Taking Every PreCAUTIion
An Inter-professional Approach to Reducing CAUTI

Cynthia Lira-Crame MSN, RNC-NIC, Alina Stancovici, BSN, RN, CCRN-K, CIC, Benjamin D. Galvan-Anderson, MLS(ASCP), Brenda Chrusciel, BN, CNA
Cynthia.liracrame@advocatehealth.com
CAUTI Workgroup Advocate Illinois Masonic Medical Center

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

• 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
  - Appropriateness of cultures

• 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
  - Appropriateness of cultures

• 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
  - Appropriateness of cultures

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

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

...We have a problem!

Purpose

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

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

ICU SICU TONS Rehab

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

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

...We met target!

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

Heather Hwang, MSN, RN, NEA-BC, Director of Operations Medical Surgical, Telemetry, Inpatient Behavioral Health
Heidi Bradley, MSN, APN, AGCCNS-BC, CCRN, Clinical Nurse Specialist
Brian Wlazlo, MPH, Director Neurosciences, Orthopedics and Diagnostic Imaging

Advocate Illinois Masonic Medical Center is proud to be Magnet® recognized by the American Nurses Credentialing Center.