Abstract:
This quality improvement project formalized central venous catheter tip surveillance augmented by the use of electronic patient reporting tool. The project setting was a large level IV academic neonatal intensive care unit with a representative convenience sample of patients with central venous catheters and quality improvement reports of complications from tip migration. Providers received education before implementation of a central venous catheter tip surveillance program using a revised electronic reporting tool was initiated. Provider evaluations of the electronic reporting tool included compliance with guidelines and use of the tool in multidisciplinary patient rounds, and were entered into a database for analysis. Nine evaluations of the electronic reporting tool were completed, with an average of 97% compliance with guidelines. Seven evaluations during multidisciplinary patient rounds using the reporting tool data demonstrated use by both resident physicians and advanced practice nurses. Central venous catheter patient data were reviewed after process implementation. Overall, infant central venous catheter complications related to tip migration decreased following implementation. Therefore, the use of an electronic reporting tool improved compliance with evidence-based clinical practice guidelines and resulted in a decrease in the risk for central venous line complications related to tip migration in this setting.

Reference: