

HQIC Patient Safety: Pressure Injury

Welcome!

- All lines are muted, so please ask your questions in Q&A.
- For technical issues, chat to the panelists.
- Please actively participate in polling questions that pop up on the lower right-hand side of your screen.

We will get started shortly!

HQIC Pressure Injury: Tools for Prevention



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 **ALLIANT**
HEALTH SOLUTIONS

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Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
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Hospital Quality Improvement

Welcome from all of us!



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Pressure Injury Prevention Patient Safety Network Objectives

- Participants will be able to:
 - Understand pressure injury risk assessment.
 - Understand how to utilize risk assessment tools to drive/develop care plans.
 - Reduce pressure injury occurrences in their facility.

Today's Learning Objectives

- Learn Today:
 - Understand pressure injury risk assessment.
 - Understand how to utilize risk assessment tools to drive/develop care plans.
- Use Tomorrow:
 - Implement pressure injury risk assessment.
 - Utilize risk assessment tools to drive/develop care plans.

The Purpose of Risk Assessment Tools

- Risk factor assessment facilitates:
 - Clinical decision making
 - Selective implementation of preventive interventions
 - Care planning
 - Communication between health care personnel and care settings
- Risk factor assessment identifies:
 - Patients who are more likely to develop a pressure injury

Risk Assessment Tools

- Adult assessment tools
 - Norton Scale:
 - Developed in the 1960s
 - Five subscale scores of the Norton Scale added for a total score that ranges from 5-20.
 - Lower Norton scores indicate a higher risk for pressure ulcer development. 14 or less indicates at-risk status.
 - Braden:
 - Developed in 1988
 - Consists of six subscales, and the total scores range from 6-23.
 - Lower Braden scores indicate a higher risk for pressure ulcer development. 18 or less indicates at-risk status.

Braden Risk Factors



1. Sensory/perception

2. Moisture

3. Activity

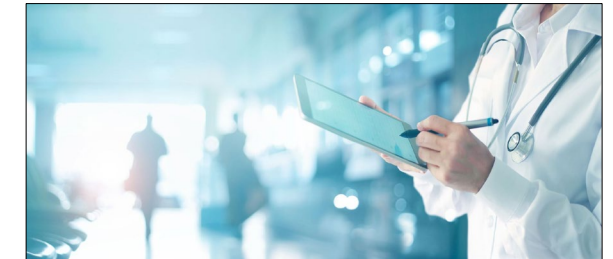
4. Mobility

5. Nutrition

6. Friction/shear

Braden Scale for Predicting Pressure Injury Risk

Patient's Name _____		Evaluator's Name _____		Date of Assessment _____					
SENSORY PERCEPTION ability to respond meaningfully to pressure-related discomfort	1. Completely Limited Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation. OR limited ability to feel pain over most of body	2. Very Limited Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness OR has a sensory impairment which limits the ability to feel pain or discomfort over 1/2 of body.	3. Slightly Limited Responds to verbal commands, but cannot always communicate discomfort or the need to be turned. OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	4. No Impairment Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort..					
MOISTURE degree to which skin is exposed to moisture	1. Constantly Moist Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.	2. Very Moist Skin is often, but not always moist. Linen must be changed at least once a shift.	3. Occasionally Moist: Skin is occasionally moist, requiring an extra linen change approximately once a day.	4. Rarely Moist Skin is usually dry, linen only requires changing at routine intervals.					
ACTIVITY degree of physical activity	1. Bedfast Confined to bed.	2. Chairfast Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	3. Walks Occasionally Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair	4. Walks Frequently Walks outside room at least twice a day and inside room at least once every two hours during waking hours					
MOBILITY ability to change and control body position	1. Completely Immobile Does not make even slight changes in body or extremity position without assistance	2. Very Limited Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.	3. Slightly Limited Makes frequent though slight changes in body or extremity position independently.	4. No Limitation Makes major and frequent changes in position without assistance.					
NUTRITION usual food intake pattern	1. Very Poor Never eats a complete meal. Rarely eats more than 1/2 of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement OR is NPO and/or maintained on clear liquids or IV's for more than 5 days.	2. Probably Inadequate Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement. OR receives less than optimum amount of liquid diet or tube feeding	3. Adequate Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) per day. Occasionally will refuse a meal, but will usually take a supplement when offered OR is on a tube feeding or TPN regimen which probably meets most of nutritional needs	4. Excellent Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.					
FRICTION & SHEAR	1. Problem Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures or agitation leads to almost constant friction	2. Potential Problem Moves feebly or requires minimum assistance. During a move skin probably slides to some extent against sheets, chair, restraints or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.	3. No Apparent Problem Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair.						



