

HOSPITAL ACQUIRED PRESSURE ULCERS (HAPU) CHANGE PACKAGE

Preventing Hospital Acquired Pressure Ulcers

2014 UPDATE



American Hospital
Association



HRET
HEALTH RESEARCH &
EDUCATIONAL TRUST
In Partnership with AHA

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The AHA/HRET HEN would like to acknowledge our partner, Cynosure Health, for their work in developing the Hospital Acquired Pressure Ulcers (HAPU) Change Package.

WHAT'S NEW IN THIS VERSION?

The Implementation Guide to Prevention of Hospital Acquired Pressure Ulcers (HAPU) has been enhanced!

What's New?

- An expanded multi-disciplinary approach which includes unlicensed personnel such as Nursing Assistants.
- A Secondary Driver to “Minimize Pressure” that focuses on medical device-related pressure ulcers added.
- An example from an acute care facility of a “bundle” for HAPU prevention.
- Patient and family engagement in HAPU prevention
- Updated Key Resources and References.

HOSPITAL-ACQUIRED PRESSURE ULCER PREVENTION OVERVIEW

Background

- Pressure ulcers cause significant patient harm, including pain, infections, and extended hospital lengths-of-stay.
- The cost of treating a single full-thickness pressure ulcer can be as high as \$70,000, and total costs for treatment of pressure ulcers in the U.S. is estimated at \$11 billion annually.¹²
- Pressure ulcer incidence rates vary considerably by clinical setting – ranging from 0.4% to 38% in acute care, from 2.2 to 23.9% in long term care, and from 0% to 17% in home care.¹

Suggested AIMS

- Reduce the prevalence of hospital acquired Stage II or greater pressure ulcers by 40% by December 8, 2014.
- Reduce the incidence of significant hospital-acquired Stage III-IV pressure ulcers by 40% by December 8, 2014.

Potential Measures

Outcome: The percentage of patients with at least one Stage II or greater hospital-acquired (not present on admission) pressure ulcer on the day of the prevalence study. (EOM-58)

The number of patients who develop significant (stages III & IV) hospital-acquired pressure ulcers — (rate per 1,000 FFS acute discharges). (EOM-63)

New Measure – Days since last Pressure Ulcer (AHA/HRET HEN – Rural CAH Data Collection Tool)

Process: Skin assessment is documented within 4 hours of admission. (EOM-136)

Skin assessment is documented daily. (EOM-137)

Pressure ulcer risk assessment is completed within 24 hours of admission. (EOM-56)

Documentation of compliance with prevention interventions. (EOM-138)

PRIMARY DRIVER	IDEAS TO TEST
Conduct Skin Evaluation/Risk Assessment & Reassessment	<ul style="list-style-type: none"> • Use a head-to-toe skin and risk assessment as soon as possible, within 4 hours upon admission to the hospital. • Utilize a validated standard tool for the skin and risk assessment with subscales to drive individual risk and intervention. • The risk and skin assessment should be age appropriate, i.e. pediatric versus adult. • Implement skin assessment and re-assessment of risk daily or more frequently for high-risk patients.
Manage Moisture	<ul style="list-style-type: none"> • Keep the patient dry, and moisturize the skin only if necessary. • Use a moisture barrier to ensure the skin is protected. • When necessary, use under-pads with a quick-drying surface that wick moisture away from skin. • Set specific time intervals to remind staff to reposition, offer toileting and oral fluids, and reassess for wet skin, i.e. the 3 P's - Pain/Potty/Position-Pressure. • Keep supplies handy at the bedside in the event a patient is incontinent.
Optimize Hydration and Nutrition	<ul style="list-style-type: none"> • Give patients their food and drink preferences to encourage good hydration and nutrition. • Provide at-risk patients with a water container in a unique color so staff and families will be guided to encourage hydration. • Provide nutritional supplementation if needed and not contraindicated. • Consult a Registered Dietician if the patient is at high risk. • Monitor weight status, food and fluid intake, hydration status, and laboratory test results.
Minimize Pressure	<ul style="list-style-type: none"> • Turn and reposition patients at least every two hours, as prompted by visual or musical cues, bells, and alarms at the nurses' station. • Use special beds, mattresses, and foam wedges to redistribute pressure on the skin. • Use the NPUAP Guidelines for alignment. • Use lifting devices, glide sheets, or special dressings for the sacral area to reduce shearing or friction during movement. • Use devices such as clear dressings, foam, and securement devices to reduce pressure from medical devices.
Patient and Family Engagement	<ul style="list-style-type: none"> • Educate patient and family using teach back technique on patient's risk for pressure ulcers and patient individual skin care plan. • Use bedside shift report to reinforce mobility activities and mutual accountability in turning, ambulation, and up to chair. • Use of whiteboard to outline skin care and mobility program. • Educate about early warning signs of pressure ulcers. • Encourage patient and families to ask questions and share concerns.

