Initiatives to reduce central line associated blood stream infection (CLABSI) rates in the Pediatric Critical Care Unit (PCCU) were reviewed in 2010. It soon became clear that the patients with central venous catheters (CVC) were not confined to the PCCU. These CVC were accessed by other clinicians in many areas of the hospital. For instance, central venous catheters are being accessed in the operating room, radiology, and cardiac catheter lab. In addition, patients were transferred to acute care floors with their CVC in place. No standardized care or protocol to care for these central venous catheters had been established; therefore CVC care varied from unit to unit and person to person. A task force was formed that included nursing from all areas of the hospital, physician champions, infection control and prevention and quality improvement, in which to develop standard procedures for the care of CVC. Collaboration from all areas of the institution is necessary to develop a standardization of central venous catheter care and foster a zero tolerance culture.

Objectives

- Decrease central line associated blood stream infections.
- Obtain collaboration from all areas of the children’s hospital in the development of protocols to decrease central venous associated line infections.
- Standardize the care and maintenance of central venous lines throughout the institution.

Project

A multidisciplinary team was formed to look at the maintenance care of CVC throughout the children’s hospital.

- Promote a new “Scrub the Hub” campaign.
- Develop standardized dressing change kits. Three size kits were developed to capture the varying sizes of pediatric patients.
- The Vascular Access Team (VAT) expanded their role.
- CLABSI event analyses (huddles) are performed on all hospital CLABSI events.
- Bedside rounding tool templates were developed that could be individualized to meet the needs of a specific unit.

Results

Following the implementation of these initiatives, the CLABSI rates decreased throughout the institution.

- 2010 the numbers of CLABSIs were 54, for a rate of 2.4.
- 2011 the number of CLABSIs were 17, for a rate of 0.8.

Next Steps

- Develop and provide education on the blood culture protocol.
- Develop and provide education on the central venous line flush protocol.

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