Reducing Readmissions Related to Pressure Ulcers

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Speaker Panel

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Lynn will speak in place of Susan Ellis

Michael Wong, JD
Executive Director, Physician-Patient Alliance for Health & Safety
Agenda

- The Pressure Ulcer Problem - Lynn Razzano
- Scott Trigger - Susan Scott
- Some Pressure Ulcer Solutions - Michael Wong
The Pressure Ulcer Problem

Lynn Razzano
Pressure ulcers are known to impact general physical health, as complications and even death may occur

- Most often, pain accompanies the presence of a pressure ulcer
- Studies have actually shown that 84% of those with pressure ulcers have reported pain even while they are at rest, with some expressing their pain to be at an excruciating level.
- Many patients have reported experiencing fatigue due to sleep disruptions because of the presence of the ulcers.
- Patients experience a diminished quality of life.
Hospital-acquired pressure ulcers are a leading threat to quality, modern healthcare

• The U.S. Department of Health and Human Services reports that pressure ulcers affect more than 2.5 million U.S. patients annually, and their treatment typically prolongs a hospital stay by nearly two weeks.

• Globally, they contribute to **60,000 deaths a year**.

• Research shows that pressure ulcers cost the nation's healthcare system more than **$11 billion** each year.

Pressure Ulcers

2.5 million patients annually

- 17,000 lawsuits related to pressure ulcers annually
- Second most common claim after wrongful death and greater than falls or emotional distress
- Pressure ulcers may be associated with severe pain
- ~60,000 patients die as a direct result of a pressure ulcer each year

Patients with HAPU compared to patients without HAPU are more likely to die during their hospitalization.

Prevalence of Hospital Acquired Pressure Ulcers (HAPU) is 5% in acute care settings.

Statistics quoted in a 2010 published study “The Economic Measurement of Medical Errors” by Shreve, J. et al. June 2010 revealed the following:

- The likelihood of death during the hospital stay was **2.81 times higher**
- More likely to be readmitted within **30 days**, which further increases potential for skin pressure
- Stay in hospital longer
A community acquired pressure ulcer as defined by Joint Commission and AHRQ:

Ulcer discovered/documeneted within the first 24 hours from the time of inpatient admission; or Prevalence study was done within the first 24 hours from the time of inpatient admission and ulcer was already present.

- A Hospital-acquired pressure ulcers refer to new ulcer(s) developed after the first 24 hours from the time of inpatient admission.
- All pressure ulcers not meeting the community-acquired criteria should be designated as hospital-acquired pressure ulcers.
- An ulcer of category/stage II or greater observed after the first 24 hours from the time of inpatient admission AND for which there is no documentation in the record indicating the date of first discovery; should be considered as hospital-acquired.
Pressure ulcers (decubiti) continue to be problematic in all healthcare settings. Most pressure ulcers can be prevented, and deterioration at Stage I can be halted. The use of evidenced-based clinical practice guidelines can effectively identify residents and define early intervention for prevention of pressure ulcers.

Source: Nursing Care Center NPSG.14.01.01 Elements of Performance for NPSG.14.01.01
Pressure ulcers are one indicator of quality of care measured by nursing homes as part of the mandatory Minimum Data Set (MDS), which is required for participation in Medicare and Medicaid.
Reimbursement Penalties under CMS

- CMS identified 10 hospital/long term care-acquired conditions (HACs) for which Medicare will not cover.
- In October 2008, CMS stated that “Medicare will no longer pay hospitals at a higher rate for the increased costs of care that result when a patient is harmed during their hospital stay.
- # 4 on the list is Stage III and IV Pressure Ulcers

Source: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HRRP/Hospital-Readmission-Reduction-Program.html
**Payment Issues**

Diagnosis was present at time of inpatient admission.  
Payment is made for condition when a HAC is present.

Diagnosis was not present at time of inpatient admission.  
No payment is made for condition when a HAC is present.

Documentation insufficient to determine if condition was present at the time of inpatient admission.  
No payment is made for condition when a HAC is present.

Clinically undetermined. Provider unable to clinically determine whether the condition was present at the time of inpatient admission.  
Payment is made for condition when a HAC is present.
Are Pressure Ulcers Preventable?

- Pressure ulcers are highly preventable with proper care, monitoring, and treatment.
- Health care providers must remain vigilant in preventing their development.
- Preventing pain and discomfort is foremost; however, helping patients to avoid social and psychological effects that arise is also a factor in patient’s well-being.
- It is much easier to prevent a pressure ulcer from forming in the first place.

Prevention starts with head to toe skin assessment
The Agency for Healthcare Research and Quality (AHRQ) has identified several basic principles for pressure-ulcer prevention:

1. **Use a validated tool to assess risk**
   - The Braden Scale and Norton Scale are the most widely used risk-assessment tools. These scales score alertness, mobility, incontinence, and nutritional status. Nurses should reassess risk using one of these tools or another comparable one at regular intervals.

2. **Implement a preventive plan for residents at risk**
   - The care plan should focus on avoiding friction and shear trauma to skin regions at risk, avoiding maceration from moisture, and addressing nutrition and mobility. High-risk residents may need an individualized plan to reduce pressure, such as frequent repositioning.

3. **Inspect skin daily for high-risk residents**
   - Skin and deep-tissue damage can occur in as little as two hours. Thus, high-risk residents may need daily skin examination.
   - The 1996 AMDA clinical practice guideline on pressure ulcers highlights additional responsibilities of physicians to help prevent pressure sores.
Risk assessment tools can help you identify patients at risk of developing pressure ulcers and improve care

- Scott Triggers for pre-assessment of surgical patients
- The Braden Scale for Predicting Pressure Sore Risk and the Norton Plus Risk Assessment Scale contain subscales to help identify the areas of greatest risk.
- Patients are scored on the subscales, which include sensory perception, moisture, activity, mobility, nutrition and friction/shear.
Scott Triggers
Susan Scott
Perioperative Pressure Ulcer (Injury) Prevention:
Scott Triggers Susan M. Scott MSN, RN, WOC Nurse
Objectives

• Identify the factors that increase the risk of pressure injuries in the surgical patient.
• Discuss strategies to decrease the incidence of hospital-acquired pressure injuries in the surgical population.
Defining OR-Acquired Pressure Ulcer (Injury)

A perioperative pressure injury is any pressure-related tissue injury that presents (i.e. non-blanchable erythema, purple discoloration or blistering) within 48-72 hours postoperatively and is associated with the surgical position. Scott, 2015

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Defining OR-Acquired Pressure Injury (PIs)

48 hours post-op Coronary Artery Bypass Graft (CABG)

Slide compliments of Susan M. Scott http://www.scotttriggers.com
Do not confuse pressure injuries with other types of skin injury

1. Burns
2. Blisters/bulla from tape or third spacing
3. Medical adhesive related skin injury (MARSI)


Incidence and the Silver Tsunami

1999 Aronovitch study
- Rate 4%-45 in 1,128 subjects

2012 Chen review of 17 studies
- Rate 0.3% to 57% in 5,451 subjects
- Pooled incidence of 15%

51.4 million surgeries (CDC, 2010)

19.2 million 65 years and older

“Incidence over the past 5 years has NOT decreased but increased”

37 to 86.7 million baby boomers by 2050

NCHS 2010 National Hospital Discharge Survey
<table>
<thead>
<tr>
<th>Surgery Type</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac</td>
<td>29.5%</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>20%-55%</td>
</tr>
<tr>
<td>General/Thoracic</td>
<td>13%-29.3%</td>
</tr>
<tr>
<td>Urology</td>
<td>14.4%-17%</td>
</tr>
<tr>
<td>Vascular</td>
<td>9.8%-16%</td>
</tr>
<tr>
<td>Spine</td>
<td>12%-35.7%</td>
</tr>
<tr>
<td>Trauma</td>
<td>6.8%-38%</td>
</tr>
</tbody>
</table>

**What is the Evidence?**

### Risk
- 1. Consider additional risk factors specific to individuals undergoing surgery (C)

### Support Surface
- 2. Use a high specification mattress on the OR table for at risk individuals (B)

### Positioning
- 3. Position patient to reduce risk of PrI development during surgery (C)
- 4. Ensure that the heels are free of the surface of the operating table (C)
- 5. Position the knees in slight flexion when offloading the heels (C)

### Pressure Redistribution
- 6. Pay attention to pressure redistribution prior to and after surgery (C)

**Strength of Evidence (A,B,C)**
**Strength of Recommendations (Definitely do it)**
Review patient record and complete data in left column. Place a check in the right column if the answer is YES. If two or more YES answers are present, this may indicate an increase risk of perioperative pressure ulcers. Use Perioperative Pressure Ulcer Prevention Plan (PPUPP) of care.

<table>
<thead>
<tr>
<th>SCOTT TRIGGERS*</th>
<th>Does it meet these qualifications?</th>
<th>If YES, please check here.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age _____</td>
<td>Age 62 or Older</td>
<td></td>
</tr>
<tr>
<td>Serum Albumin ___ g/L or BMI</td>
<td>Albumin level &lt;3.5 g/L or BMI &lt;19 or &gt;40</td>
<td></td>
</tr>
<tr>
<td>ASA score (circle)</td>
<td>ASA score 3 or greater</td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated surgery time in hours/minutes_____</td>
<td>Surgery time over 3 hours or 180 minutes**</td>
<td></td>
</tr>
</tbody>
</table>

Two or more YESES = HIGH RISK SURGICAL PATIENT

Trigger System: Assess – Score - Act

- Age > 62
- Albumin < 3.5 or
- BMI < 19 or > 40
- ASA Score ≥ 3
- Time on the table ≥ 3 hr

Score 2 or more = HIGH RISK

OR SKIN BUNDLE

“Sustainability of a Hospital-Acquired Pressure Ulcer Prevention Bundle in Surgical Patients”

- 21,377 surgical patients
- Screen with Scott Triggers
  - (Age >62, Albumin <3.5, ASA ≥ 3, Surgery >3 hrs)
- 7,000 high risk (≥2 triggers)
- High Risk OR Skin Bundle

HAPU dropped from 3.37% to 0.89% (P=.004) Sustained over an 14 month period

A- Assessment of Skin and Risk

Skin Assessment on admission and per policy
Did you know...

AORN Safe Patient Handling and Movement Tool Kit

In an 8-hour shift, a nurse lifts 1.8 TONS
Types of Lateral Transfer Devices

- Two + person lift
- Roller board
- Patient Sliders
  - Board
  - Plastic
  - Sheet
- Air transfer Devices
2

Non-powered
- Foam alternative such as viscoelastic polymer foam, multi-layer

Powered
- Limited research on powered devices in the OR

QI Outcome studies:
- Mass General Study

Do not use small cell alternating air mattresses

Use a high specification table pads
323 pts. Scott (2006) Patients were eight times more likely to develop a PI on the standard vs. “New” Technology (OR pad)

Scott S. Progress and Challenges in Perioperative Pressure Ulcer Prevention. J Wound Ostomy Continence Nurs. 2015;42 (5);480-485.
Positioning

Position the patient in such a way as to reduce the risk of pressure injury development during surgery

- Supine
- Prone
- Lithotomy
- Trendelenburg
- Lateral Jack Knife

Common Surgical Positions

Supine

Lateral

Lithotomy

Prone

Trendelenburg

Photography supplied courtesy of STERIS Corporation

Photo used with permission D. A. Surgical

Http://www.dasurgical.com


Ensure that the heels are free of the surface of the operating table.

Use heel suspension devices that elevate and offload the heel completely in such a way as to distribute the weight of the leg along the calf without putting all the pressure on the Achilles tendon.

(Strength of Evidence = B)
Position the knees in slight flexion when offloading the heels.

(Strength of Evidence C)
Consider pressure redistribution prior to and after surgery. (Strength of Evidence = C)

- Place the individual on a high specification support surface both prior to and after surgery. (Strength of Evidence = C)
- Document the individual’s position and the anatomical areas under increased interface pressure during surgery (Strength of Evidence = C)
- Position the individual in a different posture preoperatively and postoperatively than the posture adopted during surgery. (Strength of Evidence = C)

The PPUPP was recognized by the American Academy of Nursing in the Raise the Voice Campaign.


- Quality Improvement
- Assessment (SWOT, 360°)
- Staff Education & Awareness
- Evidence-based practice (EBP)
- Risk Assessment
- Perioperative Nursing Care Plan (PNCP)
  - Skin Bundle, Communication, Documentation
- Universal Pressure Precautions
- Positioning Competencies
- Product selection/technology
- Interprofessional collaboration
Successful Pressure Injury Prevention Initiatives

Lyder CH, Ayello EA October 2009 annual Checkup. The CMS pressure ulcer present on admission indicator. Advances in skin and wound care 22 (10):476-84
**Action Plan**

**Administrative support backed by support at the patient care level is vital**
- Standardize High Specification Support Surfaces for all OR and procedural areas.