Making Changes

- This intervention is in the Collaborative with Reducing Pressure Ulcers and VTEs (**PIVOT Collaborative**). National meetings, webinars, monthly coaching calls, change packages and other tools will augment state association activities.

Key Resources

- AHRQ Toolkit – Preventing Pressure Ulcers in Hospitals. Retrieved at: <http://www.ahrq.gov/research/lrc/pressureulcertoolkit/>
- AHRQ Guideline Synthesis on Preventing Pressure Ulcers. Retrieved at: <http://www.guideline.gov/syntheses/synthesis.aspx?id=25078>
- National Pressure Ulcer Advisory Panel. Retrieved at: <http://www.npuap.org/>
- IHI How to Guide Reducing Pressure Ulcers. Retrieved at: <http://www.ihi.org/knowledge/Pages/Tools/HowtoGuidePreventPressureUlcers.aspx>

HOSPITAL-ACQUIRED PRESSURE ULCER DRIVER DIAGRAM

AIM: Reduce the prevalence of hospital acquired Stage II or greater Hospital Acquired Pressure Ulcers (HAPU) by 40% by 12/8/14.

PRIMARY DRIVER	SECONDARY DRIVER	CHANGE IDEAS
<p>Conduct Skin/ Risk Assessment and Reassessment</p>	<ul style="list-style-type: none"> • Implement a risk assessment tool which includes a head-to-toe skin evaluation. 	<ul style="list-style-type: none"> • Utilize a validated standard tool for the skin evaluation and risk assessment. • Assess the skin and risks within 4 hours of admission. • Assess skin and risk at least daily and along with other routine assessments. • The risk and skin assessments should be age appropriate (pediatric versus adult). • Visual cues should be available to promote the completion of the assessment. • Use multiple methods to visually identify patients at risk. Use visual cues in the patient's room, on the door, or on the front of the medical record. • Develop documentation tools that prompt daily skin inspections and use subscales to assess individual risk and to drive interventions. • Develop an individualized plan of care to reduce the risks of pressure ulcers. • With patient consent, photograph and document skin issues present on admission. • Conduct nurse-to-nurse shift reports at the bedside, and include skin assessment with 2 sets of eyes. Document and address findings.
<p>Manage Moisture</p>	<ul style="list-style-type: none"> • Avoid skin wetness; protect and moisturize as needed 	<ul style="list-style-type: none"> • Use topical agents that hydrate the skin and form a moisture barrier to reduce skin damage. Consider using all-in-one cleaning/moisture-barrier clothes. • Set specific timeframes or create reminder systems to reposition; frequently offer toileting, oral fluids, and reassess for wet skin. Remember the 3 P's - Pain/Potty/Position-Pressure. • Involve licensed and unlicensed staff such as nurse's aides in every hour rounding and checking for the 3 P's. • Consider a Stage I pressure ulcer as a "warning sign." • Use under-pads that provide a quick-drying surface and wick moisture away from skin. Keep supplies readily available at the bedside in case the patient is incontinent. • Develop a skin-care cart with supplies and a guide for how to manage skin issues according to severity. • Combine interventions with other routine activities. • Identify a staff nurse for each unit to serve as a skin care resource. • Avoid using a thick paste as a cleansing/moisture barrier (staff may have difficulty cleaning the paste when stool is present and may injure the skin).

