Pressure Ulcers: New Staging, Reporting, and Risk Reduction Strategies

ABSTRACT

The 2007 National Pressure Ulcer Advisory Panel (NPUAP) updated pressure ulcer staging, following a lengthy synthesis of current literature review and expert opinion, adding two stages to create a total of six pressure ulcer stages. The goal of this revision was to increase the number of correctly staged pressure ulcers. In June 2008, the Pennsylvania Patient Safety Authority incorporated this change in its reporting system for skin integrity/pressure ulcer stages. When a facility reports a pressure ulcer event through PA-PSRS, the two additional staging options appear in the event detail questions. These stages include Suspected Deep Tissue Injury (SDTI) and Unstageable (see Table 1 for definitions of these and other stages).

An SDTI indicates a localized discolored area of intact skin or a blood-filled blister. Compared to surrounding tissue, the area may be firm, boggy, warm, cool, or painful. An SDTI may be difficult to detect in patients with dark skin tones, so accurate assessment skills are critical. An SDTI may manifest as a thin blood-filled blister over a dark wound bed evolving into a thin eschar layer (see Figure). Though optimal treatment may be instituted, the evolution of an SDTI may be rapid, exposing additional layers of tissue. The Unstageable category is defined as full-thickness tissue loss with slough (yellow, tan, gray, green, or brown) and/or eschar (tan, brown, or black) in the bed of the wound. The true depth of the wound cannot be established until enough slough and/or eschar is removed to expose the wound base.

In 2007, nearly 13% of all pressure ulcers reported through PA-PSRS were categorized as Stage III or IV; more than 26% of the total reports did not include any pressure ulcer staging information. The admission diagnosis and documentation of Stage III or IV pressure ulcers are essential to overall pressure ulcer identification, care, and ultimately, reduction. Risk reduction strategies include pressure ulcer protocol development, implementation, consistent documentation, and communication systems that extend along the entire continuum of care. (Pa Patient Saf Advis 2008 Dec;5[4]:118-21.)

Table 1. PA-PSRS Definitions—Skin Integrity Stages

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<th>Stage</th>
<th>Description</th>
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<tr>
<td>STAGE I</td>
<td>A reddened area on the skin that, when pressed, is “nonblanchable” (does not turn white). This indicates that a pressure ulcer is starting to develop.</td>
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<td>STAGE II</td>
<td>The skin blisters or forms an open sore. The area around the sore may be red and irritated.</td>
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<td>STAGE III</td>
<td>The skin breakdown now looks like a crater where there is damage to the tissue below the skin.</td>
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<tr>
<td>STAGE IV</td>
<td>The pressure ulcer has become so deep that there is damage to the muscle and bone, and sometimes tendons and joints.</td>
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<tr>
<td>UNSTAGEABLE</td>
<td>Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.</td>
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June 2004 to December 2005 reports data discussed in the September 2006 issue of the Patient Safety Advisory. Clearly defined pressure ulcer reporting criteria includes pressure ulcer assessment, documentation, and precise ulcer staging. The implementation of an effective pressure ulcer protocol allows facilities to accurately detect, assess, and treat existing ulcers; track care interventions; monitor ulcer changes; identify patients at risk; reduce risks of further skin injury; and improve patient safety by consistent and routine monitoring of skin integrity. The ultimate goal is to decrease the overall rate of hospital-acquired pressure ulcers.

The number of PA-PSRS pressure ulcer reports that lack staging information, coupled with the new SDTI and Unstageable stages and the cost to treat these pressure ulcers add resource burdens to healthcare facilities. Facilities are obliged to provide education to all clinicians conducting skin assessments as to the pressure ulcer stages and documentation requirements. Physicians must be involved in the prevention of pressure ulcers and in the documentation of skin assessments upon patient admission so that pressure ulcers that are present on admission are not mistaken for hospital-acquired pressure ulcers.

Facilities may consider the development of a multidisciplinary pressure ulcer prevention taskforce composed of wound ostomy and continence nurses, physicians, nurses, dietitians, physical therapists, and any departments involved with pressure ulcer prevention such as patient transport. Typically, the pressure ulcer taskforce develops a hospitalwide standard of care with protocols in risk assessment, documentation, and communication systems that extend along the entire continuum of care in pressure ulcer prevention. The hospital’s portal of entry, the emergency department, where initial admission skin assessment occurs, is now vitally important as identifying Stage III and IV pressure ulcer existence.

