MEDICAL CENTER

A Pressure Injury Prevention Initiative

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BACKGROUND

- Healthcare and the quality indicator metrics used to define successful patient care remain ever-changing
- Often, skin integrity protection is an indicator of quality patient care
- Despite numerous studies, methods of pressure injury prevention vary between healthcare staff and between facilities[2]
- Hospital-acquired pressure injuries produce a significant burden on the healthcare system and can often be avoided[1]
- Per the AHRQ, the average cost of a hospital acquired pressure injury averages $10,700
- Patients with dermal burns are at a greater risk of developing pressure injury secondary to critical illness, decreased skin integrity and increased length of stay
- Our burn center had 4 hospital-acquired pressure injuries, stage 2 or greater, in a 2-month span within our patient population
- This incidence placed the burn unit in the top 5 units at Vanderbilt University Medical Center with the highest prevalence of hospital-acquired pressure injury

METHODS

- After discussion with the nursing staff, we discovered a large variance in pressure injury prevention strategies, many of which were not focused on heel protection
- The burn team assembled a multidisciplinary team to combat the issue:
  - Staff nurses from day and night shift
  - Quality improvement nurse
  - Physical therapist
  - Nursing management team
- We examined pressure injury prevention evidence-based practice, however there is very limited evidence directly related to heel protection[1]
- We then modified the evidence for our unique patient population to develop a recommendation for best practice on our unit
- We introduced the recommendations to the burn unit staff after creation by the multidisciplinary team
- To assess staff compliance to the new unit recommendations, patient positioning audits were completed before and after staff education.

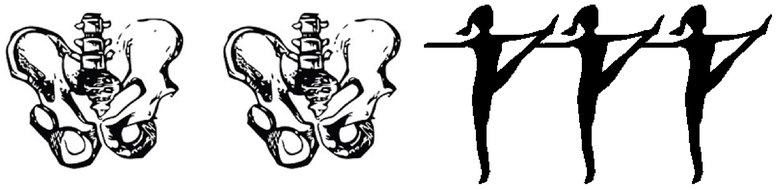
RECOMMENDATIONS

The recommendations, affectionately known as the Hip Hip Heels Raised Campaign, include:

- Effective Heel Lift defined as the ability to slide a hand between the bed and heel
- 2 pillows positioned perpendicular to the legs
- Floating heels and maintenance of knee extension
- Neutral hip alignment
- Mepilex as indicated for friction and shear protection
- 1 foam boot and 1 multi-podus boot rotated every 2 hours with turns to assist with heel elevation
- Product representative rounding for re-education of proper boot fit and placement

TABLES/FIGURES

Figure 1.



Hip Hip Heels Raised

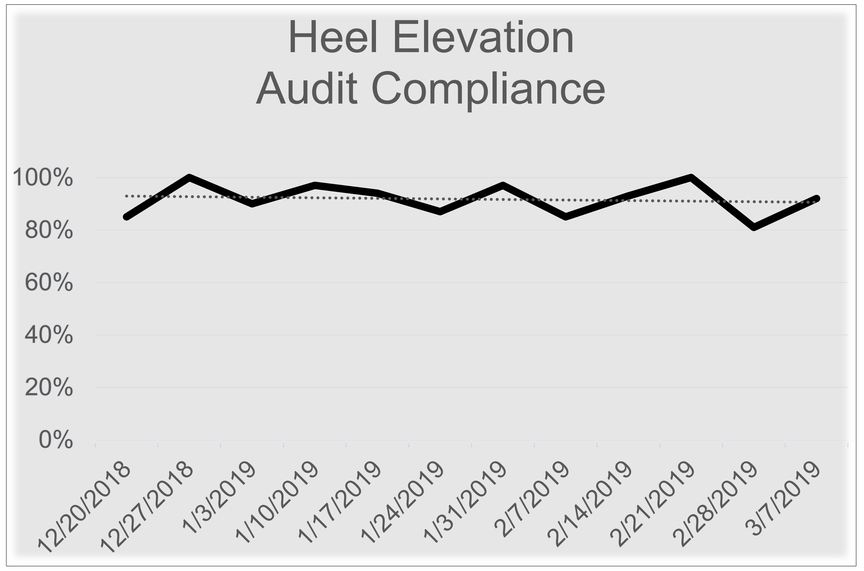


Figure 2. Foam Boot

Figure 3. Multi-Podus boot

RESULTS

- Our retrospective analysis for patients in our burn center discovered 4 pressure injuries, stage 2 or greater, in a 2-month period prior to the campaign implementation
- Over the 5-month span since campaign application, only 3 hospital-acquired pressure injuries, stage 2 or greater, have occurred in our patient population, a reduction of approximately 7 pressure injuries from the previous trajectory
- This reduction is the equivalence of $300,000 in patient-care costs saved
- Additionally, there have been no instances of knee flexion contractures or other complications since implementation of the Hip Hip Heels Raised Campaign
- Prior to instruction and implementation of the campaign, compliance with heel elevation varied from 75-83%
- With this information in mind, the goal was to achieve >90% compliance during audits by January, with education beginning in November
- Our goal was met the week of December 27, 2018 and compliance has remained strong, averaging 92% implementation of heel elevation since campaign implementation

CONCLUSIONS

- We successfully lowered the incidence of hospital-acquired pressure injuries on the burn unit with this initiative
- All burn patients would benefit from heel pressure relief
- This initiative would be applicable to other patient populations as well
- There is no apparent downside to this method of performing heel pressure relief
- Because the sample size was limited, the length of the study was relatively short and the implementation occurred on a single hospital unit, additional study should be completed to determine overall effectiveness of this pressure injury prevention program and relevance to implementation on a larger scale

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