PRIMARY DRIVER	SECONDARY DRIVER	CHANGE IDEAS
Optimize Hydration and Nutrition	<ul style="list-style-type: none"> • Monitor weight, nutrition and hydration status 	<ul style="list-style-type: none"> • Give patients their food/liquid preferences to enhance hydration and nutrition. • Provide nutritional supplementation if needed and not contraindicated. • Generate an automatic Registered Dietician consult if the patient is at high risk. • Monitor weight, food and fluid intake, and laboratory test results. • Provide at-risk patients with a water container of a unique color so staff and families will know to encourage hydration. • Assist the patient with meals if needed and encourage snacks. • Offer water to the patient when rounding for the 3 “P’s,” Pain/Potty/Position.
Minimize Pressure, Shear, and Friction	<ul style="list-style-type: none"> • Turn and reposition patients at least every two hours. • Develop and institute early mobility/ambulation protocols 	<ul style="list-style-type: none"> • Use visual or musical cues, e.g. a turning clock, bells, and alarms, at the nurse’s station as a reminder to turn and reposition the patient. • Use visual cues at the bedside to remember turn the patient, e.g. a turning clock or whiteboard that displays the time for the next turn. • Establish ‘rules’ for which side patients should lie on at certain times (e.g. even hours on right side, odd hours on left side). • Ensure pressure-reducing equipment is available at all times. (e.g. beds, mattresses, and foam wedges, etc.). Use a device that elevates the heel and prevents external rotation of the ankle and foot. • To redistribute pressure, use special beds, mattresses, and foam wedges, and use pillows (only for limbs) to redistribute pressure. • Use transparent dressings, foam, and securement devices to reduce risk of shear and pressure from medical devices. • Operating room tables should be covered by special overlay mattresses. • Use breathable glide sheets and/or lifting devices to prevent shear and friction. • Use ceiling lifts to encourage mobility and movement and to prevent staff work-related injuries. • Limit layers of linen to no more than 3 (using more than 4 layers has been shown to be an independent risk factor for HAPU). A breathable glide sheet is helpful for in-bed mobility and lifts are best for out-of-bed mobility.
Patient and Family Engagement	<ul style="list-style-type: none"> • Invite patients and their families to become an active partner in their care. 	<ul style="list-style-type: none"> • Educate patient and family using teach back technique on patient’s risk for pressure ulcers and patient individual skin care plan. • Use bedside shift report to reinforce mobility activities and mutual accountability in turning, ambulation, and up to chair. • Use of whiteboard to outline skin care and mobility program. • Educate about early warning signs of pressure ulcers. • Encourage patient and families to ask questions and share concerns.

PREVENTION OF HOSPITAL-ACQUIRED PRESSURE ULCERS (HAPU)

More than 2.5 million patients in U.S. acute-care facilities suffer from pressure ulcers, and 60,000 die from pressure ulcer complications every year (2009). Hospital-acquired pressure ulcers result in pain, expensive treatments, increased length of institutional stay, and, in some patients, premature mortality. Interventions that can help to prevent pressure ulcers, or treat them quickly if they develop, can reduce the costs of HAPU care and improve quality of life for those affected.

SUGGESTED AIMS

An AIM statement for HAPU reduction initiatives could encompass one of the following:

- Reduce the prevalence of Stage II or greater Hospital-Acquired Pressure Ulcers (HAPU) by 40% by December 8, 2014.
- Reduce the incidence of significant Hospital-Acquired Stage III-IV Pressure Ulcers by 40% by December 8, 2014.

CONDUCT SKIN/RISK ASSESSMENT & REASSESSMENT

Prevention of pressure ulcers should begin with an assessment of a patient's risk for such ulcers. This assessment must be done upon admission and then at least daily during a patient's stay, and should include evaluation of the condition of the patient's skin.³ Risks for the development of pressure ulcers include advanced age, immobility, incontinence, inadequate nutrition and hydration, neuro-sensory deficiency, device-related skin pressure, multiple co-morbidities, and circulatory abnormalities.⁴

Secondary Driver: Implement a risk assessment tool which includes a head-to-toe skin evaluation.

Adequate assessment of a patient's risk with an accurate tool will allow the care team to implement timely prevention strategies for each patient.

Change Ideas: Skin Assessment Strategies

- Utilize a validated standard tool for risk assessment. The most widely used is the Braden Scale⁵; others include the Norton, Gosnell, Knoll, and Waterlow Scales.⁶
- Assess risk and evaluate skin within 4 hours of admission.
- Evaluate skin at least daily and during routine assessment. Develop documentation tools to prompt daily skin inspections and use subscales to assess for individual risk and drive interventions. In acutely ill patients, skin condition can change rapidly, and multiple reassessments may be indicated.⁷

— Utilize nurses' aides in daily inspection of skin. Nurses' aides are often the ones who bathe and toilet patients. Educate them and ask them to notify the nurse if their workflow inspections identify any suspected skin changes. Enlisting these care givers can improve PU prevention efforts.⁸

- Assessments should be age appropriate, e.g. pediatric versus adult.⁹
- Develop cues to ensure the completion of the assessment, such as an admission checklist or a process integrated into charge nurse rounds.
- Use multiple methods to identify patients at risk. For example, place visual cues on the door of the patient's room, on the front of the medical chart, etc.¹⁰
- Develop an individualized plan of care for each patient to reduce the risks of pressure ulcers.
- Utilize nurses' aides (as part of their workflow) to inspect that preventive measures such as turning, proper linen use (e.g. no linen layering or diapers), and skin hygiene are in place.¹¹
- Conduct nurse-to-nurse shift reports at the bedside which review the skin areas of concern. (Skin assessment with two sets of eyes can improve reliability of skin assessment and documentation.)
- With patient consent, use an authorized camera to photograph and document skin issues at admission and beyond.

