

EP5EO – CARE DELIVERY SYSTEM(S)

UTILIZING DAILY FOCUSED ROUNDS TO DECREASE CLABSI ON 8HS

Using the required empirical outcomes presentation format, provide one example of an improved patient outcome associated with one or more experts' recommended change in nursing practice.

Problem

Central line-associated bloodstream infections (CLABSIs) are largely preventable and continue to impact medical and surgical units. Lauren English, MSN, RN, APRN, SCRNP, Clinical Nurse Manager (clinical nurse, at the time), Neuroscience Division, NewYork-Presbyterian/Columbia University Irving Medical Center (NYP/Columbia), noted an increased CLABSI rate per 1,000 central line days on the Neuro Surgery (8HS-605158) [8HS] Unit.

Pre-Intervention

June 2021:

- The June 2021 8HS CLABSI rate per 1,000 central line days was 19.42.
- Ms. English shared her concerns with Emily Anderson, MSN, RN, CNRN, Patient Care Director (nurse manager, at the time), 8HS, who agreed there was a concerning trend with the rising CLABSI rate. Ms. Anderson encouraged Ms. English to consult with the NYP/Columbia epidemiology experts to address the CLABSI rate.
- Ms. English sought the expertise of nurse epidemiologists Erin McLaughlin, MSN, BSN; Ari Steinburg, BSN, RN; and Lilibeth Andrada, MSN, RN, NP, CIC. The NYP/Columbia Department of Epidemiology is responsible for providing guidance and direction to improve hospital-acquired infection rates, including CLABSI rates, throughout the hospital. Ms. McLaughlin, Mr. Steinburg, and Ms.

Andrada have specialized competence in the practice of infection prevention and control and healthcare epidemiology. Ms. Andrada, as a national board certified nurse expert, recommended changes in nursing practice, including focused rounds by charge nurses using the MyRounding electronic rounding platform and enhanced visual management utilizing the visibility board, to improve the CLABSI rate on 8HS.

Goal Statement

To reduce the 8HS CLABSI rate per 1,000 central line days

Participants

Name/Credentials	Discipline	Title	Department/Unit
Lauren English, MSN, RN, APRN, SCRNI	Nursing	Clinical Nurse Manager (at the time); Clinical Nurse	Neuroscience Division
Emily Anderson, MSN, RN, CNRN	Nursing	Patient Care Director (Nurse Manager, at the time)	8HS
Erin McLaughlin, MSN, RN	Nursing	Nurse Epidemiologist (Expert)	NYP/Columbia Epidemiology
Ari Steinburg, BSN, RN	Nursing	Nurse Epidemiologist (Expert)	NYP/Columbia Epidemiology
Lilibeth Andrada, MSN, RN, NP, CIC	Nursing	Nurse Epidemiologist (Expert)	NYP/Columbia Epidemiology
Trudy Brown, BSN, RN, SCRNI	Nursing	Clinical Nurse; Charge Nurse	8HS

Intervention

July 2021:

- Ms. McLaughlin, Mr. Steinburg, and Ms. Andrada (experts), in collaboration with Ms. English, expressed the expectation that charge nurses should round on all patients with central lines using the MyRounding platform. MyRounding is a software application that validates specific practices and allows leaders to generate reports and analytics. They educated the charge nurses on the MyRounding electronic rounding platform.

Impact Statement: When experts in the field of infection prevention, such as CLABSI prevention, set expectations and recommend best practices, the team adopts these recommendations. Having the experts provide education of best practices for the charge nurses on the MyRounding platform empowered them with a comprehensive overview of central lines across the unit on any given day. This enhanced perspective enabled the charge nurses to proactively mitigate CLABSI risks and reduce CLASBI rate on 8HS.

August 2021:

- Ms. English and Ms. Brown, in collaboration with Ms. McLaughlin, Mr. Steinburg, and Ms. Andrada (experts), developed standardized processes for charge nurses to round daily on all patients with central lines to ensure CLABSI prevention strategies were properly applied, providing an opportunity for real-time feedback, practice improvement, and on-the-spot education. Based on expert recommendations, the team embedded the following standards as expectations into the daily charge nurse rounds on all central line patients. These standards represent the content evaluated during rounds by the charge nurse.
 - All central venous catheter (CVC) lumens, stopcocks, and tubing access points have needleless endcaps and CUROS™ Caps? (YES/NO/NA)
 - All IV tubing is labeled with the date the tubing needs to be changed; no tubing is expired? (YES/NO)
 - CVC dressing is appropriate and applied correctly? (YES/NO)
 - CVC dressing is clean, dry, intact, and not reinforced? (YES/NO)
 - CVC dressing is clearly labeled with date and initials? (YES/NO)
 - RN is able to verbalize how to cleanse the CVC insertion site during a dressing change? (YES/NO)
 - RN is able to verbalize how to scrub the CVC hub? (YES/NO)
 - A chlorhexidine gluconate (CHG) treatment has been performed in the past 24 hours? (YES/NO)
 - RN/support staff are able to verbalize the frequency and proper procedure for CHG treatment? (YES/NO)
 - CVC patency is assessed within the past 12 hours? (YES/NO)

- RN is able to verbalize strategies to maintain patency and actions to take if issues arise? (YES/NO)
- RN can confirm that the CVC is a necessity and was discussed in interdisciplinary rounds within 24 hours? (YES/NO)
- RN can verbalize the current indication and plan for removal? (YES/NO)
- A “vascular access – adult” order panel is present in OR orders for flushing, dressing change, and CHG treatment for each central line? (YES/NO)

Impact Statement: The daily focused rounds using the MyRounding platform prompted the charge nurses provide feedback, practice improvement, and real-time education to clinical nurses on CLABSI prevention strategies, contributing to the reduction of CLASBI rate on 8HS.

- Ms. English coordinated with Ms. McLaughlin, Mr. Steinburg, and Ms. Andrada (experts) to establish a weekly rounding schedule that included chart audits, visibility board audits, and real-time education as necessary to ensure the charge nurses (clinical nurses) were compliant with this recommended change in nursing practice. Additionally, Ms. English was responsible for ensuring the charge nurses (clinical nurses) completed daily rounds and updated the visibility board.

Impact Statement: Data from the rounding platform were reviewed and discussed at daily huddles to address opportunities to reduce CLASBI rate on 8HS.

- By August 31, 2021, 8HS clinical nurses implemented the daily standardized charge nurse rounds and consistently updated the visibility board, fully adopting the recommended change in nursing practice from NYP/Columbia epidemiology experts to decrease the CLASBI rate on 8HS.

- **Key references:**

Meyer, R., Best, D., Geiger, A., Beiting, S., Kramer, K., & Flesch, L. (2020). Nurse Driven CVC Rounding Utilized to Improve Bone Marrow Transplant Patient Outcomes. *Biology of Blood and Marrow Transplantation*, 26(3), S378-S379. <https://doi.org/10.1016/j.bbmt.2019.12.167>

Hugo, M. C., Rzucidlo, R. R., Weisert, L. M., Parakati, I., & Schroeder, S. K. (2022). A Quality Improvement Initiative to Increase Central Line Maintenance Bundle Compliance through Nursing-led Rounds. *Pediatric Quality and Safety*, 7(1), e515. <https://doi.org/10.1097/pq9.0000000000000515>

Outcome

EP5EO 8HS CLABSI Rate per 1,000 Central Line Days

