Implementation Guide for Pressure Ulcers

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1. Introduction

This implementation guide was created to support the Partnership for Patients, a national initiative sponsored by the Department of Health and Human Services to reduce harm in health care facilities. Military Health System leadership has pledged its support to the PfP, and has made a commitment to specific, identified aims. Improving the quality and safety of health care in all Department of Defense facilities will only be possible with universal support at every level in the MHS.

This guide is one of 10 harm-specific guides designed to assist you as you implement identified evidence-based practices to improve patient care. Common to all guides are resources that support efforts to educate the health care team by providing MHS-selected EBPs and quality improvement strategies.

In addition, implementation strategies and tools relevant to all harm categories are included in a guide titled “Practical Applications for Process Improvement and Change Management.” This guide supports efforts to equip the health care team with rapid-cycle process improvement methods and engage the health care team through the use of change management strategies.

2. Pressure Ulcer Prevention Evidence-Based Practices

2.1 Background Information

According to the National Pressure Ulcer Advisory Panel, a pressure ulcer is defined as a localized injury to the skin and/or underlying tissue, usually over a bony prominence, as a result of pressure or pressure in combination with shear and/or friction. To review the NPUAP definition and stages of pressure ulcers, visit: [http://www.npuap.org/pr2.htm](http://www.npuap.org/pr2.htm).

### Pressure Ulcer Burden of Illness

Pressure ulcers:

- Were reported as the cause of approximately 10,000 deaths annually (1990 to 2001).
- Accounted for 503,300 hospital stays in 2006, a 78.9 percent increase from 1993.
- Are present in 15 percent of patients in acute care facilities.
- Cost as much as $70,000 for management of a single full-thickness pressure ulcer.
- Burden the U.S. health care system with an estimated $11 billion per year for treatment of 2.5 million patients in acute-care facilities.
- Are avoidable in some, but not all cases.

**Sources:**
Pressure ulcers, also called decubitus ulcers, pressure sores and bedsores, cause considerable harm to patients, hindering functional recovery, frequently causing pain and the development of serious, occasionally fatal infections. Because muscle and subcutaneous tissue are more prone to pressure injury than skin, pressure ulcers are often worse than they appear. They are classified according to the degree of damage observed, from Stage I (intact skin with non-blanchable redness) to Stage IV (full thickness tissue loss) and can develop within 24 hours of skin injury or appear as late as five days post-injury.

2.2 Risk Factors

The Institute for Healthcare Improvement cites multiple factors that place patients at risk for the development of pressure ulcers:

- Advanced age
- Immobility
- Inadequate nutrition
- Sensory deficiency
- Device-related pressure
- Multiple co-morbidities
- Circulatory abnormalities
- Dehydration
- Incontinence

Several of these factors can be mitigated through early identification and implementation of EBPs. The Braden Scale for Predicting Pressure Ulcer Risk is a widely used standardized risk assessment tool.

2.3 Evidence-Based Practice Guidelines

To reduce the prevalence of pressure ulcers, the IHI describes six essential elements of pressure ulcer prevention. The MHS has selected these elements and associated EBPs to be implemented in all Military Treatment Facilities:
### Evidence-Based Practice Guidelines for Pressure Ulcer Prevention

1. **Conduct a pressure ulcer assessment (risk and skin) at admission for all patients**
   - a. Ensure that risk assessment is conducted on admission
   - b. Include a visual cue on admission documentation for completion of risk and skin assessments
   - c. Use a standard risk assessment tool (Braden scale)
   - d. Use methods to visually cue staff regarding patients at risk

2. **Reassess risk for all patients daily**
   - a. Adapt daily documentation tools to prompt daily risk assessment
   - b. Educate staff on risk factors and process for implementing prevention strategies
   - c. Use validated risk assessment tool

3. **Inspect skin daily**
   - a. Adapt daily documentation tools to prompt daily skin inspection, documentation of findings and initiation of prevention strategies
   - b. Ensure that staff inspect the skin any time they are assisting the patient

