Supplement 1. Initial candidate risk factors for central-line associated bloodstream infection in the pediatric intensive care unit, for inclusion in univariate analysis

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| Race  | History of prematurity | CCC: neuromuscular disease |
| Ethnicity | History of short gut syndrome | CCC: cardiovascular disease |
| Gender | Compromised skin integrity based on Braden-Q score\* | CCC: respiratory disease |
| Primary patient language | Present of graft-vs-host-disease | CCC: renal disease |
| Interpreter required | Neutropenia | CCC: gastrointestinal disease |
| International medicine patient | History of CLABSI | CCC: hematologic/immunologic disease |
| Type of central venous catheter | Administration of total parenteral nutrition | CCC: malignancy |
| Number of central venous catheters present at time of CLABSI or end date  | Administration of blood products  | CCC: metabolic/endocrine disease  |
| Duration of central venous catheter placement  | Non-invasive mechanical ventilation  | CCC: congenital anomalies  |
| Anatomic location of central venous catheter placement  | Invasive mechanical ventilation  | CCC: illness related to prematurity  |
| Month/year of central venous catheter placement  | Administration of vasoactive medications  | Presence of ostomy |
| Hospital location of central venous catheter placement  | Administration of alteplase for catheter clearance | Presence of tracheostomy  |
| Number of accesses into central venous catheter | Acute behavioral health needs# |  |

\* The Braden QD Scale reliably predicts both immobility-related and device-related pressure injuries in the pediatric acute care environment and here serves as a marker for skin integrity. [Curley MAQ](https://proxy.library.upenn.edu:2065/pubmed/?term=Curley%20MAQ%5BAuthor%5D&cauthor=true&cauthor_uid=29246340), [Hasbani NR](https://proxy.library.upenn.edu:2065/pubmed/?term=Hasbani%20NR%5BAuthor%5D&cauthor=true&cauthor_uid=29246340), [Quigley SM](https://proxy.library.upenn.edu:2065/pubmed/?term=Quigley%20SM%5BAuthor%5D&cauthor=true&cauthor_uid=29246340), et al. Predicting Pressure Injury Risk in Pediatric Patients: The Braden QD Scale. [J Pediatr.](https://proxy.library.upenn.edu:2065/pubmed/29246340) 2018 Jan;192:189-195.e2. doi: 10.1016/j.jpeds.2017.09.045.

# Acute behavioral health needs were defined as: 1. Behavioral health consults that were ordered within 90 days of the CLABSI date or end date (Consults included: consult to psychiatry, consult to psychology, consult to behavioral health) OR 2. The following medications administered or ordered "PRN" in the days prior (day 0,1,2, or 3) to the CLABSI date or end date: risperidone, olanzapine, haloperidol, quetiapine.

CCC: complex chronic condition, see primary text and references