Suggested Process Measures

- Monthly audit for the percentage of patients who received risk assessment and skin evaluation on admission.
- Monthly audit for the percentage of patients who had daily reassessments performed.

“Hardwiring” Skin/Risk Assessment and Reassessment in Improvement Plans

Hardwiring methods include incorporating skin and risk assessments in the admission process and as part of other routine assessments.¹² The skin and risk assessment tool selected should be incorporated into the standard documentation; for example, by developing an admissions checklist that lists all the necessary elements of skin and risk assessment. If using electronic health records, a force function can require that a skin and risk assessment is completed before the provider signature is accepted. Descriptors of each area of risk should be listed in both paper and electronic documentations to ensure reliability of the assessments.

MANAGE MOISTURE

Avoiding inappropriate wetness and optimally moisturizing skin can reduce the risk of developing pressure ulcers.¹³

Secondary Driver: Avoid skin wetness and optimally moisturize.

Limit exposure of a patient's skin to moisture from sources such as incontinence, wound drainage, or perspiration. Use underpads that wick away moisture and present a dry surface to the skin.¹⁴

Topical agents are available that will provide a barrier to wetness and simultaneously moisturize the skin.¹⁵

Change Ideas: Reliable Moisture Management

- Use topical agents that hydrate the skin and form a wetness barrier to reduce skin damage. Consider using all-in-one cleaning/moisture-barrier clothes, which ensure that protection is never forgotten.
- Diapers should only be used to preserve a patient's dignity when he or she is up in a chair or walking. They must be removed on returning to bed.
- Set specific time intervals with reminder alerts to reposition patients. Offer frequent toileting and oral fluids, and reassess for wet skin. Remember the 3 P's – Pain/Potty/Position-Pressure.
- Ask licensed and unlicensed staff such as nurses' aides to make rounds and check the 3 P's every hour.
- Consider a Stage I pressure ulcer as a "critical warning sign."
- Use underpads that wick moisture away from the skin and provide a quick-drying surface.
- Keep supplies readily available at the bedside in the event a patient is incontinent.¹⁶
- Develop a skin-care cart that provides supplies, and to reduce process variation, a guide for how to manage skin pathology according to severity and degree, to reduce process variation.
- Combine skin care with other routine activities as per protocols.
- Identify a staff nurse in each unit to serve as a skin-care resource.
- Avoid using a thick paste as a cleansing/moisture-barrier (staff may tend to have difficulty removing or cleaning the paste when stool is present, resulting in skin injury).

Suggested Process Measures

- Audit compliance with hourly rounding and checking the 3P's through random spot checks.
- Perform random spot checks to determine the percentage of rooms with supplies available for incontinent patients.

Balance Measure

- Assess the incidence of incontinence-associated dermatitis.

"Hardwiring" Moisture Management in Improvement Plans

Making skin care and HAPU prevention part of the everyday routine of nursing staff is a reliable hardwiring tactic. Identify periodic activities such as hourly rounding, repositioning, assessing for wet skin, applying barrier agents, and offering oral fluids and toileting opportunities, and include them in nursing protocols for licensed and non-licensed staff to complete and document, as appropriate.¹⁷

OPTIMIZE HYDRATION AND NUTRITION

Nutrition and hydration status affect skin condition and risks for pressure ulcers. Patients with nutritional deficiency may be twice as likely to develop skin breakdown.¹⁸ Risk assessment for pressure ulcer development should include a review of the patient's nutrition and hydration status.

Secondary Driver: Assess weight, nutrition and hydration status.

Patients with nutritional intake and hydration deficits frequently lose weight and muscle mass, making bones more prominent and reducing mobility. Poor nutrition and hydration may promote edema and reduce blood flow to the skin, resulting in ischemic damage and subsequent skin breakdown.^{19,20,21}

Change Ideas: Strengthen Metabolic Status

- Give patients food/liquid choices to enhance appetite, hydration, and nutrition.
- Provide necessary nutritional supplementation if not contraindicated.
- Generate an automatic consult with the registered dietician if a patient is assessed as high risk.
- Consider implementing a standardized process to order a pre-albumin level for patients with high risk status.
- Monitor weight, food and fluid intake, and relevant lab test results.

