PURE© SCALE: A VALIDATED TOOL FOR THE PREDICTION OF PERIOPERATIVE PRESSURE ULCERS

Primary Investigator: Carol Nicoladis BSN RN CPAN
The Methodist Hospital, Houston, Texas
Co-Investigators: Janet Gilmore, MSN, RN; Michelle Brents, MSN, RN, CNOR; Art Shumate, BSN, RN; Jocelyn Goffney, MSN, RN, WOCN

Pressure ulcers are a devastating complication of surgery as well as a non-reimbursable expense for hospitals. Literature review revealed that there is a need for a pressure ulcer risk evaluation scale specific to perioperative patients.

The objective was to create a tool that will predict pressure ulcers in the perioperative population. The tool, Pressure Ulcer Risk Evaluation (PURE©), was developed with a multidisciplinary team including a wound care specialist and dietician.

The scale incorporates two elements from the Braden scale: activity and nutrition. The PURE© scale mirrors the scoring of the Braden scale: the lower the score, the higher the risk. The PURE© scale is used preoperatively and intraoperatively to assess a patient’s risk for developing pressure ulcers during surgery. Preoperatively the scale evaluates age, activity, malnutrition risk, skin assessment, previous history of ulcers, diabetes, hematocrit, cardiovascular surgery. Intraoperatively the scale evaluates anesthesia risk score (ASA), use of a warming blanket under the patient, use of extracorporeal circulation, hypotensive episodes (diastolic less than 60mm Hg), operating room time, surgical position and hypothermic episodes (less than 36°c) during surgery.

PURE© scale was validated by comparing results of both the Braden and the PURE © scale using 40 surgical patients. Results of the comparison indicated that the PURE© tool predicted surgical patients at risk for pressure ulcer development.

Using the PURE© scale The Methodist Hospital in Houston, Texas will conduct a research study of 100 cardiovascular patients to predict pressure ulcer risk and methods of reducing of development of pressure ulcers.