Changing the Culture
Catheter-associated Urinary Tract Infection Prevention in the Progressive Care Unit

Amanda Tavares, RN, BSN
Rose Bienaime, RN, BSN
“Culture is the atmosphere created by shared beliefs, practices, attitudes, etc., which shape our behavior. In a strong safety culture, everyone feels responsible for safety and pursues it on a daily basis.”

- Drivers for culture change:
  - Front line “buy-in”
  - A system of accountability
  - Ongoing measurement and feedback
  - Communicate results and celebrate successes
  - An interdisciplinary steering committee
  - On-going support

(Occupational Safety & Health Administration, n.d.)
Objectives

• To support culture change through interdisciplinary collaborative practice while improving quality and safety for patients

• To adopt and implement a standardized approach in order to reduce process variability and improve team member accountability
CAUTI Facts

• Catheter-associated urinary tract infections (CAUTI) remain the most common nosocomial infection (Tambyah & Oon, 2012).

• CAUTIs lead to increased hospital costs, length of stay, morbidity, and mortality
  – More than 500,000 CAUTIs occur yearly in the US
  – Single largest source of bacteremia in hospitalized patients
  – Average cost per CAUTI varies from $980 to $2900
  – Annual cost is over $424 million

• With appropriate infection prevention measures
  – 20% to 70% of CAUTIs may be preventable
  – nearly 9,000 deaths could be prevented annually

(Tambyah & Oon, 2012; Halm & O’Connor, 2014)
Guidelines & Recommendations

CDC Guidelines (2009)

• Proper insertion technique including aseptic technique
• Proper securement
• Minimize catheter use and duration in all patients
• Daily review of continued need
• Quality improvement programs should entail:
  – monitoring adherence to criteria for appropriate utilization
  – periodic in-service training and CAUTI education
  – provision of performance feedback
  – standardized format of documentation in EMR

(Gould et al., 2009)
Project Triggers

• There were four CAUTIs on the Progressive Care Unit in 2012
• The Unit Nurse Practice Council (UNPC) perceived a variability in practice
  – Missing NHSN/OH criteria on catheter insertion orders
  – Catheters inappropriately placed
  – Inconsistent catheter care and documentation
  – Daily review of necessity not consistently discussed in collaborative rounds
  – Concerns about insertion techniques and staff knowledge
  – Improper anchoring of device
• Participation in the Comprehensive Unit-based Safety Program (CUSP)
CAUTI Rates

Infection Rate per 1,000 Device Days

- 2012: 2.2
- 2013: 0
- 2014: 0
Unit Nurse Practice Council

- Purpose: to examine and evaluate the practice of nursing on South Seminole Hospital’s progressive care unit and to develop methods to improve quality of patient care and staff satisfaction (Orlando Health, n.d.).
- Meets monthly for 2 hours
- Led by a chair and co-chair
- All PCU team members are participants
  - 25 – 30 members in attendance monthly
- Shared leadership approach
  - Nurse leaders are involved
Team for Success

• **Staff engagement**
  – Unit Nurse Practice Council led initiative
  – Interdisciplinary team assembled:
    • RNs
    • Nursing assistants
    • Learning specialist
    • Clinical Nurse Specialist
    • Unit leadership
      – Nurse Manager
      – Assistant Nurse Manager
    • Executive leadership support
    • Physicians
Methodology

• Education

  – Competency demonstration check-off required for all RNs during 2013 annual skills fair and new staff orientation
  – Monthly education briefs shared with staff included:
    • Orlando Heath policy regarding indwelling catheters
    • Evidence-based best practices for CAUTI prevention
  – One on one education
    • Registered nurses educated to address daily necessity during collaborative rounds with physicians
    • Nursing assistants educated on catheter care and documentation
  – MD Chief Quality Officer and urologist collaborated to develop educational music video titled “Get the Foley Out”
Methodology

- Surveillance of Process Compliance
  - Weekly auditing completed by bedside nurses
  - Works to facilitate accountability and reinforcement
  - Process metrics:
    - Insertion order meets NHSN/OH criteria
    - Daily catheter care documentation
    - Presence of catheter securement device
    - Review of necessity on the day of the audit
  - Immediate feedback provided at time of audit
  - Charge nurses address catheter necessity with primary nurse daily
  - Trends shared during staff huddles, monthly at unit practice council meetings, and via email
# Process Audit Tool

<table>
<thead>
<tr>
<th>Stop CAUTI PCU</th>
<th>CAUTI Prevention Audit</th>
<th>Date: ____________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pt ID</td>
<td>Sunrise Order Present?</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>Appropriate NHSN/OH criteria on order?</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>• If no, was nurse directed to obtain order?</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>• If no, inappropriate indication #______</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>• If yes, indication #______</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>Is securement device present?</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>Has Foley care been documented appropriately in Sunrise?</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>Has the nurse addressed daily necessity during collaborative rounds?</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>• If no, was the nurse directed to review necessity with the MD?</td>
<td>YES</td>
</tr>
<tr>
<td>Notes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2016 American Nurses Association Annual Conference
Connecting **Quality**, **Safety** and **Staffing** to Improve Outcomes

[Image of ANA logo]
Process Audit Results

Sunrise order for catheter insertion indication meets NHSN/OH criteria

Sunrise order for Foley insertion indication meets NHSN/OH criteria

Expon. (Sunrise order for Foley insertion indication meets NHSN/OH criteria)
Has catheter care been documented daily since catheter insertion?
Process Audit Results

Is catheter secured with a securement device?

% Compliance

Is Foley secured with a securement device?
Process Audit Results

Catheter necessity addressed daily in rounds?

% Compliance

RN addressed daily necessary for foley in rounds with MD?
CAUTI Outcomes

South Seminole Hospital
PCU
Catheter Associated Urinary Tract Infection (CAUTI)
2013 & 2014

ZERO CAUTI in 2013 and 2014!

Continued success: there were no CAUTIs in 2015
Outcomes

• Maintained Zero CAUTIs since 2013!!
• Process variability reduced
  – Improvements seen in presence of catheter orders and care documentation
  – Opportunities still exist in addressing catheters daily in collaborative rounds
• Improved accountability with staff led auditing involving real time feedback
• Positive support and collaboration with the CUSP initiative
Sustaining the Culture Change

- Our multifaceted approach proved effective in establishing a positive change in the PCU safety culture which has been sustained for over two years.
  - Process audits continue today led by front-line staff
  - Process audits have spread to all inpatient units
  - An awareness of CAUTI prevention maintained despite 57% staff turnover
  - PCU CAUTI prevention team collaborating with corporate team to standardize infection prevention efforts
  - Growing partnership with physicians

- Unit AHRQ Safety Survey & NDNQI Survey 2015 Results
  - Results of leader support of safety, learning and continuous improvement, teamwork and overall perception of safety significantly above benchmark
“A culture is a living thing, powered by and kept up to date by the people who are encouraged to be, in a meaningful way, part of it.” - Micah Solomon

(Solomon, 2014)
References


Thank you!
Questions?