Using Pressure Ulcer Risk Assessment Tools in Care Planning (ahrq.gov)

How to Score

- Score risk factors from 1 to 4, except shear
 - Score friction/shear from 1 to 3.
- Risk factor score of 1 is the lowest level of functioning.
- If an element falls between two numbers, choose the lower score.
- Remember to consider **HALT** – History, Assess comorbidities, Look at the skin, Touch the skin

Plan Care for Each Category

Assessment and Care planning				
Braden Category	Braden Score: 1	Braden Score: 2	Braden Score: 3	Braden Score: 4
Sensory Perception	<p>Completely limited</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. Pay attention to heels *Elevate heels and use protectors *Consider specialty mattress or bed *Use pillows between knees and bony prominences to avoid direct contact. 	<p>Very limited</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. Pay attention to heels *Elevate heels and use protectors *Consider specialty mattress or bed. 	<p>Slightly limited</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. Pay attention to heels *Elevate heels and use protectors 	<p>No limitation</p> <ul style="list-style-type: none"> *Encourage patient to report pain over bony prominences. *Check heels daily.
Moisture	<p>Constantly Moist</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. *Use moisture barrier ointments (Protective skin barriers) *Moisturize dry unbroken skin. *Avoid hot water. Use mild soap and soft cloths or package cleanser wipes. *Check incontinence pads frequently (q2-3h) and change as needed *Apply condom catheter if appropriate. *If stool incontinence consider bowel training and toileting after meals or Rectal tubes if appropriate *Consider low air loss bed 	<p>Moist</p> <ul style="list-style-type: none"> *Use moisture barrier ointments (Protective barriers) *Moisturize dry unbroken skin. *Avoid hot water. Use mild soap and soft cloths or package cleanser wipes. *Check incontinence pads frequently (q2-3h) *Avoid use of diapers but if necessary check frequently (q2-3h)and change as needed *If stool incontinence consider bowel training and toileting after meals *Consider low air loss bed 	<p>Occasionally Moist</p> <ul style="list-style-type: none"> *Use moisture barrier ointments (Protective skin barriers) *Moisturize dry unbroken skin. *Avoid hot water. Use mild soap and soft cloths or package cleanser wipes. *Check incontinence pads frequently *Avoid use of diapers but if necessary check frequently (q2-3h) and change as needed *Encourage patient to report any other moisture problem (such as under breasts.) *If stool incontinence consider bowel training and toileting after meals 	<p>Rarely Moist</p> <ul style="list-style-type: none"> *Encourage patient to use lotion to prevent skin cracks. *Encourage patient to report any moisture problem (such as under breasts.)
Activity	<p>Bedfast</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. *Position prone if appropriate or elevate HOB no more than 30 degrees *Position with pillows to elevate pressure points off of the bed. *Consider specialty bed *Elevate heels off bed and/or heel protectors *Consider physical therapy consult for conditioning and W/C assessment *Turn/reposition q 1-2 hours. *Post turning schedule. *Teach or do frequent small shifts of body weight 	<p>Chairfast</p> <ul style="list-style-type: none"> *Consider specialty chair pad *Consider postural alignment, weight distribution, balance, stability, and pressure relief when positioning individuals in chair or wheelchair. *Instruct patient to reposition q 15 minutes when in chair. *Stand every hour *Pad bony prominences with foam wedges, rolled blankets or towels. *Consider physical therapy consult for conditioning and W/C assessment 	<p>Walks Occasionally</p> <ul style="list-style-type: none"> *Provide structured mobility plan. *Consider chair cushion *Consider physical therapy consult 	<p>Walks Frequently</p> <ul style="list-style-type: none"> *Encourage ambulating outside the room at least bid. *Check skin daily *Monitor balance and endurance
Mobility	<p>Completely Immobile</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. *Turn/reposition q 1-2 hours. *Post turning schedule. *Teach or do frequent small shifts of body weight. *Elevate heels *Consider specialty bed 	<p>Very Limited</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. *Turn/reposition 1-2 hours. *Post turning schedule. *Teach or do frequent small shifts of body weight *Elevate heels *Consider specialty bed 	<p>Slightly Limited</p> <ul style="list-style-type: none"> *Check skin daily *Turn/reposition frequently *Teach frequent small shifts of body weight *PT consult for strengthening/conditioning *Gait belt for assistance. 	<p>No Limitation:</p> <ul style="list-style-type: none"> *Check skin daily *Encourage ambulating outside the room at least bid. *No interventions required.
Nutrition	<p>Very Poor</p> <ul style="list-style-type: none"> *Nutrition Consult *Skin assessment and inspection q shift *Offer Nutrition Supplements and water *Encourage family to bring favorite foods *Monitor Nutritional Intake *If NPO for > 24 hours, discuss plan with MD *Record dietary intake and I & O if appropriate 	<p>Probably Inadequate</p> <ul style="list-style-type: none"> *Nutrition Consult *Offer Nutrition Supplements and water *Encourage family to bring favorite foods *Monitor Nutritional Intake *Small frequent meals *If NPO for > 24 hours, discuss plan with MD *Record dietary intake and I & O if appropriate 	<p>Adequate</p> <ul style="list-style-type: none"> *Monitor nutritional intake *If NPO for > 24 hours, discuss plan with MD *Record dietary intake and I&O if appropriate 	<p>Excellent</p> <ul style="list-style-type: none"> *Out of bed for all meals. *Provide food choices. *Offer Nutrition Supplements If NPO for > 24 hours, discuss plan with MD *Record dietary intake
Friction & Shear	<p>Problem</p> <ul style="list-style-type: none"> *Skin assessment and inspection q shift. *Minimum of 2 people + draw sheet to pull patient up in bed. *Keep bed linens clean, dry, and wrinkle-free. *Apply or elbow/heel protectors to intact skin over elbows and heels. *Elevate head of bed 30 degree or less 	<p>Potential Problem</p> <ul style="list-style-type: none"> *Keep bed linens clean, dry, and wrinkle-free. *Avoid massaging pressure points. *Apply transparent dressing or elbow/heel protectors to intact skin over elbows and heels. 	<p>No apparent problem</p> <ul style="list-style-type: none"> *Keep bed linens clean, dry, and wrinkle-free. 	

