

Identifying PICC Line Tips: Saving Time from Insertion to Therapy
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Problem: A Peripherally Inserted Central Catheter (PICC) is one of the most common forms for intravenous (IV) access. A competency-validated Registered Nurse (RN) places the PICC. A chest x-ray is taken to confirm proper placement of the PICC before beginning IV therapy. Initiation of therapy can be delayed depending on the radiologist's availability. The vascular access specialty team (VAST) realized that action was needed to expedite PICC use.

Evidence: A literature review of nurses identifying PICC line tips was conducted. Infusion Nurses Society and Association of Vascular Access workshops were attended. Networking with other hospitals resulted in knowledge of procedure with the goal being the identification and implementation of a best practice.

Strategy: The information was presented to Nursing Leadership and Nurse Practice Council at Durham Regional Hospital. With the support of these groups and the radiologists, the team consulted the North Carolina Board of Nursing to determine scope of practice in which it was. Approval was then obtained from the Medical Executive Committee and Risk Management. Staff attended a six-hour workshop presented by a radiologist and RN from an outside hospital using this practice and a sixty-minute conference on chest x-ray review with one of their hospital's radiologists. Each member of VAST then performed 15 consecutive radiographic assessments monitored and deemed accurate by a radiologist.

Practice Change: VAST implemented this practice in October, 2008.

Evaluation: Time is measured from when the chest x-ray is taken until ready to be viewed by a VAST nurse.

Results: IV therapy is started within 15 minutes upon chest x-ray completion in 98% of our patients with 99.6 percent accuracy out of 262 assessments.

Recommendations: Management support. Further data related to length of stay, patient outcomes be tracked to assess the long-term advance of this practice change. Work with finance to identify the financial impact to organization.

Lessons Learned: Increased multidisciplinary collaboration. Identifying best practice models. Implementing these practices takes time and coordinated efforts.

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