

Pressure Injury Prevention in the OR: Building a Safer Surgical Experience

Angela Balding, BSN, RN, CNOR, CPHQ
Vanderbilt University Hospital - Perioperative Services

BACKGROUND

- Pressure injuries (PIs) are skin or soft tissue damage caused by prolonged pressure, friction, or shear, often occurring during extended surgical procedures due to factors like immobility, anesthesia, and positioning.
- Vanderbilt University Hospital (VUH) perioperative services observed an increase in PIs developing during surgery in FY23, emphasizing the need for improved prevention strategies.
- Guided by AORN Clinical Guidelines, this project aimed to improve patient skin assessments, standardize interventions, integrate risk assessment into the documentation, and enhance education through a multidisciplinary approach to improve patient outcomes and reduce healthcare costs.

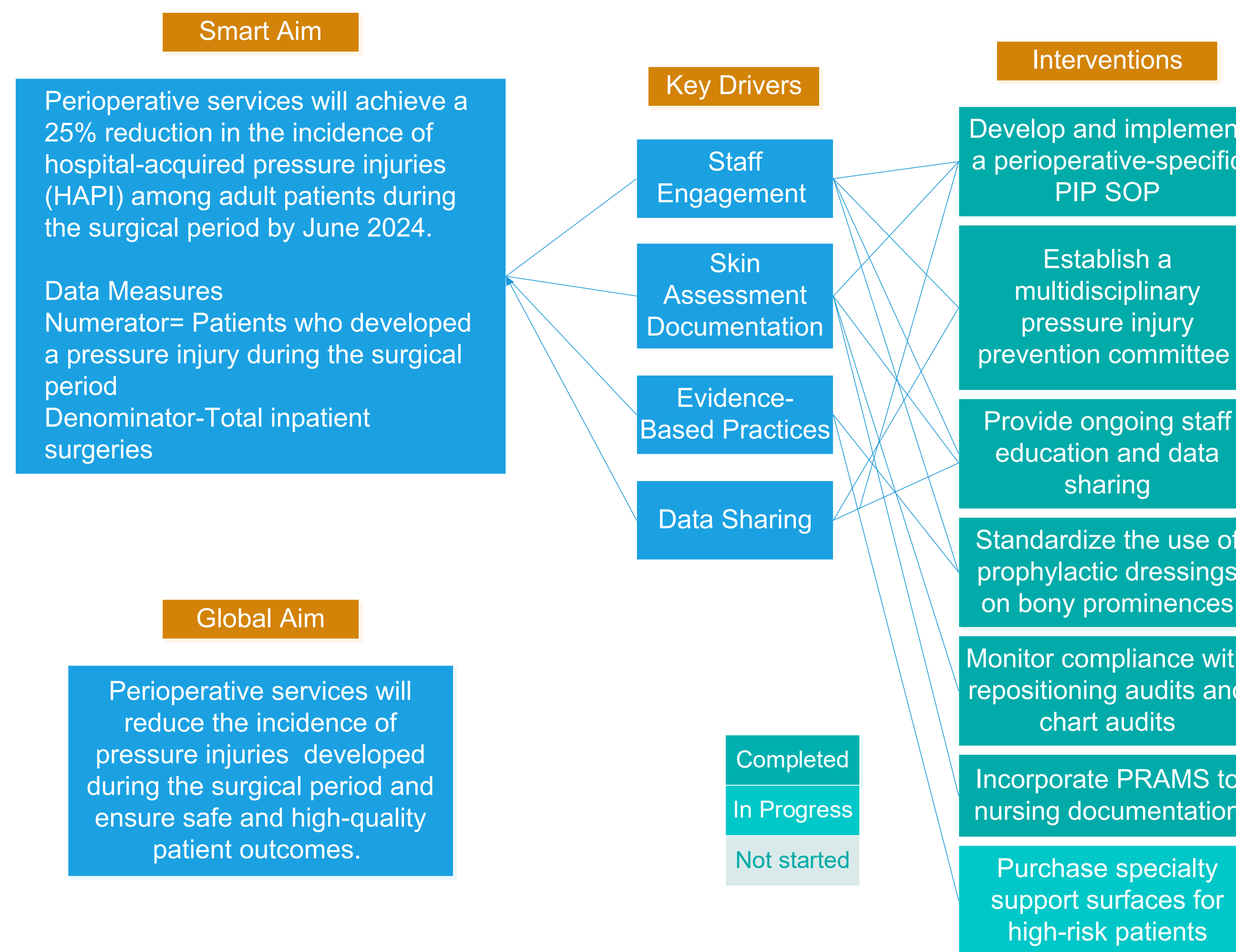
AIMS

- SMART AIM:** Perioperative services will achieve a 25% reduction in the incidence of hospital-acquired pressure injuries (HAPI) among adult patients during the surgical period by June 2024.
- Global AIM:** Perioperative services will reduce the incidence of pressure injuries developed during the surgical period and ensure safe and high-quality patient outcomes.

