



Assessing Available Pressure Injury Predictor Tools in the Perioperative Setting

Jaya Mathew, BSN, RN, CCRN, Cori Kopecky, MSN, RN, OCN, Kevin Lim, BSN, RN CNOR, Harjeet Kaur, MSN, RN, CNL, CMQ, Cindy Segal, PhD, MSN, RN & Sara John, BSN, RN, CCRN

Background

Pressure injuries (PI) have been observed in patients across the perioperative setting, particularly among patients undergoing prolonged surgical procedures.

Yet the majority of tools developed to assess risk for pressure injury has been developed in the acute, intensive or long-term care settings.

As part of a quality improvement initiative at a comprehensive cancer center, 2 validated PI prediction tools were applied retrospectively to patients who developed a PI post-operatively and prospectively to a trial group of Head and Neck patients.

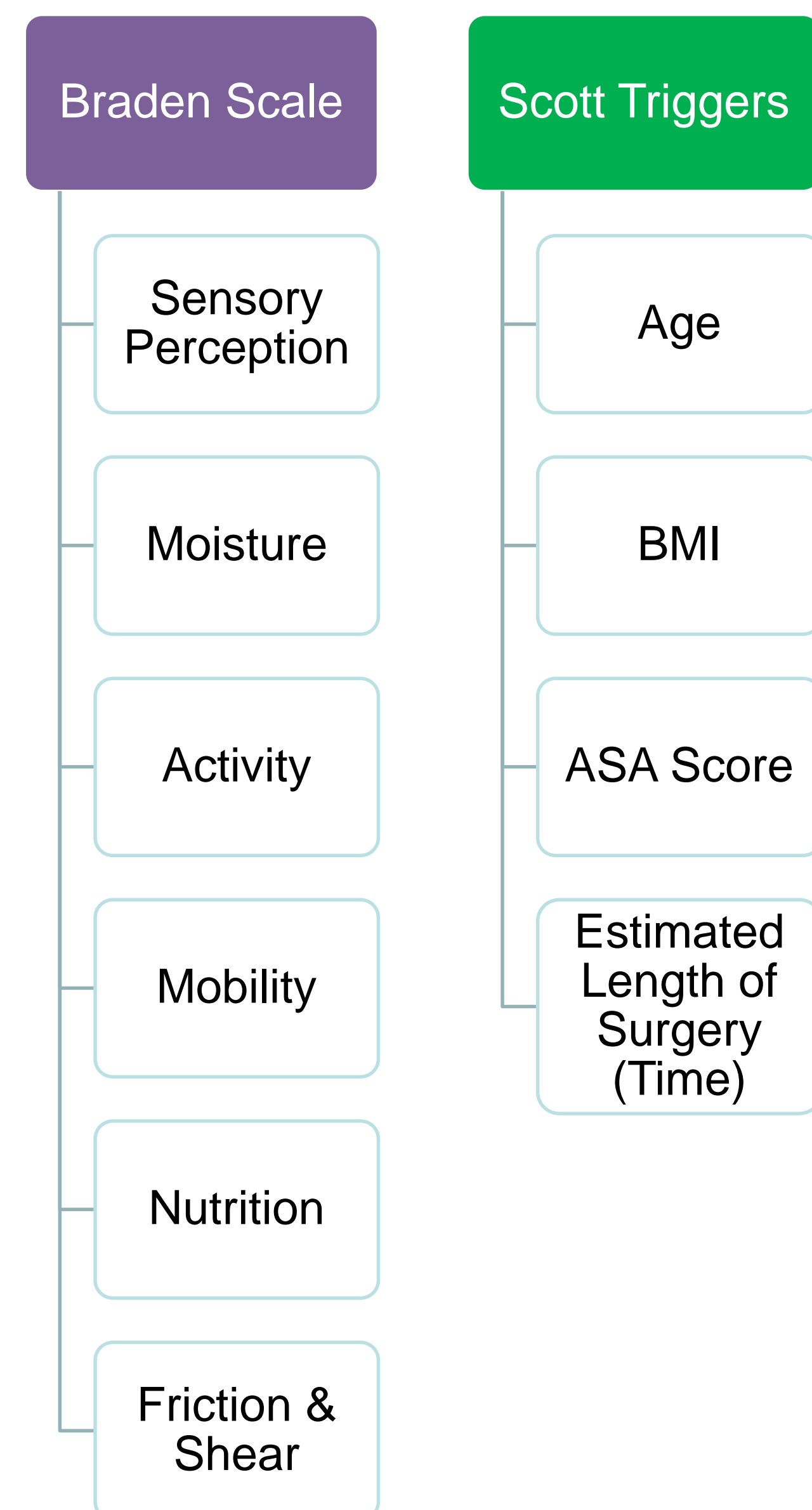
Objective

The aim of this project was to evaluate the sensitivity of the Braden Scale and Scott Trigger Tool to predict the development of a PI post-operatively in a surgical oncology population.