- Provide at risk patients with a water container in a unique color to encourage staff and families to promote ongoing hydration.
- Offer the patient assistance with meals if necessary, and encourage snacks.
- Offer water to the patient during rounds for the 3 “P’s” (Pain/Potty/Position).

Suggested Process Measure

- A monthly audit of percentage of high risk patients receiving full pressure ulcer preventative care (daily skin assessment, moisture management, nutrition and hydration optimization, repositioning, use of pressure-redistribution surfaces).²²

“Hardwiring” Hydration and Nutrition Optimization in Improvement Plans

To hardwire hydration and nutrition, make the assessment of patient’s nutrition and hydration status routine, with admission assessments as well as with other patient care interventions.

- If a patient is assessed at high risk for a pressure ulcer, an automatic registered dietician consult should be generated.

MINIMIZE PRESSURE, SHEAR AND FRICTION

Minimizing the amount of pressure on bony prominences will help to reduce the possibility of breakdown of the thin overlying skin. By repositioning and utilizing pressure-distribution surfaces, pressure on the skin can be redistributed.^{23,24} This is especially critical for patients with limited mobility as they are at high risk for developing pressure ulcers.²⁵

Secondary Driver: Turn and reposition patients at least every two hours.

Turning and repositioning a patient helps to redistribute pressure on skin surfaces and maintains circulation to tissues in areas at risk for ulcers.²⁶ The literature does not provide clear guidelines for turning frequency; however one and one half to two hours in a single position is the maximum amount of time recommended for patients that have normal circulatory function.²⁷

Change Ideas: Methods to Reduce Pressure, Shear and Friction

- Repositioning and use of pressure-redistribution surfaces.²⁸
- Use visual or musical cues, e.g. a turning clock, bells, or alarms at the nurses’ station as a reminder to turn and reposition the patient.²⁹
- Use visual clues at the bed side to turn the patient, e.g. a turning clock or white board that records the time for the next turn.

- Establish ‘rules’ for which side a patient should lie on for certain intervals, e.g. even hours on the right side, odd hours on the left side.
- Use pressure-reducing equipment such as beds, mattresses, and foam wedges. Use devices that elevate the heel and prevent external rotation of the ankle and foot.
- Use special beds, mattresses, foam wedges, and pillows (only for limbs) to redistribute pressure on high risk areas.³⁰
- Operating room tables should have special overlay mattresses to provide cushioning.^{31,32}
- Use breathable glide sheets and/or lifting devices to prevent shear and friction.
- Use a dressing that can be placed on the sacral area to reduce shear and friction (See Appendix IV).
- Use ceiling lifts to encourage patient mobility and movement and to prevent work-related injuries among staff.
- Limit layers of linen to no more than 3 (using more than 4 layers has been shown to be an independent risk factor for HAPU). A breathable glide sheet that remains with the bed is much more user-friendly for in-bed mobility, and lifts are better for out-of-bed mobility.

Suggested Process Measure

- A monthly audit of the percentage of high risk patients receiving full pressure ulcer preventative care such as daily skin assessment, moisture management, and nutrition and hydration optimization.

Secondary Driver: Develop and institute early mobility/ambulation protocols.

Reduced mobility is a risk factor for the development of pressure ulcers. Putting a process into place that assess a patient’s mobility and generates recommendations for physical therapy referral will enable staff to safely mobilize patients. Nurse driven mobility protocols have been demonstrated to be effective in reducing immobility related complications and reducing length of stay.^{33,34}

Secondary Driver: Utilize tools and techniques to prevent medical device related pressure ulcers.

Medical devices prescribed for therapy are responsible for approximately 10% of pressure ulcers.³⁵ Devices known to cause pressure ulcers include endotracheal tubes and the devices used to secure them, cervical collars, tracheostomy tubes, bi-level positive airway pressure and continuous positive airway pressure masks, and rigid transfer boards.³⁶ Additional risks stem from the use of nasal cannula oxygen tubing and intravenous administration tubing, and incorrect fitting anti-embolism devices.

The National Pressure Ulcer Advisory Panel recommends the following (retrieved at: <http://www.npuap.org/resources/educational-and-clinical-resources/best-practices-for-prevention-of-medical-device-related-pressure-ulcers/>).

