Saving Face: Preventing Device-related Pressure Ulcers

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The speaker has no disclosures to report.
Communication | Collaboration | Innovation

The AACN Clinical Scene Investigator (CSI) Academy is a 16-month nursing leadership and innovation training program to empower hospital-based staff nurses as clinician leaders and change agents whose initiatives measurably improve patient outcomes and hospital bottom line.
Communication | Collaboration | Innovation

The CSI Academy seeks to enable participants to:

- Demonstrate the components of innovative project management
- Develop, plan, and implement an innovative project that targets a patient or organizational outcome on the unit
- Create measurable improvements in patient or organizational outcomes

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Webinar Goal
Teach bedside nurses collaborative strategies to prevent device-related pressure ulcers (DRPU)

Session Topics
- Define device-related pressure ulcers
- Strategies to decrease DRPUs
- Overcoming implementation barriers
- Outcomes
- Lessons I learned from CSI that you can use
Pressure Ulcers: “Never Event”

Prevention of hospital-acquired pressure ulcers (HAPU) continues to be a challenge.
Pressure Ulcers Attributable to Medical Devices

- Frequent occurrence in hospitals
- Limited data about:
  - Incidence and prevalence
  - Best practices for preventing them
Evidence: DRPU in Hospitalized Patients

Of 2,079 patients studied, 104 (5%) had HAPU

Patients with medical devices are **2.4x more likely** to develop a pressure ulcer of any kind.
Evidence: A Prospective Window Into Medical Device-related Pressure Ulcers In Intensive Care

PATIENTS STUDIED
483

PATIENTS WITH DRPU
15

ETT & NG caused most DRPU

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All Device-related HAPU: Definition

A localized injury to the skin and/or underlying tissue including mucous membranes as a result of pressure, with a history of an external medical device at the location of the ulcer that mirrors the shape of the device.
Pressure Ulcers Identification: Monthly Skin Audits Results

Indiana University Health Methodist, Adult Critical Care Unit

- NG tubes
- Small bore feeding tubes (SBFT)
- ETT-securing devices

50% Nose and Mouth

Patients Studied: 222

Patients with unit-acquired PU: 12
Collaboration: Define a Solution

- Adopt a taping method for NG and SBFT
- Review policy for repositioning ETT side to side
- Define outcomes
- Collaborate with critical care quality and patient safety council
Innovation: **New Taping Method**

- Leaves the tube free-floating, eliminating pressure on the nares
- Requires change every 24 hours and as needed

**New NG/SBFT Taping** Effective January 2013

1. Tear a piece of tape.
2. Tear horizontal slits in the tape.
3. Fold middle sections inward, and tear slit in bottom portion.
4. Date and time the tape, change Q4H, and p.m.

Adapted from: IHM Methodist Neuro Critical Care
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Communication: Dissemination

- Kick-off meeting
- One-on-one education with mugs
- Posters
- Diagrams in the bathroom

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Implementation Barriers

- Staff acceptance of new NG tube taping method
- Establishing accountability for ETT repositioning
- Documentation of interventions
- Patient discomfort with NG taping method
## Overcoming the Challenges

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Strategies</th>
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</thead>
<tbody>
<tr>
<td>Acceptance</td>
<td>- <strong>Frequent reminders</strong>: Date and time the patient’s tape</td>
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<tr>
<td></td>
<td>- <strong>Re-education</strong>: Highlight purpose of change</td>
</tr>
<tr>
<td>Communication</td>
<td>- <strong>Repositioning guide</strong>: Who is repositioning ETT, and when?</td>
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<td></td>
<td>- <strong>Continued communication</strong>: Documentation, date and time of tape change</td>
</tr>
<tr>
<td>Documentation</td>
<td>- <strong>Audits</strong>: Use tools to evaluate</td>
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<td></td>
<td>- <strong>Re-education</strong>: Documentation is critical</td>
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<tr>
<td>Patient discomfort</td>
<td>- <strong>Use nursing judgment</strong></td>
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<td>- If the NG movement is causing pain or gagging, use the old taping method</td>
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<td>- Patients who are awake are not likely to have the tube in, long term</td>
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Collaboration: Additional Recommendations

