

## BUNDLE BASICS

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Bundles are groupings of best practices that individually improve care, but when applied together, result in even greater improvement.

### CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTION (CLABSI) PREVENTION

**Central line-associated bloodstream infections (CLABSI)** result in thousands of deaths each year and billions of dollars in added costs to the U.S. healthcare system. These infections are preventable. CLABSI Prevention strategies must focus on clear indications for the insertion of a central line and prompt removal when no longer necessary.

#### INDICATIONS FOR CENTRAL LINE INSERTION

- Administration of blood products and intravenous fluids
- Immediate medication delivery for unstable patients
- Administration of hypertonic solutions
- Administration of vasodilator/vasopressor
- Monitor central venous pressure
- Hemodialysis access
- Prolonged duration of IV fluids

#### CLABSI PREVENTION INTERVENTIONS

- Perform hand hygiene by washing hands with soap and water or using an alcohol-based hand product
- Use maximal barrier precautions, including sterile gloves, sterile gown, cap, mask and large sterile full body drape
- Apply a skin cleanser (antiseptic), such as Chlorhexidine Gluconate (CHG)
- Select optimal site for central line; avoid femoral vein
- Evaluate need for central line every day and remove promptly, if required
- Change dressing over central line and replace with clean, dry occlusive dressing, according to schedule

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### CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTION (CLABSI) PREVENTION

CLABSIs may be prevented through proper placement and management of the central line. Facilities have found it useful to monitor adherence to evidence-based central line insertion practices as a method for identifying quality improvement opportunities and strategically targeting interventions. Feedback of adherence data has been an intervention that successfully reduced CLABSI rates.

#### CLIP: CENTRAL LINE INSERTION PRACTICES

- Perform a time out using the informed consent form
- Clean hands
- Wear cap, mask, sterile gown/gloves and eye protection if in contact with or crossing the sterile field at any time during the procedure
  - All others entering the room during the procedure must wear cap and mask
- Prep site with chlorhexidine and let air dry
- Drape patient from head to toe using sterile technique
- Prepare catheter by pre-flushing and clamping all lumens not in use during procedure
- Place patient in trendelenburg position unless contraindicated (e.g., increased intracranial pressure) or if femoral/PICC (place supine and flat)
- Maintain sterile field
- Ensure grasp on guide wire is maintained throughout procedure and removed post procedure
- Aspirate blood from all lumens, flush and apply sterile caps
- Ensure venous placement
- Clean site with chlorhexidine, apply sterile dressing and apply sterile caps on all hubs



TARGETED ASSESSMENT FOR  
PREVENTION (TAP) STRATEGY  
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