Innovation Ruler and Photography Decreased Pressure Injuries

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Introduction

Pressure injuries remain a major health concern and patient safety and quality indicator. Accuracy in assessment, documentation, and clear communication are essential in maintaining patient safety goals.

The Johns Hopkins EBP model was used to identify evidence. Literary search was completed using Ovid, CINHAL, PubMed. A total of 40 articles were identified using the terms “pressure ulcer”, “wound photography” and “documentation”. Reviewed current Atlantic Health System policies for wound assessment and documentation. National professional organizations neither recommend nor discourage the use of digital photography in the acute care setting. National Pressure Ulcer Advisory Panel (NPUAP) clarifies in a position statement that wound photography should not be used to replace documentation but recommend any system used must be consistent.

Based on the EBP there was a need to determine if a change in practice was efficacious. An initial device was created to standardize photo distance. Collaboration took place with risk management and legal representatives to determine the process for documentation of wound photos on the chart.

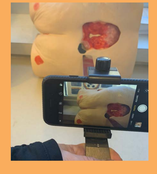
Objective/Purpose

The purpose of this innovative project was to develop a device to standardize the distance and lighting for photos, as well as a process for documenting photographs. The standardization was aimed at enhancing communication and continuity of care to prevent hospital acquired pressure injuries (HAPI).

The outcome measure was the HAPI rate on an adult respiratory unit. Patients on this unit have a longer length of stay than observed on other units. Many of the patients are on respirators and have mobility challenges.

Method

- This project started with evidence-based research leading to the creation of a quality improvement project.
- Stakeholders were identified: unit staff, wound and ostomy specialists, legal representative, risk management, nurse researchers, infection control, information systems, innovation team, engineers, senior leadership including Chief Nursing Officer, Chief Medical Officer, Unit Nursing Director.
- Creation of the first prototype ruler to standardize distance.
- Baseline data of HAPI were recorded.
- The preliminary design allowed photos to be taken at a consistent distance but did not allow for standardization of lighting.
- Collaboration with engineering and the innovation team allowed for refinement of the device and an embedded lighting source.
- A smaller, more convenient standardization ruler was developed.



Design 1

Use of the standardization ruler, posting of photographs to the patient health record, education of unit clinical staff (physicians and nurses) and monitoring HAPI were all part of the methodology used.

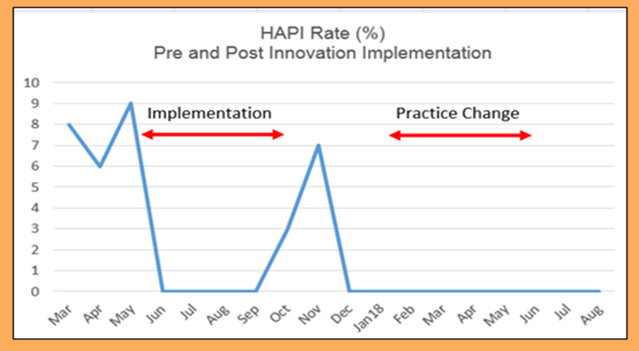
- Surveys to monitor clinical nurse perception of comfort level and efficiency of the wound photographs on the health record were obtained.
- HAPI rate on the unit was the objective measure of success.

Results and Discussion

After implementing the use of the standardization ruler, posting photos of the skin progress resulted in a decreased HAPI rate.

HAPI rate prior to the use of photograph was 8%. Rates decreased to average 2% over the next three months post-implementation (a 75% decrease). The decrease continues to be sustained. Only one HAPI has been identified since the innovation was implemented.

Easy access to photos served as reminders that skin care was key for patients. Subsequent meetings with engineers resulted in modifications to improve ease of use and accuracy and patent application. Use of the device and process was expanded and used on other units.



The use of a nurse driven innovation and process helped decrease in HAPI on an adult unit. Use of a standardization ruler and posting photos on the chart are useful interventions that have the potential to improve patient outcomes.

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