Abstract:

OBJECTIVE: The primary aim of this project is to reduce the incidence of 3 Fr. Groshong™ PICC occlusions through focused nursing education.

BACKGROUND: The use of Peripherally Inserted Central Catheters (PICC) has become an essential tool in the care of pediatric patients. The small lumen and long length of PICCs requires specialized skill and knowledge in proper care, maintenance and flushing in order to prevent catheter occlusion and other complications. Occluded catheters compromise patient care and increase costs. Reducing the incidence of catheter occlusion, will have a significant impact on the quality of patient care; patient, family and nursing satisfaction, patient outcomes, and costs.

METHODS: A pre-test/post-test design using a convenience sample of all the core staff nurses working on the medical/surgical unit at a Southern California Children’s Hospital was utilized. Objective measures included a written assessment of nursing knowledge, direct observations of nurses’ flushing technique, and retrospective chart review to determine the rate of total catheter occlusion.
RESULTS: Mean written test scores improved from 0.78 to 0.93 (p=0.00) Mean observation scores improved from 0.88 to 0.95, (p=0.004). The pre-test occlusion rate was 21.11/1000 catheter days. The post test occlusion rate was 15.49/1000 catheter days (p=0.057).

CONCLUSION: Focused nursing education contributed to reducing 3F Groshong™ PICC occlusions and the associated costs due to PICC occlusions.