Title: Optimizing patient turning resources by using a novel wearable technology.

Authors: Margaret Doucette, DO, Stephanie Adams, RN, Kelsey Cosdon, RN, Kattie Payne RN PhD. VA Medical Center, Boise Idaho.

Category: Information/Education report (Quality improvement project)

Background

Patient turning is mainstay of pressure ulcer prevention.\(^1\) Prior studies have estimated compliance rates between 30%\(^3\) and 66%.\(^4\)

Methods

Wearable monitoring system\(^\dagger\) shown to improve turn compliance\(^6\) was implemented on 27-bed medical/surgical unit. Two-hour turn protocol was assigned to all patients per unit protocol.

Results

Sixty-nine patients (mean Braden 19.4, min 13, max 23) were monitored over 31 days for 3287 hours.

Average turn compliance was 90.3%. Least compliant times coincided with shift changes, high patient admit days and medication delivery.

Patients with high Braden scores (19-23) repositioned up to 42 times per hour. Lower Braden scores were associated with fewer hourly repositionings.

Project Outcomes

The data provided evidence to exclude patients with high mobility/activity subscores from turn protocol. Compliance by hour of day indicated that clustering certain nursing tasks would improve staffing effectiveness and compliance. Monthly compliance data was adopted as quality metric.

\(^\dagger\) Product notation: Leaf Patient Monitoring System, Leaf Healthcare, Pleasanton CA

1. AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, HCUPnet, Nationwide Inpatient Sample, 1993-2006