



The Roadmap to Success:

Hospital-Acquired Pressure Injury (HAPI)



Conduct Risk and Skin/Tissue Assessments—Step

1

Rationale:

Conducting a risk assessment and a skin and tissue assessment are the first steps aimed in identifying patients who are susceptible to pressure injuries (PIs) in order to develop and implement an individualized management plan to mitigate modifiable risk factors.

	Strategies	Tools and Resources
<input type="checkbox"/>	Conduct a PI risk assessment as soon as possible after admission and implement a risk-based prevention plan for patients at risk.	<ul style="list-style-type: none"> • Braden Scale—risk assessment tool: www.in.gov/isdh/files/Braden_Scale.pdf
<input type="checkbox"/>	Customize interventions based on the score of the subcategories of the risk assessment tool.	
<input type="checkbox"/>	<p>Conduct a comprehensive skin and tissue assessment for all patients at risk of PI:</p> <ul style="list-style-type: none"> • As soon as possible after admission/transfer (within 8 hours, preferably 4 hours). • As part of every risk assessment. • And repeat based on risk and prior to discharge. <p>Skin and tissue assessment should include:</p> <ul style="list-style-type: none"> • Erythema (blanchable or non). • Temperature differences. • Tissue consistency differences (edema). • Pain at pressure points. • + Special attention for darkly pigmented skin. 	<ul style="list-style-type: none"> • Association of periOperative Registered Nurses (AORN) Scott Triggers® risk assessment tool specific to the operating room: www.aorn.org/-/media/aorn/guidelines/tool-kits/pressure-ulcer/update-2017/scott-triggers-tool.pdf?la=en&hash=AFB1B7701A0B2218499A8965E98AD33
<input type="checkbox"/>	Prioritize the skin and tissue assessment based on: Patients with limited mobility, limited activity, and a high potential for injury from friction and shear to be at risk of PIs.	<ul style="list-style-type: none"> • National Pressure Injury Advisory Panel (NPIAP)—Prevention and Treatment Of Pressure Ulcers/Injuries: Clinical Practice Guideline: www.internationalguideline.com
<input type="checkbox"/>	Confirm best-practice skin and tissue assessments by at least 2 people, completed each shift, and at regular intervals.	

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Limit Patients' Skin Exposure to Moisture—Step 2

Rationale:

Several studies demonstrated a statistical association between excess skin moisture and the development of PIs.¹ Maintaining skin integrity and protecting underlying tissues are essential in the prevention of PIs.

Strategies	Tools and Resources
<input type="checkbox"/> Implement a skin care regimen that includes: <ul style="list-style-type: none">• Keeping skin clean and appropriately hydrated.• Cleansing skin promptly after episodes of incontinence.• Avoiding use of alkaline soaps and cleansers.• Protecting skin from moisture with a barrier product.• Using high-absorbency incontinence products to protect the skin of patients with or at risk of PIs who have urinary incontinence.• Consideration to using textiles with low-friction coefficients for patients with or at risk of PIs.• Using a soft silicone multi-layered foam dressing to protect the skin for patients at risk of PIs.	<ul style="list-style-type: none">• NPIAP—Prevention and Treatment of Pressure Ulcers/Injuries: clinical Practice Guideline: www.internationalguideline.com• Centers for Disease Control and Prevention (CDC)—Guideline for Prevention of Catheter-Associated Urinary Tract Infections (2009): www.cdc.gov/infectioncontrol/guidelines/cauti/recommendations.html
<input type="checkbox"/> Have supplies to assist in moisture management easily accessible (e.g., assemble a skin-care cart, standardize topical agents, encourage use of “wick-away” supplies).	
<input type="checkbox"/> Assess catheter indication regularly.	

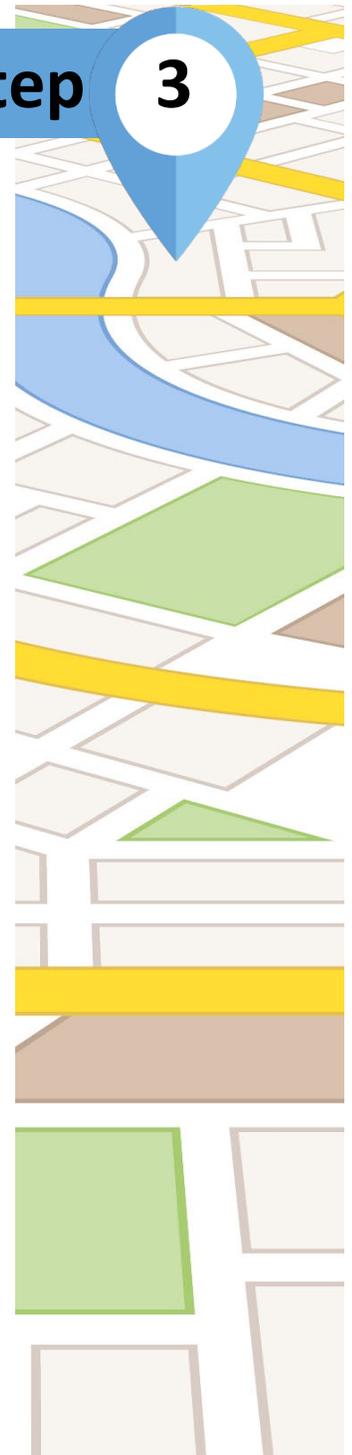
¹ Tescher AN, Branda ME, Byrne TJO, Naessens JM. All at-risk patients are not created equal: analysis of Braden pressure ulcer risk scores to identify specific risks *Journal of Wound Ostomy Continence Nursing*, 2012;39(3):282-91. Available at: https://pubmed.ncbi.nlm.nih.gov/?term=Tescher+AN&cauthor_id=22552104.

