Implementation of Pressure Injury Protocol on Admission: A Quality Improvement Project

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PROBLEM STATEMENT

- 2.5 million patients annually develop a pressure injury,
 - 60,000 patients dying annually as a direct result of a pressure injury
 - Costs over 11 billion dollars annually in the United States
- Patients that develop a hospital acquired pressure injury (HAPI) that aren't properly treated have a:
 - decrease in quality of life
 - increased risk of infection and amputation
 - higher hospital readmission rate
 - increased pain levels and risk of death.



PROJECT PURPOSE

- Project aims to initiate preventative pressure injury protocol on admission for every patient, to decrease the rate of hospital acquire pressure injuries
- PICOT: In an adult pulmonary progressive care unit how does implementing a pressure injury prevention protocol bundle on admission compared to standard care in reducing overall pressure injuries over the course of three months?

NURSING THEORY & MODEL

 Orem's theory of self-care guided this project through identifying a patients self-care deficit requiring the patient to rely on a nursing agency for health promotion and care

Methods:

- All patients admitted to a pulmonary progressive care unit in a long-term acute care hospital (LTACH)
 were included
- Instruments/Tools: Hospital acquired pressure injuries were monitored and compared to pre implementation rates

Intervention & Data Collection:

- Data was collected over a 12-week timespan. April to June 2023.
- **Week one:** Educational in-service on protocol components and process change of changing protocol initiation to on admission for every patient rather than only patients with existing wounds. Wound care team made "super-users" to continue protocol component education throughout project. Retrospective chart review and data collection done, pressure injury prevention protocol implemented for all current and newly admitted patients.
- Week two to twelve: Project implementation continued, checked new admission patients for pressure injury prevention protocol implementation. Wounds monitored and documented in data collection chart weekly. Data collected.

| Variable | Prechange 🔽 | Postchange 🔽 | Pvalue 🔽 |
|-----------------------|-------------|--------------|----------|
| No. (%) of patients | | | |
| Gender: | | | |
| Male | 113(59) | 71(46) | 0.0164 |
| Female | 79(41) | 82(54) | 0.0164 |
| | | | |
| Ethnicity: | | | |
| White | 62(32) | 44(29) | 0.5489 |
| Hispanic | 34(18) | 38(25) | 0.114 |
| Black | 5(2) | 8(5) | 0.1234 |
| Other | 91(47) | 63(41) | 0.2658 |
| | | | |
| Age: | | | |
| <40 | 4(2) | 3(2) | 1 |
| 40-60 | 23(12) | 9(6) | 0.0574 |
| 60-80 | 125(65) | 118(77) | 0.0155 |
| 80+ | 46(24) | 23(15) | 0.0382 |
| | | | |
| Braden score: | | | |
| No risk (19-23) | 2(1) | 1(1) | 1 |
| Mild risk (15-18) | 36(19) | 27(18) | 0.8126 |
| Moderate risk (10-14) | 86(45) | 86(56) | 0.0426 |
| Severe risk (<9) | 68(35) | 39(25) | 0.0455 |
| | | | |
| Total HAPIs: | 9(4) | 2(1) | 0.0864 |

Old process:

Patient Acquired Acquired Pressure Injury Occurs

Hospital Acquired Consult Placed

Placed

Wound Care sees patient and protocol initiated

New process:

Patient Injury Admitted Protocol Initiated

DISCUSSION

Findings:

- Utilizing the pressure injury bundle on admission decreased the rate of HAPIs.
- The reduction in HAPIs was clinically significant, but not statistically significant due to the small sample size.
- The results show a gap in the literature on timing of pressure injury prevention initiation to best negate pressure injuries and identifies a need for further study

IMPLICATIONS FOR ADVANCE PRACTICE NURSING

This change in implementation timing is easily sustainable as the wound care team and floor nurses do skin assessments and it is now included in all physician's admission care set.