Customize Interventions to the Patient

- Bariatric patients
 - Appropriate size and weight of equipment, including:
 - Pressure redistribution support surfaces.
 - Are staff trained to care for these patients?
 - Critically ill patients
 - Choose pressure redistribution support surfaces based on individual's perfusion and ability to be turned.
 - Slow, gradual turns; allow time for hemodynamic and oxygenation stabilization.
 - Perioperative patients
 - Facial pads for the prone position.
 - Operating room support surfaces on the table.
 - Heel suspension devices.

Case Study

- Hospitalized patient:
 - Responds to verbal commands
 - Reports no pain
 - Can turn and reposition without assistance, but needs frequent reminders
 - Needs encouragement to walk more than twice a day outside his/her room
 - Eats some of the food on his/her tray
 - Has not suffered any recent weight loss
 - Has moist skin from urinary and fecal incontinence
- What is the total Braden Scale score for this patient, and is he/she at risk for a pressure ulcer?

Care Planning Example

- Plan care for moisture problems
 - Use pH-balanced skin cleaning products.
 - Don't massage or vigorously rub skin at risk for pressure ulcers.
- Cope with dry skin
 - Apply moisturizing products such as lotions and creams.
- Cope with wet skin (incontinence, perspiration)
 - Clean skin promptly.
 - Protect skin with products such as skin sealants, lotions, and creams.


