

INSTRUCTIONS

Selected Best Practices and Suggestions for Improvement

What is this tool? The purpose of this tool is to provide:

- Detailed description of best practices, including supporting evidence, suggestions for improvement, prescribed process steps, and additional resources.
- Sufficient information to complete a Gap Analysis (Tool D.5), make a decision to implement (or not to implement) a process, and develop an Implementation Plan (Tool D.6).

These tools provide information on evidence-based best practices when available, as well as information gathered from real-world experience in working with hospitals. These tools are not meant to replace validated guidelines. Rather, these documents are meant to supplement various improvement process projects related to the AHRQ Quality Indicators.

The information used to populate these documents is derived from professional association guidelines, the research literature, and experience and lessons learned from hospitals' work on previous AHRQ Quality Indicator implementation efforts. The references cited were not derived from a full systematic evidence-based literature review. Rather, the list includes more well-known research and publications on the subject, where available.

The information contained in these documents should be used to review and compare against your organization's current processes to determine where gaps may exist. As always, the final decision regarding whether to implement the guidance provided in this document should be made by a multidisciplinary quality improvement team in your hospital and should be based on information specific to your organization.

Who are the target audiences? The primary audiences include quality improvement leaders, clinical leaders, and multidisciplinary frontline staff members.

How can the tool help you? The Best Practices and Suggestions for Improvement Tool details each of the following components of a best practice and its implementation:

- Indicator Specifications
- Literature Support
- Best Processes/Systems of Care
- Additional Resources

How does this tool relate to others? The Best Practices and Suggestions for Improvement Tools are used to prepare the Gap Analysis (Tool D.5) and the Implementation Plan (Tool D.6).

Instruction Steps

1. See instructions for Gap Analysis (Tool D.5).

2. Use the appropriate Selected Best Practices and Suggestions for Improvement Tool to populate the Gap Analysis (Tool D.5).

Selected Best Practices and Suggestions for Improvement

Patient Safety Indicator Specifications

PSI 3: Pressure Ulcer

Numerator: Discharges among cases meeting the inclusion and exclusion rules for the denominator with International Classification of Diseases (ICD)-9 code of pressure ulcer in any secondary diagnosis field and ICD-9 code of pressure ulcer stage III or IV (or unstageable) in any secondary diagnosis field.

Denominator: All medical and surgical discharges 18 years and older defined by specific diagnosis-related groups (DRGs) or Medicare Severity (MS)-DRGs.

Exclude:

- Length of stay of less than 5 days.
- Principal diagnosis of pressure ulcer or secondary diagnosis present on admission.
- Major diagnostic category (MDC) 9 (Skin, Subcutaneous Tissue, and Breast).
- MDC 14 (Pregnancy, Childbirth, and Puerperium).
- Any diagnosis of hemiplegia, paraplegia, or quadriplegia.
- Any diagnosis of spina bifida or anoxic brain damage.
- ICD-9 procedure code for debridement or pedicle graft **before or on the same day** as the major operating room procedure (surgical cases only).
- Transfer from a hospital (different facility).
- Transfer from a skilled nursing facility (SNF) or intermediate care facility (ICF).
- Transfer from another health care facility.
- Missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing).

Reference: AHRQ Patient Safety Indicators Technical Specifications, Version 4.3, August 2011.

Recommended Practice	Details of Recommended Practice
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<p>Skin Assessment at Admission and Daily, With Documentation of Lesions</p>	<p>Total skin assessment is completed every 24 hours, with special attention to bony prominences, especially the coccygeal/sacral skin and heels. Include in the medical record complete documentation of any pressure ulcer found.¹⁻⁵</p>
<p>Pressure Ulcer Risk Assessment at Admission and Daily</p>	<p>All patients are evaluated 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.^{2, 3, 5}</p>
<p>Repositioning of Patients Every 1 to 2 Hours and Promotion of Highest Level of Mobility</p>	<p>One of the most effective ways to prevent pressure ulcers is to reduce mechanical load. Patients should be repositioned every 1 to 2 hours.^{1, 4, 5}</p>
<p>Daily Rounds Assessment</p>	<p>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</p>

Literature Support

Skin Assessment at Admission and Daily, With Documentation of Lesions

"Although there is a lack of consensus as to what constitutes a minimal skin assessment, CMS recommends the following five parameters be included: skin temperature, color, turgor, moisture status, and integrity."

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/nursesfdbk/>.

"A head-to-toe skin inspection should occur upon admission to care setting and at least daily or per specific setting regulation focusing on high risk areas such as bony prominences."

"Assess and regularly monitor pressure ulcer(s) on admission to care setting, and at least weekly, for any signs of skin/wound deterioration to include the following parameters: description of ulcer(s)— location, tissue type, shape, size, presence of sinus tracts/tunneling, undermining, exudate amount, exudate type, presence/absence of infection, wound edges, and stage of ulcer."

Guideline for the prevention and management of pressure ulcers. Mt. Laurel, NJ: Wound Ostomy and Continence Nurses Society; June 2010.

Pressure Ulcer Risk Assessment at Admission and Daily

"Risk assessment should be performed upon entry to a health care setting, and repeated on a regularly scheduled basis, or when there is a significant change in the individual's condition such as surgery or decline in health status."

"Use of a valid and reliable risk assessment tool is recommended."

Guideline for the prevention and management of pressure ulcers. Mt. Laurel, NJ: Wound Ostomy and Continence Nurses Society; June 2010.

"Each health care setting should have a policy in place that includes clear recommendations for: a structured approach to risk assessment relevant to that healthcare setting; clinical areas to be targeted; the timing of risk assessment and reassessment; documentation of risk assessment; and communication of that information to the wider health care team."

