

TAKING ON THE CHALLENGE: DEVELOPING A MULTIDISCIPLINARY DECISION TREE FOR HEEL PROTECTION IN THE ICU

Cathleen T. Van Houten, BSN, RN, CWON, Nancy Freeland, MS, RN, CCRN, Tara L. Sacco, MS, RN, CCRN, Heather Odden, PT, DPT, Robert Brown, MS, CPO, FAAOP

Introduction

Heel pressure ulcers (hPUs) can be painful for patients and costly for hospitals. Reducing nosocomial hPUs in critical care units is crucial, and generally requires the use of off-loading and protective devices as well as nursing staff education. Differences in opinion between nursing and other disciplines presented challenges and obstacles to implementing strategies to prevent and treat hPU.

■ Early in 2008, ICU Skin Champion nurses began weekly rounds with a certified wound and ostomy nurse (CWON) to audit a pressure ulcer prevention bundle, collect pressure ulcer incidence data, and promote pressure ulcer prevention and treatment strategies.

■ At biweekly group meetings heel ulcers were identified as an area for performance improvement.

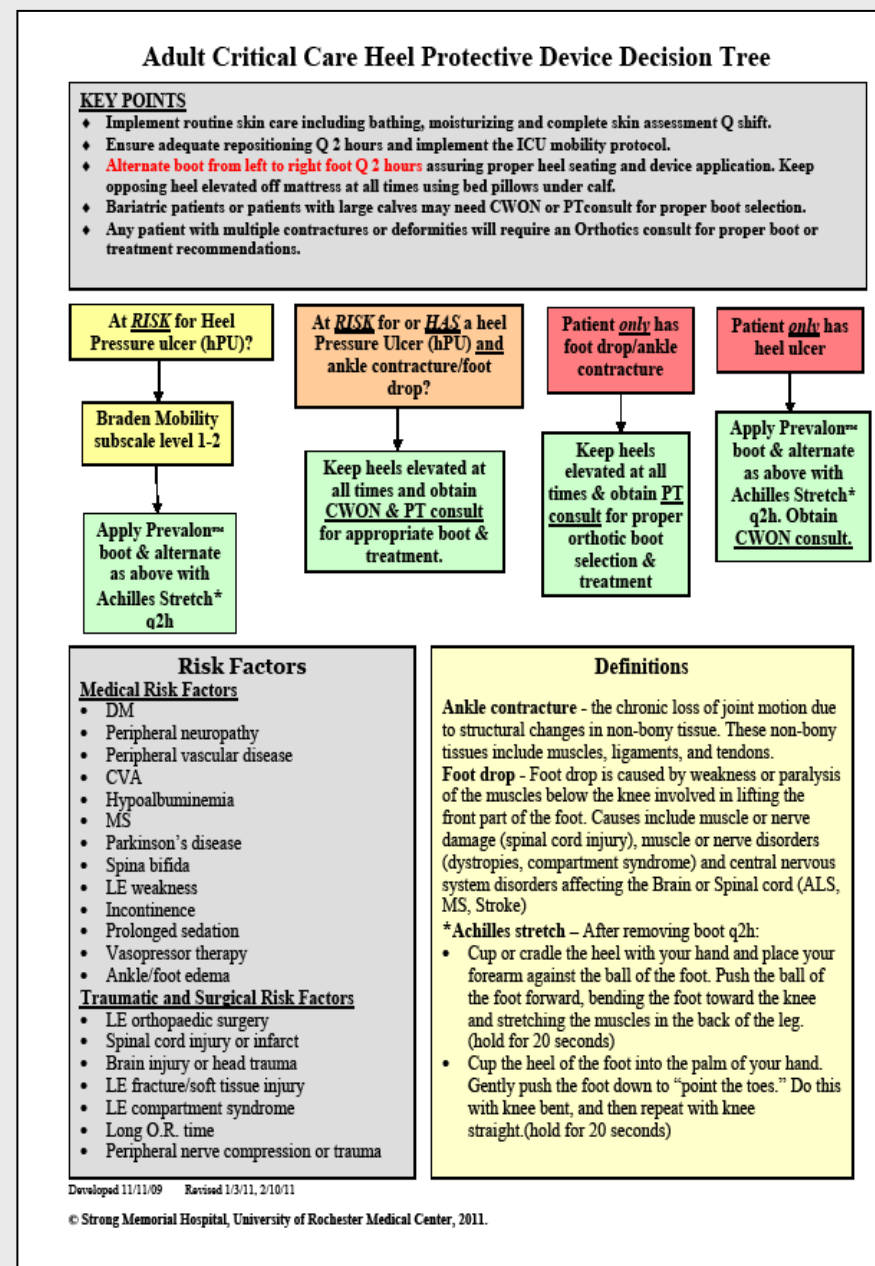
■ Staff query revealed that the current boot did not fit all patients, did not always stay in place, and was used inconsistently.