Optimize Nutrition—Step 3

Rationale:

Malnutrition can impact PI development and healing. Ensuring that patients receive the nutrient requirements for growth, development, maintenance, and repair of body tissues is essential.

	Strategies	Tools and Resources
<input type="checkbox"/>	Assess nutritional status and trigger a dietitian consult for patients who are at risk of malnutrition.	<ul style="list-style-type: none">• National Council of Aging—malnutrition screening and assessment tools: www.ncoa.org/assessments-tools/malnutrition-screening-assessment-tools• NPIAP—Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline: www.internationalguideline.com
<input type="checkbox"/>	Use a validated and standardized screening tool to determine risk of malnutrition.	
<input type="checkbox"/>	Facilitate a nutrition plan with specific attention for enteral and parenteral feeding.	
<input type="checkbox"/>	Provide and encourage adequate water and fluid intake for hydration.	
<input type="checkbox"/>	Alternative considerations for critical access and rural hospitals: A dietitian e-consult may be considered for patients at risk of malnutrition who suffer from unintended weight loss.	



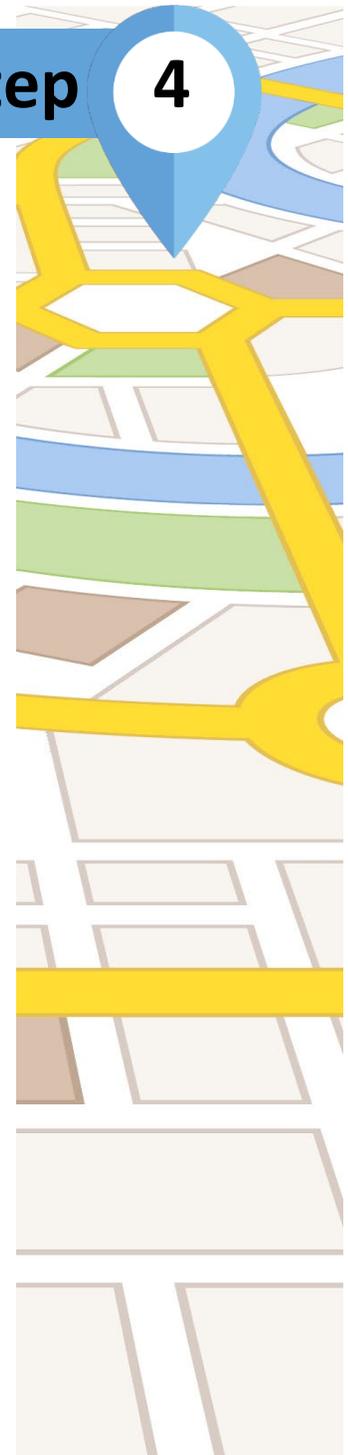
Optimize Mobility. Reduce Pressure, Friction, Shear—Step

4

Rationale:

Extended periods of lying or sitting on a particular part of the body and failure to redistribute the pressure on the body surface can result in sustained deformation of soft tissues, and, ultimately in tissue damage. Repositioning and mobilizing patients are important components in the prevention of PIs.

