

Selected Best Practices and Suggestions for Improvement

PSI 3: Pressure Ulcer

Why Focus on Pressure Ulcers?

- Pressure ulcers represent an important patient adverse event that is associated with significant patient and economic burden. The number of hospitalizations involving pressure ulcers increased by about 80% between 1993 and 2006.¹
- Acute care hospitals treat about 2.5 million pressure ulcers each year, and as many as 15% of hospital patients may have pressure ulcers at any one time.²
- Hospital-acquired pressure ulcer complications are associated with up to 60,000 deaths each year in the United States.²
- A pressure ulcer diagnosis may extend the typical hospital stay from 5 to 14 days and costs between \$16,755 and \$20,430, depending on the circumstances.¹
- At least part of this cost is likely to be shouldered by hospitals. In 2008 the Centers for Medicaid and Medicare Services (CMS) identified stage III and IV pressure ulcers as one of a number of conditions for which hospitals do not receive the higher payment for cases when the condition was acquired during hospitalization.³
- Starting in 2015, the pressure ulcer PSI will be one of the measures used for Medicare’s Hospital Value-Based Purchasing (as part of a composite indicator) that links quality to payment.⁴

Recommended Practice	Details of Recommended Practice
Skin Assessment at Admission and Daily, With Documentation of Lesions	Complete total skin assessment every 24 hours, with special attention to bony prominences, especially the coccygeal/sacral skin, heels and skin adjacent to external devices. ⁵ Include in the medical record complete documentation of any pressure ulcer found. ^{1,6-9}
Pressure Ulcer Risk Assessment at Admission and Daily	Evaluate all patients for pressure ulcers and pressure ulcer risk (using Braden Scale or other tool) upon admission and every 24 hours thereafter, using valid risk assessment, with results documented in the patient's chart. ^{1,7-9}
Repositioning of Patients Every 1 to 2 Hours and Promotion of Highest Level of Mobility	Reposition patients every 1 to 2 hours. ^{6,8,9}
Daily Rounds Assessment	Include in the daily rounds a nutritional assessment to ensure adequate nutrition and hydration and reassess the need for special pressure-distributing surfaces. ^{1,6-10}

Best Processes/Systems of Care

Introduction: Essential First Steps

- Engage key nurses, physicians, hospitalists, pharmacists, wound ostomy and continence (WOC) nurses, inpatient units, and representatives from quality improvement and information services to develop evidence-based guidelines, care paths, or protocols for the full continuum of care for the prevention of pressure ulcers.⁸
- The above team:
 - Identifies the purpose, goals, and scope and defines target population of this guideline.
 - Analyzes problems with guideline compliance, identifies opportunities for improvement, and communicates best practices to frontline nurses.
 - Establishes measures that will tell if changes are leading to improvement.
 - Agrees on the use of a standard risk assessment tool (for example, Braden Scale); facilities may adapt the tool to allow for easy completion, using check boxes and short phrases to ensure completion.

Recommended Practice: Skin Assessment at Admission and Daily, With Documentation of Lesions

- Determine organizational policy for the frequency of skin checks.
- Assign responsibility to staff for skin checks and repositioning of patients.
- Give all patients a head-to-toe skin inspection at admission and at least once a day, paying particular attention to bony prominences and skin adjacent to external devices.^{1,5-9}
 - Include a visual cue on each admission documentation record for the completion of a total skin assessment and risk assessment.⁹
 - Educate professionals on how to undertake a comprehensive skin assessment that includes the techniques for identifying blanching response, localized heat, edema, and induration (hardness).^{7,9}
 - Ensure that skin inspection includes assessment for localized heat, edema, or induration (hardness), especially in individuals with darkly pigmented skin.⁶
 - Ask individuals to identify any areas of discomfort or pain that could be attributed to pressure damage.⁷⁻⁹
 - Observe the skin for pressure damage caused by medical devices.^{7,8}
- Document results of the skin inspection in the medical record, including skin temperature, skin color, skin texture/turgor, skin integrity, and moisture status.^{1,6-9}
- Identify and stage all pressure ulcers according to the National Pressure Ulcer Advisory Panel (NPUAP) criteria. Also include the following^{1,8}:
 - Location.
 - Tissue type.
 - Shape.
 - Size.
 - Presence of sinus tracts/tunneling.
 - Undermining.
 - Exudate amount and type.
 - Presence/absence of infection.

