

## **Central line-associated bloodstream infections (CLABSIs) are among the most frequent health care-associated infections. Central line bundle (CLB) programs are useful for reducing CLABSIs” Devrim et al (2016).**

### Abstract:

**BACKGROUND:** Central line-associated bloodstream infections (CLABSIs) are among the most frequent health care-associated infections. Central line bundle (CLB) programs are useful for reducing CLABSIs.

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**METHODS:** A retrospective study was designed to compare 2 periods: the prebundle and bundle periods. We evaluated the impact of a CLB including implementation of split-septum (SS) devices and single-use prefilled flushing (SUF) devices in critically ill children.

**RESULTS:** During the prebundle period, the overall rate was 24.5 CLABSIs per 1,000 central line (CL) days, whereas after the initiation of the CLB, the CLABSIs per 1,000 CL days dropped to 14.29. In the prebundle period, the daily cost per patient with CL and CLABSI were \$232.13 and \$252.40 consecutively. In the bundle period, the daily cost per patient with CL and CLABSI were \$226.62 and \$221.90 consecutively. Compared with the period with no CLB, the CLB period, which included SUF and SS devices, resulted in more costs saving by lowering the daily total costs of patients and indirectly lowering total drug costs by decreasing antibacterial and more significantly antifungal drugs.

**CONCLUSIONS:** CLB programs including SS and SUF devices were found to be effective in decreasing the CLABSI rate and decreasing the daily hospital costs and antimicrobial drug expenditures in children.

### Reference:



Devrim, İ., Yaşar, N., İşgüder, R., Ceylan, G., Bayram, N., Özdamar, N., Turgut, N., Oruç, Y., Gülfidan, G., Ağırbaş, İ. and Ađın, H. (2016) Clinical impact and cost-effectiveness of a central line bundle including split-septum and single-use prefilled flushing devices on central line-associated bloodstream infection rates in a pediatric intensive care unit. American Journal of Infection Control. April 6th.

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