Care Planning Example

- Plan care for activity problems:
- Inability to move while sitting in a wheelchair
 - Use support cushion in properly fitted wheelchair.
 - Consider PT/OT referrals for evaluation.

Activity	Bedfast	Chairfast	Walks Occasionally	Walks Frequently
	*Skin assessment and inspection q shift. *Position prone if appropriate or elevate HOB no more than 30 degrees *Position with pillows to elevate pressure points off of the bed. *Consider specialty bed *Elevate heels off bed and/or heel protectors *Consider physical therapy consult for conditioning and W/C assessment *Turn/reposition q 1-2 hours. *Post turning schedule. *Teach or do frequent small shifts of body weight	*Consider specialty chair pad *Consider postural alignment, weight distribution, balance, stability, and pressure relief when positioning individuals in chair or wheelchair. *Instruct patient to reposition q 15 minutes when in chair. *Stand every hour *Pad bony prominences with foam wedges, rolled blankets or towels. *Consider physical therapy consult for conditioning and W/C assessment	*Provide structured mobility plan. *Consider chair cushion *Consider physical therapy consult	*Encourage ambulating outside the room at least bid. *Check skin daily *Monitor balance and endurance

Proper Positioning Guidelines

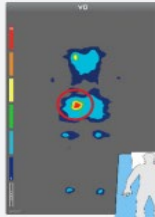
Free Materials - National Pressure Injury Advisory Panel (npiap.com)



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Reducing Patient Concerns Through Education, Research and Public Policy

PROPER SUPINE POSITIONING IN ADULTS TO PREVENT PRESSURE INJURIES

BEFORE TYPICAL POSITIONING



Turn patient to a supine position


5.1: Reposition all individuals with or at risk of pressure injuries on an individualized schedule, unless contraindicated. (Strength of Evidence=B1; Strength of Recommendation=1)¹

STEP-BY-STEP INTERVENTIONS

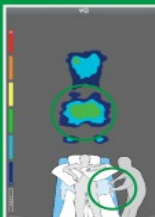
FOR BEST POSITIONING OUTCOMES, PERFORM THE FOLLOWING STEP SEQUENTIALLY.

Place pillows between knees & ankles and ensure heels are **offloaded** from the support surface.

(see Tip Sheet, Offloading Heels Effectively)



AFTER CBPM¹ - GUIDED POSITIONING



Use microshifts (small shifts) by lifting sheet/underpad **slightly** (reducing friction/shear on the patient) to adjust patient. Microshifts help to reduce pressure to the hips & other body areas (e.g., shoulders, etc.) & allow further immersion into a support surface.

5.6: Reposition the individual to relieve or redistribute pressure using manual handling techniques and equipment that reduce friction and shear. (Strength of Evidence=B2; Strength of Recommendation=1)¹

5.7: Consider using continuous bedside pressure mapping as a visual cue to guide repositioning. (Strength of Evidence=C; Strength of Recommendation=↔)




Figure 1.

First, elevate foot of bed to **20° (but no more than 30°)** using bed controls or pillows (*knee-gatch position, above figure*). Raising the knees, first, will stop patient from sliding (shearing) when the head of bed is raised.

Then, elevate the head of bed using bed controls or pillows to **30° or lower if clinically feasible**.


When elevating the head of bed, maintain elevations at 30° or lower to minimize soft tissue deformation. (Expert Opinion)¹

RESULTS

HEEL PRESSURE REDUCED BY OFFLOADING HEELS
SACRUM PRESSURE REDUCED THROUGH MICROSHIFTS

*Continuous bedside pressure mapping images courtesy of WellSense/VU

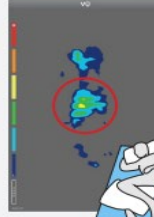
¹European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel, & Pan Pacific Pressure Injury Alliance. (2019). *Repositioning and Mobilization*. In E. Haesler (Ed.), *Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline: The International Guideline 2019* (pp. 115-146). European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance.



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PROPER SIDE LYING POSITIONING IN ADULTS TO PREVENT PRESSURE INJURIES

BEFORE TYPICAL POSITIONING



Turn patient to a 30° side lying position.

