Changing the Perception of Safety on Your Unit

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Disclosures

• Guy Fragala Ph.D., PE, CSP, CSPHP is on the Sage Speakers Panel
• Susan Salsbury BS, OTR/L, CDMS, CSPHP is on the Sage Speakers Panel
• Kathleen Vollman MSN, RN, CCNS, FCCM, FAAN is on the Sage Speakers Panel
Objectives

- Describe the patient benefits from early mobility, skin and falls prevention while ensuring the need for safe strategies to address frequent patient handling.
- Identify the inherent risk to healthcare workers from patient handling during mobility that leads to risk of injury.
- Describe guidelines, assessments, programs and products within a tool kit to provide safety for both patients and healthcare workers.
Working to Achieve Culture Change

- Evidence on the patient benefits from early mobility
- Synergy of relationships of safe patient handling, maintaining skin integrity and falls management
- Risks to care givers from activities required to achieve early mobility
- The “Culture of Safety” to change behavior
- Approaches based on patient care and outcomes
- Effective solutions and success stories
- What it means to strive for Culture of Safety
2016 is the year of a Culture of Safety

What is Culture of Safety?
Core values and behaviors resulting from a collective and sustained commitment by organizational leadership, managers and health care workers to emphasize safety over competing goals.

SAFETY 360
Taking Responsibility Together

ANA
AMERICAN NURSES ASSOCIATION
American Nurse Today

Improving outcomes for patients with spinal cord injuries

Can you recognize delirium in pediatric patients?

The crucial role of nurses in antibiotic stewardship

Focus on...

Education

Special Report:
Preventing Patient-Handling Injuries in Nurses
Patient-Handling Injuries: Risk Factors and Risk-Reduction Strategies

Learn about a multifaceted approach to safe patient handling and mobility programs.

Consenous Panel: By Guy Fragala, PhD, PE, CSP, CSPHP; Teresa Boynton, MS, OTR, CSPHP; Marlyn T. Conti, BSN, RN, MM, CPHQ; Lee Cyr, CPCU, ARM; Lynda Enos, BSN, MS, RN, COHN-S, CPE; Devon Kelly, MS, OTR/L; Nancy McGann, PT, CSPHP; Kathleen Mullen, BSN, RN, CNOR, CSPHA; Susan Salsbury, BS, OTR/L, CDMS; and Kathleen Vollman, MSN, RN, CCNS, FCCM, FAAN
Activities To Promote a Culture of Safety

- Open communication using daily in-house or unit-based huddles
- Presenting safety messages or topics at the start of all meetings
- Visible safety boards and messaging
- Rounding by senior leadership
- Coaching programs
- Promoting the message that errors provide opportunities to learn
- Improve safe patient handling and mobility (SPHM) skills.
2017: YEAR OF THE HEALTHY NURSE

- In recognition of the impact that increased nurse health, safety, and wellness has on patient outcomes, quality of care, and overall nurse satisfaction and quality of life, American Nurses Association (ANA) has designated 2017 as the “Year of the Healthy Nurse”
The Facts

• For nearly every indicator, the health of America’s nurses is worse than that of the average American.
• Nurses are more likely to be overweight, have higher levels of stress and get less than the recommended hours of sleep.
• Health care delivery requires 24/7 support, the demands of shift work exacerbate the health of nurses.
• Hazards such as workplace violence and musculoskeletal injuries are contributing factors to poorer health.
The Healthy Nurse, Healthy Nation™ Grand Challenge (HNHN GC), is a social movement designed to transform the health of the nation by improving the health of the nation's 3.6 million registered nurses. The HNHN Grand Challenge will launch in May 2017.
ANA Definition of a Health Nurse

• A nurse who actively focuses on creating and maintaining a balance and synergy of physical, intellectual, emotional, social, spiritual, personal and professional wellbeing.

