

PICCs, Hicks and Ports

A Quality Improvement Project for improving junior doctor confidence managing central venous catheters and their complications. Belfast Health and Social Care Trust 2020.

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Problem

Central Venous Access devices (CVADs) are common on medical and surgical wards. Complications including blockage and infection are relatively common. These need addressed appropriately to prevent loss of IV access, days without TPN or line sepsis. There is limited training in hospitals, therefore junior doctors can be unsure in dealing with issues that arise.

Strategy for Change

To improve junior doctor aptitude and confidence in managing CVADs, a survey was prepared which consisted of two sections.

- 1) Junior doctor rated confidence on a 1-10 scale
- 2) Technical knowledge of CVADs and their associated guidelines.

An education session was then set up with information provided by the Infusional Services team.

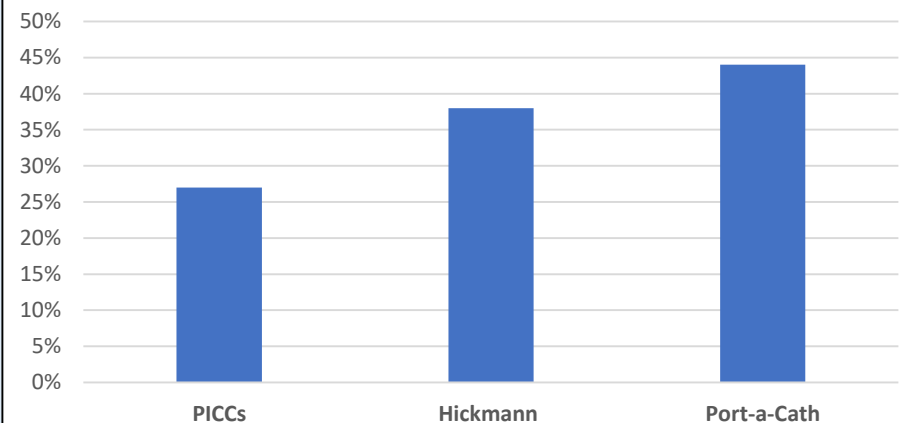
Measurement of Improvement

The survey was re-taken after the education session to assess areas which improved and areas which still required attention.

Effects of Change

Junior Doctor **confidence increased 36%** overall for all 3 types of CVAD (Figure 1). There was a **57% improvement in the technical knowledge** of CVADs and management of complications.

Percentage Increase in Confidence for Each CVAD (Figure 1)



Discussion

Both junior doctor confidence rating and technical knowledge greatly improved after the education session. To ensure retention of knowledge we plan to re-audit. Further measures for implementation include easy access to CVAD protocols on the trust intranet.