Note: Patient is turned with pillows or wedge to a 30° position, not greater than 30°.


5.8: Use the 30° side lying position in preference to the 90° side lying position when positioning. (Strength of Evidence=C; Strength of Recommendation=1)¹

STEP-BY-STEP INTERVENTIONS


FOR BEST POSITIONING OUTCOMES, PERFORM THE FOLLOWING STEP SEQUENTIALLY.

Place pillows between knees & ankles and ensure heels are **offloaded** from the support surface.

(see Tip Sheet, Offloading Heels Effectively)



AFTER CBPM¹ - GUIDED POSITIONING



Use microshifts (small shifts) by lifting sheet/underpad **slightly** (reducing friction/shear on the patient) to adjust patient. Microshifts help to reduce pressure to the hips & other body areas (e.g., shoulders, etc.) & allow further immersion into a support surface.

5.6: Reposition the individual to relieve or redistribute pressure using manual handling techniques and equipment that reduce friction and shear. (Strength of Evidence=B2; Strength of Recommendation=1)¹

5.7: Consider using continuous bedside pressure mapping as a visual cue to guide repositioning. (Strength of Evidence=C; Strength of Recommendation=↔)




Figure 1.

First, elevate foot of bed to **20° (but no more than 30°)** using bed controls or pillows (*knee-gatch position, above figure*). Raising the knees, first, will stop patient from sliding (shearing) when the head of bed is raised.

Then, elevate the head of bed using bed controls or pillows to **30° or lower if clinically feasible**.

When elevating the head of bed, maintain elevations at 30° or lower to minimize soft tissue deformation. (Expert Opinion)¹

RESULTS

HEEL PRESSURE REDUCED BY OFFLOADING HEELS
HIP PRESSURE REDUCED WITH MICROSHIFTS

*Continuous bedside pressure mapping images courtesy of WellSense/VU

¹European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel, & Pan Pacific Pressure Injury Alliance. (2019). *Repositioning and Mobilization*. In E. Haesler (Ed.), *Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline: The International Guideline 2019* (pp. 115-146). European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance.

Resources

- Ayello, Elizabeth A., Ph.D., RN, ACNS-BC, CWON, ETN, MAPWCA, FAAN. AHRQ: Using Pressure Ulcer Risk Assessment Tools in Care Planning. https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/pressure_ulcer_prevention/webinars/webinar5_pu_riskassesst-tools.pdf
- AHRQ Pressure Injury Prevention Guide Appendix C. Training and Learning Webinars. <https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureinjury/guide/apc.html>
- AHRQ: Preventing Pressure Ulcers in Hospitals, Section 7. Tools and Resources <https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/pu7b.html>
- National Pressure Injury Advisory Panel: Free Materials. <https://npiap.com/page/FreeMaterials>

Key Takeaways

- Learn Today:
 - The value of pressure injury risk assessment.
 - How to utilize risk assessment tools to drive/develop care plans.
- Use Tomorrow:
 - Implement pressure injury risk assessment.
 - Utilize risk assessment tools to drive/develop care plans.

How will this change what you do?



Getting Started


- Review the resource materials provided today.
- Develop a plan for implementation of care planning centered on risk assessment.
- Revise your reduction goal – short-term and long-term.

Questions?



Email us at HospitalQuality@allianthealth.org or call us at 678-527-3681.

HQIC Goals



Behavioral Health Outcomes & Opioid Misuse

- ✓ Promote opioid best practices
- ✓ Decrease high dose opioid prescribing and opioid adverse events in all settings
- ✓ Increase access to behavioral health services



Patient Safety

- ✓ Reduce risky medication combinations
- ✓ Reduce adverse drug events
- ✓ Reduce *C. diff* in all settings



Quality of Care Transitions

- ✓ Convene community coalitions
- ✓ Identify and promote optical care for super utilizers
- ✓ Reduce community-based adverse drug events

Upcoming Events

Wednesday, February 23, 2022 12 p.m. ET



Only the Best: Best Practices to Improve Your HAPI Measures

Tracy Rutland *MBA/MHA CLSSBB*

Event registration and information: [HERE](#)

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How did we do today?**

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