- Reposition ETT every 2 hours (if using an ETT-securing device)
  - Low level of compliance
- Collaborated with RT on a repositioning schedule
Repositioning ETT Schedule

Start the Day off “Right”

<table>
<thead>
<tr>
<th>RT Team</th>
<th>RN Team</th>
<th>RT Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move ETT during vent rounds left to right</td>
<td>Move ETT during assessments to center</td>
<td>Move ETT during vent rounds right to left</td>
</tr>
<tr>
<td>Left</td>
<td>Center</td>
<td>Right</td>
</tr>
<tr>
<td>1200</td>
<td>1000</td>
<td>0800 Start</td>
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<tr>
<td>1400</td>
<td>1600</td>
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Implementation Results

At any given time, you could walk into the room and determine if the ETT had been repositioned.
I don't think a reference is needed for this information, as the speaker is simply providing rationale based on her institutional experience. If she or anyone at AACN feels differently, I would suggest using the same citation that appeared on slide 13.

Harris, 10/28/2014
## Results: Monthly Skin Audits

3 DRPU in 2013

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETT</td>
<td>NG</td>
<td>NG</td>
<td></td>
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<tr>
<td>Tongue</td>
<td>Nuna</td>
<td>Nuna</td>
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</table>

*Tape had not been changed in 4 days*
Results: All Device-related Pressure Ulcers

Reduction in pressure ulcers

FROM SBFT: 100%
FROM ETT: 50%
FROM NGT: 33%

Unpublished data. Indiana University Health Methodist, 2013
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Suggest citing these data to their source. If unpublished data from Indiana University, the following would be appropriate: "Unpublished data. Indiana University Health Methodist. Year." (But substitute the year the data were collected for "Year"). If the data were presented at a meeting or have been submitted for publication, please let me know and I will suggest language.

Harris, 10/28/2014
Compliance: Taping Method Auditing

- 90% NEW TAPING METHOD
- 90% LABELED: DATE AND TIME
Compliance: Documentation

Compliance with documentation is work that remains to be done

57% Q24 HOURS

Enpublished data. Indiana University Health Methodist. 2013
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Reaching Our Goals

- 50% DRPU reduction
- New taping method and ETT repositioning vigilance spread to other critical care units
- With $86,300 as the average cost of a pressure ulcer per the NPUAP, the approximate cost savings to our organization is **$258,900**
Summary

- Decrease prevalence of hospital-acquired device-related pressure ulcers, specifically in nose and mouth, by:
  - Changing methods for caring for patients with medical devices
  - Ensuring vigilant nursing care
- Bedside nurses can make a difference in patient outcome while having a positive financial impact in their organizations
- Collaborative strategies at the bedside bring success to patients and units
- Compliance with documentation continues to be a challenge
Practical Lessons Learned From CSI

- Bedside staff nurses can be change agents—and should be encouraged to fulfill that potential
- Identifying problems requires vigilance
- Teams of 3–5 are optimal
- Data are needed—and we can do the research
- Progress may require trying something new
- You, too, can make a difference
For more information, you can visit the CSI Innovation database http://www.aacn.org/csi

Some CSI topics you can find in the database:

☐ Delirium
☐ Mobility
☐ Ventilator-associated pneumonia
☐ Pressure ulcers
AACN Implementation
Tools and Resources

Designed to help you apply these practices in your environment

- Tools and Tactics: Blueprint for Integrating DRPU Prevention
- Bridging the Gap to Better Outcomes: A Gap Analysis for Preventing DRPU
- Try a New NG Taping Method: Prevent DRPU Today
- Create Your Own ETT Repositioning Schedule: Start the Day Off Right

Find these tools on the DRPU webinar information page at www.aacn.org
Integrate Device-related Pressure Ulcer Strategies Now—Improve Patient Outcomes

1. Download the **Implementation Tools**. Find them on the DRPU webinar information page at [www.aacn.org](http://www.aacn.org)

2. **Discuss** the tools and recommended practices with your colleagues

3. **Implement practices** that are suitable for your unit