- Wound edges.

Recommended Practice: Pressure Ulcer Risk Assessment at Admission and Daily

- Determine which pressure ulcer risk assessment will be used as the standard in your organization. Use a risk assessment tool with established validity and reliability, such as the Braden Scale or Norton Scale.^{1,6}
- Include in the pressure ulcer prevention protocol that a risk assessment should be completed at admission, daily and when the patient's status changes.⁶⁻⁹
- Assign responsibility for conducting a pressure ulcer risk assessment at admission and when the patient's status changes.
- Document risk assessment results in the medical record.⁷⁻⁹

Recommended Practice: Repositioning of Patients Every 1 to 2 Hours and Promotion of Highest Level of Mobility

- Have senior leaders ensure that staff can access the appropriate resources to help increase mobility.
- Educate caregivers to promote the highest possible level of patient mobility.¹
- Maintain head of bed at the lowest point consistent with patient's medical condition.^{1,8,9}
- Schedule regular turning and repositioning for bedbound and chairbound patients every 1 to 2 hours.^{1,6,8}
 - Frequency of repositioning will be influenced by variables such as the individual's tissue tolerance, his/her level of activity and mobility, his/her general medical condition, overall treatment objectives, and assessments of the individual's skin condition.^{1,7}
 - Record repositioning regimens, specifying frequency and position adopted, and include an evaluation of the outcome of the repositioning regimen.⁷

Recommended Practice: Daily Rounds Assessment

- For patients at risk, perform a nutritional assessment at entry to a new health care setting and whenever the patient's status changes.^{1,7,8}
- For patients at risk, develop a reliable process for consulting a dietitian when nutritional elements could contribute to risk of nutritional deficiencies.⁷⁻⁹
 - Ensure fluid balance by providing fluids and supplements as appropriate^{7,8}
- Give nutritional supplements only to at risk patients with identified nutritional deficiencies.^{8,10}
- Place at-risk patients on a pressure-reducing surface rather than a standard hospital mattress.^{1,6-9}
 - Triage use of pressure-redistributing beds and mattresses.⁷
 - Ensure a reliable process for redistributing pressure (e.g., use a turn clock as a reminder to staff, implement turn rounds).

Educational Recommendation

- Educational programs for the prevention of pressure ulcers should be structured, organized, and comprehensive and should occur upon hire, annually, and when this protocol is added to job responsibilities.^{8,9}

- Programs should be directed to all health care providers involved in preventing pressure ulcers. Education should also be directed toward patients, families, and patients' caregivers.^{8,9}

Effectiveness of Action Items

- Track compliance with elements of established protocol steps.^{8,9}
- Evaluate effectiveness of new processes, determine gaps, modify processes as needed, and reimplement.⁹
- Develop a plan of action for staff in noncompliance.
- Provide feedback to all stakeholders (physician, nursing, and ancillary staff; senior medical staff; and executive leadership) on level of compliance with process.
- Conduct surveillance and determine prevalence of healthcare-associated pressure ulcers to evaluate outcomes of new process.⁹
- Monitor and evaluate performance regularly to sustain improvements achieved.⁸

Additional Resources

Systems/Processes

- Agency for Healthcare Research and Quality. Preventing pressure ulcers in hospitals, a toolkit for improving quality of care. Available at: <http://www.ahrq.gov/professionals/systems/long-term-care/resources/pressure-ulcers/pressureulcertoolkit/index.html>.
- Institute for Healthcare Improvement. How-to guide: prevent pressure ulcers. ; 2011. Available at <http://www.ihl.org/resources/Pages/Tools/HowtoGuidePreventPressureUlcers.aspx>.

