

Actionable Patient Safety Solutions (APSS): Pressure Ulcers

How to use this guide

This guide gives actions and resources for pressure ulcers. In it, you'll find:

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SAUDI PATIENT SAFETY CENTER



Patient Safety
MOVEMENT

Executive Summary

The Problem

Although effective pressure ulcer prophylaxis can come to fruition through standardization, seamless integration into existing workflows, and emphasis from the leadership level, it has been shown that only 9.7% of patients who required preventive care for pressure ulcers received thorough and frequent preventive care ([Vanderwee, Clark, Dealey, Gunningberg, & Defloor, 2007](#)).

The Cost

In the US alone, pressure ulcers cost between \$9.1-11.6 billion annually, with an estimated average additional cost of \$43,180 for each pressure ulcer ([AHRO, 2014](#)). With 2.5 million affected in the US each year, and an 18.1% prevalence in European countries ([Vanderwee et al., 2007](#)), pressure ulcers claims are the second most common claim. The prevention of pressure ulcers costs very little if implemented strategically but the clinical, financial, and emotional repercussions upon pressure ulcer development are substantial.

The Solution

Many healthcare organizations have successfully implemented and sustained improvements and reduced injuries and deaths from pressure ulcers. These organizations have focused on projects that included **implementing pressure ulcer prophylaxis into pre-existing clinical workflows**.

This document provides a blueprint that outlines the actionable steps organizations should take to successfully improve pressure ulcer prophylaxis and summarizes the available evidence-based practice protocols. This document is revised annually and is always available free of charge on our website. Hospitals who make a formal commitment to improve pressure ulcer rates and share their successes on the PSMF website have access to an additional level of consulting services.

Leadership Checklist

On a monthly basis, or more frequently if a problem exists, the executive team should review the outcomes of patients at risk for pressure ulcers. Use this checklist as a guide to determine whether current evidence-based guidelines are being followed in your organization:

- Measure and report pressure ulcer prophylaxis and compliance monthly (total number of patients with a pressure ulcer at any given time/how many patients developed a new ulcer while on the unit). Note trends in areas with low compliance and high pressure ulcer incidence. Routinely reassess outcomes.
- If pressure ulcer rates indicate room for improvement, initiate a PI (performance improvement) project. If a problem is not indicated, routinely reassess to identify gaps, and ensure integrity of the data collected.
- Ensure frontline involvement in pressure ulcer prophylaxis improvement activities. Maintain their engagement and remove barriers to progress.
- If a PI plan is put in place, measure the associated process outcomes.
- Ensure that pressure ulcer prophylaxis and treatment protocols are embedded into [clinical workflows](#), whether electronic or paper.
- Ensure there are enough staff to effectively manage necessary preventive care.
- Ensure adequate training and documentation of pressure ulcer prophylaxis and treatment competencies and skills.
- Eliminate barriers to making rapid changes to documentation templates and order sets.
- Debrief on a regular basis to solicit team feedback about barriers to sustained compliance. Adjust the plan quickly and nimbly as needed.
- Hold staff accountable for providing the standard of care and reward success.
- Ensure that leaders have a simple process to oversee pressure ulcer improvement work while also considering how it aligns with other initiatives across the organization.
- Endorse a single, standard pressure ulcer risk assessment tool for use organization-wide.
- Adopt documentation tools to prompt daily risk assessment and to encourage documentation of both findings and prevention strategies employed.
- Evaluate the clinical workflow to embed pressure ulcer surveillance into pre-existing processes to optimize efficiency. Bundle pressure ulcer prevention with other related activities.
- Set clear, unambiguous aim statements.
- Conduct small-scale tests of change on one unit, with the intention of evaluating, adjusting, and expanding to the full organization with the same optimized model.
- Conduct weekly team meetings to report weekly results, discuss barriers, and evaluate opportunities for improvement.

Clinical Workflow Infographic

ADMISSION

- Perform a risk assessment within four hours of admission, including stay in the emergency department prior to admission. The [Braden scale](#) is a popular risk assessment tool.
- Include a visual document on each admission record for the total skin assessment.

