

STANDARDIZING CENTRAL VENOUS CATHETER LAB COLLECTION PROCESS TO REDUCE RISK OF CENTRAL LINE ASSOCIATED BLOOD STREAM INFECTION

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Background Information: According to the Centers for Disease Control CDC, an estimated 30,100 central line associated bloodstream infections (CLABSI) occur in acute care facilities each year. The Joint Commission National Patient Safety Goals recommends implementing proven guidelines to prevent CLABSI. In a major cancer center, with an average of 60 to 80 surgical procedures performed daily, the risk of CLABSI is significant considering the immunocompromised patient population. Post Anesthesia Care Unit (PACU) nurses committed to infection control developed a standardized process for collecting lab samples from the Central Venous Catheter (CVC).

Objectives of Project: The objective of the project was to identify barriers in obtaining CVC blood samples among PACU nurses. The project aimed to assess any knowledge deficit and barriers to safe nursing practice related to CVC blood draw. The goal was to implement and educate nurses on a standardized process of CVC blood draw in compliance with institutional policy and CDC recommendations.

Process of Implementation:

- Obtained the primary needs assessment via electronic survey
- Collaborated with lab educator to identify best practice and obtained training
- Trained superusers to assist with educating PACU nurses regarding standard guidelines and current policies
- Provided skill station and training for nurses followed by return demonstration and competency validation
- Identified a need to re-educate as illustrated by a post survey
- Addressed the barriers to safe practice and knowledge gaps
- Administered a second post-survey that illustrated 98% validation of understanding of the correct policy and procedures among the respondents
- Implemented measures, such as staff surveillance, utilization of superusers, and partnership with lab, to sustain the standardized process

Statement of Successful Practice: Pre-survey results indicated knowledge deficits among clinical nurses related to proper disinfection, collection techniques, and institutional policies. The post survey results, following reeducation and simulation, illustrated 98% validation of understanding correct CVC blood draw policies and procedures to prevent CLABSI.

Implications for Advancing the Practice of Perianesthesia Nursing: The use of standardized guidelines for the collection of blood samples from CVC lines can potentially reduce the risk of CLABSI. The use of skill stations to provide education can enhance understanding of correct policy and procedure as indicated by the post survey.