“Skin gets forgotten.” Two SICU nurses’ idea has dramatically driven down the incidence of the pressure ulcers that complicate life – and care – for the critically ill.

Two UCH nurses take their bright idea global

SICU Nurses Round up Pressure Ulcer Prevention Success

By Tyler Smith

A little less than three years ago, Alyson Kelleher and Mandy Moorer looked at the pressure ulcer rates in the hospital’s Surgical Intensive Care Unit. They were, frankly, unacceptable, particularly for the acutely ill patients they care for.

The two nurses decided that the best way to do something about it was to take the issue directly to their colleagues. The idea: use bedside rounds to challenge nurses to use the tools and clinical knowledge they already have to examine their patients critically, ask questions, and figure out what each one needed to prevent a skin breakdown.

It’s a vital issue for critical care patients. Pressure ulcers, caused by a variety of factors, including old age, immobility, incontinence, chronic disease, malnourishment and poor circulation, can cause infections, destroy tissue, and even lead to death. They increase hospital length of stay and drive up costs. The Centers for Medicare and Medicaid Services does not pay for the care required to treat patients who acquire pressure ulcers while they are in the hospital.

“Skin gets forgotten, but [pressure ulcers] significantly complicate care for a critically ill population,” Moorer said.

For the hospital, preventing pressure ulcers is also a critical success factor: a measure the hospital deems essential to retaining its position as a top-ten academic medical center.

Putting the pressure on. But thanks to the efforts of Kelleher, Moorer and other key contributors, the SICU has reduced its pressure ulcer rate significantly since early 2009, when bedside rounds began (see graph). In the first three quarters of 2010 and the third quarter of 2011, the unit had no pressure ulcers.

Kelleher and Moorer have also taken their work to the wider health care world. They created a poster presentation describing their quality improvement project and presented it at last month’s NDNQI annual conference in Las Vegas.

In March, their work will appear in the Journal of Wound Ostomy and Continence Nursing.

Left to right: Kelleher, Moorer and Makic with poster summarizing their bedside rounding initiative. Kelleher and Moorer presented their work at last month’s NDNQI annual conference in Las Vegas.
The core of the SICU initiative – all of the intensive care units took their own approaches to reducing the number of pressure ulcers – was regular, one-on-one rounds with nurses about preventing skin from breaking down. In addition to Kelleher and Moorer, the rounding team included SICU Nurse Manager Martha Paulsen; Nurse Educator Shannon Johnson; Wound Ostomy Clinical Nurse Paula Gipp; and Research Nurse Scientist Mary Beth Flynn Makic, who co-chairs the Evidence-Based Skin Care Champions Council.

“Old” tool, new emphasis. Nurses already had the tools to care for their patients, Moorer said. The Braden Scale, for example, uses various factors – moisture, friction, nutrition and mobility, for example – to help providers assess patients’ risk of acquiring pressure ulcers.

“We wanted them to use the information they already had,” Moorer noted, “and directly relate it to their patients.” The rounds, she added, gave nurses an opportunity to “think and talk in real time. We didn’t want to tell them what to do. We wanted them to think through the [number value on the] Braden Scale and relate it directly to their patients.”

The rounds also presented an opportunity to roll out education about preventive measures, such as special bed surfaces, incontinence pads and nutrition consults, Moorer said.

“At the time of the discussion, we would ask nurses if the patients had any skin breakdowns, and if so, what they were doing,” she added. “It’s a busy unit. We wanted them to stop and think it through.”

On the spot. Makic, who assisted Kelleher and Moorer in collecting and analyzing data collected from the initiative and in developing the manuscript for publication, said the rounding encouraged nurses not only to think critically but also act on their observations and conclusions.

“We asked questions and nurses came up with the answers and were empowered to act on them,” she said. As a result, she added, pressure ulcers that occur in the SICU today generally affect only “the sickest of the sick.” When a patient has one, Makic said, the Skin Champions – who include representatives with expertise in inpatient and outpatient nursing, wound care, nutrition and research – thoroughly analyze the case to discover the root cause and disseminate the information to staff to bolster their understanding.

The rounding is now well-established and accepted, but the idea took a little getting used to for the unit’s nurses, Kelleher acknowledged.

“Nurses would see a group coming at them, and it could be scary because management was with us,” she said. “But it was well-received quickly. It led to open communication and care planning.”

The effort, in turn, refocused nurses’ attention on how important it is to stop pressure ulcers from happening, Kelleher said.

“They can lead to bone infections, debilitation and cosmetic issues,” she pointed out. “And patients are often embarrassed about it when their skin breaks down.”

The positive results the SICU achieved in reducing the number of pressure ulcers led Makic to encourage Kelleher and Moorer to dip a toe into the publishing world.

“I was aware of the outcomes that occurred with rounding,” Makic recalled. “I saw an opportunity to publish the work, and they took it.”

Outside interest. Makic helped the two nurses collect and analyze the data and served as a mentor during the nearly year-long process of writing, submitting and revising the manuscript, which the journal accepted for publication in October, Moorer said.

Less a pure analytical study than a recounting of developing and implementing an idea and sharing the results, the article had a built-in structure, Kelleher added.

“It was about a quality improvement project so we could use a different writing style than some journal articles,” she said. “We told the story of how [the rounding] happened. We were more comfortable with narrating.”

As Makic puts it, “They lived it, so it was easier to write about what they learned from their experience and how [others can] adapt it to their practice world.”

If Kelleher's and Moorer’s NDNQI presentation is any indication, the clinical world has plenty of interest in their work.

“Pressure ulcers are a big NDNQI issue, and there were representatives at the conference from around the world,” Moorer said. “We got lots of detailed questions and were busy talking to people and handing out our business cards.”

The interest isn’t surprising, Makic said. “Their poster presentation showed a successful intervention and strategy that impacted a high-risk, acutely ill population – the patients who are the most vulnerable,” she said.
Moorer said the quality-improvement effort is meant only to offer a guide to other clinicians intent on reducing the number of pressure ulcers.

“The general idea is to round, but units can tailor that to their unique patient populations,” she said. Thinking back to 2009 and the SICU’s high pressure ulcer rates, she said, the success of the initiative on her unit couldn’t have come at a more opportune time.

“We needed it to take off,” Moorer concluded. “We had no room for error.”