

Baystate Health

## Scholarly Commons @ Baystate Health

---

Research and Education Celebration 2023

Presentations and Posters

---

Summer 2023

### Improving Patient Outcomes: Decreasing Central Line Blood Stream Infections

Erin Sevilla RN  
*Baystate Health*

Follow this and additional works at: [https://scholarlycommons.libraryinfo.bhs.org/nurs\\_presentations2023](https://scholarlycommons.libraryinfo.bhs.org/nurs_presentations2023)



Part of the [Medicine and Health Sciences Commons](#)

---

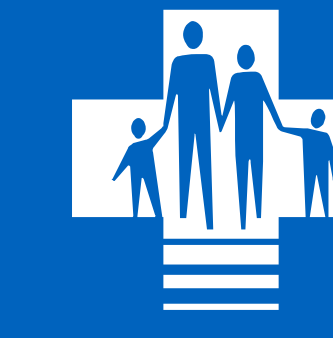
#### Recommended Citation

Sevilla, Erin RN, "Improving Patient Outcomes: Decreasing Central Line Blood Stream Infections" (2023). *Research and Education Celebration 2023*. 10.  
[https://scholarlycommons.libraryinfo.bhs.org/nurs\\_presentations2023/10](https://scholarlycommons.libraryinfo.bhs.org/nurs_presentations2023/10)

This Book is brought to you for free and open access by the Presentations and Posters at Scholarly Commons @ Baystate Health. It has been accepted for inclusion in Research and Education Celebration 2023 by an authorized administrator of Scholarly Commons @ Baystate Health.

# Improving Patient Outcomes: Decreasing Central Line Blood Stream Infections

Erin Sevilla, RN, VA-BC & Diane Kos-Ditto MSN, RN-BC

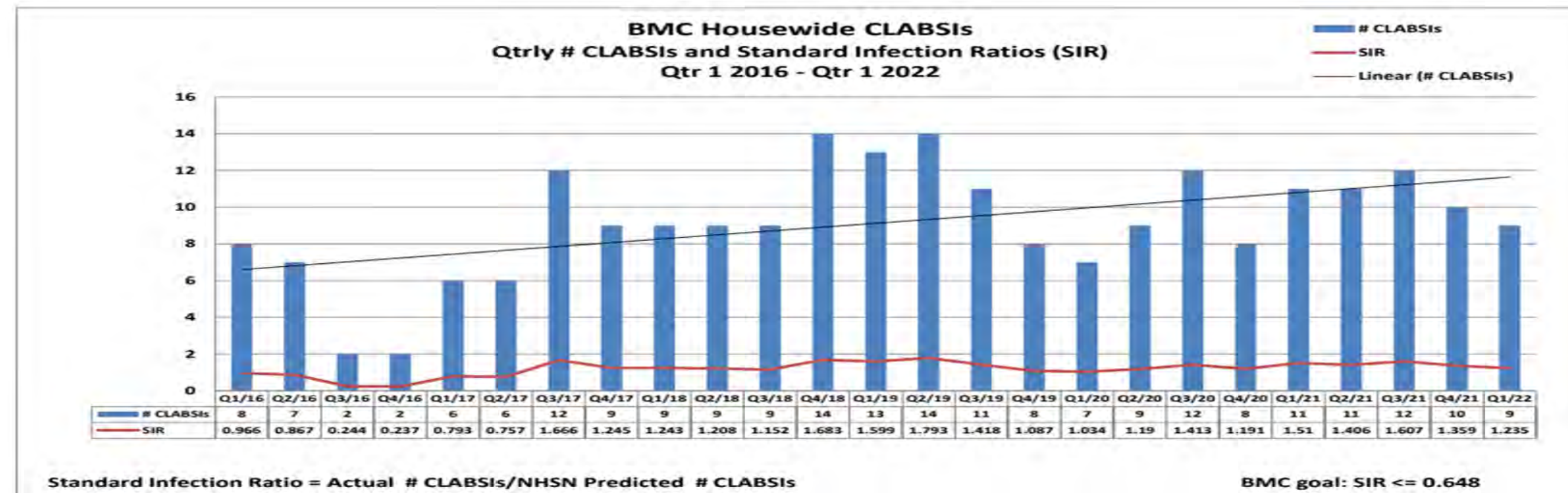


Baystate Health

ADVANCING CARE.  
ENHANCING LIVES.

## Problem

- With 15 million central-venous-catheter days per year in the ICU, it is critical to improve patient outcomes and prevent central line blood stream infections (CLABSI).
- Evidence demonstrates that checklists, IV teams, proper disinfection practices and standardizing of practices can improve CLABSI rates.
- With implementation of best practices, organizations can achieve zero CLABSI's related to insertion practices.
- At our organization, CLABSI rates related to insertion, have increased by 25% in 2022.



## Interventions

- A Checklist was created that included the following components based off the Institute for Healthcare Improvement guidelines:
  - Handwashing
  - Maximal barrier
  - Chlorhexidine for skin antisepsis (waiting until it is completely dried before puncturing the skin with the needle)
  - Proper site selection with avoidance of femoral vein
  - Prompt removal when no longer needed to help in the reduction of CLABSI
- Licensed Practical Nurses (LPN) were hired. Their role is as a second nurse to complete the newly created checklist and observe the PICC Insertion.
- A just culture was implemented within the department to establish an atmosphere of trust and clear communication.



## Results

- With the implementation of the checklist and 2<sup>nd</sup> RN, there was an increase in accountability in the practice of PICC insertions in accordance with ethical, legal, regulatory principles, and professional standards.
- With the Implementation of these interventions there has been a reduction in CLABSIs at our organization.

## Significance and Future Work

- We will continue to standardize the workflow and best practices with PICC line insertion. These will include:
  - Perform timeouts with two healthcare providers involved in the procedure.
  - Improve PICC order to actual time of placement.
  - Continue to advocate for proper vascular access device on admission.

## Objectives

- To implement a checklist for all inserters on the PICC team.
- Education and training of an observer using the checklist to help decrease CLABSI's related to insertion practices.

### PICO Question:

In patients requiring a PICC line, how does implementation of a standardized checklist compared to usual care affect CLABSI rates?

Westfield STATE UNIVERSITY

