## PHILIPS

### Veradius Neo

Surgery

#### Who/Where

Jack Retzlaff Director of Radiology,

Dan Brooks, Registered Technologist, Radiography, Greeley Emergency & Surgery Center, Medical Center of the Rockies University of Colorado Health Greeley, Colorado USA

#### Challenge

Find a mobile C-arm system that delivers image quality, manages X-ray dose, and assists with procedural efficiency

#### Solution

Choose the versatile Veradius Neo mobile C-arm system with flat detector technology to meet current and future needs

# Increase productivity **in the OR**

Achieve efficiencies in time, X-ray dose, and quality across procedures using the Philips Veradius Neo mobile C-arm with flat detector



"If we can save two or three minutes per procedure because it's easy to use, we can do another procedure that same day. All we need is a minute or two per case when we're doing six to eight cases a day. That equates to a good impact on our bottom line."

Jack Retzlaff, Director of Radiology. Greeley Emergency and Surgery Center

On a typical day, the imaging team at Greeley Emergency and Surgery Center in Greeley, Colorado, must prep their mobile X-ray system for use at a moments notice, be it for outpatient surgeries or emergency trauma. In every case the need for precision, ease-ofuse, and reliability is crucial.

They experience all of these features, and more, with the Philips Veradius Neo mobile C-arm with flat detector.

#### Expanding capabilities

Recently opened, the 22,000 square-foot Greeley Emergency and Surgery Center is part of the Poudre Valley and University of Colorado Health Systems and is designed to provide patients with emergency, general same-day, and outpatient surgical procedures.

"We're dealing with a growing patient population," indicates Retzlaff. "Because we're affiliated with other hospitals, this center is an extension of our emergency department. We need equipment that keeps us efficient and operating at a high level."

## A need for speed, accuracy, and dose management

How did Greeley Emergency and Surgery Center come to select the Philips Veradius Neo? It was the realization that a state-of-the-art surgical center required state-of-the-art imaging equipment – something nimble, something versatile across applications, something with exceptional image quality.

Jack Retzlaff describes the criteria, "In terms of key components for a C-arm, we focused on a number of features. First was ease-of-use for our technologists, because that gets into productivity. We can shorten a procedure time if the equipment is easy to use. We were also looking at the image quality, because if we get high image quality, that also helps us shorten the procedure times. Another key component that we're looking for across the board was good dose management."



Dan Brooks, Team Lead for OR Imaging Technologists suggests, "A high quality image allows the surgeon or interventionalist to make a confident decision, whether they're operating or doing an injection. After rigorous review, the decision was clear. "We evaluated several machines from a variety of companies," recalls Brooks. "We need output, we need quality, and we need visibility. We get all three with the Veradius Neo; it was clearly the winner."

#### Positive workflow impact

"The Veradius Neo has the ability to shorten our work times," says Brooks. Every aspect of the Veradius Neo has been tailored to help Dan and his team increase their efficiency and deliver images fast.

"The surgeons are very happy with the image quality," notes Brooks. They have good reason to be. Veradius Neo employs flat detector technology for undistorted, high contrast images to help visualize complex bone structure, device detail, and tortuous vasculature. First time right, high quality images speed decision-making and help reduce the need for repeat exposures.



Pain management Lumbar Spine



Hip Fracture Repair (Hip Pinning)



Disk Replacement Cervical Spine

Procedures are streamlined further with the system's intuitive, ergonomic operation. "From a usability perspective, our operators often say, 'we prefer the Veradius over anything else because it's easy to use'," says Retzlaff.

#### "From an image quality versus dose perspective, the Veradius Neo puts us at the absolute top."

#### Jack Retzlaff, Greeley Emergency and Surgery Center

As an example, Brooks describes the ease at which the C-arm can be positioned. "The Veradius Neo C-arm has counterbalance movements so you can slide it into position" he says. "It stays in position and doesn't float while it's there. That helps greatly when we're going back and forth from AP to lateral shots. When a surgeon needs images at different angles, such as an axial image or a lateral image, we can move quickly and smoothly without having to interrupt or slow the surgeon down."

