

**Utilizing a Central Line Cart to Increase Bundle Compliance**  
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**Evidence:** The Institute for Healthcare Improvement Central Line Bundle has demonstrated the ability to decrease in central line infections, and bundle components are included in the Center for Disease Control recommendations for central line insertion. Critical components *specific to line insertion* include:

- Hand hygiene
- Maximal Barrier Protection
- Site Prep with Chlorhexidine
- Optimal Catheter site selection

In 2003 and 2005 surveys of Intensivists, Robinson et al identified less compliance to Bundle components during line insertion if the equipment was not readily available.

**Strategy:** The ICU/CCU formed a multidisciplinary team to specifically implement insertion aspects of the Central Line Bundle. One issue readily identified by our physician champion was lack of immediate availability of the equipment needed for safe central line insertion, including drapes, gowns, gloves, masks and chlorhexidine preps. This concern echoed the research findings identified by Robinson et al.

**Practice change:** The team gathered all necessary equipment into one readily-available cart which could be transported from room to room. The team also implemented the use of a cap, gown, mask and gloves for both inserting practitioner and assistants and made all of this equipment readily available.

**Evaluations:** Nursing staff members were performing routine audits of line insertions, (excepting emergent central line insertions where Barrier components could not reasonably be performed). Audits continued after the practice change was implemented.

**Results:** Compliance with bundle aspects increased significantly with the availability of the cart. All audited components were at 100% in November, with the exception of masks, which increased from 69% to 80%.

**Recommendations:** The cart became so popular with physicians and residents that maintaining stocking became an issue. A systematic restocking process was created. Utilizing the multidisciplinary approach facilitated buy-in from staff and physicians, and the ready availability of supplies increased compliance with Bundle components.

## Bibliography:

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