



Our analysis found a statistically significant association between CLABSI status and readmission, suggesting that CLABSI may have adverse health impact that extends beyond hospital discharge” Khong et al (2015).

Reference:

Khong, C.J., Baggs, J., Kleinbaum, D., Cochran, R. and Jernigan, J.A. (2015) The Likelihood of Hospital Readmission Among Patients With Hospital-Onset Central Line-Associated Bloodstream Infections. Infection Control and Hospital Epidemiology. May 20th. .

Hospital readmission among patients with Central Line-Associated Bloodstream Infections  
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Abstract:

**OBJECTIVE:** To determine whether central line-associated bloodstream infections (CLABSIs) increase the likelihood of readmission.

**DESIGN:** Retrospective matched cohort study for the years 2008-2009.

**SETTING:** Acute care hospitals.

**PARTICIPANTS:** Medicare recipients. CLABSI and readmission status were determined by

linking National Healthcare Safety Network surveillance data to the Centers for Medicare and Medicaid Services' Medical Provider and Analysis Review in 8 states. Frequency matching was used on International Classification of Diseases, Ninth Revision, Clinical Modification procedure code category and intensive care unit status.

**METHODS:** We compared the rate of readmission among patients with and without CLABSI during an index hospitalization. Cox proportional hazard analysis was used to assess rate of readmission (the first hospitalization within 30 days after index discharge). Multivariate models included the following covariates: race, sex, length of index hospitalization stay, central line procedure code, Gagne comorbidity score, and individual chronic conditions.

**RESULTS:** Of the 8,097 patients, 2,260 were readmitted within 30 days (27.9%). The rate of first readmission was 7.1 events/person-year for CLABSI patients and 4.3 events/person-year for non-CLABSI patients ( $P < .001$ ). The final model revealed a small but significant increase in the rate of 30-day readmissions for patients with a CLABSI compared with similar non-CLABSI patients. In the first readmission for CLABSI patients, we also observed an increase in diagnostic categories consistent with CLABSI, including septicemia and complications of a device.

**CONCLUSIONS:** Our analysis found a statistically significant association between CLABSI status and readmission, suggesting that CLABSI may have adverse health impact that extends beyond hospital discharge.

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