ROUTINE CARE

The fundamental components in routine care to prevent pressure ulcers include skin care, redistribution of pressure, repositioning, adequate nutrition and hydration, and patient and family education. To prevent pressure ulcers:

- Reassess pressure ulcer risk for all patients at least daily (every 24 hours).
- Reassess skin for all patients at least daily. This skin assessment can happen at any interaction with the patient, including changing the bed, helping the patient to the restroom, or repositioning the patient.
- Keep that patient's skin dry, moisturized, and clean.
- Minimize exposure of skin to moisture from sources such as perspiration, wound drainage, and excrement. If this is not possible, use absorbent underpads and ensure that skin is cleansed at the time of soiling using mild cleansing agents.
- Put supplies at the bedside for each at-risk patient if they are incontinent.
- Ensure proper nutrition and hydration. Patients who have nutritional deficiencies or are malnourished are twice as likely to develop pressure ulcers ([Thomas et al., 1996](#)).
 - o Provide patients with as much choice in their meals as possible.
 - o Turn and reposition the patient every two hours. Encourage mobility to the extent of which the patient is capable. See [Early Mobility Management APSS](#).
 - o Use lift devices or draw sheets to move patients with limited mobility.
 - o Take caution to avoid dragging or pushing into the patient's skin when moving.
- Use pillows under heels and bony prominences to redistribute pressure.
- Assess patient pain.
- Involve patient and family members in pressure ulcer prevention by providing an overview of the patient's specific risk factors, their daily nutrition and fluid intake plan and its importance, importance of movement and repositioning, and the importance of keeping the patient's skin dry. Walk through and discuss factsheets, such as the ["What you need to know about pressure ulcers"](#) fact sheet.
- Teach family members to participate in turning and repositioning as appropriate. See ["Education for Patients and Family Members"](#) section.

If a pressure ulcer develops:

- Obtain a consult with the wound care nurse or team.
- Classify the pressure ulcer using tools such as the [National Pressure Ulcer Staging System \(US\)](#) or the [International NPUAP/EPUAP Pressure Ulcer Classification System](#).
- Select the appropriate dressing. See page 43 of the [NPUAP/EPUAP/PPPIA guidelines](#) for selection instructions.
- Cleanse the ulcer with a nontoxic solution, such as normal saline, at every dressing change. Cleanse the surrounding area.
- For every dressing change, evaluate the need for a change in treatment.
- Document all results of the wound assessment, including location, category/stage, size, tissue type, color(s), wound edges, condition of skin around the wound, and odor.
- Assess patient pain.
- Remain vigilant for pressure ulcer-related infection. See page 41 of the [NPUAP/EPUAP/PPPIA guidelines](#) for instructions to prevent and treat infection.
- Consider possible alleviations, including physical therapy, muscle relaxants, pressure redistributing devices, negative pressure wound therapy, debridement, and dressings, such as alginate dressings, hydrocolloid dressings, foams, and/or gels.

DISCHARGE

- Spend time with the patient and family members in the days leading up to discharge to ensure all understand the importance of pressure ulcer prevention, daily steps to prevent pressure ulcers, and the patient-specific risk factors.
- Devise a 'schedule' of steps that the patient should perform daily to prevent pressure ulcers.
- Attempt to understand any barriers the patient and family members may have in pressure ulcer prophylaxis and discuss strategies to overcome those barriers, taking the patient's individual circumstance into account.

Performance Improvement Plan

Follow this checklist if the leadership team has determined that a performance improvement project is necessary:

- **Gather the right project team.** Be sure to involve the right people on the team. You'll want two teams: an oversight team that is broad in scope, has 10-15 members, and includes the executive sponsor to validate outcomes, remove barriers, and facilitate spread. The actual project team consists of 5-7 representatives who are most impacted by the process. Whether a discipline should be on the advisory team or the project team depends upon the needs of the organization. Patients and family members should be involved in all improvement projects, as there are many ways they can contribute to safer care.

Complete this Lean Improvement Activity: Conduct a [SIPOC](#) analysis to understand current state and scope of the problem. A SIPOC is a lean improvement tool that helps leaders to carefully consider everyone who may be touched by a process, and therefore, should have input on future process design.



RECOMMENDED PRESSURE ULCER IMPROVEMENT TEAM

- | | |
|--|--|
| <ul style="list-style-type: none">• Emergency department nurses• Quality and safety specialists• Physicians• Nurses• Physical therapists• Occupational therapists• Care coordinators | <ul style="list-style-type: none">• Social workers• Nursing assistants• Dieticians• Nurse educators• Materials management members• Admitting and registration staff• Wound care nurses |
|--|--|

Table 1: Understanding the necessary disciplines for a pressure ulcer improvement team

- **Understand what is currently happening and why.** Reviewing objective data and trends is a good place to start to understand the current state, and teams should spend a good amount of time analyzing data (and validating the sources), but the most important action here is to go to the point of care and observe. Even if team members work in the area daily, examining existing processes from every angle is generally an eye-opening experience. The team should ask questions of the frontline during the observations that allow them to understand each step in the process and identify the people, supplies, or other resources are needed to improve patient outcomes.