- Choose the correct size for each medical device.
- Cushion and protect the skin with dressings in high risk areas (e.g. nasal bridge).
- Inspect the skin in contact with the device at least daily (if not medically contraindicated). Avoid placement of device(s) over sites of prior or existing pressure ulcers.
- Educate staff on the correct use of prescribed devices and prevention of skin breakdown. Be aware that edema) and skin breakdown may occur under device.
- Confirm that devices are not placed directly under an individual who is bedridden or immobile.

Change Ideas: Strategies to minimize risk of device related pressure ulcers.

- Incorporate inspection of skin and proper fit of devices into daily workflow such as hourly rounding.
- Incorporate checks of devices into nurses' aides' workflow. Have them report to the patients nurse any new areas of redness or possible improper fit of a medical device.

PATIENT AND FAMILY ENGAGEMENT

Communication and information sharing may increase patient willingness to engage in prevention activities and assist care givers in shaping an individualized care plan.^{37,38}

Secondary Driver: Invite patients and their families to become an active partner in their care.

Patient and their families can be excellent source of information on reliability of care delivery from their observations of staff. They can give insight on barriers and effective care processes.

Change Ideas:

- Educate patient and family using teach back technique on patient's risk for pressure ulcers and patient individual skin care plan.
- Use bedside shift report to reinforce mobility activities and mutual accountability in turning, ambulation, and up to chair.
- Use of whiteboard to outline skin care and mobility program.
- Educate about early warning signs of pressure ulcers.
- Encourage patient and families to ask questions and share concerns.

“Hardwiring” Minimizing Pressure in Improvement Plans

Hardwire pressure minimization by making the process as routine as possible and ensuring that all aspects of HAPU prevention are addressed reliably in every patient, every day. Implement protocols for skin evaluation and risk assessment; for assessing nutrition, hydration and mobility; and for interventions such as repositioning, managing moisture, using of barrier agents, and offering toileting and oral fluids. A protocol should also identify those high-risk patients who require additional interventions such as pressure-relieving surfaces and consults with the registered dietician and physical therapist. Bundling care practice guides and supplies together helps the caregiver to remember the evidence-based practices required and to comply with the guidelines. See Appendix 5 for an example of how one hospital bundled together their PU prevention interventions.

POTENTIAL BARRIERS

- Recognize that for many staff these improvements will demand a change in their day-to-day activities. Nurses should be encouraged to embrace the ownership of pressure ulcer prevention as a vital part of their practice. Many nurses appreciate the importance of this critical role in harm prevention.
 - Although pressure ulcers are a “nursing-sensitive condition,” physician participation can support these interventions, address medical staff concerns, and help promote nursing staff momentum.
 - In the past, physicians typically generated consults to other physicians; however, new protocols engage nurse members of the team in harm prevention. Lead physicians and champions can build support for these changes among the medical staff by describing the advantages for the healthcare team’s patients.
 - Order sets and protocols may be seen by some physicians or nurses as “cookbook” medicine. A more appealing perspective is to frame order sets them as “best recipe” medicine, and use evidence-based findings that demonstrate reduced patient risks for HAPU.
- These processes may be considered “new territory” by many physicians, nurses, nurses’ aides, physical therapists, and registered dietitians. Nurses implementing these processes, for example, may be concerned about making a mistake, being inadequately trained to follow the new policies, or experiencing a hostile work environment around resistant or uncivil medical staff. Education of all stakeholders about the risks of delayed intervention for HAPU and the efficacy of these improvement efforts can alleviate some of these concerns.

Enlist Administrative Leadership as Sponsors to Help Remove or Mitigate Barriers

- A management executive sponsor who recognizes the value for the organization and its patients of preventing HAPU can help brainstorm solutions; contribute helpful resources such as funding, staffing, and supplies; and encourage process adoption. Executive sponsors can provide a “big picture” perspective on the organizational impact of these initiatives, and serve as champions across the organization, removing barriers to implementation.

- Respected nurse and physician leaders and champions can promote the adoption of best practice protocols for pressure ulcer prevention. Since these protocols typically involve nursing care without the requirement for physician orders, choose a unit to do a first trial in which the initiative is supported by a receptive nurse lead and partnering physician. A successful trial will demonstrate the benefits of the new protocols and be more easily disseminated to units across the organization by the nurse and doctor.
- Physician and nurse leaders, as well as champions from physical therapy and nutrition, can advocate on behalf of new innovations, and can address inaccurate perceptions that new protocols are burdensome, difficult, or punitive.

