

**Evidence-Based Quality Improvement: Pressure Ulcer Prevention**  
**Kimberly Catania, MSN, RN, CNS, AOCN, Cheryl.huang@osumc.edu**  
**OSU James Cancer Hospital**

Pressure ulcers in hospitalized patients represent a significant health care problem. Despite advances in modern technology and the array of preventative strategies available, the prevalence of pressure ulcers continues to rise. In addition to the impact on patients and families and the significant financial burden on the health care system, pressure ulcer rates are viewed by the public as an indicator of the quality of care provided.

Evidence-based guidelines for pressure ulcer prevention programs have been developed; however, their existence does not ensure quality care. While some of these programs have decreased prevalence, reduced care costs and demonstrated more effective use of resources, the development of hospital-acquired pressure ulcers has continued to rise despite increased expenditures on these prevention programs. Successful implementation of evidence-based practice needs administrative support and available resources but ultimately will only have positive outcomes if it is adopted into daily practice by the staff at the bedside.

Pressure Ulcer Prevention Protocol Intervention (PUPPI) is an evidence-based nursing initiative developed using the competencies for pressure ulcer prevention and treatment compiled by The National Pressure Ulcer Advisory Panel (NPUAP) Education Committee. These included risk assessment, skin assessment, individualized skin care programs, documentation, critical thinking and use of referrals as needed. Integration into practice in September 2004 focused on teamwork, communication and critical thinking to allow staff ownership and control for improving the quality of patient care and outcomes. Following implementation pressure ulcer prevalence was reduced by 10% and has been maintained well below national benchmark for more than a year.

References Cited:

- Acaroglu, R., & Sendir, M. (2005). Pressure ulcer prevention and management strategies in Turkey. *Journal of Wound Ostomy Continence Nursing*, 32(4), 230-237.
- Agency for Healthcare Research and Quality. (1992). *AHCPR Supported Clinical Practice Guidelines: Treatment of Pressure Ulcers*. Retrieved September 19, 2005, from National Library of Medicine Web Site: <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.section.5462>
- Ayello, E. A., & Franz, R. A. (2003). Pressure ulcer prevention and treatment: Competency-based nursing curricula. *Dermatology Nursing*, 15(1), 44-61.
- Braden, B. J., & Maklebust, J. (2005). Preventing pressure ulcers with the braden scale. *American Journal of Nursing*, 105 (6), 70-72.
- Clark, H. F., Bradley, C., Whytock, S., Handfield, S., van der Wal, R., & Grundy, S. (2005). Pressure ulcers: implementation of evidence-based nursing practice. *Journal of Advanced Nursing*, 49(6), 578-590.

- Jacksich, B. B. (1997). Pressure ulcer prevalence and prevention of nosocomial development: one hospital's experience. *Ostomy/Wound Management*, 43(3), 32-40.
- Maklebust and Dieggreen (2000). *Pressure ulcers: guidelines for prevention and management* (3rd ed.). Springhouse, PA: Springhouse Corporation.
- Moore, Z., & Price, P. (2004). Nurse's attitudes, behaviors and perceived barriers towards pressure ulcer prevention. *Journal of Clinical Nursing*, 13, 942-951.
- National Pressure Ulcer Advisory Panel (1993). *Pressure ulcer prevention points*. Retrieved January 17, 2006, from <http://www.npuap.org>
- National Pressure Ulcer Advisory Panel. (1992). *National Pressure Ulcer Advisory Panel Statement on pressure ulcer prevention*. Retrieved January 17, 2006, from <http://www.npuap>
- Richens, Y., Stephens, F., Bick, D., Morrell, C., Loftus-Hills, A., & Duff, L. (2003). *Improving practice: improving care*. London: Royal College of Nursing.
- Runy, L. A. (2005). The bad news about bed sores. *Hospitals & Health Networks*, 79(8), 28. Retrieved December 22, 2005, from Academic Search Premier database (18049534).
- Schoonhover, L., Grobbee, D. E., Bousema, M. T., & Buskens, E. (2005). Predicting pressure ulcers: cases missed using a new clinical prediction rule. *Journal of Advanced Nursing*, 49(1), 16-22.
- Thompson O'Brien, M. A., Oxman, A. D., Davis, D. A., Haynes, R. B., Freemantle, N., & Harvey, E. L. (2001). Educational outreach visits: effects of professional practice and health care outcomes. In *Cochrane Library Issue 3 Update Software*, Oxford.
- Young, Z. F., Evans, A., & Davis, J. (2003). Nosocomial pressure ulcer prevention: a successful project. *Journal of Nursing Administration*, 33(7/8), 380-383.