

The Efforts of a Skin-Protection Task Force Significantly Decreases the Number of Hospital-Acquired Pressure Ulcers

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Background & Overview

Pressure ulcers (PUs) remain a critical health care issue, with reported incidence rates of 7% to 9%,⁶ and prevalence rates of 14% to 23.9% in acute care settings.¹²

It appears that these rates are worsening:

- ◆ During the course of a 14-year study, the incidence of PUs as either a primary or secondary diagnosis increased from 34.5 to 71.6 per 100,000 acute care patients.³
- ◆ The Agency for Healthcare Research and Quality (AHRQ) reports that nearly 1 in 5 postacute care patients had PUs in 2003-2004.⁴

The sacrum and the heel are the most frequently reported sites affected by PUs. In a review of the literature, Whittington and Briones found that PUs occurred in the sacral area in 26% to 29% of patients and on the heel in 25% to 26% of patients.¹ In patients with spinal cord injuries or who have undergone surgery for hip fracture, PUs are more likely to occur in the sacral area, but are still very common on the heel, occurring in 17.4% of spinal cord patients and in 23% of hip surgery patients.^{5,6}



PUs contribute to higher medical costs and an increased length of hospital stay. In a 2006 report from the Veteran's Health Administration, one facility reported hospitalization costs of \$22,734 to \$50,669 for patients hospitalized with PUs.⁷ The cost for direct care has been reported to be \$15,760 per PU.⁸ In a recent observational study of 2,000 patients, the median excess length of stay attributable to PUs was 4.31 days.⁹

Most experts agree that the majority of hospital acquired PUs (HAPUs) can be avoided and are often viewed as quality-of-care indicators. Implementation of an effective PU prevention protocol can reduce the incidence of PUs.¹⁰ Aspects of an effective prevention protocol include the following:

1. Frequent and systematic risk assessments
2. Frequent repositioning
3. Early implementation of pressure redistributing devices

Skin that is continuously wet increases the damaging effects of pressure, friction and shear.¹¹ The Institute for Healthcare Improvement (IHI) recommends incontinence management as one way to prevent pressure ulcers. IHI recommends cleansing at the time of soiling and at routine intervals with a pre-moistened, disposable wipe that cleans, moisturizes, and applies a skin protection barrier.¹²

Northwest Community Hospital is a 488-bed hospital offering a full range of medically advanced inpatient and outpatient services including the following:

- ◆ A center for specialty medicine
- ◆ Three treatment centers
- ◆ A day surgery center
- ◆ Home healthcare services
- ◆ An advanced imaging center

In March 2004 the Quality Assurance council identified HAPU prevalence to be above benchmark levels and sought an action plan. An acute care Wound, Ostomy, and Continence nurse specialist began working at the hospital in December of 2004. Using evidence-based practices focusing on prevention, we evaluated the effectiveness of new and improved methods of patient skin care:

- ◆ New bath product wipes and skin barrier cloths for incontinence care (7/05)
- ◆ A mandatory education project on the Braden scale (8/05)
- ◆ The introduction of advanced skin-care products (11/05)

Purpose

To decrease the number of HAPUs by formulating hospital-wide skin care protocols using a standard set of skin-care products.

Methods

- ◆ In January of 2006, an interdisciplinary, cross-continuum Skin Protection Task Force (SPTF) was formed to develop, implement, and evaluate interventions to improve skin protection in Northwest Community Hospital.
- ◆ The team reviewed surface and skin-care products and updated skin-care protocols in February 2006 to incorporate evidence-based practices. A nursing education plan and updated patient assessment guidelines were implemented from March to June 2006. Resource binders were placed on units.
- ◆ A "Skintastics" team of representatives from each adult unit served as a resource for skin-care excellence and participated in quarterly PU prevalence studies.
- ◆ Advanced skin-care products, pressure reducing heel protectors, incontinence barrier cloths, pressure redistribution surfaces, and a fecal management system were introduced. Mattress covers and worn-out foam inserts were replaced.
- ◆ Intervention strategies for PUs included the use of specialty surfaces as needed, the positioning of patients to minimize or avoid pressure on all wounds, the correction of nutritional deficiencies, and the initiation of wound care per recommended guidelines. The use of pressure-relieving heel protector boots to prevent or treat heel ulcers was initiated in January 2006.



