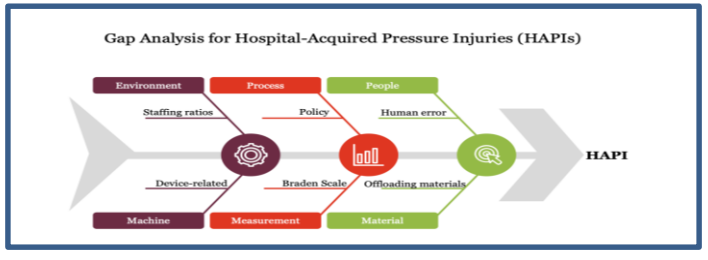
# Hospital Acquired Pressure Injury Reduction Using the Masimo Centroid

Jennifer Armengual, MSN, RN, CMSRN, CNE

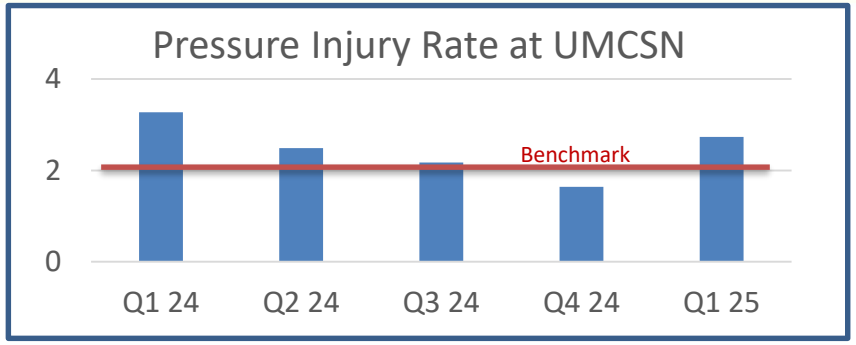
## BACKGROUND

- The Joint Commission lists pressure injuries as one of the nation's top safety concerns.
- Pressure injuries interfere with recovery and are a marker of poor prognosis and mortality in some patients (TJC, 2022).
- Development of a Hospital Acquired Pressure Injury (HAPI) can increase length of stay, which puts the patient at a higher risk of developing an infection (Lass et al., 2024).
- The cost of HAPIs in the US exceeds $26 billion annually, making the prevention of HAPIs a top priority for hospital leadership (Lass et al., 2024).
- Adherence to turning schedules is poor, with reported rates of 38%–66% (Wong et al., 2020).
- This Quality Improvement Project will implement a patient orientation and activity sensor to determine if technology could help clinical staff with the prevention of HAPIs through more effective offloading.




## PICOT

For the staff caring for non-ambulatory adult patients admitted to the IMC unit, how does use of the Masimo Centroid, a patient orientation and activity sensor that aids clinicians by alerting to tissue stress compared to the standard practice of turning patients every two hours affect the occurrence of HAPIs within 12 weeks?




## PURPOSE

The project's aim is to decrease HAPIs in an IMC, which currently lacks the use of patient movement sensors as part of the care bundle.

## METHODS

- The Masimo Centroid is a wearable and wireless patient orientation and activity sensor that alerts clinicians when a patient should be repositioned.
- Implementation is planned for 3 South.
- The EBP model used for this QI project is Plan-Do-Study-Act.
- The Standardized Pressure Injury Prevention Protocol (SPIPP) Checklist 2.0 is the best practice guideline used for pressure injury prevention.
- Staff are trained via an online module and hands-on practice.
- Data collected will include total number of HAPIs reported per month on Prevalence Day.

## RESULTS

- Implementation scheduled for September 2025.
- The intended goal is to reduce the risk of HAPI development.
- The system impact expected is a decrease in HAPIs, resulting in a decrease length of stay and lost revenue.


## CONCLUSIONS

By implementing the Masimo Centroid the intended goal is to reduce the risk of HAPI development. The system impact expected is a decrease in HAPIs resulting in a decrease length of stay and lost revenue.

## REFERENCES

To view references, scan the QR code below.

PATHWAY DESIGNATED