Policies/Protocols

- Louisiana State University Health Sciences Center, Shreveport. P-70. Pressure ulcer prevention and wound care. Available at: <http://www.lsuhseshreveport.edu/BRFHHIntranet/TeamUHSPolicies-1.aspx> (requires login).
- Institute for Clinical Systems Improvement. Pressure ulcer prevention and treatment protocol. Available at: <https://www.icsi.org/asset/6t7kxy/>.

Tools

- Braden Scale for Predicting Pressure Sore Risk. Available at: <http://www.bradenscale.com/images/bradenscale.pdf>.
- Pressure Ulcer Scale for Healing (PUSH Tool). Available at: <http://www.npuap.org/resources/educational-and-clinical-resources/push-tool/>.
- Pressure ulcer training. Available at: <https://members.nursingquality.org/NDNQIPressureUlcerTraining/>.
- European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel (NPUAP). Pressure ulcer prevention quick reference guide. Available at: http://www.npuap.org/wp-content/uploads/2012/02/Final_Quick_Prevention_for_web_2010.pdf.
- NPUAP. Pressure ulcer category/staging illustrations. Available at: <http://www.npuap.org/resources/educational-and-clinical-resources/pressure-ulcer-categorystaging-illustrations/>.

Staff Required

- Physicians (dermatology, family practice, geriatrics, internal medicine)
- Nurses
- Nursing assistants
- Relevant consultants (occupational therapy, physical therapy, enterostomal therapy, wound specialists, etc.)
- Dietitians

Equipment

- Access to equipment (therapeutic surfaces)

Communication

- Systemwide education on protocol
- Education on how to use the risk assessment accurately and reliably; requires staff development and competency testing in most organizations

Authority/Accountability

- Senior leadership mandating protocol for all providers

References

1. Guideline for the prevention and management of pressure ulcers. Mt. Laurel, NJ: Wound Ostomy and Continence Nurses Society; June 2010.
2. Safe practices for better healthcare—2010 update. Washington, DC: National Quality Forum; 2010.
3. Hospital-acquired conditions (HAC) in acute inpatient prospective payment system (IPPS) hospitals. Fact sheet. Baltimore, MD: Centers for Medicare & Medicaid Services; October 2012. Available at: <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/downloads/HACFactSheet.pdf>. Accessed June 24, 2014.
4. Hospital Inpatient Quality Reporting (IQR) Program measures (calendar year 2014 discharges). (Prepared by Telligen under contract to the Centers for Medicare & Medicaid Services.) Available at: <http://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic/Page/QnetTier3&cid=1138900298473>. Accessed June 24, 2014.
5. Black JM, Cuddigan JE, Walko MA, et al. Medical device related pressure ulcers in hospitalised patients. *Int Wound J* 2010;7:358-65.
6. Patient safety and quality: an evidence-based handbook for nurses. Rockville, MD: Agency for Healthcare Research and Quality; 2008. AHRQ Publication No. 08-0043. Available at: <http://www.ahrq.gov/qual/nurseshdbk/>. Accessed June 24, 2014.
7. European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel. Pressure ulcer prevention: quick reference guide. Washington, DC: National Pressure Ulcer Advisory Panel; 2009 Available at: http://www.npuap.org/wp-content/uploads/2012/02/Final_Quick_Prevention_for_web_2010.pdf.
8. Registered Nurses' Association of Ontario (RNAO). Risk assessment & prevention of pressure ulcers. Toronto, ON: RNAO; 2005 (revised 2011). Available at: <http://rnao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers>. Accessed June 24, 2014.

9. Perry D, Borchert K, Burke S, et al. Pressure ulcer prevention and treatment protocol. Bloomington, MN: Institute for Clinical Systems Improvement;2014. Available at: <https://www.icsi.org/asset/6t7kxy/PressureUlcer.pdf>. Accessed June 24, 2014.
10. Reddy M, Gill SS, Rochon PA. Preventing pressure ulcers: a systematic review. JAMA 2006;296(8):974-84. Available at: <http://jama.jamanetwork.com/article.aspx?articleid=203227>. Accessed June 25, 2014.