• A healthy nurse lives life to the fullest capacity, across the wellness/illness continuum, as they become stronger role models, advocates, and educators, personally, for their families, their communities and work environments, and ultimately for their patients.
Healthy Work Environment-ANA

• Is one that is safe, empowering, and satisfying
• It is not merely the absence of real and perceived threats to health, but a place of “physical, mental, and social well-being,” supporting optimal health and safety.
• A culture of safety is paramount, in which all leaders, managers, health care workers, and ancillary staff have a responsibility as part of the patient centered team to perform with a sense of professionalism, accountability, transparency, involvement, efficiency, and effectiveness.
• All must be mindful of the health and safety for both the patient and the health care worker in any setting providing health care, providing a sense of safety, respect, and empowerment to and for all persons
Changing The Perception Of Safety on Your Unit: Design Ways to Reduce Patient and Staff Harm
“It may seem a strange principle to enunciate as the very first requirement in a Hospital that it should do the sick no harm.”

Florence Nightingale

Advocacy = A Safety Culture
Safety is avoiding both short- and long-term harm to people resulting from unsafe acts and preventable adverse events.

Current infrastructure “silos” safety programs, creating one for patients, another for workers, and yet another for others who may be at risk. (Quality department, Risk Management, Employee Health, SPH)

The organizational culture, principles, methods, and tools for creating safety are the same, regardless of the population whose safety is the focus.

A true culture of safety—and the organization leaders who create and sustain it—will not be considered legitimate and genuine if the culture excludes some groups within the organization.

WHAT DOES IT MEAN TO BE IN A SAFE CULTURE FOR YOU & YOUR PATIENT?
-changing the paradigm

culture of safety in health care

patient safety

healthcare worker safety

safety culture for the patient & the hcw

core organizational value
Changing the Perception of Safety on Your Unit

- Safety for the patient and healthcare worker are integrated
- Transcends individual improvement initiatives and departmental walls
- High reliable unit/organization: engaged leadership, culture of safety, organizational processes and infrastructure to support safe practices
- Implement and maintain successful worker and patient safety improvement initiatives within your unit & organization.
- Create measurements that integrate patient safety and healthcare worker safety

Castro GM. Am J SPHM, 2015;5(1)34-35
Add ANA-
Safety Culture: Patient & Caregiver
How Well Are We Doing?
Do We Even Achieve the Minimum Mobility Standard… “Q2 Hours”?
Q 2 Hour In Bed Mobility

• Body position: clinical practice vs standard\(^1\)
  – Study of 74 patients in which the change in body position was recorded every 15 minutes for an average observation time of 7.7 hours
  – 49.3% of observed time showed no body position change for >2 hrs, and 2.7% had every-2-hour demonstrable body position change

• Positioning prevalence\(^2\)
  – Prospectively recorded, 2 days, 40 ICUs in the United Kingdom
  – Average time between turns, 4.85 hours

Environmental Scan of EM Practices

- 687 randomly selected ICU’s stratified by regional density & size- 500 responded (73% response rate)
- Demographics:
  - 51% academic affiliation, mixed medical/surgical (58%) or medical (22%) with a median of 16 beds (12–24)
  - 34% dedicated PT or OT for the ICU
  - Performed a median of 6 days, 52% began on admission

Factors associated with EMP:
- Dedicated PT/OT
- Written sedation protocol
- Daily MDR
- Daily written goals

IF AT FIRST YOU DON'T SUCCEED, YOU'RE RUNNING ABOUT AVERAGE
Hospital Acquired Skin Injury

- HAPU are the 4th leading preventable medical error in the United States
- 2.5 million patients are treated annually in Acute Care
- NDNQI data base: critical care: 7% med-surg: 1-3.3%
- Acute care: 0-12%, critical care: 3.3% to 53.4% (International Guidelines)
- Most severe pressure injury: sacrum (44.8%) or the heels (24.2%)
- 60,000 persons die from pressure injury complications each yr.
- National health care cost $11 billion annually

Oh, My Aching Back!

Back Pain Incidence in Nursing:
- 8 out of 10 nurses work despite experiencing musculoskeletal pain\(^1\)
- 62% of nurses report concern regarding developing a disabling musculoskeletal injury\(^1\)
- 56% of nurses report musculoskeletal pain is made worse by their job\(^1\)
- Nursing assistants had the 2\(^{nd}\) highest and RNs had the 6\(^{th}\) highest number of musculoskeletal disorders in the U.S.\(^2\)

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Contributing Factors to Injury

• Health care is the only industry that considers 100 pounds to be a “light” weight
• Other professions use assistive equipment when moving heavy items
• On average, nurses and assistants lift 1.8 tons per shift (ANA, n.d.)


