The rapid adoption of a publicly available toolkit featuring routine universal decolonization of intensive care unit (ICU) patients may affect catheter-related blood stream infections” Septimus et al (2016).

Abstract:

BACKGROUND: Challenges exist in implementing evidence-based strategies, reaching high compliance, and achieving desired outcomes. The rapid adoption of a publicly! available toolkit featuring routine universal decolonization of intensive care unit (ICU) patients may affect catheter-related blood stream infections.

METHODS: Implementation of universal decolonization-treatment of all ICU patients with chlorhexidine bathing and nasal mupirocin-used a pre-release version of a publicly available toolkit. Implementation in 136 adult ICUs in 95 acute care hospitals across the United States was supported by planning and deployment tactics coordinated by a central infection prevention team using toolkit resources, along with coaching calls and engagement of key stakeholders. Operational and process measures derived from a common EHR system provided real-time feedback about performance. Healthcare-associated central-line
associated bloodstream infections (CLABSI), using National Healthcare Safety Network (NHSN) surveillance definitions and comparing the pre-implementation period of January 2011 through December 2012 to the post-implementation period of July 2013 through February 2014, were assessed via a Poisson generalized linear mixed model regression for CLABSI events.

RESULTS: Implementation of universal decolonization was completed within 6 months. The estimated rate of CLABSI decreased by 23.5% (p =0.001, 95% confidence interval [9.8%, 35.1%]). There was no evidence of a trend over time in either the pre- or post-implementation period. Adjusting for seasonality and number of beds did not materially affect these results.

CONCLUSIONS: Dissemination of universal decolonization of ICU patients was accomplished quickly in a large community health system and was associated with declines in CLABSI consistent with published clinical trial findings.

Reference:

Thank you to our partners for supporting IVTEAM