Table: VAE incidence rates per 1,000 ventilator days in LTCH locations, 2016-2018

Year	Location	No. Locations[1]	No. VAEs	No. vent days	Pooled mean	Percentile[2]		
						10%	50%	90%
2016	Critical Care	89 (86)	252	102,144	2.467	0	0	9.56
	Ward	597 (508)	1,817	1,087,080	1.671	0	0	6.38
2017	Critical Care	89 (84)	268	102,329	2.619	0	0	9.62
	Ward	571 (484)	1,464	1,044,161	1.402	0	0	5.37
2018	Critical Care	81 (77)	206	97,643	2.110	0	0	8.48
	Ward	546 (459)[3]	1,283	942,132	1.362	0	0	4.95

[1]No. of locations reporting >50 ventilator days/year shown in parentheses.
[2]Percentile distributions shown for locations with ≥20 units reporting >50 ventilator days per year.
[3] The VAE Outcome Measure was removed from the CMS LTCH QRP on October 1, 2018.

complications (IVAC), and possible ventilator-associated pneumonia (PVAP). Furthermore, we calculated pooled mean VAE rates per 1,000 ventilator days, and we determined the rate distributions for locations with ≥20 units reporting >50 ventilator days per year. **Results:** Overall, 493 LTCHs reported 22,359 location months of VAE data from ward and critical care locations. In total, 5,290 VAEs were reported, of which 3,871 (73%) were VAC, 961 (18%) were IVAC, and 458 (9%) were PVAP. Also, 42% (2,241) of VAEs occurred in female patients, and 1,305 (25%) occurred in patients who died during their hospitalization. The median time from LTCH admission to VAE onset was 18 days (IQR, 9–37), and from initiation of mechanical ventilation to VAE onset was 22 days (IQR, 10–43). Pathogens were identified from 454 PVAPs, with *Pseudomonas aeruginosa* (43% of PVAPs) and *Staphylococcus aureus* (26%) being the most common organisms. Annual pooled mean incidence rates in critical care locations ranged from 2.11 to 2.62 VAEs per 1,000 ventilator days, whereas rates in ward locations ranged from 1.36 to 1.67 VAEs per 1,000 ventilator days (Table 1). **Conclusions:** During a period of required reporting, pooled mean LTCH VAE rates remained low. Most VAEs in LTCHs were reported as VACs. Additional work is needed to understand the clinical events associated with LTCH VAE, including whether most VAEs truly represent non–infection-related events or reflect limited evaluation to identify infection-related complications. This distinction might influence the identification of appropriate interventions to reduce LTCH VAE rates.
Funding: None
Disclosures: None
Doi:10.1017/ice.2020.688

Presentation Type:
Poster Presentation

Characteristics of Pediatric Ventilator-Associated Events Reported to the National Healthcare Safety Network, 2019

Cheri Grigg, Centers for Disease Control and Prevention; Allan Nkwata, Centers for Disease Control and Prevention; Cindy Gross, CACI, Inc.; Shelley Magill, Centers for Disease Control and Prevention

Background: Mechanical ventilation is a life-saving measure for patients with respiratory failure; however, these patients are at high risk for complications and poor outcomes. Surveillance for ventilator-associated events (VAEs) via the CDC NHSN began in 2013 in adult patient care locations in hospitals. Pediatric ventilator-associated event (PedVAE) surveillance began in January 2019. The PedVAE definition is based on increases in mean airway pressure (MAP) or fraction of inspired oxygen (FiO_2). We summarized the first 9 months of PedVAE data reported to the NHSN. **Methods:** Neonatal and pediatric locations of US acute-care hospitals, long-term acute-care hospitals, and inpatient rehabilitation facilities were eligible to participate in PedVAE surveillance as of January 1, 2019. When submitting PedVAEs to the NHSN, facilities may also optionally report information about antimicrobials, pathogens, and clinical events associated with PedVAEs. We analyzed PedVAE data from January through September 2019 submitted by facilities participating in surveillance according to the NHSN protocol. We calculated pooled mean incidence rates (no. events per 1,000 ventilator days) for neonatal and pediatric intensive care units (NICUs and PICUs), and we describe characteristics of PedVAEs. **Results:** Overall, 205 PedVAEs were reported: 111 events from 147 NICUs in 140 facilities and 94 events from 117 PICUs in 85 facilities. The pooled mean incidence was 1.61 events per 1,000 ventilator days in level 2 and 3 NICUs, 1.09 events per 1,000 ventilator days in level III NICUs, and 1.25 events per 1,000 ventilator days in PICUs. Of 205 PedVAEs, 133 (65%) met only the MAP criterion, 65 (32%) met only the FiO_2 criterion, and 7 (3%) met both. Optional data on antimicrobials, pathogens, and clinical events were reported for 74 of 205 PedVAEs (36%). Among these 74 events, antimicrobial administration was common (50 of 74, 68%). By contrast, a minority had a pathogen reported (21 of 74, 28%). Of 74 PedVAEs, 60 were associated with a clinical event (80%), although only 15 (20%) were reported to be associated with a clinical infection. Of 74 PedVAEs, 4 (5%) were associated with mechanical ventilation weaning. **Conclusions:** PedVAE incidence rates are low in NICUs and PICUs. Most PedVAEs appear to be associated with clinical events. Although a minority of PedVAEs were associated with infections or pathogens, antimicrobial administration was reported for >60%. Further evaluation of the clinical correlates of PedVAEs can inform development of effective prevention and antimicrobial stewardship in mechanically ventilated children.
Funding: None
Disclosures: Cheri Grigg, Centers for Disease Control and Prevention
Doi:10.1017/ice.2020.689

Presentation Type:
Poster Presentation

CHG Skin Application in Non-ICU Patients with Central Venous Catheters: Impact on CLABSI, MRSA Bacteremia, and LabID Rates

Carey Dombecki, Michigan Medicine; Jennifer Sweeney, Michigan Medicine; Jackie White, Michigan Medicine; Amanda Valyko, Michigan Medicine; Terri Stillwell, Michigan Medicine; John Mills, Michigan Medicine; Laraine Washer, Michigan Medicine

Background: Prevention of central-line–associated bloodstream infections (CLABSIs) and methicillin-resistant *Staphylococcus aureus* (MRSA) infections requires a multifaceted approach including