# Creating a Culture of Zero Tolerance for Central Line-Associated Bacteremia

J Zack, PhD, RN, CIC<sup>1</sup>; D Spence, BSN, RN, CCRN<sup>1</sup>; B Lamb, BSN, RN<sup>1</sup>; R Martin, MD<sup>1</sup>, D Striker, MD, FCCP<sup>1</sup>; J Krettek, MD, PhD<sup>1</sup>; E Dubberke, MD, MSPH<sup>1,2</sup> Missouri Baptist Medical Center<sup>1</sup> Washington University, St. Louis, MO,<sup>2</sup>

## **Background Information**

- ♦ Annually, the Centers for Disease Control (CDC), estimate 250,000 cases of central line-associated bacteremia (CLAB)
- ♦ Attributable mortality is 12%-25%
- ◆ Additional patient length of stay in the ICU
- ◆Additional patient length of stay in the hospital 7-10 days
- ♦ Associated costs of caring for these patients \$296 million - \$2.3 billion.

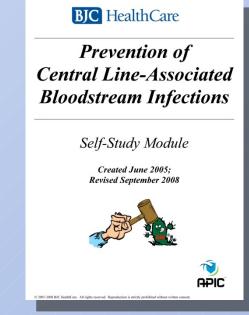
## Purpose

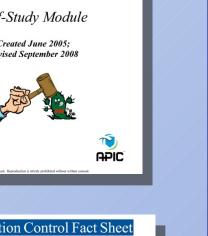
- ♦ The goal was to create a culture of zero tolerance for CLAB in the Medical/Surgical Intensive Care Unit (MSICU).
- ◆Patients with central lines are more susceptible to getting a CLAB.
- Device utilization is prevalent in this population.
- ♦ CLAB rates are state reportable and there is increased public awareness surrounding these rates.





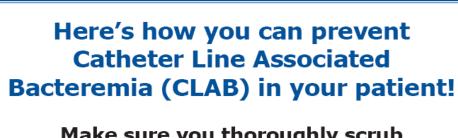
# Strategy and Implementation







- ♦ Increase in CLAB rates in the MSICU.
- ◆Identified that the educational module had not been implemented for over a year.
- ♦ CLAB educational module was given to all MSICU nurses using an electronic testing system -Cornerstone.



Make sure you thoroughly scrub the injection port with alcohol before njecting IV medications.

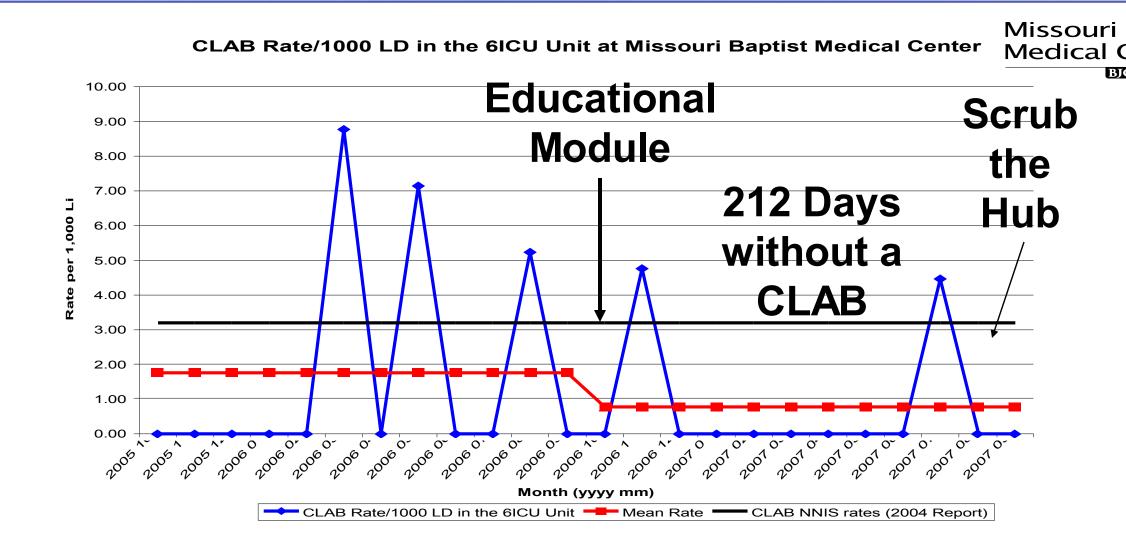


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#### **Scrub the Hub Maintenance Bundle**

- Perform hand hygiene.
- Put on clean gloves prior to accessing the line.
- Perform a 30 Second "Hub Scrub" using alcohol and friction in a twisting motion on the hub as if you were juicing an orange.
- Draw the blood or inject medications per the policy.
- Discard gloves and perform hand hygiene.

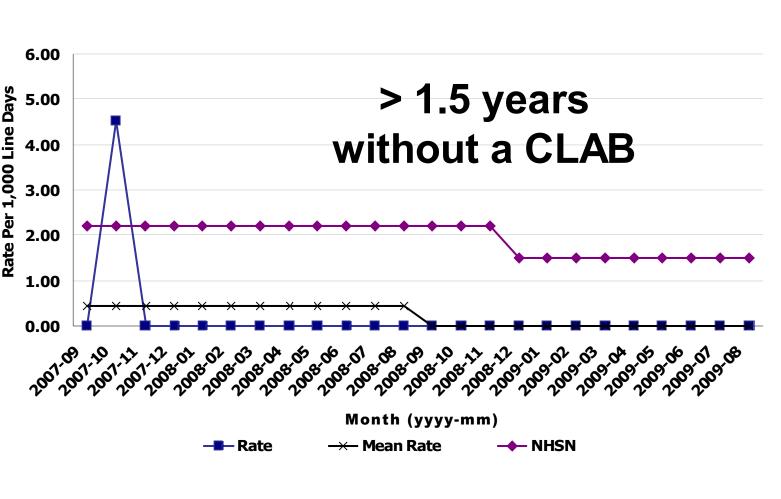
# **Intervention Timing**



- Missouri Baptist **Medical Center** 
  - ♦ MSICU nurses were upset about the CLAB after 212 days without a CLAB.
  - Observations were performed by the infection prevention practitioner.
  - Scrub the hub bundle was initiated

### Results





## **Summary/Conclusions**

- ♦ The CLAB educational module resulted in zero CLAB rates, thus the educational module is annual mandatory testing for MSICU nursing staff.
- CLAB rates are shared at nursing staff meetings.
- ◆Transparency in feeding back the CLAB rates to the MSICU nurses changed the culture in the MSICU.
- One CLAB is considered a bad outcome.

## **Implications for Practice**

- Creating a culture for zero tolerance for CLAB improves patient care by reducing mortality, the number of days in the ICU and the hospital, and associated costs.
- ◆Additionally this creates a culture of success among the nurses, increasing nursing ownership and nursing morale.