4. **Manage moisture**
   - a. Institute a pressure ulcer prevention protocol
   - b. Provide bedside supplies for incontinent patients
   - c. Provide moisture-wicking underpads
   - d. Provide pre-moistened, disposable barrier wipes

5. **Optimize nutrition and hydration**
   - a. Assist patients with meals, snacks and hydration allowing for personal preferences
   - b. Document nutritional intake; notify dietician or physician if inadequate
   - c. Offer water to every patient who is scheduled to be turned

6. **Minimize pressure**
   - a. Use tools to remind caregivers to turn/reposition every two hours
   - b. Use positioning, transferring and turning techniques
   - c. Use pressure-redistribution surfaces (mattresses, beds, cushions)

**Source:**
2.4 MHS Pressure Ulcer Performance Measures

In order to collect and interpret data that documents success in reducing the incidence of pressure ulcers, it is imperative that process and outcome measures be utilized. The MHS has committed to using the measures listed on the next page.

<table>
<thead>
<tr>
<th>Description</th>
<th>Data Source</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation / check list for bundle compliance</td>
<td>Essentris</td>
<td>Process Measure</td>
</tr>
</tbody>
</table>
| **Numerator:** Patients with skin assessment completed on admission and every 24 hours during hospitalization  
**Denominator:** Hospitalized patients | Essentris | Process Measure |
| **Numerator:** Discharges (medical and surgical discharges age 18 and older) among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM code of pressure ulcer in any secondary diagnosis field and ICD-9-CM code of pressure ulcer stage III or IV (or unstagable) in any secondary diagnosis field.  
**Modification** – hemiplegia, paraplegia, quadriplegia and transfers are included in measure  
**Denominator:** All medical and surgical discharges age 18 and older defined by specific DRGs or MS-DRGs. | MHS PSP PSI-3 modified | Outcome Measure |
3. References


4. **Appendix**

Attachment A: Pressure Ulcer Prevention EBP Compliance Form

**Pressure Ulcer Prevention – EBP Compliance**

Objective: To document compliance with MHS Pressure Ulcer Prevention EBPs.

<table>
<thead>
<tr>
<th>Pressure Ulcer EBP Compliance Checklist</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Identified Barriers/Plans to Overcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Conduct a pressure ulcer assessment (risk and skin) at admission for all patients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Was a pressure ulcer documented within four hours of admission?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Did a standardized risk assessment tool indicate that the patient was at risk?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. If yes, was pressure ulcer prevention protocol initiated?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Reassess risk for all patients daily</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Was a standardized tool used daily to document a risk assessment?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. If patient was identified at risk, was pressure ulcer prevention protocol initiated?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Inspect skin daily</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Was a daily “head to toe” skin inspection documented?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. If signs of skin breakdown:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Is a full description (location, length, width, depth, stage) of each wound documented?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Is there documentation that the provider was notified?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii. Was pressure ulcer prevention protocol initiated?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. Is there an odor detected?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Manage moisture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Was skin cleaned promptly after soiling with a mild cleansing agent?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Was a topical barrier and skin moisturizer used?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Were absorbent, moisture-wicking underpads placed on the bed?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Was the patient offered frequent toileting opportunities?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5. Optimize nutrition and hydration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Was assistance with meals, snacks and hydration provided?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. If nutritional supplements were ordered, were they offered?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Is nutritional and fluid intake documented?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. If nutritional and/or fluid intake inadequate, was dietician or physician notified?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 6. Minimize pressure

<table>
<thead>
<tr>
<th>a. If unable to position self:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Was the patient turned every 2 hours?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ii. Were pillows, blankets and other cushioning devices used to protect high risk areas (bony prominences, areas of concern)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii. Were lift devices/maneuvers used to reposition patient rather than dragging?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. Was a pressure-redistributing surface used?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:**