Presented at the 19th Annual CAWC Conference; November 7-10, 2013, Vancouver, Canada

PRHC Peterborough Regional Health Centre

Four Years of Heel Pressure Ulcer Prevention

Debbie Hanna-Bull RN, BScN, MN; Stephen Martin MD FRCS(c); Joan Maclean, OT Reg(Ont)

INTRODUCTION

Heel pressure ulcers (hPUs) are associated with increased morbidity, decreased quality of life, increased costs, and can lead to increased risk for osteomyelitis and other related complications.[1,2] Evidence-based prevention guidelines have been published, and adopted by our regional 375-bed acute care facility utilizing a comprehensive quality improvement initiative.[3-5] In 2009, 5.8% of patients developed a hPU, ranking heels the number one location for facility acquired PU in our hospital. This poster represents a sustainable QI intervention, which has led to a 72% reduction in facility-acquired hPUs.

OBJECTIVES

A goal was set in 2009 to decrease facility acquired hPU rates by 25% in the first year, strive for and maintain a 50% decrease in subsequent years, and stay below the Canadian benchmark.

METHODS

Business Case Approval: In 2009 a hPU Prevention Initiative was implemented following acceptance of a Business Case emphasizing the benefit in patient quality of life and cost avoidance.

Protocol Components: The staff received in-depth education on the evidence-based rationale behind the need for a hPU prevention protocol and utilization of an effective heel off-loading device* for those patients meeting the inclusion criteria.

Inclusion Criteria: The following inclusion criteria were developed for patients to receive the heel protector:

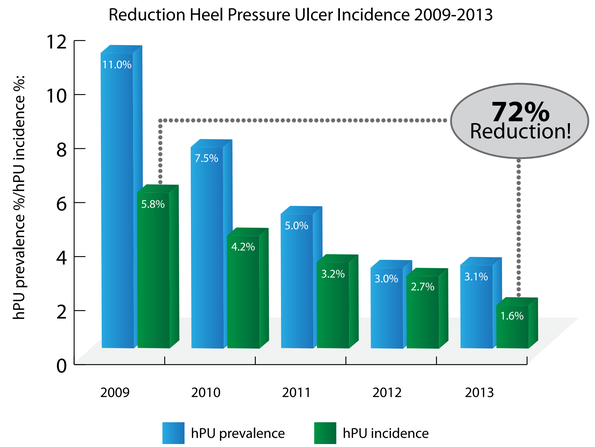
- Braden score of ≤18
- Limited patient mobility
- Presence of ≥2 comorbidities

Compliance Monitoring: The team lead conducted continuous monitoring of compliance with the hPU prevention protocol and ensured continual reporting of outcomes to ensure accountability.

*Prevalon® Pressure-Relieving Heel Protector, Sage Products LLC (Cary, IL)

RESULTS

On average over the 4-years, 45% of the inpatients met the inclusion criteria and of those only 36% of the patients used the heel off-loading device. One-year after the hPU Prevention Initiative was implemented facility acquired hPU's decreased by 28%. The figure demonstrates the continual decrease in hPU incidence through 2013, resulting in an overall 72% decrease.



REFERENCES

1. Redelings MD, Lee NE, Sorvillo F. Pressure ulcers: More lethal than we thought? Adv Skin Wound Care. 2005;18(7):367-372.
2. Chan BC, Nanwa N, Mittmann N, Bryant D, Coyte PC, Houghton PE. The average cost of pressure ulcer management in a community dwelling spinal cord injury population. International Wound Journal 2013 (4); 431-440. doi: 10.1111/j.1742-481X.2012.01002.x. Epub 2012 Jun 21.
3. Canadian Association of Wound Care. Pressure Ulcer Awareness 2007. Available at http://www.prevent-pressureulcers.ca/decision-maker/decision-maker.html Accessed February 12, 2011.
4. Donnelly J, Winder J, Kernohan WG, Stevenson M. An RCT to determine the effect of a heel elevation device in pressure ulcer prevention post-hip fracture. Journal of Wound Care 2011 (20) 7; 309-318.
5. European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel. Prevention and treatment of pressure ulcers: quick reference guide. Washington DC: National Pressure Ulcer Advisory Panel; 2009.