Kelly, 2015
## Number, Incidence Rate, & Median Days Away From Work for Occupational Injuries RN’s with Musculoskeletal Disorders in US, 2003 – 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Ownership</th>
<th>Occupation</th>
<th>Total Cases</th>
<th>Incidence Rate</th>
<th>Median Days Away From Work</th>
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<tr>
<td>2009</td>
<td>Private industry</td>
<td>RNs</td>
<td>8,760</td>
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<td>2010</td>
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<td>RNs</td>
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<td>2011</td>
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<td>RN's</td>
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<td>8</td>
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<tr>
<td>2012</td>
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<td>RN's</td>
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<td>2013</td>
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<td>RN</td>
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<td>2014</td>
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<td>RN</td>
<td>9820</td>
<td>55.3</td>
<td>9</td>
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<tr>
<td>2014</td>
<td>Private Industry</td>
<td>NA</td>
<td>18,510</td>
<td>55.3</td>
<td>6</td>
</tr>
</tbody>
</table>

* Incidence rate per 10,000 FTE

Significance of Patient Falls

- Falls are the leading cause of hospital-acquired injury and can frequently prolong or complicate hospital stays (Degelau et al., 2012)
- Between 700,000 and 1 million patients suffer a fall in U.S. hospitals each year (Dupree et al., 2014)
- 30-35% of those patients sustain an injury, and approximately 11,000 falls are fatal (Health Research & Educational Trust. 2016, October)
- Falls have been identified by the Centers for Medicare and Medicaid Services as an acquired condition that should not occur. (Dupree et al., 2014)
Skin Risk Factors

- Moisture
- Pressure
- Shear
- Friction

Mobility, Skin & Fall Prevention Strategies

- Clean & Protect
- Reduce Pressure & Shear
- In-bed Exercise & Out of Bed Mobility

Care Giver Risk

- Repetitive motion, Lifting
- Repetitive motion, Lifting & Limb holding
- Repetitive motion, Dragging, patient weight

Mobility, Skin & Fall Prevention Strategies Care Giver Risk

Repetitive motion, Lifting
Repetitive motion, Lifting & Limb holding
Repetitive motion, Dragging, patient weight
In-Bed Mobility
&
Out of Bed Mobility
Progressive Mobility Continuum

**START HERE**

Perform Initial mobility screen w/in 8 hours of ICU admission
Reassess mobility level at least every 24 hours (Recommended at shift Δ)

Refer to the following criteria to assist in determining mobility level
- PaO2/FiO2 ≥ 250
- Peep <10
- O2 Sat ≥ 90%
- RR 10-30
- No new onset cardiac arrhythmias or ischemia
- HR >60 <120
- MAP >55 <140
- SBP >90 <180
- No new or increasing vasopressor infusion
- RASS ≥ 3

<table>
<thead>
<tr>
<th>LEVEL I</th>
<th>LEVEL II</th>
<th>LEVEL III</th>
<th>LEVEL IV</th>
<th>LEVEL V</th>
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<tbody>
<tr>
<td>RASS -5 to - 3</td>
<td>RASS -3 &amp; up</td>
<td>RASS -1 &amp; up</td>
<td>RASS 0 &amp; up</td>
<td>RASS 0 &amp; up</td>
</tr>
</tbody>
</table>

**Goal:** clinical stability; passive ROM

**Activity:**
- Q 2 hr turning
- Passive /Active ROM 3x/d
- HOB 45º X 15 min.
- HOB 45º, Legs in dependent position X 15 min.
- HOB 65º, Legs in dependent position X 15 min.
- Step (3) & full chair mode
- Full assist into cardiac chair 2X/day

**Tolerates Level I Activities**

**Tolerates Level II Activities**

**Tolerates Level III Activities**

**Tolerates Level IV Activities**

**Tolerates Level V Activities**

**Activity:**
- Bed sitting Position
- Min. 20 min. 3X/d
- Sitting on edge of bed: stand with RN, PT, RT assist
- Active Transfer to Chair (OOB) w/ RN/PT/RT assist

