



CLABSI Elimination : It Takes a Team To Reach Zero

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METHODS

In (month) 2009, a Nursing Staff/Infection Prevention Performance Improvement (PI) team was established to address CLABSI in our facility's ICU. The team's membership included bedside caregivers, along with nursing management personnel and the Infection Prevention manager. The team's initial task was the identification of various factors possibly contributing to CLABSI occurrence; each factor was then given a weight assignment. This information was used to formulate the CLABSI Problem Statement and PI plan. Three main categories were identified and weighted as follows:

•CL maintenance factors = 40%

a) Implement annual CVC maintenance competency

•CL insertion factors = 30%

a) Develop and implement a CVC insertion bundle.

•Overuse/Necessity of PICC lines = 30%

a) Develop and implement PICC criteria and central authority to authorize insertion.

This resulted in a temporary drop in CLABSI's to zero. Ongoing efforts and a continued team focus proved necessary.

In January 2010, a Nursing Staff/Infection Prevention Performance Improvement (PI) was reformed and CLABSI's elimination was again addressed. Three main categories were identified and weighted as follows:

•CL maintenance factors = 40%

•CL insertion factors = 30%

•CL discontinuation factors = 30%

The PI team focused on the maintenance factors identified. These maintenance factors were weighted as follows:

•Non-compliance with existing care bundle = 25%

•Technique/time = 20%

•Education = 15%

•Policy/criteria known? & annual competency = 10% each

•Supply availability & scattered location of supplies = 5% each

Since previously established CLABSI bundle measures were already in place, the team decided that additional measures beyond the established care bundle would be necessary, and that establishment of more measurable care parameters would be essential. Below are major foci of the PI project and interventions implemented to support each:

•Major focus: Hub Maintenance

•Hubs aseptically changed every Thursday with dressing change

•COLOR-CODED HUB implementation (GREEN on payday week/RED non payday week) for quick visual check of hub-changing compliance

•Major scrub-the-hub campaign completion

•Initiated CHG swab use house wide (limited use of alcohol swabs)

•Major focus: Tubing/Dressing Changes

•All tubing must be dated (including IVPB)

•All IV tubing and add-on devices changed every 7 days (Thursdays)

•All central line dressings changed every Thursday (and prn to keep dressings occlusive/dry/intact)

•Major focus: Decrease patient skin bioburden

•Patients with central lines bathed every 24 hours with CHG-impregnated cloths

•Major focus: Compliance Monitoring

•Daily audits of all central line care issues on all central lines in the ICU

After CLABSI PI interventions were successfully established in the ICU, the extended bundle interventions were spread to non-ICU areas in the facility.

RESULTS/CONCLUSIONS

➤ Following implementation of the extended bundle measures in late January 2010, the quarterly ICU CLABSI rate decreased to zero, and no CLABSI has occurred in the ICU with surveillance completed through October of 2011.

➤ The CLABSI rate OUTSIDE the ICU also decreased to zero the quarter following implementation of the extended measures. There were no CLABSI's in the non-ICU setting for 413 days.