Change not only “The Practice,” but also “The Culture”

- A change in nursing culture may be necessary; nursing staff will need to embrace the value of their diligent contributions to skin care and harm prevention. Some nurses may be uncomfortable with the idea of a nurse-driven protocol, or with the collaboration demanded not only with physicians, but with physical therapists and registered dietitians. Education and involvement of staff from multiple units and specialties in the development of the protocols may ease concerns and promote multi-disciplinary team cohesion.
- By empowering nursing staff, these innovations may also be of concern to physicians who fear potential negative outcomes for their patients and practices. Many physicians will learn from respected peers rather than from “expert advice.” Enlisting physician champions to advocate for these changes and to reassure other physicians about the benefits for patients can be an effective strategy.
- These innovations will require small tests of change; successful trials can then be disseminated across the organization. The ideal outcome is the development and implementation of team-based care in which each member of the team (physician, nurse, nurses’ aide, physical therapist, and registered dietitian) contributes to improved healthcare quality for patients.

Tips on How to Use the Model for Improvement

Choice of Tests and Interventions for HAPU Reduction:

- There are many potentially effective interventions to reduce the risks of HAPU. Improvement teams should begin their efforts by asking: “What is the greatest need at our facility? Where can we have the greatest impact?”
 - Implementation of skin evaluations and risk assessments?
 - Implementation of handoff communications between nurses regarding patient risks and risk mitigation interventions?
 - Redesign of processes to align risk assessment findings with appropriate interventions?
 - Prioritization of interventions based on resources available?
- Do not wait for “the new beds” or “the new sheets” to arrive to implement prevention strategies. Do small tests of change using the resources available (e.g. turning patients every 1-2 hours, optimizing nutrition, improving handoff communications), and then upgrade the processes/ equipment/technology over time.

Implement Small Tests of Change:

Choose a risk assessment tool to adopt

- Step 1: Plan – Choose an established evidenced-based practice tool such as the Braden Skin Risk Assessment Tool. Choose one or two tools to test and solicit staff feedback on ease-of-use and effectiveness.
- Step 2: Do – Keep the scale of an initial test small. Begin with one nurse, on one shift. Then test with a few more nurses of varying experience levels and a small number of patients.
- Step 3: Study – Evaluate tool ease-of-use and effectiveness with the staff members that tested the tool. Which tool was easiest to use and provided assessment findings that could be incorporated into the care plan?
- Step 4: Act – Flowsheets that document skin risk assessment may need to go through several “tweaks” before they are ready to use on a wider scale.

- **Know when to stop a test.** If the test results show that a change is not leading to improvement, then stop the test, and test a different process.
- **Implement a Nursing Protocol to turn patients at least every two hours**
 - Step 1: Plan – Decide which unit and shift will launch the small tests of change, opting to enlist nurses who are willing to attempt the trials. Seek out nurse champions and early adopters.
 - Step 2: Do – Test the nursing protocol to turn patients at least every two hours.
 - Start “simple” – one unit, one shift, one process.
 - Step 3: Study – Debrief with the participating staff at the end of each shift to evaluate the results of the process.
 - Ask questions such as, “What worked well?”, “What did not work well?”, and “What do we need to change for the next test?”
 - Step 4: Act – Implement learning from tests as soon as possible. Retest on the same unit, with the same staff, on the next day. Repeat until the process is successful and then disseminate the trial to other shifts or units.

The poster features a central image of an iceberg floating in dark water. The tip of the iceberg is visible above the surface, while the much larger, submerged portion is hidden below. The text is arranged as follows:

- At the top, the text "Protect Your Patient's" is in a standard font, followed by the word "SKIN" in large, bold, white, sans-serif capital letters.
- Below the "SKIN" text, the words "Tissue injury can be more than skin deep" are written in a bold, white, sans-serif font, centered over the submerged part of the iceberg.
- At the bottom of the iceberg image, there is a grey rectangular box containing the word "SKIN" in large, bold, white letters. To the right of the "SKIN" text, the words "Surface selection", "Keep turning", "Incontinence management", and "Nutrition" are stacked vertically in a smaller, white, sans-serif font.
- Below the iceberg image, on the left side, is the text "Your Ministry Logo Here" in a small, grey font.
- At the bottom left, there is the "ASCENSION HEALTH" logo, which consists of a stylized triangle icon followed by the words "ASCENSION" and "HEALTH" stacked vertically.
- At the bottom right, the text "HEALTHCARE THAT IS SAFE" is in a bold, black, sans-serif font, with the tagline "Delivering Clinically Excellent Care" in a smaller, italicized, black, sans-serif font below it.

