The Impact of Clinical Nurse Specialist Intentional Rounds on Nursing Knowledge, Adherence to Evidence Based Recommendations, and Hospital Acquired Infections

Kate Holmes, MSN, RN, CNS
Wheaton Franciscan Healthcare – All Saints

Objectives

- Identify the impact of Hospital Acquired Conditions; specifically catheter-associated urinary tract infections and central line bloodstream infections; on patients and the healthcare organization.
- Outline the process used to implement the quality improvement project.
- Explain the results and implications of Clinical Nurse Specialist Intentional rounds.

Background

- Affordable Care Act (ACA)
  - Higher quality, safer, more affordable and accessible care (Robert Wood Johnson Foundation, 2010)
- Value Based Purchasing (VBP)
  - Adopted by Center for Medicare and Medicaid Services (CMS)
  - Reduces payments for care that results in preventable conditions (Kurtzman et al., 2011)
- Future of Nursing
- Institute of Medicine report
- Nurses have largest impact on patient outcomes (Montalvo, 2008)
- Clinical Nurse Specialists (CNS)
- Improving the quality of care and reducing costs (NACNS, 2013)
Theoretical Support

- Florence Nightingale
  - Patient advocacy
  - Environmental management
  - Infection prevention
- Hildegard Peplau
  - Nurse/patient relationship
  - Plan of care
  - Therapeutic process towards common goal

Literature Review

- Hospital Acquired Infections (HAIs)
  - 92,011 CLBSIs annually (Scott, 2009)
  - 449,334 CAUTIs annually (Scott, 2009)
  - 99,000 deaths annually from HAIs (WHO, 2014)
- Evidence improving outcomes
- Barriers to evidence-based practice
  - Targeted implementation strategies should be used (Thompson, et al., 2005)
  - Less than half of nurses are using evidence-based guidelines while treating patients (ANA and Ohio State, 2012)

Literature Review

- Intentional Rounding
  - Decreases call light usage, increases patient satisfaction, and improves safety initiatives such as fall rates
  - Gives a structured or consistent approach to care
- CNS
  - Poised to bring evidence to the bedside
  - Advanced Practice Nursing (APN) led rounds (Mahanes, Quatrara, and Shaw, 2013)
Purpose

- Evaluate whether intentional rounds by a CNS can directly impact knowledge and compliance to evidence-based practice in the management of CAUTIs and CLBSIs.

Setting

- Community based hospital in Southeast Wisconsin
- Adult, inpatient medical-intermediate care unit with 20 beds

Sample Population

- Patients with an indwelling urinary catheter and/or central line and a convenience sample of all nursing associates (n=41)
- Twenty associates (49%) who agreed to participate completed the pre-survey
- Nine associates of the twenty (45%) participated at least once in the 22 intentional round interactions
- Fourteen associates of the twenty (70%) completed the post-survey
Design

- Prospective, comparative, cross-sectional design
- Intentional rounds completed by a CNS (independent variable) impacted the compliance to recommended best practices for the management of indwelling lines (dependent variable)
- Evaluated process of care measures and infection outcomes

Methodology

- Received Institutional Review Board (IRB) approval from Alverno College and Wheaton Franciscan Healthcare
- Obtained CAUTI and CLBSI rates for September 2013
- Dispersed nursing survey to all nursing associates
- Completed pre-prevalence review
- Implemented intentional rounds for one month using the adult learning principles of Malcolm Knowles
- Completed post-prevalence review
- Dispersed nursing survey to all associates who completed original survey
- Obtained CAUTI and CLBSI rates for September of 2014

Data Collection and Analysis

- CAUTI and CLBSI rates
- Nursing survey
  - Four point Likert scale
  - Provided baseline information around:
    - Nursing knowledge of evidence-based practice
    - Patient/family education
    - Importance of quality care
    - Handoff
    - Interactions with a CNS
- Intentional rounds
- Prevalence review
Results

- CAUTI and CLBSI rates
- ZERO

Pre-prevalence review
- Three patients with a central line, one patient with an indwelling urinary catheter
- Hand hygiene inconsistent
- Port protectors inconsistent
- Use of Chlorhexidine impregnated dressing inconsistent
- Standard care for indwelling urinary catheter met

Post-prevalence review
- One patient with a central line and one patient with an indwelling urinary catheter
- Hand hygiene
- Port protectors standard
- Chlorhexidine impregnated dressing consistent
- Indwelling urinary catheter care not standard

Nursing Survey – Evidence-Based Practice
Results

Nursing Survey - CNS

Intentional rounds qualitative themes
- Electronic health record (EHR) documentation limitations
- Lack of standardization for urinary catheter maintenance
- Inconsistent management of implanted ports
- Non-inclusive nursing handoff
- Minimal patient/family education

Strengths and Limitations

Strengths
- Identified barriers in practice
- Uncovered knowledge gaps in management of indwelling urinary catheters and central lines
- Enhanced partnership between CNS and frontline associates
- Improved nursing knowledge and practice in sample population
- Discovered themes that promote future work

Limitations
- Small sample size
- Short time frame for implementation
- Minimal research in the area
- Unit activity
Discussion/Future Implications

- Partner with Clinical Informatics to build EHR systems
- Provide education around CAUTI and CLABSI prevention
- Standardize nursing handoff
- Develop a formal approach to educating patients and families
- Utilize the concept of CNS intentional rounds to focus on other nurse sensitive indicators
- Determine financial savings attributed to improved hospital acquired condition rates
- Promote the CNS role and their ability to be an avid leader in the future of nursing by integrating evidence-based care into bedside practice

References

Questions