Comprehensive Unit-based Safety Program (CUSP)

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Learning Objectives

• To understand the steps in CUSP

• To learn how to investigate a defect

• To understand some teamwork tools such as Daily Goals, AM Briefing, Shadowing
The Michigan Keystone ICU Project saved over 1,500 lives and $200 million by reducing health care associated infections.

Office of Health Reform, Department of Health and Human Services
Physicians and RN Collaboration

% of respondents reporting above adequate teamwork

- L&D RN/MD: 83%
- ICU RN/MD: 88%
- OR RN/Surg: 90%
- CRNA/Anesth: 93%

RN rates Physician
Physician rates RN
Teamwork Disconnect

• MD: Good teamwork means the nurse does what I say

• RN: Good teamwork means I am asked for my input
Culture linked to clinical and operational outcomes in healthcare:

- Wrong Site Surgeries
- Decubitus Ulcers
- Delays
- Bloodstream Infections
- Post-Op Sepsis
- Post-Op Infections
- Post-Op Bleeding
- PE/DVT
- RN Turnover
- Absenteeism
- VAP

Data provided by Bryan Sexton
The strongest predictor of clinical excellence: caregivers feel comfortable speaking up if they perceive a problem with patient care

Teamwork Climate Across Michigan ICUs

No BSI = 5 months or more w/ zero

No BSI 21%

No BSI 31%

No BSI 44%

Health Services Research, 2006;41(4 Part II):1599.
Teamwork Climate & Annual Nurse Turnover

% reporting positive teamwork climate

- High Turnover 16.0%
- Mid Turnover 10.8%
- Low Turnover 7.9%

RN Teamwork Climate
Staff Physician Teamwork Climate
“Needs Improvement” Statewide Michigan CUSP ICU Results

- Less than 60% of respondents reporting good safety climate = “needs improvement”
  - Statewide in 2004 84% needed improvement, in 2007 23%
  - Non-teaching and Faith-based ICUs improved the most
  - Safety Climate item that drives improvement: “I am encouraged by my colleagues to report any patient safety concerns I may have”
Pre CUSP Work

• Create an CUSP CAUTI team
  – Nurse, physician, administrator, infection control, others
  – Assign a team leader

• Measure Culture in your clinical unit
  (discuss with hospital association leader)

• Work with hospital quality leader to have a senior executive assigned to your unit based team
Comprehensive Unit-based Safety Program (CUSP)  
An Intervention to Learn from Mistakes and Improve Safety Culture

1. Educate staff on science of safety  
   [http://www.safercare.net](http://www.safercare.net)

2. Identify defects

3. Assign executive to adopt unit

4. Learn from one defect per quarter

5. Implement teamwork tools

Science of Safety

• Understand system determines performance

• Use strategies to improve system performance
  – Standardize
  – Create independent checks for key process
  – Learn from mistakes

• Apply strategies to both technical work and team work
Identify Defects

- Review error reports, liability claims, sentinel events or M and M conference

- Ask staff how will the next patient be harmed
Prioritize Defects

• List all defects

• Discuss with staff what are the three greatest risks
## Learning From Defects to Enhance Morbidity and Mortality Conferences

| Fellow 1 | Unstable oxygen tanks on beds | Oxygen tank holders repaired or new holders installed institution-wide |
| Fellow 2 | Nasoduodenal tube (NDT) placed in lung | Protocol developed for NDT placement |
| Fellow 3 | Medication look-alike | Education, physical separation of medications, letter to manufacturer |
| Fellow 4 | Bronchoscopy cart missing equipment | Checklist developed for stocking cart |
| Fellow 5 | Communication with surgical services about night coverage | White-board installed to enhance communication |
| Fellow 6 | Inconsistent use of Daily Goals rounding tool | Gained consensus on required elements of Daily Goals rounding tool use |
| Fellow 7 | Variation in palliative care/withdrawal of therapy orders | Orderset developed for palliative care/withdrawal of therapy |
| Fellow 8 | Inaccurate information by residents during rounds | Developing electronic progress note |
| Fellow 9 | No appropriate diet for pancreatectomy patients | Developing appropriate standardized diet option |
| Fellow 10 | Wrong-sided thoracentesis performed | Education, revised consent procedures, collaboration with institutional root-cause analysis committee |
| Fellow 11 | Inadvertent loss of enteral feeding tube | Pilot testing a ‘bridle’ device to secure tube |
| Fellow 12 | Inconsistent delivery of physical therapy (PT) | Gaining consensus on indications, contraindications and definitions, developing an interdisciplinary nursing and PT protocol |
| Fellow 13 | Inconsistent bronchoscopy specimen laboratory ordering | Education, developing an orderset for specimen laboratory testing |
Executive Partnership

• Executive should become a member of the CUSP CAUTI team
• Executive should meet monthly with the CUSP CAUTI team
• Executive should review defects, ensure the CUSP CAUTI team has resources to reduce risks, and hold team accountable for improving risks and catheter associated urinary tract infections
Learning from Mistakes

• What happened?

• Why did it happen (system lenses)?

• What could you do to reduce risk?

• How do you know risk was reduced?
  – Create policy / process / procedure
  – Ensure staff know policy
  – Evaluate if policy is used correctly

Pronovost 2005 JCJQI
To Evaluate Whether Risks were Reduced

- Did you create a policy or procedure
- Do staff know about the policy
- Are staff using it as intended
- Do staff believe risks have been reduced
Teamwork Tools

• Daily Goals
• AM briefing
• Shadowing
• Culture check up
• TEAMSTepps
• What needs to be done for the patient to be discharged?
• What is the patient's greatest safety risk?
• What can we do to reduce the risk?
• Can any tubes, lines, or drains be removed?
AM Briefing

• Have a morning meeting with charge nurse and unit attending

• Discuss work for the day
  – What happened during the evening
  – Who is being admitted and discharged today
  – What are potential risks during the day, how can we reduce these risks
Shadowing

- Follow another type of clinician doing their job for between 2 to 4 hours

- Have that person discuss with staff what they will do differently now that they walked in another person’s shoes
CUSP Lessons Learned

• Culture is local
  – Implement in a few units, adapt and spread
  – Include frontline staff on improvement team

• Not linear process
  – Iterative cycles
  – Takes time to improve culture

• Couple with clinical focus
  – No success improving culture alone
  – CUSP alone viewed as ‘soft’
  – Lubricant for clinical change
## CUSP & CAUTI Interventions

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<th>CAUTI</th>
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<td>1. Care and Removal Intervention</td>
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<tr>
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<td>Removal of unnecessary catheters</td>
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<td>Proper care for appropriate catheters</td>
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<td>2. Identify defects</td>
<td>2. Placement Intervention</td>
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<td>Determination of appropriateness</td>
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<td>3. Assign executive to adopt unit</td>
<td>Sterile placement of catheter</td>
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<td>4. Learn from Defects</td>
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<td>5. Implement teamwork &amp; communication tools</td>
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CUSP is a Continuous Journey

• Add science of safety education to orientation

• Learn from one defect per month, share or post lessons (answers to the 4 questions) with others

• Implement teamwork tools that best meet your teams needs

• Details are in the CUSP CAUTI manual
References