Create a [process map](#) once the workflows are well understood that illustrates each step and the best practice gaps the team has identified (IHI, 2015). Brainstorm with the advisory team to understand why the gaps exist, using whichever [root cause analysis tool](#) your organization is accustomed to (IHI, 2019). Review the map with the advisory team and invite the frontline to validate accuracy.



PRESSURE ULCER PROCESSES TO CONSIDER ASSESSING

- | | |
|--|---|
| <ul style="list-style-type: none">• Diet and fluid intake assessment• Pressure ulcer assessment upon admission• Pressure ulcer reassessment during routine care• Use of pressure redistribution devices | <ul style="list-style-type: none">• Skin inspection• Moisturizing processes• Repositioning• Mobility |
|--|---|

Table 2: Consider assessing these processes to understand where the barriers contributing to pressure ulcers may be in your organization

- **Prioritize the gaps to be addressed and develop an action plan.** Consider the cost effectiveness, time, potential outcomes, and realistic possibilities of each gap identified. Determine which are a priority for the organization to focus on. Be sure that the advisory team supports moving forward with the project plan so they can continue to remove barriers. Design an experiment to be trialed in one small area for a short period of time and create an action plan for implementation.

The action plan should include the following:



- Assess the ability of the culture to change and adopt appropriate strategies
- Revise policies and procedures
- Redesign forms and electronic record pages
- Clarify patient and family education sources and content
- Create a plan for changing documentation forms and systems
- Develop the communication plan
- Design the education plan
- Clarify how and when people will be held accountable

TYPICAL GAPS IDENTIFIED IN PRESSURE ULCER PREVENTION

- | | |
|--|---|
| <ul style="list-style-type: none"> • Neglect to bundle pressure ulcers into routine nursing care • Sustaining the momentum over time, especially when the key initiative leader leaves the organization • Vague or ambiguous aim statements and goals | <ul style="list-style-type: none"> • Lack of patient and family education, especially upon discharge • Lack of bedside-ready supplies for immediate cleansing when needed |
|--|---|

Table 3: By identifying the gaps in pressure ulcer prevention and compliance, organizations can tailor their project improvement efforts more effectively

- **Evaluate outcomes, celebrate wins, and adjust the plan when necessary.** Measure both process and outcome metrics. Outcome metrics include the rates outlined in the leadership checklist. Process metrics will depend upon the workflow you are trying to improve and are generally expressed in terms of compliance with workflow changes. Compare your outcomes against other related metrics your organization is tracking. Routinely review all metrics and trends with both the advisory and project teams and discuss what is going well and what is not. Identify barriers to completion of action plans, and adjust the plan if necessary. Once you have the desired outcomes in the trial area, consider spreading to other areas ([IHI, 2006](#)).

It is important to be nimble and move quickly to keep team momentum going, and so that people can see the results of their labor. At the same time, don't move so quickly that you don't consider the larger, organizational ramifications of a change in your plan. Be sure to have a good understanding of the other, similar improvement projects that are taking place so that your efforts are not duplicated or inefficient.

[Read this paper](#) from the Institute for Healthcare Improvement to understand how small local steps can integrate into larger, system changes



PRESSURE ULCER COMPARATIVE OUTCOMES

- | | |
|--|--|
| <ul style="list-style-type: none"> • Cellulitis prevalence • Necrotizing fasciitis prevalence • Bone infection prevalence • Joint infection prevalence | <ul style="list-style-type: none"> • Nursing time spent at the bedside • Readmission • Length of stay • Patient mobility |
|--|--|

Table 4: Consider evaluating related metrics to better understand pressure ulcer presence and contributing factors

What We Know About Pressure Ulcers

Pressure ulcers are defined as damage to the skin and underlying tissues caused by pressure, shear, excessive moisture, or friction. Pressure ulcers impact 3-14% of inpatients and up to 70% of older hospitalized adults ([Grey et al., 2006](#)). Severe pressure ulcers can cause pain, infection, contribute to longer hospital stays, and compromise the estimated recovery trajectory.

