Reduction of Central Line-Associated Blood Stream Infections (CLABSI) is a priority in healthcare. CLABSI rates in our burn ICU had been at or below the expected National Health and Safety Network (NHSN) rate from 2009 through 2nd quarter 2013. However, rates were above the expected NHSN benchmark in 3rd and 4th quarter, 2013. There is a gap in the literature related to compliance with nursing standards of care and maintenance. In our unit 85% of the CLABSI occurred more than 5 days post insertion, indicating that quality improvement should focus on the care and maintenance, rather than insertion practices. The purpose of this project is to review nursing adherence to standards of care in our unit.

Methods

1. Survey of nursing regarding missed nursing care
   - Definition of missed nursing care = any aspect of required patient care omitted or delayed (error of omission)
   - 88.2% rate of missed nursing care

2. Implementation ideas from burn unit RN staff
   - 118 ideas submitted for improvement
   - Categories of ideas for change:
     - Education
     - Awareness promotion
     - Audits
     - Material Availability

3. Implemented ideas implemented
   - Education Video created and shown to staff for education
   - Quality audits of central lines and documentation
   - Posting days without CLABSI on unit bulletin board for awareness promotion

Results

- 437 days without a CLABSI as of March 31, 2015
- Rates of self-missed nursing care dropped from a high of 88.2% to 53.3%.
- Education video most meaningful to nursing staff
- 78.57% of nurses indicated that their personal practice changed
- 57.14% of nurses strongly agreed that the having staff member lead the project had a significant impact on their ability to change practice

Examples of Audit with Communication to Staff

EXAMPLE #1: Audit results and e-mail communication to staff
   RN 1 & RN 2:

   You both took care of patient TT in 5425 on 2/1/15. I audited your lines unfortunately the 1600 documentation did not match with actual site appearance and dressing integrity for TLC and Aline. The 2000 documentation is great, identifying that the dressing was not intact and the corresponding intervention. Please see attached picture and screen shot showing site and corresponding documentation.

   Here are a few points to remember for the future:
   - When using Mepilex AG (or acticoat) please frequently assess to ensure that your dressing is actually placed over the site this maximizes the antimicrobial effect over your site.
   - When using Mepilex AG change the dressing PRN when strike through begins to show on the dressing this is a sign that dressing is saturated and may no longer be as effective as a protective barrier.
   - Put a note somewhere in a device documentation that Mepilex AG or when using any other special dressing over your site.

   Sincerely,
   Muriel Makamure CN II
   Lead BICU CLABSI PI Team

EXAMPLE #2
   RN 1 and RN 2:

   You both took care of patient TT in 5430 on 12/8. I audited your lines unfortunately the 1600 documentation did not match with actual site appearance and dressing integrity for TLC and Aline. The 2000 documentation is an example of a good assessment and corresponding intervention of notifying the MD and documentation of pink/redness around the site. Please see attached document with a photo of the site and the corresponding documentation.

   Excellent work ladies

   Sincerely,
   Muriel Makamure CN II
   Lead BICU CLABSI PI Team

Conclusions/Applicability to Practice

- Basic care and maintenance of central lines based on organizational standards is essential for achieving quality of care for patients
- Nurses must first evaluate actual practice against standards when evaluating care and prior to revising policies and procedures
- Improvement efforts should focus on:
  - Barriers and facilitators of enhancing nursing adherence to standards of practice
  - Consideration of the unit culture
  - Nurse preferences when instituting interventions

References


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