

# CENTRAL LINE ASSOCIATED BLOOD STREAM INFECTIONS

## CASE FOR CHANGE

**12 to 25%**

12% - 25% of patients with a central line associated blood-stream infection will die.<sup>1</sup>



An estimated 23,000 bloodstream infections occur in hospitalized patients with central lines each year.<sup>1</sup>



The estimated cost per infection ranges from \$6,000 - \$29,000.<sup>2</sup>

Reduce the incidence of catheter associated blood stream infections by

**20 PERCENT**  
by 2019.

## BOLD AIM & KEY DRIVERS

- ◀ Intervention Priorities
- ◀ Communication
- ◀ Monitoring and Surveillance

## KEY LEARNING

- Engage multidisciplinary teams in the process by creating awareness, training, and education around current evidence-based practice
- Engage and educate patients and families
- Implementation of insertion and maintenance bundles

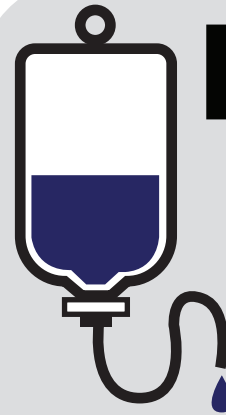
## RAPID CYCLE INNOVATIONS

### Intervention Priorities

- Provide and implement written guidelines for catheter use, insertion, and maintenance
- Implementation, of insertion and maintenance bundles, into all care areas
- Implementation of evidence based measures to prevent surgical site infections (use of chlorhexadine baths, needleless connectors, adherence to infection prevention practices at time of insertion and dressing changes)
- Implementation of a robust hand hygiene program

### Communication

- Explore opportunities for improved communication among care providers and sites of care
- Utilize a multi-disciplinary team with physician and nursing champions
- Provide education of healthcare personnel involved in insertion, care, and maintenance of central lines and regarding CLABSI prevention



## MEASURES

### Process:

- Central line insertion compliance
- Central line utilization ratio

### Outcome:

- CLABSI rate

### Monitoring and Surveillance

- Conduct daily monitoring and review of all central lines
- Implement a system for documenting information regarding catheter insertion and maintenance in the patient record
- Use of standardized NHSN definitions for monitoring and surveillance

#### Sources:

1. Centers for Disease Control and Prevention (CDC), Morbidity and Mortality Weekly Report (MMWR). <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6008a4.htm>.

2. Scott, R. D. (2009) The direct medical costs of healthcare-associated infections in U.S. hospitals and the benefits of prevention. [http://www.cdc.gov/HAI/pdfs/hai/Scott\\_CostPaper.pdf](http://www.cdc.gov/HAI/pdfs/hai/Scott_CostPaper.pdf)

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