Strategies	Tools and Resources
<input type="checkbox"/> Reposition all patients with or at risk of PIs on an individualized schedule, unless contraindicated.	<ul style="list-style-type: none"> • Institute for Healthcare Improvement (IHI)—Age-Friendly Health Systems: Guide to Using the 4Ms in the Care of Older Adults: www.ihf.org/Engage/Initiatives/Age-Friendly-Health-Systems/Documents/IHIAgeFriendlyHealthSystems_GuidetoUsing4MsCare.pdf • NPIAP—Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline: www.internationalguideline.com • CMS webinar—Medical Devices Related to PI; Device Rounds Tool. April 2019, available upon request. Email: HospitalQuality@hsag.com
<input type="checkbox"/> Select a support surface that meets the patient’s need for pressure redistribution.	
<input type="checkbox"/> Determine repositioning frequency with consideration of the patient’s: <ul style="list-style-type: none"> • Level of activity, mobility, and ability to independently reposition. • Skin and tissue tolerance. • General medical condition. • Overall treatment objectives. • Comfort and pain. 	
<input type="checkbox"/> Keep the head of the bed as flat as possible.	
<input type="checkbox"/> Implement repositioning reminder strategies to promote adherence to the repositioning regimen.	
<input type="checkbox"/> Reposition the patient to relieve or redistribute pressure using manual handling techniques and equipment that reduce friction and shear.	
<input type="checkbox"/> Select seat and seating support. Promote seating out of bed in an appropriate chair or wheelchair for limited periods of time. <ul style="list-style-type: none"> • Teach and encourage a patient who spend prolonged durations in a seated position to perform pressure relieving maneuvers. 	
<input type="checkbox"/> Implement an early mobilization program. Increase activity and mobility as rapidly as tolerated.	
<input type="checkbox"/> Choose the correct size of medical device(s) to fit the patient, with thin foam or breathable dressings under medical devices. <ul style="list-style-type: none"> • Standardize the process to review if a medical device is still needed. 	



Standardize Staff Education and HAPI Care Competencies—Step

5

Rationale:

Several studies showed a significant relationship between PI knowledge and behavior/skill performance, suggesting that improving knowledge might have a direct impact on the level of preventative PI care.²

	Strategies	Tools and Resources
<input type="checkbox"/>	Implement training on PI prevention delivered by wound-care nurses.	<ul style="list-style-type: none"> • Agency for Healthcare Research and Quality (AHRQ)— Preventing Pressure Ulcers in Hospitals. A Toolkit for Improving Quality of Care: www.ahrq.gov/sites/default/files/publications/files/putoolkit.pdf • Pieper Pressure Ulcer Knowledge Test: www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/pu7a.html • National Database of Nursing Quality Indicators® (NDNQI)—Press Ganey Pressure Injury Training: learning2.pressganey.com/ndnqi/copyright/2019/468913158456/story_html5.html • NPIAP website—Materials around staging and best practices: npiap.com/page/FreeMaterials
<input type="checkbox"/>	Assess staff knowledge regularly.	
<input type="checkbox"/>	Alternative considerations for critical access and rural hospitals: A wound-care consultant can provide this training for new staff members and/or for annual competency.	

² Tallier PC, Patricia R, Reineke PR, Kathy Asadoorian K, John G Choonoo JG, Marc Campo M, Christine Malmgreen-Wallen C, Perioperative registered nurses knowledge, attitudes, behaviors, and barriers regarding pressure ulcer prevention in perioperative patients, *Applied Nursing Research*, 2017; 36:106-110. Available at: https://pubmed.ncbi.nlm.nih.gov/?term=Reineke+PR&cauthor_id=28720229.

Develop and Implement Your HAPI QI Program—Step

6

Rationale:

Research shows that an organization’s ongoing involvement in quality improvement initiatives is associated with lower PI incidence.³

Strategies	Tools and Resources
<input type="checkbox"/> Identify a wound champion.	<ul style="list-style-type: none"> • Atrium/HSAG—Pressure Injury (PSI-03) Post Event Form: www.hsag.com/globalassets/hqic/pi_posteventform.pdf • NPIAP—Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline: www.internationalguideline.com • Health Services Advisory Group (HSAG)—Quality and Safety Series materials: www.hsag.com/hqic-harms/#hapi
<input type="checkbox"/> Form a multidisciplinary HAPI team that includes patient/family representative(s), nursing-unit champions, wound-care clinicians, physical therapists, hospitalists, respiratory therapists, and others to streamline processes, develop education, conduct prevalence studies, and address performance.	
<input type="checkbox"/> Add a patient/family representative to review education materials and provide input regarding patient and family partnering and enhance care strategies from the patient perspective.	
<input type="checkbox"/> Implement a patient/family education program. Standardize the process for including patients and family in the PI risk assessment and treatment plan. Standardize the process for educating patients and care partners on skin injury prevention methods and treatments.	
<input type="checkbox"/> Develop and implement a structured, tailored, and multi-faceted QI program.	
<input type="checkbox"/> Conduct root cause analysis (RCA)/debriefing for all HAPIs stage-2 and above and include the nurses and certified nursing assistants caring for the patients.	
<input type="checkbox"/> Standardize the documentation of the discharge summary about risks of PI or specialized skin care needs.	
<input type="checkbox"/> Alternative considerations for critical access and rural hospitals: The implementation of a HAPI QI program can be more effective through an existing Quality Committee in which the goals of HAPI QI will be discussed, defined, and evaluated.	

³ Lahmann NA, Halfens RJG, Dassen T, Impact of prevention structures and processes on pressure ulcer prevalence in nursing homes and acute-care hospitals, *Journal of Evaluation in Clinical Practice*, 2010; 16(1):50-56. Available at: https://pubmed.ncbi.nlm.nih.gov/?term=Lahmann+NA&cauthor_id=20367815.