

Long-Term Care Survey Alert

Case Study: Nip Pressure Ulcers - And F314 Tags - In The Bud

Portable ultrasound scans provide an early warning system for wounds.

Prevention is always the best medicine, and some facilities are gaining a competitive edge in stopping pressure ulcers that no standardized risk assessment instrument could ever predict.

Case in point: Little Flower Manor in Wilkes Barre, PA, uses new portable, high-frequency ultrasound scans to detect patterns of edema that flag pressure-induced damage lurking under the skin. "Upon admission, some residents have skin that looks really good, yet we detect fluid under the skin signaling pressure-induced damage and risk of skin breakdown," explains **Nancy DeFranco, RN**, director of nursing for the facility.

Left untreated, these damaged areas can quickly turn into serious pressure ulcers that land the facility with F314 and several tag-along tags - or even immediate jeopardy citations.

"The ultrasound scans aren't better than a standardized risk assessment tool, but the reality is that those tools cannot look under a person's skin to see if there is tissue damage present," says **Courtney Lyder, ND**, professor of internal medicine and geriatrics at the **University of Virginia** in Charlottesville. "So the ultrasound is a wonderful adjunctive measure that no risk assessment tool can even come close to [matching]," he adds.

How the technology works: The ultrasound system uses high frequency ultrasound, which allows it to image the skin and the underlying soft tissue about 3 to 4 centimeters deep, explains **Connie Phillips-Jones RN, MSN**, director of clinical support for Longport Inc., which holds the patent on the technology. "That [depth of imaging] is valuable in visualizing skin and soft tissue over bony prominences where skin breakdown usually occurs."

Little Flower Manor uses the scans as part of a total wound care program designed to detect and act on risks in real time. That's important considering the facility takes in a lot of residents with wounds and, therefore, flags on the MDS-generated quality indicators/measures.

"We use the information from the new federal survey guidelines for F314 to collect data about predisposing factors, such as diagnoses, previous history of an ulcer, incontinence, etc., and then have the physician review the data and document unavailability if he or she believes that's the case," says DeFranco.

Get a 'Heads Up' on Heels

Little Flower Manor finds that approximately 99 percent of residents admitted from the hospital have some fluid under the skin on their heels, says DeFranco. Thus, facilities might be wise to implement preventive measures to keep heels off the bed by positioning them with pillows, for example.

Wound staging tip: The facility doesn't code a stage 1 pressure ulcer based on scan results showing underlying tissue damage (a DAVE reviewer admonished the facility not to do this, says DeFranco). "But facilities that use the ultrasound technology can document that the overlying skin is intact and appears normal but the scan reveals underlying tissue damage," comments Lyder. "And the facility staff can show they identified the risk much earlier than otherwise possible and implemented preventive measures."

Chronicle Wound Healing

The Little Flower Manor wound team also scans residents' existing wounds every two weeks to check for healing. And

they've learned that what they see with the naked eye can sometimes head them down the wrong path with their care planning.

Example: When Little Flower Manor first bought the scanning machine three years ago, the staff had a resident whose wound had closed and appeared to be healed. So they planned to halt the treatment, which would have been a mistake. The ultrasound scan showed fluid remained under the healed area, so the facility continued treatment until the edema resolved.

"Facilities can use the wound scans to detect tunneling and undermining beneath a wound - and also to measure tissue granulation and provide objective data that shows if the wound is in fact healing," adds **Steve Mogensen**, president of **Advanced Clinical Services**, which provides the portable scans in nursing facilities.

Improve Outcomes, Lower Costs

Little Flower Manor was one of the first facilities to use the scanner, which it purchased three years ago from Longport for approximately \$40,000. The scanner saved the facility about \$30,000 on skin care in the first year of use, says DeFranco.

The staff interprets the daily scans in house. "You can easily see the fluid patterns [signaling pressure-induced damage] under the skin, but training is required to determine the extent of the damage," says DeFranco. The facility saves images of the scans on the computer hard drive but can print them, if needed.

"Physicians can also review the scans," DeFranco adds.