Florence Nightingale in 1859 wrote, "If he has a bedsore, it's generally not the fault of the disease, but of the nursing" ([Nightingale F. Notes on nursing, 1859, p. 8](#)).



Clinical and Financial Implications

With 2.5 million patients affected by hospital-acquired pressure ulcers each year, the annual cost in the US ranges from \$9.1-11.6 billion. Per patient, this cost can range from \$20,900 to \$151,700 per pressure ulcer. It is estimated that hospital-acquired pressure ulcers added \$43,180 to hospital stay costs. Still, despite these significant costs, approximately 60,000 patients die as a direct result of pressure ulcers annually ([Agency for Healthcare Research and Quality, 2014](#)).

Depending on the grade rating of the pressure ulcer (see the [NHS Pressure Ulcer Grading Chart](#)), in the UK, the approximate cost of healing a pressure ulcer can range from £1,064 (grade 1) to £10,551 (grade 4) ([Bennett et al., 2004](#)). Due to the increase in healing time and the increased likelihood of complications, pressure ulcers of a higher grade cost more to treat. Overall, in one year, the NHS spent £1.4-£2.1 billion for pressure ulcer care ([Bennett et al., 2004](#)).

Patients with pressure ulcers are at risk for further complications including cellulitis, blood poisoning and sepsis, bone and joint infection, necrotizing fasciitis, and/or gas gangrene ([Health Service Executive, 2011](#)). If pressure ulcers remain untreated, and if these complications develop, the patient can face severe consequences:

- Cellulitis occurs in about about 2 in every 1,000 individuals annually.
 - The overall worldwide mortality rate was 1.1% ([Gunderson et al., 2018](#)).
 - Cellulitis itself can be treated very easily. However, neglect of early treatment can cause cellulitis to develop into chronic illnesses and other skin disorders, including extensive tissue damage, tissue death, or sepsis ([John Hopkins Medicine, 2020](#)).
- Blood poisoning and sepsis claimed 11 million lives in 2017 alone ([Rettner, 2020](#)). See [Early Recognition and Treatment of Sepsis APSS](#).
- Osteomyelitis, or infection in the bone, affects 2 out of every 10,000 individuals ([Cleveland Clinic, 2017](#))
 - The overall incidence of osteomyelitis in the US is largely unknown, however, approximations determine it to be as high as one in 675 US hospital admissions each year, or about 50,000 cases annually ([Momodu II et al., 2019](#)).
- Necrotizing fasciitis, also known as 'flesh-eating bacteria', can cause rapid tissue death and even with treatment, 1 in 3 people die from the infection ([CDC, 2019](#)).
- Each year, the US has approximately 1000 cases of gas gangrene per year ([Buboltz et al., 2020](#)).

In short, it has been shown that treating pressure ulcers is 2.5 times more expensive than their prevention ([Oot-Giromini et al., 1989](#)).

Populations At Risk

There have been more than 100 risk factors identified in the literature, ranging from chronic conditions, to age, to health habits ([Lyder et al., 2008](#)). While it is important to acknowledge the risk factors of each individual, pressure ulcer precautions should be embedded in the clinical routine workflow for all patients.

Pressure ulcers are often first identified by sight. **It is important to recognize that pressure ulcers may present differently on individuals with various ethnic backgrounds. Do not discount a potential pressure ulcer sighting because it doesn't look exactly as it looked on another patient.** Investigate further if a pressure ulcer is suspected.

Immobility and limited activity are common causes of pressure ulcers, lending to the importance of early mobility management for inpatients (See [Early Mobility Management APSS](#)). Other risk factors include:

- Acute illness
- Age
- Chronic disease
- Spinal cord injury
- Arthritis
- Sensory impairment
- Certain medications
 - Drug-induced pressure ulcer (DIPU), a newly recognized adverse drug reaction, was detected in four of 148 elderly patients with pressure ulcers being treated with olanzapine, fluvoxamine, valproic acid, clonazepam, triazolam, rilmazafone, administered to manage the patients' psychological symptoms associated with dementia ([Mizokami et al., 2016](#), [Hayashi et al., 2018](#)). The research in this area is fairly nascent but is worth consideration. In summary, any medication which confines a patient to their bed should warrant higher prophylaxis for pressure ulcers.