**Activity:**
- Q 2 hr turning
- Self or assisted
- Sitting on edge of bed
- Full assist into cardiac chair 2X/day

**Activity:**
- Q 2 hr turning
- Self or assisted
- Transfer to chair
- Full assist into cardiac chair 2X/day

**Activity:**
- HOB > 30º
- Passive ROM 2X/d performed by RN, or UAP

**Activity:**
- HOB 45º X 15 min.
- HOB 45º, Legs in dependent position X 15 min.
- Step (3) & full chair mode
- Full assist into cardiac chair 2X/day

**Activity:**
- HOB 65º, Legs in dependent position X 15 min.
- Step (3) & full chair mode
- Full assist into cardiac chair 2X/day

**Activity:**
- HOB 45º X 15 min.
- HOB 45º, Legs in dependent position X 15 min.
- Step (3) & full chair mode
- Full assist into cardiac chair 2X/day

**Activity:**
- HOB 65º, Legs in dependent position X 15 min.
- Step (3) & full chair mode
- Full assist into cardiac chair 2X/day

**Activity:**
- HOB 45º X 15 min.
- HOB 45º, Legs in dependent position X 15 min.
- Step (3) & full chair mode
- Full assist into cardiac chair 2X/day

**Activity:**
- HOB 65º, Legs in dependent position X 15 min.
- Step (3) & full chair mode
- Full assist into cardiac chair 2X/day

For each position/activity change allow 5-10 minutes for equilibration before determining the patient is intolerant

***If the patient is intolerant of current mobility level activities, reassess and place in appropriate mobility level***

Mobility is the responsibility of the RN, with the assistance from the RT’s Unlicensed Assistive Personnel and PT/OT. PT and OT may assist the team with placement to the appropriate mobility level of activity, always prioritizing patient and provider safety. Placement is based on clinical judgment.
Outcomes of Early Mobility Programs

- ↓ incidence of VAP
- ↓ time on the ventilator
- ↓ days of sedation
- ↓ incidence of skin injury
- ↓ delirium
- ↑ ambulatory distance
- Improved function
- ↓ in hospital readmissions

Thomsen GE, et al. CCM 2008;36;1119-1124
Winkelman C et al, CCN,2010;30:36-60
Azuh O, et al. The American Journal of Medicine, 2016,
doi:10.106/jmimed.2016.03.032
It Takes a Village For Sustainability

1. Necessary Components for Early Rehab
   - Buy-in
   - Multiple disciplines
   - Team communication
   - Opinion leader
   - Individual discipline champion
   - Dedicated rehab personnel
   - Equipment
   - Sedation practice
   - Administrative funding

2. Implementation Strategies
   - Team center approach
   - Staff education
   - Strength & quality of evidence

3. Perceived Barriers
   - Increase workload
   - Safety concerns

4. Positive Outcomes
   - Improved patient outcomes
   - Staff satisfaction
   - Changed culture
   - Financial savings

Building Resiliency Into Interventions

- Forcing Functions and Constraints
- Automation and Computerization
- Standardization and Protocols
- Checklist and Independent Check Systems
- Rules and Policies
- Education and Information
- Vague Warning – “Be More Careful!”

**Strongest**

**STRENGTH OF INTERVENTION**

**Weakest**
Attitude & Accountability

Factors Impacting the ability to Achieve Quality Nursing Outcomes at the Point of Care

Resources & System

- Breathable glide sheet/stays
- Foam Wedges
- Microclimate control
- Reduce layers of linen
- Wick away moisture body pad
- Protects the caregiver

Achieving Use of The Evidence: Patient & Care Giver Safety for In-Bed Mobility

Comparative Study of Two Methods of Turning & Positioning

- Non randomized comparison design
- 59 neuro/trauma ICU mechanically ventilated patients
- Compared SOC: pillows/draw sheet vs turn and position system (breathable glide sheet/foam wedges/wick away pad)
- Measured PU incidence, turning effectiveness & nursing resources

### Demographic Comparison

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<th>SOC</th>
<th>PPS</th>
<th>P</th>
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<td>Mean time on product (range), d</td>
<td>7 (1-29)</td>
<td>7 (1-45)</td>
<td>1.00</td>
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<tr>
<td>Mean age (SD) (range), y</td>
<td>57.72 (18.45) (18-89)</td>
<td>57.73 (17.67) (23-92)</td>
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<tr>
<td>Gender</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>10</td>
<td>.43</td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>19</td>
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<tr>
<td>Braden Scale score</td>
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<td>13.23</td>
<td>.46</td>
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<tr>
<td>Mobility</td>
<td>0-1</td>
<td>0-1</td>
<td>1.00</td>
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<tr>
<td>BMI</td>
<td>29.62</td>
<td>30.97</td>
<td>.65</td>
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</table>

