgrading to Philips’ DigitalDiagnost C90. As a result, PCI today is enjoying the fruits of increased clinical exam capabilities, newly created workflow efficiencies, faster exams, and higher staff and patient satisfaction.

Improved imaging capabilities

Performing an estimated 600 X-ray exams per month in each of its six exam rooms, PCI focuses on providing its large patient base in the Midwest with superior imaging services. In recent times, however, the equipment in one of the rooms began falling behind the growing demand. Rather than installing a new system merely to meet increased demand, PCI sought out a system that could also substantially impact patient and staff experience. The PCI team ultimately selected Philips’ DigitalDiagnost C90 system, which features thoughtfully redesigned user interface upgrades and other patient-friendly improvements. It can handle many types of specialty exams, including orthopedic exams that require image stitching, and podiatry exams.

“We want to provide patients with a seamless journey to better care, but sometimes we are so busy it reminds me of Target on Black Friday,” explains Peggy Colbeck-Rochford, PCI’s Imaging Manager and PACS Administrator. “It is truly a hardship for our team when we have a lobby full of patients, the team is going as fast as they can, yet all they see is an ocean of people looking at them in desperation, ‘When is it going to be my turn?’

“Now that we’ve installed the DigitalDiagnost C90, we can perform every exam for all of our specialty practices in that room and not have to segue patient care to another of our imaging suites,” Colbeck-Rochford says.

In addition to advanced imaging capabilities, PCI invested in several accessories, including a Skyplate, a wireless detector held by the patient for extremity exams. “Our other CR cassettes could process as quickly as 12 seconds, and we were thrilled with that, but with the Skyplate, there is no processing needed at all. There is an instant image on our technologist’s workstation. In our high volume clinic, those 12 seconds saved have contributed significantly to our faster exam times and workflow improvement,” she says.

Patient focus

The PCI team is also pleased with new features that improve both staff and patient satisfaction by increasing the visibility of the technologist and their interaction with the patient throughout the exam. “PCI patients are curious,” Colbeck-Rochford says. “They come to us with expectations of high-quality care. The C90 has not only met, but has exceeded those expectations.” The clinic’s technologists guide the patients through the imaging exam process including showing them the video camera on the 12-inch touch screen monitor on the tube head; as well as giving them the added surprise of seeing an actual x-ray image on the touch screen after the acquisition.

“Whether the patient is a child, an elderly person, or someone with a communication
barrier, the video camera has elevated the level of comfort and trust between the patient and technologist. The patient understands the technologist can see them even when they step into the control suite. This has enriched our patients’ experience and strengthened the confidence they have in our team.”

Colbeck-Rochford reflected on the team’s objectives. “Our leadership team wanted to feel confident in providing our patients with the highest quality diagnostic images, so that in the event our providers are coordinating care plans with other facilities such as the University of Iowa, Mayo Clinic, or the Cleveland Clinic, the studies would not have to be repeated,” she says.

Improving efficiency and staff satisfaction

The DigitalDiagnost C90 also takes efficiency and staff satisfaction to an entirely new level, making it possible for technologists to do virtually everything related to any given exam without leaving the patient’s side. The tube head, for example, serves as virtually the entire workstation, displaying all parameters needed for each exam, as well as enabling the technologist to ensure all settings are correct. In addition, the live camera collimation helps accurately position each patient for imaging to prevent retakes. Indeed, with the C90, the only reason the technologist must leave the patient’s side and walk to the workstation is to take the actual exposure.

“The redesigned tube head has had a major impact on reducing the physical demands on our technologists in terms of walking back and forth between the workstation and the patient,” explains Colbeck-Rochford. “We are a busy practice; it’s not uncommon for a technologist to average 13,000 to 18,000 steps per day. Using the C90, technologists have reduced our exam times by 30 to 50 percent of what they were before.”

The efficiencies gained in clinical workflow and exam time have also had a significant effect on patient throughput, she says. Since the installation, PCI staff have more than doubled the number of exams performed in that once-trailing exam room from about 500 to 1,200 exams in one month, out of an average total of 3,700 digital exams.1

“I think that the C90 has reinvigorated our staff and our providers,” Colbeck-Rochford says. “We created a buzz to generate excitement around the C90 during construction and installation. It is humbling to think as an independent practice in Cedar Rapids, Iowa, that we had the privilege of installing the first C90 in the Midwest. We are very proud to provide this latest technology for our community and have already ordered a second C90 unit to be installed later this year.”

Collaborative planning

PCI holds its longtime relationship with Philips in high regard, says Colbeck-Rochford, who explains that the clinic works closely with their Philips rep on strategic planning for department growth and collaborating on new projects. “We celebrate Philips because they are more than a vendor; we consider them an integral part of our imaging team. From sales to service, they go above and beyond to support us in all that we do — 24/7,” concludes Colbeck-Rochford. “Our mission is to provide exceptional service and quality medical care to our patients, while also providing a safe and happy working environment for our team mates. Philips understands our goals, they know where we’re going, and most importantly, they know what our patients’ health means to us.”

1 Results are specific to the institution where they were obtained, and may not reflect the results achievable at other institutions.