

# Venous Access Quality Improvement Initiative – “Scrub the Hub”

## The Problem

To assess current nursing practice related to the hospital recommendations to “scrub the Hub” for accessing a peripheral IV(PIV), we identified an improvement opportunity for staff education about best practice for PIV care and maintenance. The hospital has had higher than benchmark incidences for PIV bacteremia. Our team wanted to highlight best practice for “scrub the hub” with our staff. The Joint Commission recommends scrubbing the hub and generating friction every time you access a patient’s IV. (TJC 2013)

- The scope of the project was to conduct observations with the Farr 2 nursing staff, and then plan for Farr 2 and Farr 7 staff education.
- The problem impacts patient safety as a potential contributor to PIV bacteremia.
- IOM Dimensions of Quality Care: This is an important Patient Safety initiative.

## Aim/Goal

To assess, current practice on a medical surgical floor at BIDMC we asked:

*Does focused education on care and maintenance of venous catheter sites (PIV, Midline or CVL such as: PICC, Port or Temporary Line) influence daily clinical practice on a medical-surgical floor at BIDMC?*

## The Team

- Megan Buckley RN,BSN
- Alice Bradbury RN,BSN
- Kim Campbell Olivieri RN,MSN
- Donna Clarke RN MS
- Denise Corbett-Carbonneau RN,MSN
- Barbara Donovan RN,MSN
- Dawn Salter RN,BSN

## The Interventions

Before and after the intervention, **assessment** of practice was done on our unit, followed by focused education.

- The Education consisted of an oral poster presentation to RN staff using material supporting BIDMC venous access care policies and “scrub the hub” recommendations made by The Joint Commission.

## The Results/Progress to Date

### Pre Education:

- 7/10 nurses observed **did not** “scrub the hub” in between flushes and intravenous medications for the full 10 seconds.
- When an alcohol swab was used, “scrubbing the hub” was an average of 2 seconds instead of the recommended minimum 10 second scrub.

### Post Education:

- 9/10 nurses “scrubbed the hub” in between flushes and intravenous medications.
- For the 9/10 nurses who “scrubbed the hub” in between flushes and medications, the scrubs occurred for an average of 8.6 seconds.



## Lessons Learned

**“Scrub the hub” is not basic nursing knowledge and needs to be reinforced through focused education.**

- Focused education should be introduced to clarify knowledge regarding:
  - The Why- “scrubbing the hub” in between flushes to prevent biofilm formation on IV catheters
  - The How- care and maintenance of venous catheter sites (PIV, Midline or CVL such as: PICC, Port or Temporary Line)

## Next Steps/What Should Happen Next

The Team provided focused education to two units:

- Education was provided to Farr 2 staff. To spread the improvement to other units, we also provided the education to Farr 7 staff.

### Going Forward:

- We would like to do spot audits of our practice to see if the education change is sustained.