

Large, multi-site healthcare system improves X-ray imaging with Konica Minolta AeroDR[®] Detectors.



Upgrading existing Computed Radiography (CR) to AeroDR[®] LT wireless flat panel detectors is helping Nevada-based Renown Health reduce patient radiation dose and improve X-ray image quality while maximizing reimbursement across its hospitals and clinics.

When Renown Health's X-ray imaging volume increased, many of its sites with CR could not keep up with demand. At the same time, the Centers for Medicare and Medicaid Services (CMS) imposed a 7% penalty to all reimbursements for CR exams.

With a dedication to investing in the right equipment and technology, hospital leadership decided to convert to digital radiography (DR).

After a rigorous selection process, Renown Health chose Konica Minolta's AeroDR LT Detectors to upgrade and retrofit multiple systems at the main hospital, acute care facility and multiple departments and clinics.

Business integrity, product reliability

Christy Orosco, RT(R), Imaging Manager, says Renown wanted a panel that could handle the system's high imaging volume with quality, efficiency and reliability. The AeroDR's built in power cell was a noticeable differentiator, especially in acute care settings where exposure to fluids is common and infection control is paramount.

"We had a lot of issues with batteries, so the lithium capacitor for high performance on this detector was very important to us. It also had a higher level of durability and water resistance than everything else we looked at," Orosco says.

Tim Stephens, MPH, administrator of imaging services, says this reliability is linked with total cost of ownership and downtime. Within the Renown network, some sites are a four-hour drive from the main campus in Reno. "If that site goes down, then patients are traveling," says Stephens. With AeroDR LT panels, they're able to keep sites up and running with limited need for service.

Renown also implemented remote monitoring, which alerts administrators when a panel is dropped. Since installation, panels have been dropped but didn't need to be replaced. "It works like it was supposed to," says Stephens.

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Easy implementation

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Installation took just four months in early 2018 and was rolled out in phases, with several panels installed each week throughout the system. This also allowed Konica Minolta to train all users, even if they were on irregular schedules.

Lower dose, higher image quality

The AeroDR LT panels have helped Renown with dose efficiency particularly in spine and abdomen imaging. “We can use a lower KV and lower radiation period. It’s a huge difference than CR,” says Orosco. Image quality, however, has improved to the point that radiologists can see printed writing on labels inside patients’ clothing.

On the radiologist side, Renown’s contracted radiology group has been impressed with the images. “There’s been comments that it’s much better on image quality,” says Stephens. “The radiologists are very happy with it.”

More time with the patient

They’ve also noticed that technologists are able to spend more time with the patient and are more engaged during the exam. “More importantly, we’re able to keep our technologists closer to our patients so they’re focused on the actual event instead of with a piece of equipment,” says Stephens. “This makes it all in a single engagement with the patient, the equipment and DR all in one fluid movement.”

When technologists are doing multiple views of patients all day long, the ability to work more efficiently makes a difference. “AeroDR panels are more ergonomic overall, and the technologists don’t have to pick up the detectors and process the images. When they’re doing multiple studies, they really enjoy that,” says Orosco.

Responsive service

Renown biomed Carrie Pacheco worked as a field service engineer for eight years for a diagnostic imaging and healthcare IT vendor before joining Renown in 2015.

“I was a little nervous about going with Konica Minolta because I’d never worked with them before. But everything was

seamless, from the delivery time to installing the equipment,” she says. “I know my limits with other vendors because I’ve dealt with them before, but with Konica Minolta, it was a really nice surprise and a really good experience.”

“There’s really good collaboration going on between Konica Minolta, our team and the other manufacturer. Everybody works together so the doctors were happy, the technologists were happy and it was functioning the way it should,” she says.

She commented Konica Minolta Field Engineer Mark Pfeffen is an important part of the team. His response time is notable, ranging from just four hours to next-day service, even though he’s based several hours from Renown’s locations.

Although technologists have dropped several panels, Pacheco is impressed with the detectors’ durability. “They are really durable and so far, so good,” she says.

Training and education was also a seamless experience. “The applications training was great,” she says. “When we had issues, our trainer was always available. I felt like after she was done explaining, our team understood what they needed to do and how to work the equipment.”

An easy decision

Both Stephens and Orosco say that choosing Konica Minolta for their DR panels was an easy decision. Right away, they noticed a critical difference that made the entire experience rewarding. “Konica Minolta is running a really good business,” says Orosco. “Their communication, service and products were a pretty big deal for us.”