■ Value Analysis was consulted. Vendors were contacted for sample boots.

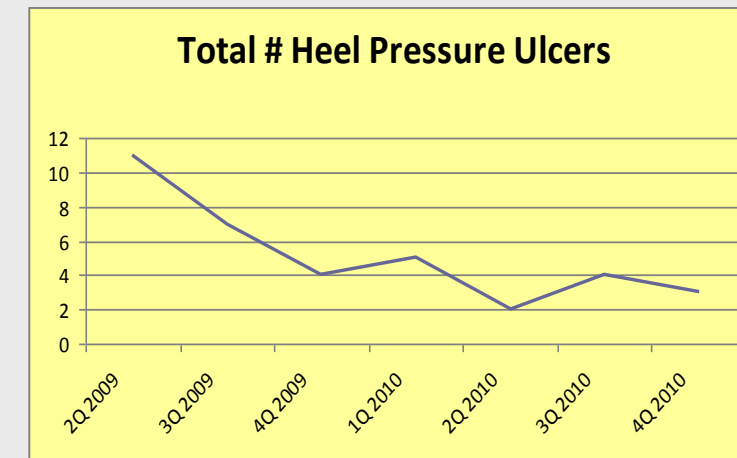
■ Boot options were evaluated by the ICU Pressure Ulcer Committee. Those with favorable reviews were trialed on patients and presented to the department of physical therapy for their feedback.

Methods

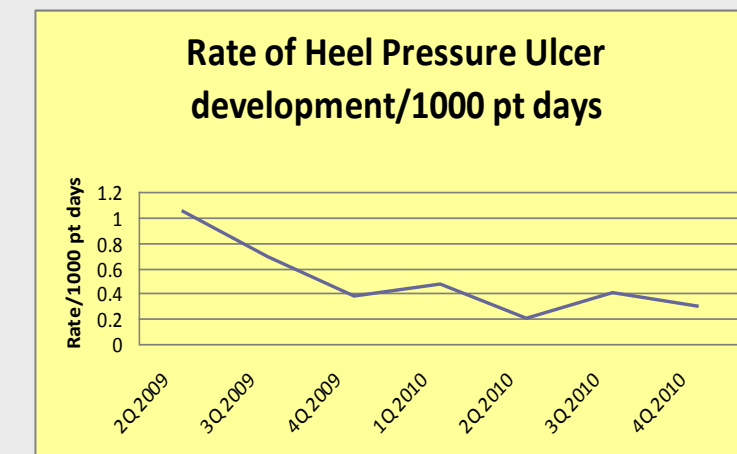
A work group was assembled with representation from nursing, physical therapy, and orthotics. After serious discussion and debate, it was decided that two heel boots would fit all the needs of the critical care population. One boot would be available through Materials Management, and the other through the department of Orthotics. A decision tree was drafted to guide nurses in decision making regarding which heel boot to choose for specific patients.



Results



36.36 % reduction in total number of heel ulcers from 2009 to 2010.



51.63 % reduction in rate of heel ulcer development from 2009 to 2010, when looking at rate/1000 pt days.

Devices



Restorative Care of America, Inc.
MPO 2000 Active®

Prevalon® Pressure-Relieving Heel Protector
Sage Products, Inc.



Conclusions

Multidisciplinary team work, regular rounding with focused skin assessments, and implementation of a heel protection boot decision tree are components of the success of our standardized heel pressure ulcer prevention. Ongoing attention to staff education by implementing just-in-time teaching at the bedside, has been an added benefit of weekly rounds by the CWON and Skin Champions. Case review of any negative outcome occurs at the unit and service level. Collaborating with physical therapy and orthotics, has helped to strengthen the bonds between disciplines, and ensure consistent implementation of the decision tree. Patients benefit from a consistent prevention protocol. Nosocomial heel ulcer rates continue to fall.

References

Fowler, E., Scott-Williams, S., McGuire, J.B. (2008). Practice recommendations for preventing heel pressure ulcers. *Ostomy Wound Management*, 54(10), 42-8, 50-2, 54-7.

Junkin, J., Gray, M. (2009). Are pressure redistribution surfaces or heel protection devices effective for preventing heel pressure ulcers? *Journal of Wound, Continence & Ostomy Nursing*, 36(6), 602-608.

<http://www.alsphiladelphia.org>

<http://www.bradenscale.com/images/bradenscale.pdf>



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