



Nursing Survey Reveals Novel Strategy in Assisting Adherence to Best Practices of CVC Dressing Management

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BACKGROUND

Catheter-related bloodstream infections (CRBSIs) are a serious complication related to vascular access, and are associated with increased hospital length of stay, mortality, and costs. Effective catheter-related CRBSI prevention requires multiple interventions and adherence to evidence-based best practices. Evidence-based guidelines published by Society for Healthcare Epidemiology of America/Infectious Diseases Society of America (SHEA/IDSA) and the Centers for Disease Control and Prevention (CDC) highlight best practices for prevention and monitoring within acute care hospitals before, during, and after CVC insertion. According to

Timsit et al, a cornerstone of CRBSI prevention is dressing management and prevention of dressing disruption.

Our CRBSI infection rates were higher than desired, and we were able to ascertain they were not insertion related; therefore, we started looking at the care and maintenance of the lines. It became evident that we had challenges with dressing attachment and securement. A quality improvement (QI) initiative was conducted to assess the effectiveness of new products* for enhancing dressing securement and preventing detachment.

METHODS

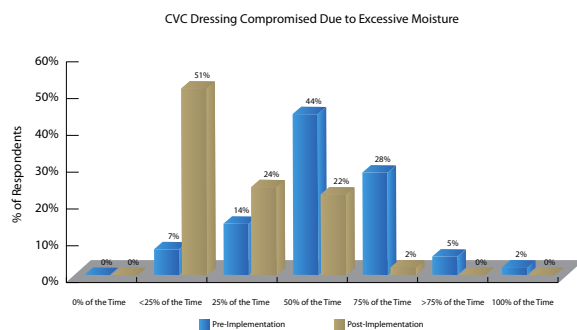
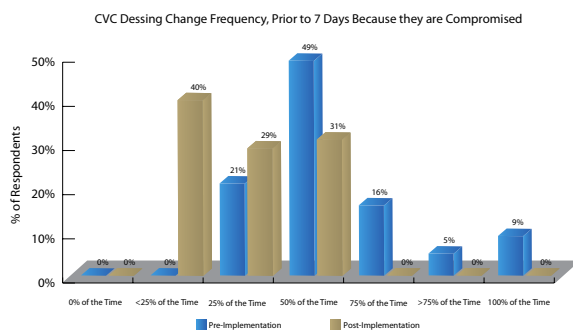
CLINICAL SETTING: A 247-bed community hospital with two separate intensive care units participated in this QI initiative.

SURVEYS: Before and after surveys were conducted to determine whether the revised products utilized for dressing securement and detachment impacted adherence to evidence-based best practices.

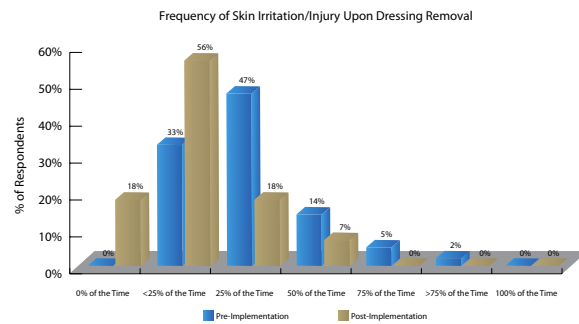
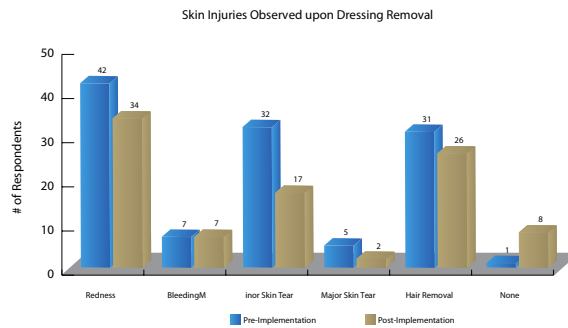
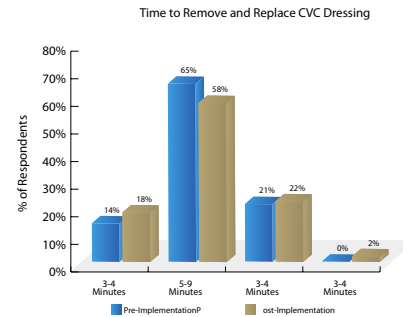
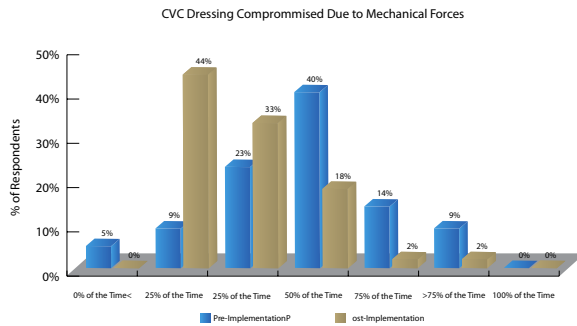
RESULTS

A comparison of before and after surveys revealed the nursing staff felt use of the revised products for dressing securement and detachment increased adherence to evidence-based best practices for CRBSI prevention and catheter management. There were fewer dressings compromised due to mechanical forces and fewer dressings were compromised prior to 7 days. Furthermore,

fewer dressings were compromised due to excess moisture. Additional results are reported in the below figures. Of interest, the additional step required for application of a product for attaching and detaching dressings did not result in decreased productivity, as before and after surveys revealed time spent applying and changing dressings did not change significantly.



RESULTS



CLINICAL IMPLICATIONS

- The before and after survey revealed nurses believed use of the products for securing and removing CVC dressings helped them adhere to best practices for CVC management.
- In each survey criteria, nurses found that products used post-implementation helped maximize short-term CVC dressings.
- Less damage to the patients skin was experienced post-implementation.
- Fewer dressing detachments occurred due to moisture.
- Adding post-implementation products to central line dressing kits helped increase compliance.

ACKNOWLEDGMENTS

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