

The Health Care Improvement Foundation  
2017 Delaware Valley Patient Safety and Quality Award  
Entry Form

**1. Hospital Name**

Einstein Medical Center Montgomery

**2. Title Of Initiative**

A Formal Process to Reduce perioperative Pressure Injury

**3. Abstract (Please limit this description to 250 words.)**

Pressure ulcer reduction initiatives are practically non-existent in surgical suites. Based on the work of our multi-disciplinary hospital-wide team, our perioperative team was formed. The team was charged by senior management to address OR generated skin issues and to create a program to assess risk and to develop measures to address and lessen the incidence of skin issues originating in the surgery. The team was formed in 2015 and comprised of senior leadership, managers, staff and educators along the surgical continuum. Based on team recommendations, pre and post op documentation screens were created. A full skin assessment is completed preoperatively on all patients. Patients with skin issues are re-dressed and documented. Patients are flagged as high risk based on BMI under 19 or over 35, surgery length exceeding 3 hours, history of previous pressure ulcers or a Braden assessment less than 16. Patients with low BMIs are prophylactically padded on bony prominences before surgery. Patients flagged as high risk have a green placard placed in their chart, wear a green bouffant instead of blue, and receive heel protectors for surgery. Post-operatively patients are offloaded from their surgical position and a full skin assessment occurs to rule out new skin issues. A policy was written in August 2015. Education for operative departments, ICU and the ED was rolled out in July 2015 and audits for compliance began in August 2015. Data shows that we have seen a marked reduction in our PPU's from the inception of our program to present.

**4. What were the goals of your initiative?**

To create and hardwire evidence-based processes. To reduce our surgical patient's risk of perioperative pressure injuries through a multi-disciplinary approach spanning the perioperative continuum.

**5. What were your initiative's baseline data and the results of your initiative?**

Perioperative generated pressure injuries were never addressed specifically at our organization. The housewide team, during a drill down found 6 OR generated pressure injuries in the year leading up to our initiative.

**6. Describe the interventions that were instrumental in achieving the results for your initiative.**

Thorough skin and risk assessments are completed both pre and post-operatively and are the foundation of the program. We estimate that approximately 25% of patients are

assessed to be at risk of pressure injury prior to surgery. This is a larger number than we would have anticipated prior to implementing the program.

Pressure injury risk is now communicated through visual alerts throughout the perioperative period and beyond, which facilitates preventive intervention.

- A bright green head cap as opposed to the routine blue cap is placed on the patient
- A green chart alert indicates that the patient is at high-risk for pressure injury

Off-loading the pressure from the anticipated or actual surgical position both pre and post operatively may also be a key to success. Cushioning other at-risk locations, such as the areas in contact with the surgery table in prone position, with either prophylactic foam dressings, gel pads or fluidized positioners, protects from atypical pressure injury.

The sacral prophylactic dressing we implemented:

- Both the National Pressure Ulcer Advisory Panel (NPUAP) and 2016 AORN Pressure Injury Prevention Guidelines recommend the use of evidence-based interventions---one such intervention is the prophylactic foam dressing.
- One 5-layer self- adherent soft silicone bordered foam dressing is backed by 3 randomized controlled trials and several systematic reviews.

Application of the prevention bundle across the facility including ambulatory surgery, all interventional units and critical care units protects the patient throughout their length of stay. Our program goes beyond preventing surgery-related pressure injuries to protect all types of existing skin injury from further damage:

- Skin safety starts with a thorough skin assessment in the pre and post-operative period.
- When existing injury is assessed pre-operatively, a soft silicone bordered foam dressing is applied as a protective barrier prior to surgery.
- A wound nurse consult is entered as needed post-operatively.
- The change from a foam donut device to a fluidized positioner to offload the occiput of cardiac surgery patients was prompted by an unstageable occipital pressure injury that occurred with use of the foam donut-shaped device.
- A review of best practice guidelines revealed that the donut-shaped devices create areas of high pressure and that AORN cautions that foam devices may compress over time.

Fluidized positioners conform to each patient's unique head contour, thus the surface area for pressure redistribution is increased; this may reduce the force of pressure on any one area and are moldable to offload medical devices. They also maintain their shape to support a therapeutic position over time.

**7. How can this initiative be replicated through the region? (Please limit this description to 100 words.)**

With leadership backing, teamwork and staff buy in, this is a program that can be readily replicated in other institutions. We also depend on our wound and ostomy nurse as well as the wound warriors' team to let us know when issues arise in the post op phase. We

maintain this initiative with PPU as a component of our mandatory Back to Basics program that is presented yearly. We continue to audit both staff compliance and incidence of PPU and both sets of data show that our program continues to be a success.

**8. Explain how the initiative demonstrates innovation (Please limit this description to 100 words.)**

Although AORN has a toolkit for addressing this issue, through networking and presentations we realized that very few Operating Rooms address perioperative generated skin issues. We created electronic medical record screens to address the documentation, high risk visual indicators were created to signal staff along the continuum that the patient has been identified as high risk. Prophylactic padding of bony prominences is done preoperatively.

**9. How does this initiative demonstrate collaboration with other providers within the continuum of care? (Please limit this description to 100 words.)**

Extensive education occurred from preop to Operating Room to the Post Anesthesia care Unit to the Intensive Care Unit so all stakeholders would be a part of the team. Our electronic medical record automatically tasked the nurse in the next stage of care to take appropriate actions in regard to the initiative.

**10. Explain ways in which senior leadership exhibited commitment to the initiative (Please limit this description to 100 words.)**

Senior leadership made this a featured PI project for the year. The Vice President for Nursing and the Assistant Vice President of the surgical departments are part of the team. Budgetary adjustments were made based on the supply needs that were identified by the team as essential to the program. (High risk indicators, dressings, positioners, table gel pads etc.) Senior leadership rounded in support of our team. Additionally, leadership supported our travel this year to Boston to present this as a poster at the AORN Conference and Expo and as a speaking presentation at the Premier Conference in Washington DC.

11. Appendices (i.e., tables and graphs)

