The heel is at increased risk for pressure ulcer Facility-acquired heel pressure ulcers (FAhPUs) are a significant challenge in patients who are high risk for pressure ulcer breakdown and are well known to be associated with increased mortality, increased length of stay, decreased quality of life, and increased economic costs.1-4 The risk for FAhPUs extends to a large patient population, including patients with impaired mobility and nutrition, decreased circulation and sensation, and multiple comorbidities. The costs of treatment substantially outweigh the costs of prevention, with Canadian cost analyses estimating the cost to treat a heel pressure ulcer at approximately $15,000 and extending length of hospital stay a median of 4.31 days.4

The majority of FAhPUs are preventable, and require an interdisciplinary collaborative adherence to evidence-based guidelines, which include healing the underlying cause of pressure ulcer risk, appropriate heel offloading, pressure redistribution, repositioning, and other multiple interventions.1-4

A pilot study published by the Canadian Association of Wound Care in 2006 reported "1 in 12 over a 10-week period in 2009, and the SHR determined an evidence-based guideline was necessary to prevent FAhPUs and improve patient outcomes.

**BACKGROUND/RATIONALE**

**Clinical Setting**
This was a regional health care initiative developed and disseminated by the Saskatoon Health Region.

**Literature Review**
An evidence-based literature review was conducted to determine best practices in identifying patients at risk for heel pressure ulcers, effective prevention efforts, and recommendations for ensuring interdisciplinary collaboration by reviewing: 1) evidence-based literature; 2) regional resources; 3) national resources.

**Standardization of Materials**
Multiple heel protectors were in use, creating confusion amongst caregivers on when to use the heel protector, how to apply it, and when to evaluate heels according to best practices. An interdisciplinary team trialed 10 different heel protectors and selected one standardized heel protector* to introduce to the SHR to ensure standardization of materials, education, and processes. The interdisciplinary team selected this heel protector because it was single-use, did not introduce additional friction or sheer, and was easily to apply.

**Simple Guideline**
After reviewing the evidence-based literature, a simple 3-criteria guideline was developed (Figure 2), and if any of the 3 criteria were met, the patient was to receive a heel protector. It should be noted that if a nurse judged the patient a strong candidate for a heel protector and they did not meet the criteria, the patient was able to receive a heel protector, providing appropriate justification was documented in the patient care plan.

**Developing Checklists**
These checklists were developed to ensure the clinical team consistently adhered to standardized care:

- Skin care checklist determined if skin was intact or reddened
- Skin care product checklist provided algorithms for routine bathing, perfused cleansing for incontinent patients, and daily moisturizing
- Skin care protocol checklist documented the following:
  - Skin protocol was initiated
  - Pressure management equipment was in place
  - Heel boots were in place
  - Nurse was notified if skin was reddened
  - Turning sheets were in place
  - Turning schedule was organized in patient care plan
  - Appropriate referrals had been requested (PT, OT, Dietician)

One of the key collaborative measures put into place which did not exist until this guideline was the ability of nurses to order OT consultations. This ensured timely consults were ordered in at-risk patients with incontinent patients.

**Caregiver Education**
The nursing and therapy staff were educated on the evidence-based guideline, appropriate use of the guidelines and checklists, and application of the heel protector. The need for effective FAhPU prevention was reintroduced through group education, one-on-one competency training, and ensuring accountability of evidence-based care.

**REFERENCES**
7. Canadian Association of Wound Care news release accessed on 10/30/12 @ www.preventpressureulcers.com/mdatat; Release nov-18-06.pdf