- Vascular disease
- History of smoking
- Malnutrition/dehydration
- Anemia

Pressure Ulcer Risk Assessment and Classification

Commonly used risk assessment scales include the Braden scale and the Norton scale. The [Braden scale](#) is designed for an adult population and consists of six subscales including sensory perception, moisture, activity, mobility nutrition, and friction/shear. The [Norton Scale](#) consists of five subscales, including physical condition, mental condition, activity, mobility, and incontinence.

There are typically four stages of pressure ulcer classification, based on clinical presentation. The below table summarizes the classification in the "[National Pressure Ulcer Staging System](#)". See "[Stages of Pressure Ulcers](#)" for more details.

It is worth noting that in stages 3 or 4, the patient may not have pain, due to the significant tissue damage.

STAGE	DEFINITION AND PRESENTATION
Stage I	<ul style="list-style-type: none"> • Area is painful, firm, soft, and warmer or cooler in comparison to surrounding tissue. • Detection may be more difficult on darker skin tones.
Stage II	<ul style="list-style-type: none"> • Shiny or dry presentation. Wound may be red or pink without slough.
Stage III	<ul style="list-style-type: none"> • The depth will vary by location on the body depending on the amount of subcutaneous tissue. Wounds classified as stage III can be relatively deep in areas with significant adiposity while in areas with little adiposity, this classification can be applied even if the wound is shallow. • Presents as full thickness tissue loss with possible visibility of subcutaneous fat.
Stage IV	<ul style="list-style-type: none"> • Presents as full thickness tissue loss with exposed bone, tendon, and/or muscle. As in stage III, depth warranting a stage IV classification depends on anatomical area.

Resources



For pressure ulcer improvement:

- [NHS: Pressure Ulcer Grading Chart](#)
- [National Pressure Ulcer Staging System](#)
- [The American Geriatrics Society: Under Pressure: Financial Effect of the Hospital-Acquired Conditions Initiative](#)
- [The American Journal of Surgery: High Cost of Stage IV Pressure Ulcers](#)
- [International Journal of Nursing Studies: The Cost of Prevention and Treatment of Pressure Ulcers : A Systematic Review](#)
- [NICE: Pressure Ulcers](#)
- [The New England Journal of Medicine: Pressure Ulcers Among the Elderly](#)
- [Preventing Pressure Ulcers: A Systematic Review](#)
- [Journal of Clinical Nursing: Incidence of Pressure Ulcers Due to Surgery](#)
- [Nutrition in Clinical Practice: Nutrition Management of Pressure Ulcers](#)
- [Joint Commission National Patient Safety Goals](#)
- [National Quality Forum Pressure Ulcer Framework](#)
- [IHI: What You Need to Know About Pressure Ulcers: Patient and Family Member Fact Sheet](#)
- [NPUAP/EPUAP/PPPIA: Prevention and Treatment of Pressure Ulcers: Quick Reference Guide](#)

For general improvement:

- [CMS: Hospital Improvement Innovation Networks](#)
- [IHI: A Framework for the Spread of Innovation](#)
- [The Joint Commission: Leaders Facilitating Change Workshop](#)
- [IHI: Quality Improvement Essentials Toolkit](#)
- [SIPOC Example and Template for Download](#)
- [SIPOC Description and Example](#)

Education for Patients and Family Members

Indicate what to watch out for. Pressure ulcers are more prevalent in elderly people who have had hip fracture surgery or other orthopaedic problems. Immobility and limited activities, such as being confined to the bed or a chair, are examples of major risk factors for pressure ulcers. Family members should assess patients for pressure ulcers daily. Indications of pressure ulcers can range from mild reddening of the skin to severe tissue damage and infections of the muscles and bones ([Alberta, 2019](#)).

The four main factors that contribute to the development of pressure ulcers should be explained to the patient and family member:

- **Pressure:** Sustained high amounts of pressure may lead to decreased capillary blood flow, occlusion of blood and lymphatic vessels, and tissue ischaemia. This may result in the deterioration of the skin and underlying tissue and muscle.
- **Shear:** Sheer force is generated by the motion of bone and subcutaneous tissue relative to the skin. Specifically in elderly patients, a reduced amount of elastin in the skin may increase the adverse effects of shear.
- **Friction:** Frictional forces may lead to superficial skin erosions, initiating or accelerating pressure ulceration.
- **Moisture:** An excessively moist environment (could be caused by perspiration, urinary incontinence or excessive wound drainage) could increase effects of pressure, friction, and shear.

Instead of employing a directive conversation style, an active, engaging conversation should take place, leaving capacity for questions and repeat-back strategies. When patients and family members understand the signs and symptoms that could be indicative of a problem, they are able to serve as an extra set of eyes in order to elevate this concern as early as possible.