Methods

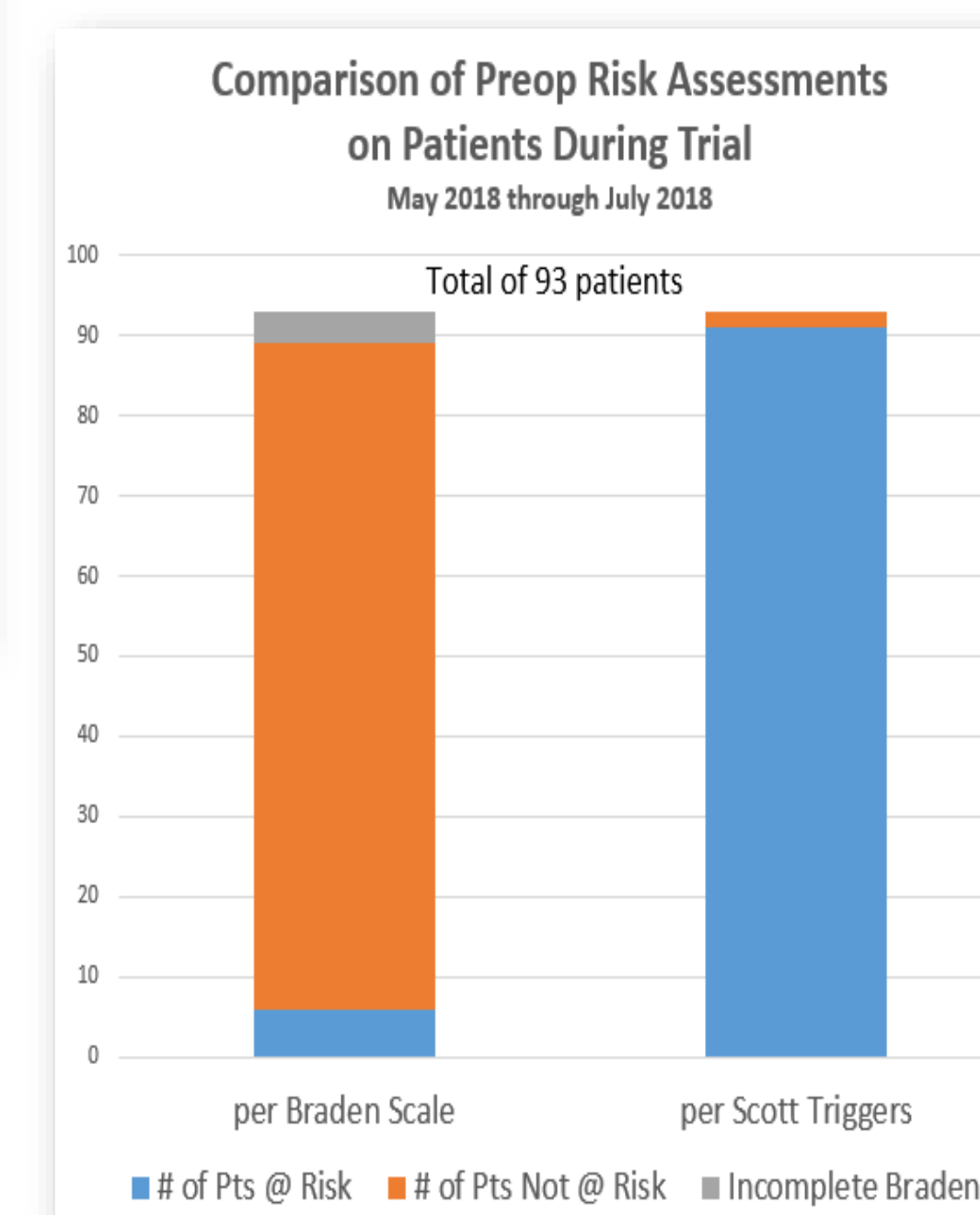
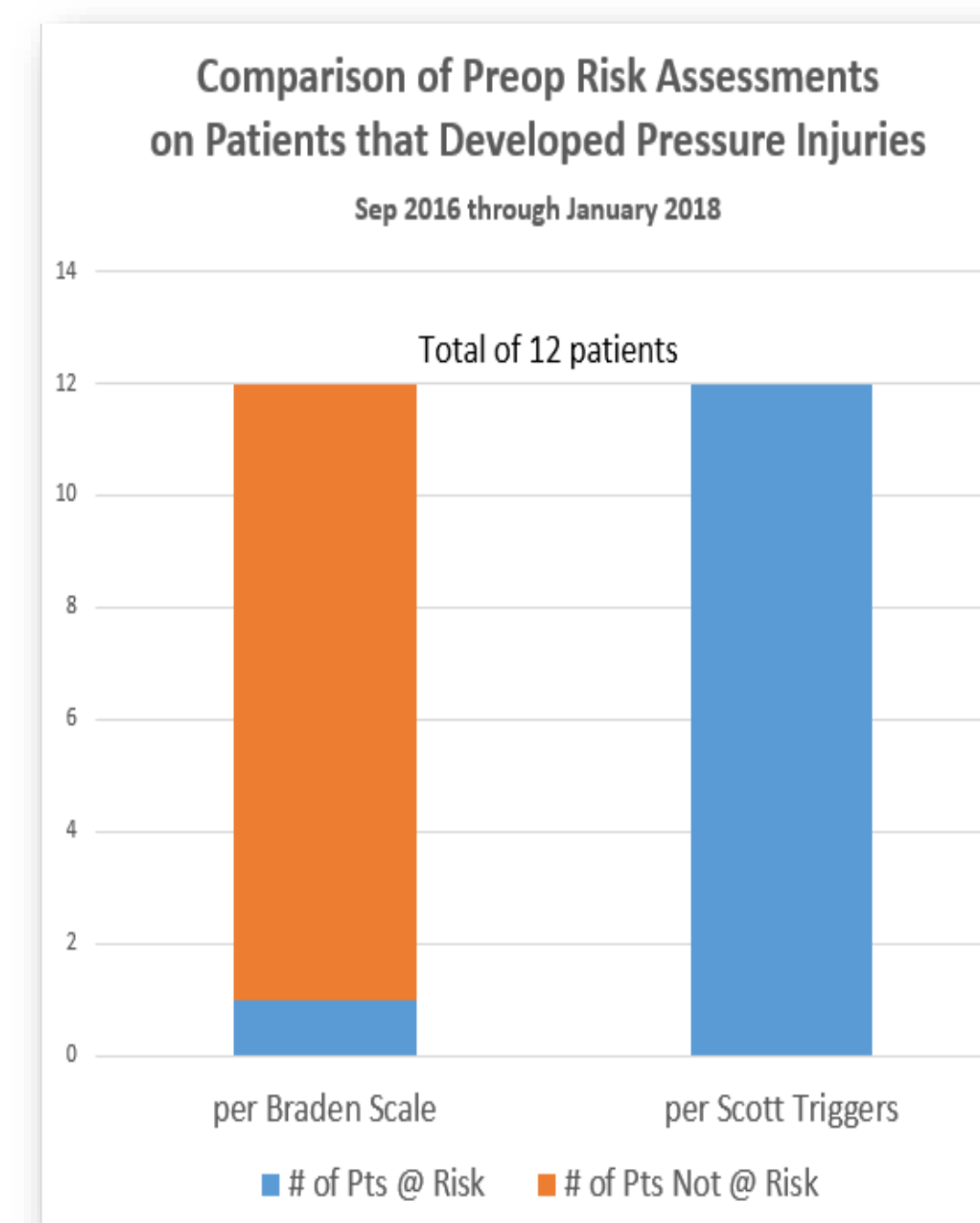
- An interprofessional team representing perioperative nursing, physician assistants, unit nursing and material management reviewed data of 12 patients who developed an intraoperative related pressure injury identified by the safety intelligence event reports over an 18 month period (September 2016- January 2018).

