

Look Who's Turning?

Implementation of a wireless patient movement monitoring system as part of a Pressure Ulcer prevention process improvement on a Medical/Surgical Unit

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Purpose

Patient turning is the mainstay of pressure ulcer prevention. Literature shows that compliance to turn protocols varies from 15%-66%^{1 2 3 4 5}.

This performance improvement project intended to identify characteristics in patient turning practices on a busy 27-bed medical/surgical unit by using a novel technology that alerts nurses when patient turns are due.

Methods

A FDA-cleared, wireless monitoring system (Leaf Healthcare, Pleasanton CA) was implemented on the unit. The system automatically resets individualized turn clocks for all patient turns that meet pre-set angle and tissue decompression thresholds.

A 2-hour turn protocol was assigned to all patients.

Results

3287 hours of turn data were gathered from 69 patients over 31 days.

Average protocol compliance during the period was 88.5% (varied between 78% and 98%). Least compliant times coincided with shift changes, high patient admit days and medication delivery times.

Conclusions

This process improvement project provided nursing management evidence-based data to justify adjusting staffing levels during certain days of the week and times of the day when turning demands exceeded available resources.

REFERENCES

¹ Agency for Healthcare Research and Quality, Rockville, MD. Are We Ready for This Change? Preventing Pressure Ulcers in Hospitals: A Toolkit for Improving Quality of Care. April 2011. <http://www.ahrq.gov/professionals/systems/long-term-care/resources/pressure-ulcers/pressureulcertoolkit/putool1.html>

² AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, HCUPnet, Nationwide Inpatient Sample, 1993-2006

³ Lyder CH, Preston J, Grady JN, Scinto J, Allman R, Bergstrom N et al. Quality of care for hospitalized medicare patients at risk for pressure ulcers. Arch Intern Med 2001;161:1549-54.

⁴ Gunningberg L. Are patients with or at risk of pressure ulcers allocated appropriate prevention measures? Int J Nurs Pract 2005;11:58-67

⁵ Bours GJJ, Halfens RJG, Abu-Saad HH, Grol RTP. Prevalence, prevention, and treatment of pressure ulcers: Descriptive study in 89 institutions in The Netherlands. Research in Nursing and Health 2002; 25: 99-110.