SKIN RISK ALERT

SKIN BUNDLE INTERVENTIONS IN EFFECT!

SURFACE:

- Be sure the patient is on the correct type of mattress.
- Do not use multiple layers of linens under the patient.
- Keep linens free of wrinkles.
- Be sure the patient is not lying on tubing, telephones or call bells.

KEEP TURNING:

- Reposition patient at least every two hours when in bed.
- “Self” is not acceptable for documenting repositioning.
- Document the actual position the patient is observed in.
- Shift patient’s weight at least every hour if he/she is up in a chair.
- Use a chair pad when patient up in chair.

INCONTINENCE:

- Offer toileting assistance every two hours.
- If the patient is incontinent, give perineal care every two hours and as needed for stool incontinence.
- Apply a moisture barrier after incontinence care.
- If the patient is not incontinent, apply moisture barrier every 8 hours.
- Avoid diapers unless needed for containing excessive amounts of stool, the patient is ambulatory and incontinent, the patient requests a diaper, or the patient saturates linens with most urinary incontinence episodes.

NUTRITION:

- If the patient has a nutritional deficit or is at high risk for a nutritional deficit, order a nutrition consult. Look at what the patient has been taking in for nutrition and also look at albumin levels.
- Consider recent weight loss as well.
- Consider hydration status.
- Carry out nutrition orders and record supplement and meal intake.

Assess skin every eight hours. Document breakdown description on Skin Flow Sheet daily.

Document all of your interventions.

Not a permanent part of the medical record

Appendix III: Skin Bundle Compliance Tool³⁷

			Patient Identifier
			Braden Score < 18
			LOS < 24 Hours
			S Surface Type
			K Turning documented every 2 hours
			K Heels off bed documented
			I Incontinence care documented
			N Nutritionally at risk
			N Nutritional consult completed
			N Nutritional orders written
			N Nutritional orders carried out
			Comments

Appendix IV: Example of a Sacral Dressing to Reduce Shear and Friction



Appendix V: Save Our Skin Bundle

Lee Memorial Health System's Cape Coral Hospital, Cape Coral Florida.



Save Our Skin Bundle

PATIENTS WITH A BRADEN SCORE < 15 OR ON A VENT:

- An S.O.S. sign on the door with a turning clock
- A flat sheet with a disposable blue pad (moisture wicking) is in place
- The patient is repositioned and repositioning is documented q2h
- If the patient is up in chair, repositioned q1h
- Daily mobility assessment is performed
- Daily nutrition assessment is performed
- Toileting offered and perineal care is performed q2h
- Appropriate care plan is in place
- If the patient has a pressure ulcer, the correct order set should be in place



S.O.S. Turn Sign

Appendix VI: HAPU Top Ten Checklist

Hospital Acquired Pressure Ulcer (HAPU) Top Ten Checklist

TOP TEN, EVIDENCE BASED INTERVENTIONS				
PROCESS CHANGE	IN PLACE	NOT DONE	WILL ADOPT	NOTES (RESPONSIBLE AND BY WHEN?)
Implement head-to-toe skin evaluation and risk assessment tool – assess the skin and risks within 4 hour of admission, risk and skin assessment should be age appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Based on skin and risk assessment develop and implement an individualized plan of care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Assess skin and risk at least daily and incorporated into other routine assessment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Involve licensed and unlicensed staff such as nurse aides in HAPU reduction efforts – such has rounding with a purpose. The nurse aids can assist in skin inspection, checking to ensure prevention strategies are in place, and check medical devices are not causing skin harm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Set specific timeframes or create reminder systems to reposition – such as hourly or every two hour rounding with a purpose (the 3 P's - pain, potty, position-pressure). This aligns nicely with Fall prevention.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Avoid skin wetness by protecting and moisturized as needed - use of under-pads that provide a quick-drying surface and wick moisture away, use topical agents that hydrate the skin and form a moisture barrier to reduce skin damage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Use special beds, mattresses, and foam wedges to redistribute pressure (pillows should only be used for limbs).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Monitor weight, nutrition, and hydration status – for high risk patients generate an automatic Registered Dietician consult.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Operating room tables should be covered by special overlay mattresses for long cases (greater than 4 hours – some hospitals choose cases greater than 2 hours) and high risk patients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Use breathable glide sheets and or lifting devices to prevent shear and friction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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