- The preoperative Braden Score and Scott Trigger assessment were used to evaluate risk for PI development in this cohort of patients.
- Three nurses completed the initial retrospective scoring which was then reviewed with the team to validate the results.
- Both tools were then prospectively used to assess preop risk on the trial group of Head and Neck patients.



Results

- The retrospective review suggested that risk scoring with the Braden Scale was not predictive of intraoperative risk identifying 1 out of 12 patients with known PIs. The Scott Trigger Tool predicted 100%.
- When applied prospectively to the 93 Head and Neck patients, the Braden Scale suggested that 6.7% of the patients were at risk while the Scott Trigger score suggested 97.8% of the patients would have skin breakdown.
- In reality only one of the trial patients developed a pressure injury related to their intraoperative period. Our observations suggest that the Braden Scale is not predictive of intraoperative PIs and the Scott Trigger assessment may be too sensitive.



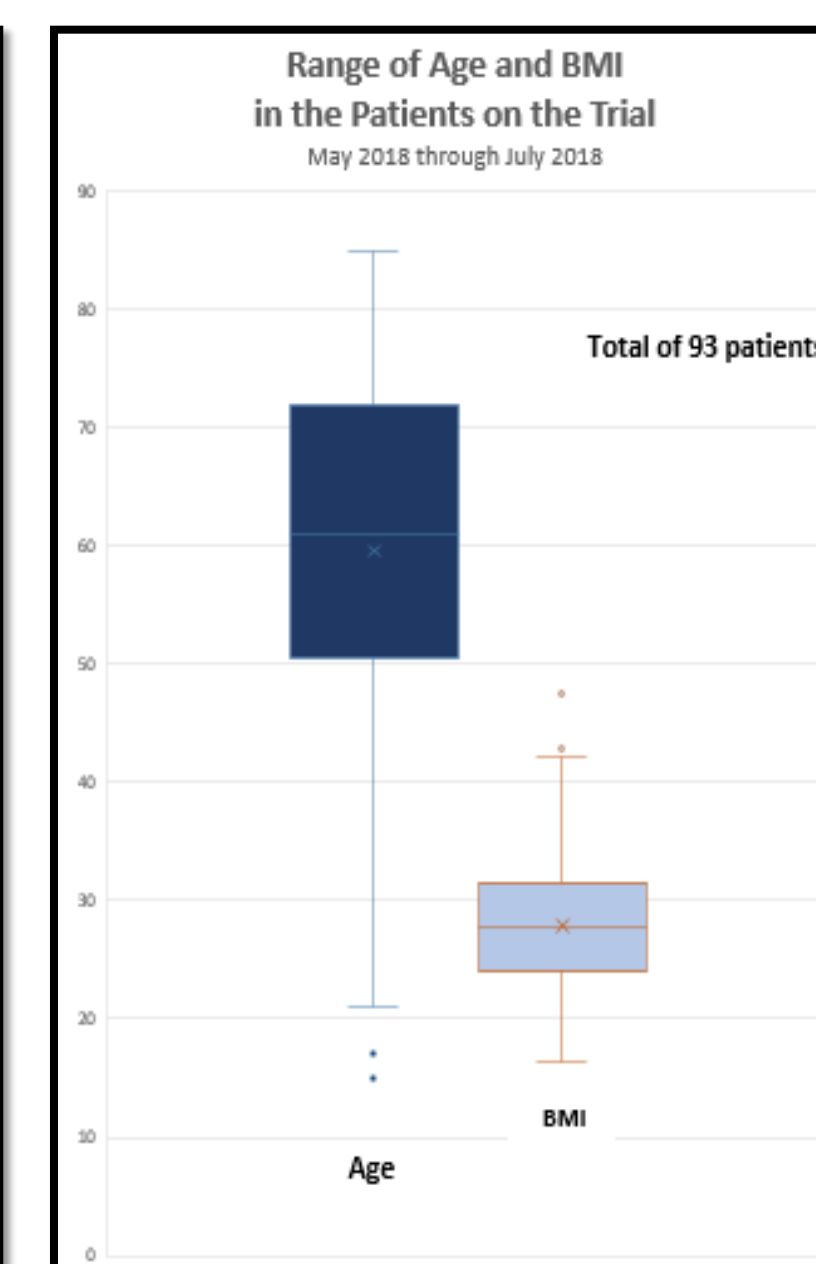
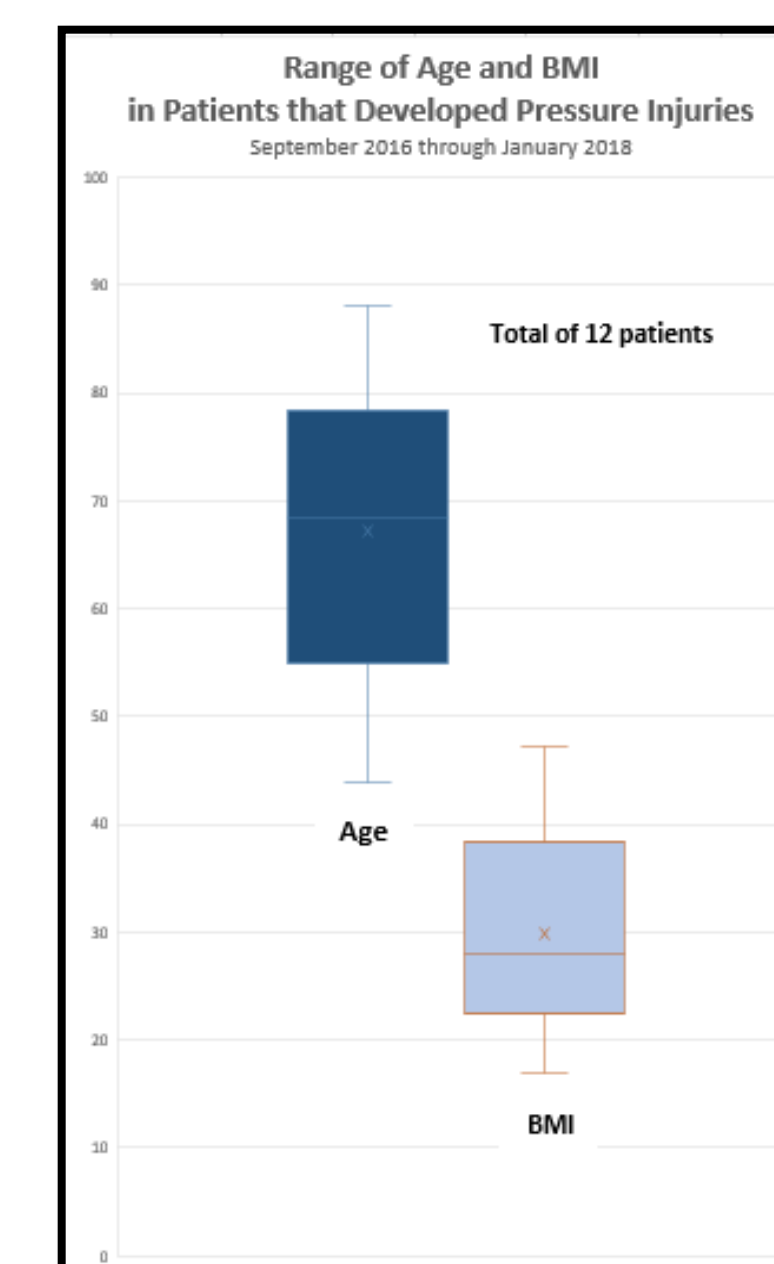
Successful Practice:

Findings suggest the need for further evaluation of these tools, specifically in the surgical oncology population and possibly in broader populations to evaluate sensitivity and specificity among individuals undergoing prolonged surgery. The ability to refine instruments to predict PI in this population is fundamental to reducing risk for PI events in the perioperative setting.

Team Members

Lauren Gamble, MPAS, PA-C
 Ismail Abushaikha, BBA

ASPAN 2019



Scott Risk Factors for 12 Pts with PIs*	Average
Age	67.2
BMI	29.9
ASA	3.1
# of Hours in OR	11.6

*9 Pts had PIs with Stage >1

Scott Risk Factors for Pts on the Trial	Average
Age	59.6
BMI	27.8
ASA	3
# of Hours in OR	8.3

*1 out of 93 trial Pts developed PI with Stage >1