



To evaluate institutional cost of community-acquired CLABSI in pediatric HPN patients” Raphael et al (2018).

Abstract:

BACKGROUND: While previous literature suggests home parenteral nutrition (HPN) dependent children experience frequent complications like community acquired central line associated bloodstream infections (CLABSI), few studies have characterized the cost.

OBJECTIVES: To evaluate institutional cost of community-acquired CLABSI in pediatric HPN patients.

METHODS: This is a single center retrospective review of institutional costs for HPN patients with community-acquired CLABSI at a tertiary care children’s hospital. Inclusions were age \leq 18 years-old between October 2011 to April 2016. Exclusions were death during hospitalization, readmission within 2 days of discharge. Patient-level factors were compared between high-cost group and all others using Welch’s two-sample t-test and ANOVA. Multivariable logistic regression was used to determine predictors of higher cost.

RESULTS: There were 176 CLABSI admissions among 68 patients over the study period (median 2 hospitalizations per patients). The mean cost and length of stay (LOS) per hospital admission are \$28,375 (2015 US dollars) and 8 days, and both were associated with intensive care unit admission (ICU), central venous catheter (CVC) removal, private insurance, and age

< 2 at admission. Nine percent of patients were classified as “super-utilizers” whose 54 hospitalizations accounted for 28% of total institutional costs.

CONCLUSIONS: Among pediatric HPN patients, community-acquired CLABSI is associated with significant cost and LOS. Healthcare utilization is disproportionately concentrated in a small number of patients. These study findings may help inform cost analysis for future CLABSI prevention strategies.

Reference:

Raphael, B.P., Hazekamp, C., Samnaliev, M. and Ozonoff, A. (2018) Analysis of Healthcare Institutional Costs of Pediatric Home Parenteral Nutrition Central Line Infections. *Journal of Pediatric Gastroenterology and Nutrition*. June 13th.

doi: 10.1097/MPG.0000000000002058.