Color-coding on the C-arm provides a clear visual aid regarding system movements to simplify communications between team members. "We can just call out a color," says Brooks, "versus having to explain movements in a more complicated way – nothing is misinterpreted."

The shape of the C-arm and use of a thin profile flat detector provides more room to image normal sized and obese patients and offers easy access. The freedom to maneuver without hindrance is superb. "The design of the C-arm itself with a larger 'C' allows us to do procedures that for some of the other systems would be a challenge," states Retzlaff.

Moving from procedure to procedure is also quick and easy. The Mobile View Station connects wirelessly to the hospital network and can be rolled into the room and ready to go in just a few minutes. "The machine boots up in less than a minute which helps reduce the time that the surgeon has to wait," explains Brooks. "To have the machine turned on and ready for the physician even before we bring in the C-arm is great. With surgery costs being very expensive and billed by the minute, it definitely saves a lot of time."



#### "The ability to provide high-quality images at a low dose is very important to us."

Dan Brooks, Team Lead for OR imaging Technologists

#### Managing X-ray dose

At Greeley Emergency and Surgery, the Veradius Neo is used for pain cases, spine work, as well as vascular and general imaging. In every instance the team must consider the radiation dose implications. "There's always going to be an inherent risk when exposing a patient to X-rays," says Brooks. "It's best to manage that risk to maintain as low a dose as possible. We educate our staff and patients, and people that are using the machines."

Fortunately, the Veradius Neo is equipped with a full range of dose management features that allow low X-ray dose when possible and superb image quality when needed. "It allows us to get the image the physician needs while not giving a lot of dose to the patient. With the Veradius Neo the amount of radiation that's produced per image is lower than any other system we were looking at."

Retzlaff adds, "From an image quality versus dose perspective, the Veradius Neo puts us at the absolute top."

#### A smart investment

For Jack Retzlaff, the mobile X-ray system must also meet certain economic criteria. As he explains, "The clinical and financial value we get from Philips really hits at multiple levels. We feel that we get great bang for our buck. We don't look at the initial cost of the equipment by itself. We look at the lifecycle cost of that equipment. What we're looking for is a system that will give us a low cost of operation over a decade and in some cases, even longer."

Lowering operational costs, while maintaining relevance in the face of rapid technological advances are key factors in the selection of any piece of medical equipment. As with other Philips products, the Veradius Neo has been designed in a 'future-proof' fashion to take advantage of innovations as they become available. For Jack Retzlaff, this is a compelling aspect, "One of the things we really like about the Veradius platform is the ability to upgrade both hardware and software. In our next capital budget we already have plans to upgrade some of the software so we can extend utilization of the equipment into areas like vascular. That's one of the distinct advantages with this platform - we can upgrade it, now and into the future."

Reliability based on build quality and rugged durability also sets Philips equipment apart. When a system is up and functioning, as it should, patients are treated and schedules are met. Throughout the surgery centers and hospitals of the University of Colorado Health system, Philips products are proving themselves. "They definitely have a great reputation for not breaking down, says Brooks. "I've rarely had a machine with a problem." "I can't remember a time when I got a call saying the Veradius is down. The reliability is incredible. Our uptime is 99 plus percent."

#### Jack Retzlaff, Greeley Emergency and Surgery Center

"I can't remember a time when I got a call saying the Veradius is down," says Retzlaff. "The reliability is incredible. Our uptime is 99 plus percent."He continues, "Philips service teams come in even when there's not a service call. Preventative maintenance is a major part of what they do. It's that continued support to get ahead of issues before they become problems that keeps us operational."

#### The right solution

In an effort to provide exceptional service and deliver positive results to its patient population, the Greeley Emergency and Surgery Center has outfitted its radiology team with industry-leading mobile X-ray technology. The Philips Veradius Neo helps achieve efficiencies of time, dose, and quality across a broad range of applications.

"It's a highly intuitive system," concludes Brooks. "And its low dose and high-quality imaging are of critical importance to us."

For a growing institution, the ability to perform an increasing number of challenging interventions in a fiscally responsible manner is an important goal. The Veradius Neo delivers on both counts. "It reinforces the fact that we made the right decision when we chose the system," assures Retzlaff.

www.philips.com/veradiusneo healthcare@philips.com

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

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