Comparative Study of Two Methods of Turning & Positioning

- **Results:**
  - Nurse satisfaction 87% versus 34%
  - 30° turn achieved versus 15.4° in SOC/7.12 degree difference at 1hr (p<.0001)

<table>
<thead>
<tr>
<th></th>
<th>SOC</th>
<th>PPS</th>
<th>P</th>
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</thead>
<tbody>
<tr>
<td>PU development</td>
<td>6</td>
<td>1a</td>
<td>.04</td>
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<tr>
<td># of times patients pulled up in bed</td>
<td>3.28</td>
<td>2.58</td>
<td>.03</td>
</tr>
<tr>
<td># of staff required to turn patient</td>
<td>1.97</td>
<td>1.35</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

1° PU development with 24hrs of admission

Impact of a Turn & Position Device on PI & Staff Time

• Prospective, QI study (1 SICU & 1MICU)
• 2 phases
  – SOC: pillows, underpads, standard low airloss bed and additional staff if required
  – Interventional: turn and position system, a large wicking pad (part of the product)
• Inclusion criteria: newly admitted, non-ambulatory, required 2 or more to assist with turning/repositioning
• Turning procedures were timed/admitting till ICU discharge
• Results
  – No difference in sociodemographic and clinical data between the groups
  – Phase 1: 14 patients (28%) Stage II sacral PI
  – Phase 2: zero sacral PI (p<.0001)
  – Timing:
    • Phase 1: 16.34 mins (range 4-60min) SD= 10.08
    • Phase 2: 3.58 mins (range 1.12-8.48) SD = 2.31 (p=0.0006)

Reducing HAPI & Patient Handling Injuries

- Compared pre-implementation turning practice: pillows/drawsheet vs turn and position system (breathable glide sheet/foam wedges/wick away pad)
- Baseline: November 2011-August 2012
- Implementation period: November 2012 to August 2015
- 3660 patients
- Compared HAPI rates, patient handling injuries and cost

Way H, Am JSPHM, 2016;6(4):160-165
Transition: In-Bed to Out of Bed & Back
Out of Bed Technology
Current Seating Positioning Challenges

Uncomfortable

- Airway & Epiglottis compressed
- Body Alignment
- Shear/Friction
- Sacral Pressure
- Potential risk of sliding from chair
- Frequent repositioning & potential caregiver injury
Repositioning Patients in Chairs: An Improved Method (SPS)

- Study the exertion required for 3 methods of repositioning patients in chairs
- 31 care giver volunteers
- Each one trial of all 3 reposition methods
- Reported perceived exertion using the Borg tool, a validated scale.

Method 1: 2 care givers using old method of repositioning
246% greater exertion than SPS
Method 2: 2 caregivers with SPS
Method 3: 1 caregiver with SPS
52% greater exertion than method 2

Ambulation Assist Devices
What are Ergonomic Risk Factors in Healthcare?

- Force
- Duration of Exposure
- Posture
- Repetition

What is Safe Patient Handling?

- **Manual Patient Handling**
  - The transporting or supporting of a patient by hand or bodily force, including pushing, pulling, carrying, holding, and supporting of the patient or a body part.

- **Safe Patient Handling**
  - Evidence-based approach to reducing risk to caregivers. Includes risk assessment, use of equipment, patient assessment, algorithms, peer safety leaders, and after-action reviews.

