2-person dressing change team, (2) enhanced quality daily chlorhexidine treatments, and (3) staff and patient line-care stewardship. The bundle included training of nurse champions to execute a team approach to changing central-line dressings. Standard process description and supplies are contained in a cart. In addition, 2 sets of sterile hands and a second person to monitor for breaches in sterile procedure are available. Site disinfection with chlorhexidine scrub and dry time are monitored. Training on quality chlorhexidine bathing includes evaluation of preferred product, application per product instructions for use and protection of the central-line site with a waterproof shoulder length glove. In addition to routine BMT education, staff and patients are instructed on device stewardship during dressing changes. CLABSIs are monitored using NHSN definitions. We performed an interrupted time-series analysis to determine the impact of our enhanced prevention bundle on CLABSI rates in the BMT unit. We used monthly CLABSI rates since January 2017 until the intervention (October 2018) as baseline. Because the BMT changed locations in December 2018, we included both time points in our analysis. For a sensitivity analysis, we assessed the impact of the enhanced prevention bundle in a hematology-oncology unit (March 2019) that did not change locations. **Results:** During the period preceding bundle implementation, the CLABSI rate was 2.2 per 1,000 central-line days. After the intervention, the rate decreased to 0.6 CLABSI per 1,000 central-line days ($P = .03$). The move in unit location did not have a significant impact on CLABSI rates ($P = .85$). CLABSI rates also decreased from 1.6 per 1,000 central-line days to 0 per 1,000 central-line days ($P < .01$) in the hematology-oncology unit. **Conclusions:** An enhanced CLABSI prevention bundle was associated with significant decreases in CLABSI rates in 2 high-risk units. Novel infection prevention bundle elements should be considered for special populations when all other evidence-based recommendations have been implemented.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.821

Presentation Type:
Poster Presentation

Impact of Critical Care Consultation Requests for Avoidable Central Venous Catheters on Medical-Surgical Units

Madhuri Tirumandas, Montefiore Medical Center; Theresa Madaline, Montefiore Health System and Albert Einstein College of Medicine; Gregory David Weston, Einstein/Montefiore; Ruchika Jain, Montefiore Medical Center and Health system Bronx NY; Jamie Figueredo, Montefiore Medical Center

Background: Although central-line–associated bloodstream infections (CLABSI) in US hospitals have improved in the last decade, ~30,100 CLABSIs occur annually.[1,2] Central venous catheters (CVC) carry a high risk of infections and should be limited to appropriate clinical indications.[6,7] Montefiore Medical Center, a large, urban, academic medical center in the Bronx, serves a high-risk population with multiple comobidities.[8–11] Despite this, the critical care medicine (CCM) team is often consulted to place a CVC when a peripheral intravenous line (PIV) cannot be obtained by nurses or primary providers. We evaluated the volume of CCM consultation requests for avoidable CVCs and related CLABSIs. **Methods:** Retrospective chart review was performed for patients with CCM consultation requests for CVC placement between July and October 2019. The indication for CVC, type of catheter inserted or recommended, and NHSN data were used to identify CLABSIs. CVCs were considered avoidable if a PIV was used for the stated indication and duration of therapy, with no anatomical contraindications to PIV in nonemergencies, according to the Michigan Appropriateness Guide for Intravenous Catheters (MAGIC).[6] **Results:** Of 229 total CCM consults, 4 (18%) requests were for CVC placement; 21 consultations (9%) were requested for avoidable CVCs. Of 40 CVC requests, 18 (45%) resulted in CVC placement by the CCM team, 4 (10%) were deferred for nonurgent PICC by interventional radiology, and 18 (45%) were deferred in favor of PIV or no IV. Indications for CVC insertion included emergent chemotherapy (n = 8, 44%) and dialysis (n = 3, 16%), vasopressors (n = 3, 16%), antibiotics (n = 2, 11%) and blood transfusion (n = 2, 11%). Of 18 CVCs, 9 (50%) were potentially avoidable: 2 short-term antibiotics and rest for nonemergent indications; 2 blood transfusions, 1 dialysis, 2 chemotherapy and 2 vasopressors. Between July and October 2019, 6 CLABSIs occurred in CVCs placed by the CCM team; in 3 of 6 CLABSI events (50%), the CVC was avoidable. **Conclusions:** More than half of consultation requests to the CCM team for CVCs are avoidable, and they disproportionately contribute to CLABSI events. Alternatives for intravenous access could potentially avoid 9% of CCM consultations and 50% of CLABSIs in CCM-inserted CVCs on medical-surgical wards.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.822

Presentation Type:
Poster Presentation

Impact of Diagnosed and Undiagnosed Respiratory *Pseudomonas* on VAP and VAE During Long-Term Acute Care

James Harrigan, University of Pennsylvania Erik Clarke, University of Pennsylvania; Ebbing Lautenbach, Perelman School of Medicine, University of Pennsylvania; Emily Reesey, University of Pennsylvania; Magda Wernovsky, University of Pennsylvania; Pam Tolomeo , University of Pennsylvania Perelman School of Medicine; Zygmunt Morawski, University of Pennsylvania; Jerry Jacob, University of Pennsylvania; Michael Grippi, University of Pennsylvania; Brendan Kelly, University of Pennsylvania

Background: Clinically diagnosed ventilator-associated pneumonia (VAP) is common in the long-term acute-care hospital (LTACH) setting and may contribute to adverse ventilator-associated events (VAEs). *Pseudomonas aeruginosa* is a common causative organism of VAP. We evaluated the impact of respiratory *P. aeruginosa* colonization and bacterial community dominance, both diagnosed and undiagnosed, on subsequent *P. aeruginosa* VAP and VAE events during long-term acute care. **Methods:** We enrolled 83 patients on LTACH admission for ventilator weaning, performed longitudinal sampling of endotracheal aspirates followed by 16S rRNA gene sequencing (Illumina HiSeq), and bacterial community profiling (QIIME2). Statistical analysis was performed with R and Stan; mixed-effects models were fit to relate the abundance of respiratory *Psa* on admission to clinically diagnosed VAP and VAE events. **Results:** Of the 83 patients included, 12 were diagnosed with *P. aeruginosa* pneumonia during the 14 days prior to LTACH admission (known *P. aeruginosa*), and 22 additional patients received anti–*P. aeruginosa* antibiotics within 48 hours of admission (suspected *P. aeruginosa*); 49 patients had no known or suspected *P. aeruginosa* (unknown *P. aeruginosa*). Among the known *P.*