

A quality improvement project was conducted to decrease CLABSI rates by 50% across all ICUs in a tertiary care hospital (Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates)" Reddy et al (2015).

Reference:

Reddy, K.K., Samuel, A., Smiley, K.A., Weber, S. and Hon, H. (2014) Reducing Central Line-Associated Bloodstream Infections in Three ICUs at a Tertiary Care Hospital in the United Arab Emirates. Joint Commission Journal on Quality and Patient Safety. 40(12), p.559-1.

Abstract:

BACKGROUND: Central line-associated bloodstream infection (CLABSI) is associated with significant morbidity and mortality. A quality improvement project was conducted to decrease CLABSI rates by 50% across all ICUs in a tertiary care hospital (Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates).

METHODS: A multifaceted interventional program was implemented in a drive to reduce CLABSI rates. Stage 1 of the intervention entailed implementation of a central line insertion bundle, an insertion checklist, dedicated central line trolleys, education of all staff involved in insertion and maintenance of central lines, and empowerment of nurses. Stage 2 entailed implementation of a maintenance bundle and a CLABSI prevention policy and inclusion of central line assessment in the daily goals. Stage 3 was implemented in the form of CLABSI champions, spot checks on maintenance techniques, and review of every CLABSI. Stage 4 entailed the implementation of a Comprehensive Unit-based Safety Program (CUSP). Stage 5 consisted of a "back to basics" campaign, which included refocusing on basic evidence-based care bundles, introduction of bundle-compliance verification, and educational sessions and awareness programs.

RESULTS: Overall CLABSI rates significantly decreased ($p < .0001$) from a mean of 2.99 (standard deviation , 1.69) in the preimplementation period (January 2008-June 2011) to 1.47 (SD, 1.01) in the postimplementation period (July 2011-August 2014) across all ICUs. Overall, there were significantly more months with CLABSI-free days in the post-implementation than in the preimplementation period.

CONCLUSION: The combination of evidence-based interventions, standardization of procedures, teamwork, and front-line staff involvement in the decision-making process contributed to decreases in CLABSI rates across three ICUs.

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