MEASUREMENT PLAN

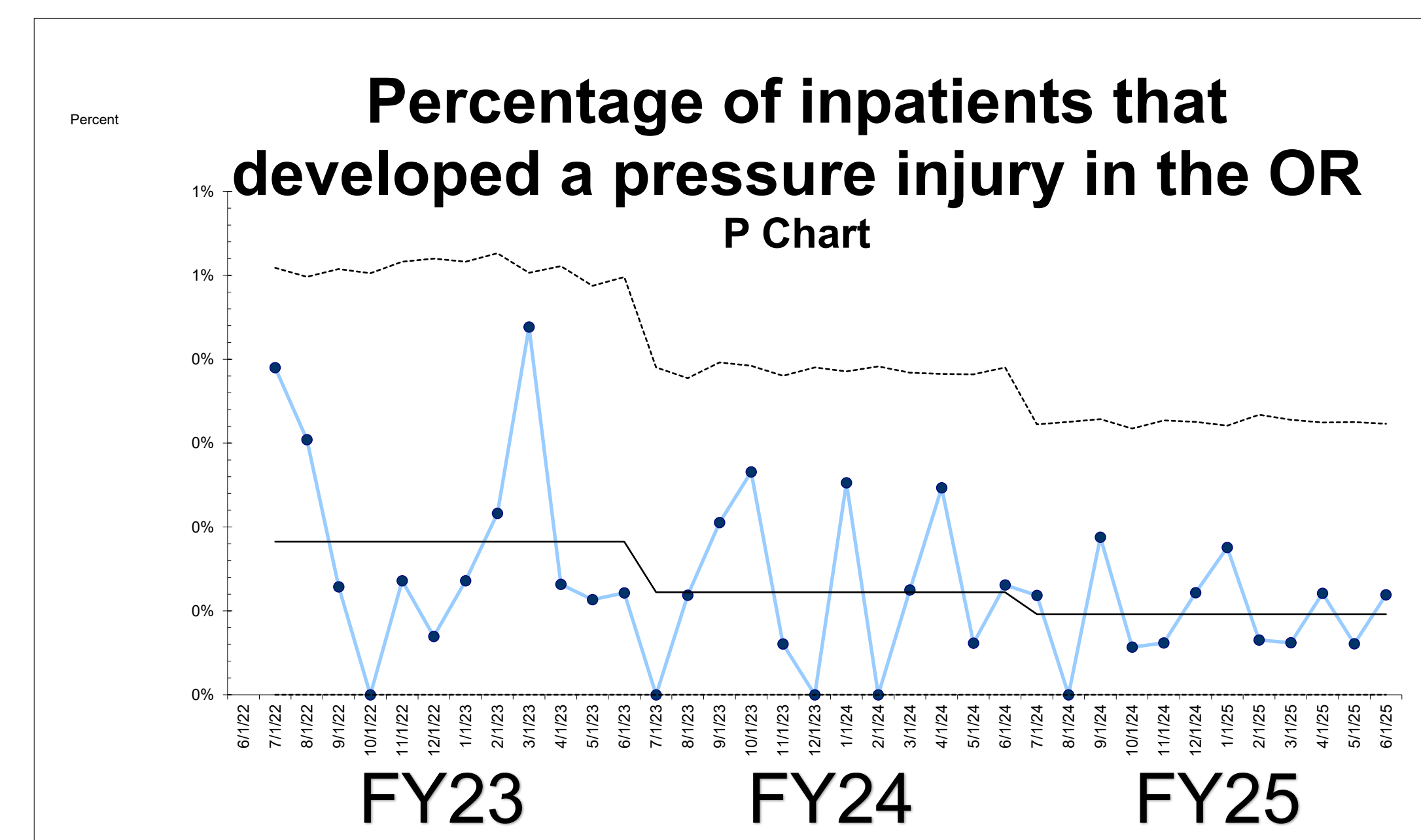
- Numerator = Adult Patients who developed a pressure injury during the surgical period. (Pre-op, Intra-op, Recovery phases of care)
- Denominator = The total number of inpatient surgeries that surgical teams performed at VUH adult operating room locations.
- Perioperative staff and inpatient units reported pressure injuries through incident reports, pressure injury surveys, or email communication.
- Wound, Ostomy, and Continence Nurses (WOCNs) validated the pressure injuries or Quality leaders screened them through a review process.

KEY DRIVER DIAGRAM



RESULTS

- Baseline Data:** Perioperative teams recorded an initial percentage of 0.18% for inpatients who developed a pressure injury during the surgical period.
- FY24 Pressure Injury Reduction:** Perioperative teams implemented interventions that reduced the percentage of inpatients developing pressure injuries during the surgical period to 0.12% by the close of FY24, achieving a 33% reduction from FY23.
- FY25 Pressure Injury Reduction:** Perioperative teams continued efforts and further reduced rate to 0.10% in FY25.



CONCLUSIONS

- The establishment of a perioperative pressure injury prevention program successfully reduced pressure injury rates.
- Multidisciplinary collaboration, implementation of a comprehensive, multifaceted educational strategy, and standardized protocols were key to the program's success.
- The addition of a perioperative risk assessment measure (PRAMS) enhanced the team's ability to proactively identify high-risk patients and standardize interventions across all phases of care

NEXT STEPS

- Sustainability:** Continue to incorporate pressure injury prevention metrics into routine quality improvement reporting.
- Reporting:** Create meaningful reports from PRAMS to evaluate effectiveness.
- Specialty Support Surfaces:** Evaluate and purchase specialty support surfaces for OR beds to protect high-risk perioperative patients, further reduce incidence rates, and improve patient outcomes.

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CONTACT INFORMATION

Angela Balding, BSN, RN, CNOR, CPHQ
Quality and Patient Safety Advisor- Perioperative Services
Angela.balding@vumc.org

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