



Intravenous literature: Cherry, R.A., West, C.E., Hamilton, M.C., Rafferty, C.M., Hollenbeak, C.S. and Caputo, G.M. (2011) Reduction of central venous catheter associated blood stream infections following implementation of a resident oversight and credentialing policy. *Patient Safety in Surgery*. 5(1), p.15.

Abstract:

BACKGROUND: This study assesses the impact that a resident oversight and credentialing policy for central venous catheter (CVC) placement had on institution-wide central line associated bloodstream infections (CLABSI). We therefore investigated the rate of CLABSI per 1,000 line days during the 12 months before and after implementation of the policy.

METHODS: This is a retrospective analysis of prospectively collected data at an academic medical center with four adult ICUs and a pediatric ICU. All patients undergoing non-tunneled CVC placement were included in the study. Data was collected on CLABSI, line days, and serious adverse events in the year prior to and following policy implementation on 9/01/08.

RESULTS: A total of 813 supervised central lines were self-reported by residents in four departments. Statistical analysis was performed using paired Wilcoxon signed rank tests. There were reductions in median CLABSI rate (3.52 vs. 2.26; $p = 0.015$), number of CLBSI per month (16.0 to 10.0; $p = 0.012$), and line days (4495 vs. 4193; $p = 0.019$). No serious adverse events reported to the Pennsylvania Patient Safety Authority.

CONCLUSIONS: Implementation of a new CVC resident oversight and credentialing policy has been significantly associated with an institution-wide reduction in the rate of CLABSI per 1,000 central line days and total central line days. No serious adverse events were reported. Similar resident oversight policies may benefit other teaching institutions, and support concurrent organizational efforts to reduce hospital acquired infections.