ANA Safe Patient Handling and Mobility Interprofessional National Standards

- Establish a Culture of Safety
- Implement and Sustain a Safe Patient Handling and Mobility Program
- Incorporate Ergonomic Design Principles to Provide a Safe Environment of Care
- Select, Install, and Maintain SPH Technology
- Establish a System for Education, Training, and Maintaining Competence
- Integrate Patient-Centered SPHM assessment Plan of Care, and Use of SPHM Technology
- Include SPHM in Reasonable accommodation and Post-Injury Return to Work
- Establish a Comprehensive Evaluation System

ANA, 2013
NIOSH (National Institute of Occupational Safety and Health) Recommendations for Safe Patient Handling

• Maximum recommended weight limit set for patient lifting
  • The weight being lifted can be estimated
  • When patient is cooperative
  • The lift is smooth and slow

• Maximum recommended limits set for patient push/pull activity

• Proper body mechanics alone will not prevent patient handling injury (Hignett, 2003)

• Safe Work Practices

IT IS NOT SAFE TO MANUALLY MOVE PATIENTS

Evidence Based Strategies for a Comprehensive SPHM Program

1. Ergonomic Assessment Protocol
2. Patient Handling Assessment Criteria and Decision Algorithms
3. Peer Leaders
4. State-of-the-art Equipment
5. After Action Reviews
6. No Lift Policy

A Multifaceted Approach for Safe Patient Handling

**System SPHM**

**Administrative Controls:**
Leadership Support, Budget, Campus Representative, Policy

**Engineering Controls:**
Equipment, Maintenance, and Storage

**Behavioral Controls:**
Education, Peer Coaching, White Board Communication
OhioHealth Our SPHM Journey
2004 to Present

• Barriers
• Solutions/Implementation
• Outcomes
• Future Directions
Evidence Based Strategies for Safe Patient Handling

The adoption of a new device for turning, boosting and lateral transfer in critically ill patients

Susan L. Salisbury OTR/L CDN5, Occupational Therapist, System Lead for Safe Patient Handling and Mobility, OhioHealth, Columbus, OH
Beth Kaper, BSN RN TNCC, Safe Patient Handling and Mobility Co-Lead, OhioHealth Riverside
Justin L Martin, MPT, Physical Therapist, Safe Patient Handling and Mobility Lead, OhioHealth Mansfield and Shelby

**BACKGROUND**

Over the past decade increasingly more focus is being placed on worker injury and safe patient handling in acute care settings. As a result, ceiling lifts have become more widely implemented in hospitals. While data support that the use of these devices is safe for patients and can reduce staff injury, numerous studies have reported a lack of compliance among health care workers in using ceiling lifts for all patient handling. This can be referred to as a lack of full adoption. Research to date supports that most health care workers are only partial adopters of ceiling lift devices.

**PURPOSE**

To measure the proportion of full adopters to partial adopters with the use of a new device for turning, boosting in bed, and lateral patient transfer. The device uses a low friction surface and air-assisted technology to decrease staff exertion repositioning moving patients. While the device can be used without the air, the full benefits for reduced healthcare worker exertion are realized when the blower is turned on.

**METHODS**

The new patient repositioning device was implemented in two intensive care units and used for turning, boosting in bed, and lateral patient transfer.

**RESULTS**

Staff were surveyed on the frequency of blower use while repositioning patients in bed. The percent of full adopters was 93% (39/42) and the percent of partial adopters was 7% (3/42). Overall ease-of-use as compared to standard practice was rated highly at 4.68 out of 5.

**CONCLUSIONS**

Critical care nurses are required to reposition patients in bed as often as 6-10 times per shift. Repositioning is a frequent repetitive activity that requires high exertion, awkward posture, and can lead to staff injury over time. Compliance with the intended use of this device was high as the vast majority of staff were full adopters, likely reducing the staff risk for injury.

Presented at SPH and Mobility/Falls conference, April 2016, Glendale AZ
Presented at AACN NTI 2016, New Orleans
Evidence Based Strategies for Safe Patient Handling

Evaluation of a new procedure for boosting critically ill patients in bed

Susan L. Salzbury OTR/L, CDMS, Occupational Therapist, OhioHealth, Columbus, OH • Beth Kaper, BSN RN TNCC, Safe Patient Handling and Mobility Co-Chair, OhioHealth Riverside
Justin I. Martin, MPT, Physical Therapist, Safe Patient Handling and Mobility Lead at OhioHealth Mansfield and Shelby

**BACKGROUND**
Patient handling is widely recognized as a contributing factor to musculoskeletal injuries for critical care nurses. Patient handling injuries originate from repeated microskeletal trauma due to high exertion, awkward posture, and frequent activities over extended periods of time without enough rest. Critical care nurses are required to boost physically dependent patients in bed as often as 6-10 times per shift. Boosting is a frequent repetitive activity that requires high exertion and awkward posture.

**RESULTS**
Forty-two nurses completed the survey. Device satisfaction was *Very Good* to *Excellent*.

<table>
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<tr>
<th>Aspect</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Average ease of boosting</td>
<td>4.81</td>
</tr>
<tr>
<td>Average ease of performing lateral transfers</td>
<td>4.79</td>
</tr>
<tr>
<td>Product comparison to current practice</td>
<td>4.78</td>
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<tr>
<td>Patient comfort</td>
<td>4.54</td>
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<tr>
<td>Ease of integrating product into clinical workflow</td>
<td>4.79</td>
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<tr>
<td>Impact on improving clinician safety</td>
<td>4.86</td>
</tr>
</tbody>
</table>

Narrative comments included:
"With this procedure, a 100 pound nurse can boost a 300 pound patient; less strain on my back; used down in CT and it was fabulous."

**METHOD**
The purpose of this product evaluation was to appraise the effectiveness of a new airflow assist device used to boost patients in bed. Critical care nurses rated their perceptions regarding ease of boost, ease of lateral transfer compared to current practice, patient comfort, clinical workflow, and clinician safety using a 5-point Likert scale (1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, and 5 = Excellent).

**CONCLUSIONS**
Critical care nurses rated the boosting device favorably in all categories. Nurses perceive the device easier to use for boosting patients in bed, which may be associated with less back strain.

**SIGNIFICANCE**
Patient handling injury is a significant safety issue for critical care nurses whose patients require assistance with even basic movements. Further evaluation is recommended to evaluate efficacy with interprofessional groups and varied clinical populations.

Presented at SPH and Mobility/Falls conference, April 2016, Glendale AZ
Presented at AACN NTI May 2016, New Orleans
Fall Prevention: Critical Part of the Circle of Safety
The Joint Commission Center for Transforming Healthcare Preventing Patient Falls Project

- 7 U.S. Hospitals
- Report describes risks for falls, root causes for those risks and solutions
- Results 62% reduction in falls with injury and 35% reduction in falls rate
- Keys for success
  - Measure and analyze contributing factors
  - Address culture change

Health Research & Educational Trust. (2016, October)
Top Contributing Factors of Patient Falls

1. Fall risk assessment issues
2. Handoff communication
3. Toileting issues
4. Call light issues
5. Education and organizational culture issues
6. Medication issues

Health Research & Education Trust. (2016, October)
Summary: Best Practices for Falls Prevention

- Complex and multifactorial **NO MAGIC BULLET**
- Organizational support for falls reduction across departments and disciplines
- Transparency of fall rates
- Accountability through auditing compliance with fall risk assessments and interventions

(Degelau, et al., 2012)
Summary: Best Practices for Falls Prevention

- Fall risk assessment (many different instruments)
- Visual identification of patients at high risk for falls
- Falls risk factor directed interventions
  - Early progressive mobility
  - Safe handling practices during ADL’s & mobility (need a reference)
- Standardized multifactorial education with visual tools for staff, family and patients
- Teach back with patient education
- Interdisciplinary collaboration

(Degelau, et al., 2012)
Even if you are on the right track, you will get run over if you just sit there.

Will Rogers
Progressive Mobility + Care Giver Safety + Skin Safety & Fall Prevention
Safety Culture: Patient & Caregiver

↓ repetitive motion injury
↓ Musculoskeletal injury
↓ Days away from work
↓ Staffing challenges
Loss of experienced staff
Nursing shortage

↓ Skin Injury
↓ Costs
↓ pain and suffering
↓ Hospital LOS
↓ ICU LOS

↓ Hospital LOS
↓ ICU LOS
↓ Skin Injury
↓ CAUTI
↓ Delirium
↓ Time on the vent

↓ Falls
↓ Falls with injury
↓ Hospital LOS
Action Items

- Talk with local and departmental leadership about a more comprehensive safety culture
- Engage your peers in developing an action plan to address patient and caregiver safety
- Speak up as a leader whenever patient mobility, prevention of pressure injury, falls and worker safety are addressed in silo’s
- Join professional associations related to SPHM, Skin, PT/OT, ANA
Additional References


References Cont’d


www.cdc.gov/niosh/topics/safepatient/