

# Taking Every PreCAUTION

## An Inter-professional Approach to Reducing CAUTI

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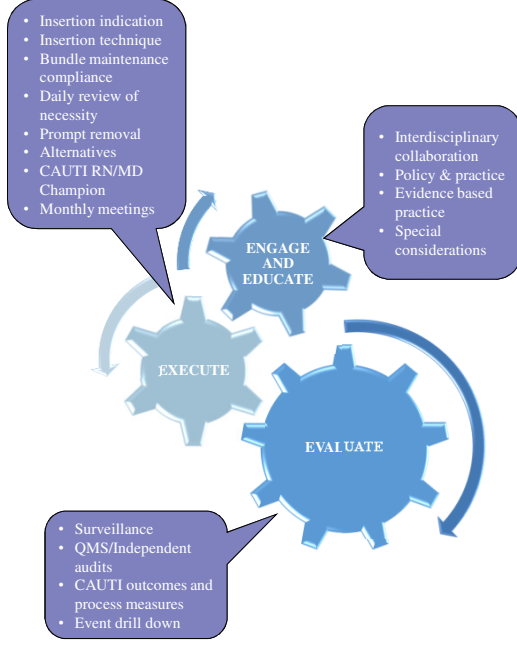
### Introduction

- Catheter associated urinary tract infection (CAUTI) is a preventable healthcare associated infection
- Impacts patient outcome, length of stay and healthcare cost
- An estimated 17% to 96% of CAUTIs may be prevented with recommended infection control measures (CDC, 2009).
- In 2017 this organization did not meet target benchmarks in the intensive care units (ICU) and Non-ICU CAUTI standardized infection ratios (SIR) – defined as the total number of infections over the expected number of infections per the national health safety network (NHSN).
  - ICU CAUTI SIR: 1.28
  - Non-ICU CAUTI SIR: 1.29

### Methods

An inter-professional workgroup was developed to review data, perform a gap analysis and implement a corrective action, preventative action plan. The Center for Disease Control and Prevention (CDC) guidelines for prevention of CAUTI (2009) were used as the source for EBP and quality improvement.

- Setting:** Urban Level 1 Trauma Center
- Intervention:** CDC guidelines focused on the life cycle of the indwelling urinary catheter
  - Device insertion
  - Device maintenance
  - Device removal
  - Special consideration
  - Alternatives
  - Appropriateness of cultures

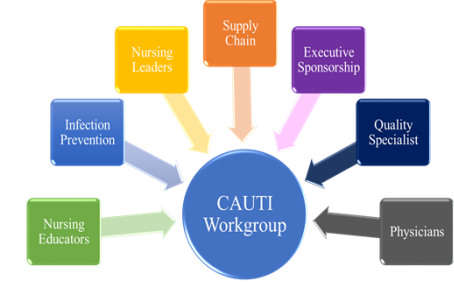


### Tools

"Together teams can take every precaution to reduce CAUTI, enhance nurse autonomy and improve patient outcomes"

### Conclusions

- An inter-professional approach to the implementation of EBP strategies to reduce CAUTI improved patient outcomes
- Nurse autonomy was fostered and supported throughout this initiative
- Critical to the breakthrough were the collaborative efforts by the inter-professional team



### Results

- Completed 86 actions through a quality improvement led corrective action preventative action plan
- Actively engaged an inter-professional team to focus on EBP CAUTI reduction strategies
- In 2018 met target benchmark in ICU and Non-ICU CAUTI
  - ICU CAUTI SIR: 0.66
  - Non-ICU CAUTI SIR: 0.20

### CAUTI Drill Down by Unit Reporting Timeframe 1/2018-12/2018

Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
ICU													3
SCU													2
WStone													1
S41													1
TONS													1
Non-ICU													1
Rehab													1
Total													15

Figure 2. 2019 CAUTI occurrence in an acute care hospital. NHSN reported CAUTIs

...We met target!

### CAUTI Drill Down by Unit Reporting Timeframe 1/2017-12/2017

Unit	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
ICU													7
SCU													4
WStone													1
S41													2
TONS													4
Non-ICU													1
Rehab													1
Total													15

Figure 1. 2017 CAUTI occurrence in an acute care hospital. NHSN reported CAUTIs

...We have a problem!

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### Purpose

Implementation of evidence based practices (EBP) to reduce CAUTIs at a level one trauma center using an inter-professional approach

#### Key Process Drivers to Prevent CAUTI by Role

Physician	Nursing/NCT	Infection Preventionist
<ul style="list-style-type: none"> <li>Place insertion order w/indication per CDC guidelines</li> <li>Evaluating need for pre-aided catheters</li> <li>Aseptic insertion technique</li> <li>Use of alternatives</li> <li>Urine culture stewardship</li> <li>Daily indication review and discontinuation</li> <li>High Risk Huddle</li> </ul>	<ul style="list-style-type: none"> <li>Use of alternatives</li> <li>Aseptic insertion technique</li> <li>2 person insertion Antigenen checklist</li> <li>Accurate documentation</li> <li>Questioning pre-aided catheters</li> <li>Bundle compliance</li> <li>Clear urine culture collection</li> <li>Education and competency validation</li> <li>Leader counseling and support</li> <li>Unit champions</li> <li>Evaluate necessity q shift</li> <li>Nurse driven protocols (Removal Protocol, UR Protocol)</li> <li>ISDA IC guidelines (Questioning, Attitude)</li> <li>High Risk Huddle</li> </ul>	<ul style="list-style-type: none"> <li>Device rounds: audit bundle compliance</li> <li>Device rounds: provide real time feedback</li> <li>Report CAUTI process/outcome measures</li> <li>Bundle compliance</li> <li>Lead event drill down</li> <li>High Risk Huddle</li> </ul>

### Implications for Practice

- Inter-professional collaboration is a key driver in the successful implementation of innovative solutions
- Nurse driven protocols: catheter removal, urinary retention management, empower real time decision making at the bedside
- The use of alternatives such as external devices for urine management can impact CAUTI outcomes
- Implementing urine culture guidelines facilitates collaborative decision making

### Acknowledgements

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