European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel. Prevention and treatment of pressure ulcers: quick reference guide. Washington, DC: National Pressure Ulcer Advisory Panel; 2009.

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

"For individuals restricted to bed: reposition at least every 2 hours or sooner if at high risk."

Registered Nurses Association of Ontario (RNAO). Risk assessment and prevention of pressure ulcers. Toronto, ON: RNAO; March 2005.

"Maintain or enhance patient's level of activity."

Skin safety protocol: risk assessment and prevention of pressure ulcers. 2nd ed. Bloomington, MN: Institute for Clinical Systems Improvement; March 2007.

Daily Rounds Assessment

"It seems reasonable to recommend consultation with a dietician for patients at risk of developing pressure ulcers to ensure adequate general nutrition."

Reddy M, Gill SS, Rochon PA. Preventing pressure ulcers: a systematic review. JAMA 2006;296(8):974–84.

"Utilize support surfaces (on beds and chairs) to redistribute pressure. Pressure redistribution devices should serve as adjuncts and not replacements for repositioning protocols."

"Individuals at-risk should be placed on a pressure redistribution surface."

Guideline for the prevention and management of pressure ulcers. Mt. Laurel, NJ: Wound Ostomy and Continence Nurses Society; June 2010.

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.
- 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
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- 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.¹⁻⁵
 - Include a visual cue on each admission documentation record for the completion of a total skin assessment and risk assessment.
 - Educate professionals on how to undertake a comprehensive skin assessment that includes the techniques for identifying blanching response, localized heat, edema, and induration (hardness).^{3, 5}
 - Ensure that skin inspection includes assessment for localized heat, edema, or induration (hardness), especially in individuals with darkly pigmented skin.¹
 - Ask individuals to identify any areas of discomfort or pain that could be attributed to pressure damage.³⁻⁵
 - Observe the skin for pressure damage caused by medical devices.³
- Document results of the skin inspection in the medical record, including skin temperature, skin color, skin texture/turgor, skin integrity, and moisture status.¹⁻⁵
- Identify and stage all pressure ulcers according to the National Pressure Ulcer Advisory Panel (NPUAP) criteria. Also include the following^{2, 4}:
 - 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 valid and reliable risk assessment tool, such as the Braden Scale or Norton Scale.^{1, 2}
- Include in the pressure ulcer prevention protocol that a risk assessment should be completed at admission and when the patient's status changes.^{1, 3, 4}
- 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.^{3, 4}

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.²
- Maintain head of bed at the lowest point consistent with patient's medical condition.^{2, 4, 5}
- Schedule regular turning and repositioning for bedbound and chairbound patients every 1 to 2 hours.^{1, 2, 4}
 - 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.^{2, 3}
 - Record repositioning regimens, specifying frequency and position adopted, and include an evaluation of the outcome of the repositioning regimen.³

Recommended Practice: Daily Rounds Assessment

- Perform a nutritional assessment at entry to a new health care setting and whenever the patient's status changes.²⁻⁴
- Develop a reliable process for consulting a dietitian when nutritional elements could contribute to risk of nutritional deficiencies.³⁻⁵
 - Ensure fluid balance by providing fluids and supplements as appropriate³
- Give nutritional supplements only to patients with identified nutritional deficiencies.^{4, 6}
- Place at-risk patients on a pressure-reducing surface rather than a standard hospital mattress.^{1, 2, 3}
 - Triage use of pressure-redistributing beds and mattresses.³
 - 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 be updated on a regular basis to incorporate new evidence and technologies. Programs should be directed to all levels of health care providers, including patients, families, and caregivers.

Effectiveness of Action Items

- Track compliance with elements of established protocol steps.
- Evaluate effectiveness of new processes, determine gaps, modify processes as needed, and reimplement.
- 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.
- Monitor and evaluate performance regularly to sustain improvements achieved.

Additional Resources

✓ Systems/Processes

- [Prevent Pressure Ulcers](#), Institute for Healthcare Improvement (IHI)
- [Pressure Ulcer Prevention Mentor Registry](#), IHI

✓ Policies/Protocols

- [Pressure Ulcer Prevention and Wound Care](#), Louisiana State University Health Sciences Center, Shreveport

✓ Tools

- [Braden Scale for Predicting Pressure Sore Risk](#)
- [Pressure Ulcer Scale for Healing \(PUSH Tool\)](#)
- [Pressure Ulcer Training](#), National Database of Nursing Quality Indicators
- [Pressure Ulcer Prevention Quick Reference Guide](#), NPUAP and European Pressure Ulcer Advisory Panel
- [Pressure Ulcer Stages Revised by NPUAP](#)

✓ 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

Supporting Literature

1. 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/nursesfdbk/>.
2. Guideline for the prevention and management of pressure ulcers. Mt. Laurel, NJ: Wound Ostomy and Continence Nurses Society; June 2010.
3. European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel. Prevention and treatment of pressure ulcers: quick reference guide. Washington, DC: National Pressure Ulcer Advisory Panel; 2009.
4. Registered Nurses Association of Ontario (RNAO). Risk assessment and prevention of pressure ulcers. Toronto, ON: RNAO; March 2005.
5. Institute for Clinical Systems Improvement (ICSI). Skin safety protocol: risk assessment and prevention of pressure ulcers. Health care protocol. Bloomington, MN: ICSI; March 2007.
6. Reddy M, Gill SS, Rochon PA. Preventing pressure ulcers: a systematic review. JAMA 2006;296(8):974–84.