Describe what can be anticipated. There are four stages of pressure ulcers. Stage 1 includes reddening or discoloration of the skin and unopened wounds. During stage 2, the skin wears away and forms an open wound known as an ulcer. This may feel tender and painful, and has the potential to expand to deeper layers of the skin. In Stage 3, the sore worsens and forms a deeper crater. This eventually leads to stage 4, where the sore continues to deepen, reaching into the muscles and bones and causing extensive damages. Family members are encouraged to assess patients for developing pressure ulcers, and should notify medical staff if they suspect any form of discoloration or abnormalities on the skin.

By engaging in these conversations before a problem arises, family members can be prepared in the circumstance of necessary treatment and will have an understanding of where to go to find out more information about their loved one's condition.

Explain what is expected of them during their care. Family members are encouraged to motivate patients to get out of bed and exercise only if they are able to. Family members should also have conversations with the primary physician about treatment plans and therapies, such as negative pressure wound therapy. This form of therapy is used for a variety of wounds, including pressure ulcers, and is aimed to assist in healing and reducing the surface area of the wound by removing wound exudate.

Family members should also be aware of the complications of additional diseases caused by pressure ulcers, such as:

- Cellulitis
- Necrotizing fasciitis
- Bone infection
- Joint infection

By giving patients and family members a "job" while they are in the hospital, they can be immersed fully in the routine care, can hold other team members accountable, can feel more confident voicing their concerns or opinions, and can serve as an extra set of informed and vigilant eyes to optimize pressure ulcer prophylaxis. This team involvement can also reduce their anxiety by transforming concern into proactive action.

Patients and family members can:

- Engage in conversations around current potential health conditions
- Ask for clarification of pressure ulcer prophylaxis standards
- Ask to change the patient's position or cushion/mattress
- Monitor temperature and speak up if there are any abnormalities
- Encourage the patient to stop smoking
- Monitor for hand hygiene in all healthcare providers and visitors
- Ensure that people do not touch the wound if unnecessary. If necessary, ensure that they have performed proper hand hygiene
- Ask healthcare staff if they noticed any signs of pressure ulcers during their assessment

Explore next steps. Planning for life after the hospital, whether in assisted living, returning home, or another option, should begin as early as possible between the healthcare providers and the patient and family. Alternative treatments should also be considered.

- If the patient is a smoker, the healthcare team should encourage smoking cessation and provide additional resources for further information, groups, or strategies for smoking cessation.
 - Try to understand what specific barriers that patient as an individual faces in cessation.
- Describe the organization's safety standards that were followed.
 - If any of the protocols changed due to this specific patient's circumstance, articulate that to the patient and

family members.

- Have a discussion with the patient and family around end of life care and advanced directives.
 - Make an attempt to thoroughly understand the religious or cultural nuances in any of the patient's or family members' decisions or questions.
- Ensure thorough explanation of necessary post-discharge appointments, therapies, medications, and potential complications.
 - Assess for patient preference in time and location of follow-up appointments, if possible.
- Provide patients and family members resources, including direct contact phone numbers, to the hospital for post-discharge questions.
 - Make sure the resources are in their own language.
- Provide thorough instructions to the patient and family members in the days leading up to discharge regarding wound care and recovery after discharge (What you should know, 2020).
 - If wound care is required after discharge, set aside time with the patient and family member more than once to ensure their understanding and confidence.
- Devise a plan with the patient and family members for pressure ulcer prophylaxis post-discharge.

Patients and family members should understand that, although all clinicians in the hospital do their best, no one is ultimately coordinating their care. Patients and family members should understand that they are the managers of their care and as such, should demand to be an active part of the care team including conversations and decisions.

Measuring Outcomes

Process metrics: Percent of patients receiving pressure ulcer admission assessment, percent of at-risk patients receiving full pressure ulcer preventive care, percent of patients receiving daily pressure ulcer risk assessment

Outcome metrics: Pressure ulcer prevalence

Endnotes

Conflicts of Interest Disclosure

The Patient Safety Movement Foundation partners with as many stakeholders as possible to focus on how to address patient safety challenges. The recommendations in the APSS are developed by workgroups that may include patient safety experts, healthcare technology professionals, hospital leaders, patient advocates, and medical technology industry volunteers. Workgroup members are required to disclose any potential conflicts of interest.

Workgroup Members

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