Risk Reduction Strategies

The following risk reduction strategies based on NPUAP practice standards, expert opinion, and case series where published supporting data are unavailable, may be considered when facilities develop or update pressure ulcer protocols, documentation, and communication systems to include SDTI and Unstageable skin integrity stages.

Assess/Reassess

Conduct pressure ulcer admission assessments, and document findings using a standard and age-appropriate risk scale that includes assessment for patients at high risk for pressure ulcer formation (e.g., Braden Scale). High-risk patients may include those who are bedridden or those who have comorbid conditions such as poor circulation, poor nutrition, incontinence, obesity, and dry skin. Use a standard reassessment tool to reassess daily a patient’s pressure ulcer risk, as condition changes indicate, and with transfers to the next level of care. Perform daily skin inspections, including skin temperature, turgor, color,
moisture, and integrity status. Pay close attention to bony prominences, particularly the sacrum and heels, as these are the most common adult pressure ulcer locations. Check the skin beneath tubes and other potential pressure ulcer-causing devices. Frequency of pressure ulcer reassessment may vary according to the healthcare setting (e.g., homecare, long-term care).6,10,11

Position

Turn or reposition patients at least every two hours or more often for those with fragile skin or with little subcutaneous fat to minimize pressure. Use lift devices or heel-protector devices to assist in turning, repositioning, lifting, or transferring patients to prevent friction or shearing forces, which may contribute to skin integrity issues. Evaluate the facility’s support surfaces such as mattresses (including those in the operating room suites), pillows, and chair cushions to ensure that pressure-relieving surfaces are used. Establish and maintain par-levels for skin care devices and products in each patient care area to ensure that resources are available to healthcare providers to deliver consistent pressure ulcer prevention.3,6,11

Monitor

Assess and monitor patient’s calorie intake, and notify the prescriber or dietitian if the patient has an unintentional weight loss, as this and poor nutrition often contribute to pressure ulcer risk. A comprehensive nutritional assessment addressing risk factors, protein intake, hydration, caloric needs, vitamins, and minerals is essential to pressure ulcer prevention. Monitor laboratory levels, including serum albumin and prealbumin levels. Vitamin or dietary supplementation may be indicated for nutritionally compromised patients.6,10,11

Protect

Protect patient’s skin from excessive moisture and dryness due to incontinence, perspiration, or wound drainage. Standardize product use by the development of a skin product formulary. Only use products that wick moisture away from the body.6,10

Educate

Provide pressure ulcer prevention education about assessments, protocols, documentation, and communication systems to all levels of healthcare providers. Provide prompt communication of modifications or additions to skin protocols or products to all healthcare providers.6,10

Notes

The following questions about this article may be useful for internal education and assessment. You may use the following examples or come up with your own.

1. Risk reduction strategies to prevent overall pressure ulcer development include which of the following?
   a. Development of interdisciplinary pressure ulcer prevention taskforce
   b. Use of pressure-relieving patient support surfaces
   c. Consistent documentation of skin assessments
   d. Communication systems that extend along the entire continuum of care
   e. All of the above

2. All of the following are clinical manifestations of Suspected Deep Tissue Injury (SDTI) EXCEPT:
   a. The skin involved has a localized discolored area of intact skin.
   b. The skin involved is painful.
   c. The skin involved is mushy or boggy to touch.
   d. The wound depth is clearly visualized.

3. The components of the treatment plan in which SDTI is diagnosed include all of the following EXCEPT:
   a. Comprehensive nutritional assessment with vitamin and mineral supplementations that address protein intake, hydration, and caloric needs
   b. Regular monitoring of serum albumin and prealbumin levels
   c. Regular skin reassessments for skin integrity changes that include skin temperature, turgor, color, and moisture
   d. Initiate treatment when the SDTI progresses to a Stage III pressure ulcer

4. Physicians or qualified healthcare practitioners identifying patients with existing Unstageable pressure ulcers being admitted to the hospital must document detailed and accurate skin assessments and indicate the presence and staging in the admitting diagnosis.
   a. True
   b. False

5. A patient's admission skin assessment indicates that the patient is a 72-year-old man admitted with a hip fracture, congestive heart failure, and malnutrition. Previous medical history includes a cerebrovascular accident and hypertension.
   Which factors may lead to hospital-acquired pressure ulcer formation for this patient?
   I. Lack of lift devices for patient transfer assistance
   II. Use of occlusive dressing over bony prominences
   III. Lack of skin protection from tubes or lines
   IV. Inconsistent skin reassessments
   a. all of the above
   b. all but I
   c. all but II
   d. all but III
   e. all but IV