New pressure ulcer risk tool moves forward with implementation study

The high incidence of pressure ulcer development in surgical patients puts the onus on perioperative nurses to be proactive in risk assessment and use of preventive measures.

The Centers for Medicare & Medicaid Services (CMS) estimates that each pressure ulcer adds more than $43,000 in costs to a hospital stay, totaling $11 billion per year. Furthermore, CMS considers Stage III and IV pressure ulcers a hospital-acquired condition and will not pay more for the treatment of patients who develop them in the hospital.

Though no standard or tool for identifying surgical patients at risk is currently in use, there is one on the horizon. An implementation study of the Munro Pressure Ulcer Risk Assessment Scale for Perioperative Patients (Munro Scale) will begin this summer.

Cassendra Munro, MSN, RN, CNOR, created the Munro Scale to identify adult general surgery patients at risk for pressure ulcer development. AORN has partnered with Munro and created a task force for further development of the scale.

In the past year, consensus was reached that the Munro Scale does indeed indicate pressure ulcer risk.

More than 20 facilities will be included in the implementation study, Munro told OR Manager. Cardinal Health (Dublin, Ohio) is sponsoring the grant for the study.

Adding up the risks

“What we have learned from the literature is that every phase of the perioperative experience contributes to the patient’s risk for pressure ulcer development,” says Munro, perioperative educator at Providence St John’s Health Center, Santa Monica, California.

Preoperatively, the patient has baseline comorbidities including nutritional status, body mass index, and mobility.

Intraoperatively, the patient’s risks go up depending on a variety of factors, including type of anesthesia, length of procedure, and positioning devices used.

Postoperatively, factors such as position and frequency of turning continue to put the patient at risk of developing pressure ulcers.

The Munro Scale assesses a patient’s risks throughout all three perioperative phases. The risk level is scored for each phase, with a cumulative score at the end.

“We need an accumulation of the risk,” says Munro. “We didn’t want just one stagnant number because that’s not what’s happening to our patients. They are evolving into this potential risk of a pressure ulcer.”

Communication tool

The Munro Scale also provides a method for communicating risk throughout the perioperative experience and onto the nursing unit, says Debra Fawcett, PhD, RN.
Fawcett is chair of the AORN task force to validate the Munro Scale and manager of infection prevention and control, Eskenazi Health, Indianapolis, Indiana.

“You can assess risk in the preop area and come up with a number, but if you don’t convey that risk to the intraoperative team, they won’t know to change the surface of the OR bed or put some positioning devices in place,” notes Fawcett, manager of infection prevention and control, Eskenazi Health, Indianapolis, Indiana.

The same goes for the postoperative care teams because patients continue to be at risk.

For example, a patient who was in the supine position for 10 hours in the OR needs to be turned from side to side if possible in the postanesthesia care unit to relieve the pressure.

“What we need to recognize is that pressure ulcers that develop in the patient care unit can start in surgery,” says Munro. “We need to communicate the level of risk that we have identified because the care unit nurses don’t know what happened to the patient in the operating room.”

**Risk scale needed**

The Munro Scale’s emphasis is on patient risk. “This is a risk assessment, not a skin assessment tool,” says Fawcett. The difference is that a skin assessment identifies perfusion of the skin, whereas a risk assessment identifies patient risks for development of a pressure ulcer, such as diabetes and immobility, she explains.

“Some ORs use the Braden Scale for predicting a patient’s risk of acquiring pressure ulcers, but even Dr Braden will tell you it was not intended for use with surgical patients,” says Fawcett. The Braden Scale was developed for patients who will be immobile for long periods of time and does not take into consideration the many unique factors related to surgery and anesthesia.

All perioperative patients will be considered at risk with the Braden Scale due to immobility, anesthesia, and any comorbidities they may have.

**Consensus reached**

The Delphi survey method of research was used to reach consensus among experts that the Munro Scale does indeed indicate pressure ulcer risk in perioperative patients.

A survey was sent out to experts, suggestions from their feedback were incorporated into the scale, and then the survey was sent out again asking for additional feedback. This was done three times.

“For the last two of the three rounds, we knew we were nearing completion of soliciting information from our experts because we started to see a trend in the same suggestions,” says Munro. “Now the scale is ready for implementation.”

Some changes Munro made to the scale in the past year include:

- addition of more comorbidities, such as the existence of pressure ulcers, and combining of some comorbidities
- clarification as to whether a patient is a current or former smoker, rather than just listing smoking as a comorbidity
- updating of scoring to make the accumulation more user friendly for both the handwritten and electronic versions of the scale.

“So much collaboration is required for something of this magnitude to take flight,” says Munro. “I have made the Munro Scale a lifelong commitment and will update it according to the evolving needs of our perioperative patients.”

**References**


Munro C A. The development of a pressure ulcer risk-assessment scale for perioperative patients. AORN J. 2010;92(3):272-287.