

Pressure Injury Prevention of At-Risk Adult Patients in the Emergency Department



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Background

- Quarterly average hospital acquired pressure injury (HAPI) prevalence in this urban teaching hospital increased from **5.46% November 2021 to 12.12% February 2022, 59% of which were sacral pressure injuries**
- 64% of patients were identified as at-risk for pressure injury development using the Braden score while in the emergency department (ED)
- Average two year ED boarding time was **6.5 hours**. Boarding times greater than **2 hours** are significantly correlated with HAPIs prevalence
- Increased need for a standardized sacral pressure injury prevention intervention in the ED.

Aim of the Project

Purpose statement: to identify those patients at-risk for pressure injury development and implement an evidenced based standardized sacral pressure injury prevention intervention in the emergency department

Primary Process Goals:

- 100%** of at-risk (scores ≤ 18) admitted patients will have Braden assessments completed while in the ED
- 100%** of admitted patients, boarding for at least 6 hours, with Braden scores of ≤ 18 will have a prophylactic foam bordered sacrum dressing applied

Outcome Goal:

- Average prevalence of HAPIs will be **<5% by 11/2022**

Description of the Intervention

Setting and Population:

- 40-bed level 2 trauma emergency department in an urban teaching hospital
- 63 RNs, 37 patient care technicians/patient assistants
- All adult patients admitted through the ED with severity index scores of 3 or lower

Intervention: Prophylactic foam bordered sacral dressing

Implementation Strategies:

- Staff education on dressing application and documentation
- Relocation of dressings inside patient rooms
- Obtained unit champions
- Posted signs, email reminders, and data dissemination at staff meetings

Description of Data Collection and Analysis

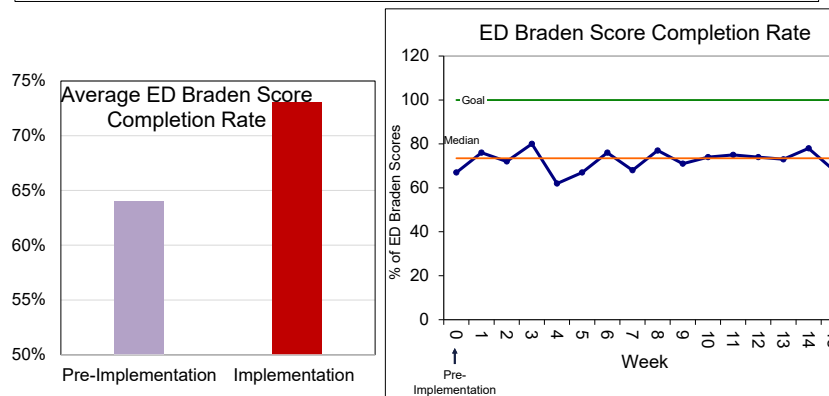
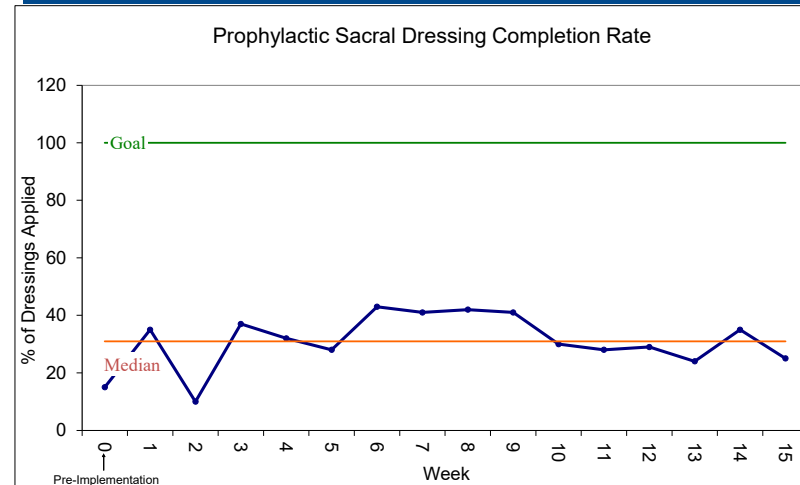
Data Collection:

- Retrospective baseline data collected three months prior to implementation June 6-August 27 2022
- 15 weeks of implementation from August 28 –December 10, 2022
- Charts audited based on weekly reports obtained from informatics RN using the organization's secure network

Data Analysis:

Descriptive statistics was used to measure percentage of dressing application and percentage of at-risk patients with Braden scores completed in the ED

Figures



Results/Outcome Measures

Process Measures:

Braden Risk Assessments completed (scores ≤ 18):

- 72.53% (n= 932) were completed in the ED**
- 27.47% (n=353) were not completed in the ED**
- Successful implementation- 13 runs indicating a non-random pattern of change

Prophylactic Foam Bordered Sacral Dressing Intervention:

- 32.61% (n=224) dressings were applied**
- 67.39% (n=463) dressings were not applied**
- Unsuccessful implementation- no shifts, no trends, runs not within expected limit

Outcome Measure:

Per Hospital wide NDNQI survey HAPI Prevalence 3.60% at Week 11 of Implementation (11/8/22)

Implications for Practice

- Pressure injury risk assessment completed in the ED allows for early intervention to prevent pressure injuries
- Prophylactic use of a foam bordered sacral dressing is a feasible standardized intervention for sacral pressure injury prevention in the ED

Lessons Learned

- 15 week implementation period limits time to see change
- Large number of agency nurses (34%) with short-term contracts not reviewing email or required to attend staff meetings limits staff engagement
- Reminder signs were removed. More permanent signs would have adhered better to computers.

References



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