**Bundling care practices and having an identifiable theme**
- Scott Triggers, VA Skin Bundle

**Creating a culture of change, commitment, and communication**
- Hand off communication

**Documentation of pressure ulcer prevention practices must be visible**
- Focus on skin assessment in perioperative period

**Education is essential**
- AORN Toolkit, WOCN, NPUAP, & www.scotttriggers.com
VISN 16 HAPU Rate (Lower is better)

HAPru % (lower is better) VISN 16

VISN Average for Fy 13 for 11 months is 1.55% VISN average for FY 2012 was 2.27
32% decrease in HAPU
Severity of HAPU Stage III&IV

44% Reduction FY 12 to FY 13
Estimated Cost Avoidance of HAPU

$2.4 Million
Debra Fawcett, PhD, RN, Susan M. Scott, MSN, RN, WOCN, Deena Guren, MSN, RN, CNOR CNS-CP, Cassendra A. Munro, MSN, RN, CNOR.

Resources

- Scott Triggers Gap Analysis
- SWOT
- Action Plan examples
- Handoff communication samples
- Scott Trigger Tool
- Publications
- Webinar
- Posters
- Presentations
- PPUPP
- Resources
- Speaking Calendar
- Contact information

http://www.scotttriggers.com
### Surgeon Trigger Tool

**Current**

**Date/Time:** 11/03/2016 08:08

**At Risk Triggers**

- **Age ≥ 82 or older**
- **Serum albumin < 3.5 g/L**
- **BMI < 19 or > 40**
- **ASA score = or > 3**
- **Estimated surgery time > 3 hours**
- **2 or more risk triggers identified**

**High Risk:** Document interventions on OR Record

- **No**
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VHA Nurse retired 34 ½ yrs.

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References - Scott

• Giachetta-Ryan D. Perioperative pressure ulcers: How can they be prevented? OR Nurse,2015 July, 22-2
• Lyder CH, Ayello EA October 2009 annual Checkup. The CMS pressure ulcer present on admission indicator. Advances in skin and wound care 22 (10):476-84
Some Pressure Ulcer Solutions

Michael Wong
The National Pressure Ulcer Advisory Panel (NPUAP) defined support surface terms and definitions as part of their “Support Surface Standards Initiative”.

- This document clarified the terms closely associated with pressure, skin and support surfaces.
- Pressure reduction and pressure relief have been rephrased to pressure redistribution.
- Pressure is defined as “the force exerted over an area.”
  - To reduce pressure, you can spread the pressure over a larger area or move the pressure completely to another part of the body- thus pressure redistribution
Discussion of branded technology is meant as information only. Not intended to be, and should not be considered, an endorsement by PPAHS. Clinicians must, therefore, always check the product information and make their own professional and clinical judgment.
“Technology Free”: Egg Crate Mattress

- **Provide Joint Support** by evenly distributing the body's weight at pressure points.

- **Assist with Circulation** according to MattressGuide.com, this happens because the bumps massage the body when the body moves. The massaging action helps the blood circulate.

- **They are Waterproof** and do not allow spills are not absorbed by the mattress. (note-Fluids can become “trapped” in the sheets-creating a layer of moisture)

- They are **inexpensive and adaptable** as they can be cut to fit chairs and beds of various sizes. They’re also lightweight and portable.
Some Helpful Technologies – The M.A.P System by Wellsense

Key Features:

- Involves a special electronic sheet placed over mattress
- Has thousands of sensors that detect in real time pressure distribution of patient’s body over bed
- System sounds alarm to ensure patients turn over on regular basis
- Keeps history of pressures to ensure each patient receive continuous care over multiple shifts
Some Helpful Technologies – Leaf Healthcare Patient Wearable Technology

• Monitors and records patient position (including upright angle) and notifies staff when interventions are needed to achieve high compliance to turn protocols.

• Use of the device increased compliance with hospital turn protocols — a standard of care method to prevent pressure ulcers — from a baseline of 64% at the start of the trial to 98% after the monitoring system was deployed.
Some Helpful Technologies - The EarlySense System

EarlySense recognizes & records turns of over 30 degrees

Discrepancies in documented care serve to ensure compliance

Key Features:

- Automatic motion analysis built to assist clinicians in pinpointing patients at high risk for developing pressure ulcers
- Turn counter exceeded alerts matching various protocols (every 1, 2, 3, 6 hrs)
- Timely turn reminders to staff’s handheld devices
- Unit reports that can verify nurses’ compliance with turn protocols to assess & improve department performance
- User sites reported up to 70% reduction rates
Contact Information

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