

"Those who fail to learn from the past are doomed to repeat it": Characterization of CLABSIs at AFCH from 2018-2020

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BACKGROUND

- Central venous catheters (CVCs) are a necessary tool for healthcare delivery, but also carry significant risk
- One possible complication is development of a Central Line Associated Blood Stream Infection (CLABSI), which increase morbidity, mortality, hospital stays and healthcare costs
- From 2018 to 2020, the CLABSI rate increased at American Family Children's Hospital (AFCH) from 0.97 to 2.16 per 1000 central line days
- We aim to identify modifiable risk factors that could potentially be targeted to decrease future CLABSI rates

DESIGN/METHODS

- Retrospective chart review of patients at AFCH who had a CLABSI (laboratoryconfirmed bloodstream infection not related to an infection at another site that developed after the first 48 hours of admission) from January 2018 to December 2020
- Characteristics reviewed included:
 - Patient-specific factors:
 - Age, race, home health agency, diagnosis, service, unit, pathogen, length of stay, and mortality
- Line-specific factors:
- Use of line at home, line type, line size, service that placed the line, and duration of line prior to CLABSI
- For comparison, CLABSIs from 2018 and 2019 were combined and compared with those from 2020
- This project was considered IRB-exempt









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No statistically significant patient- or line-specific factors that contributed to the increase in

- CLABSIs at AFCH.
- Trend of increased proportion of CLABSIs
- occurring in patients
- with PICC lines
- who accessed their lines for IV medication at
- with hematologic/oncologic diagnoses
- *Compare heme/onc patients with a CVC who* did not develop CLABSI versus those who did

Additional Resources

1. Hoffman, James M., et al. "Healthcare-Associated Infections in Pediatric Hematology-Oncology." Patient Safety and Quality in Pediatric Hematology/Oncology and Stem Cell Transplantation, 2017, pp. 183–204., doi:10.1007/978-3-319-53790-0 11

2. Santos, Karla Marie, et al. "Multi-Level Intervention Program – A Quality Improvement Initiative to Decrease Central Line-Associated Bloodstream Infections in the Pediatric Acute and Hematology/Oncology Units." Journal of Pediatric Nursing, vol. 48, 2019, pp. 106-113., doi:10.1016/j.pedn.2019.07.002

3. UW AFCH Internal CLABSI data

4. "Central Line-Associated Bloodstream Infection (CLABSI)." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 25 Nov. 2010, www.cdc.gov/hai/bsi/bsi.html.

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