

# A Collaborative Effort to Prepare South Carolina Healthcare Facilities for Statewide

## Ventilator-Associated Events Surveillance and Reporting

<sup>1</sup>Katherine L. Habicht, MPH, <sup>2</sup>Lorri Gibbons, RN, BSN, CPHQ, <sup>2</sup>Richard Foster, MD, <sup>3</sup>Patricia Kopp, BSMT(ASCP), CIC, <sup>4</sup>Cynthia Budelmann, RN, CIC, <sup>4</sup>Sue Boeker, RN, BSN, CIC, <sup>5</sup>Linda Formby, BSN, CIC, and <sup>1</sup>Matthew B. Crist, MD, MPH

<sup>1</sup>Division of Acute Disease Epidemiology, South Carolina Department of Health and Environmental Control, Columbia, SC; <sup>2</sup>South Carolina Hospital Association, Columbia, SC; <sup>3</sup>Bon Secours St. Francis Hospital, Greenville, SC; <sup>4</sup>Greenville, SC; <sup>4</sup>Greenville Health System, Greenville, SC; <sup>5</sup>Medical University of South Carolina, Charleston, SC



#### INTRODUCTION AND BACKGROUND

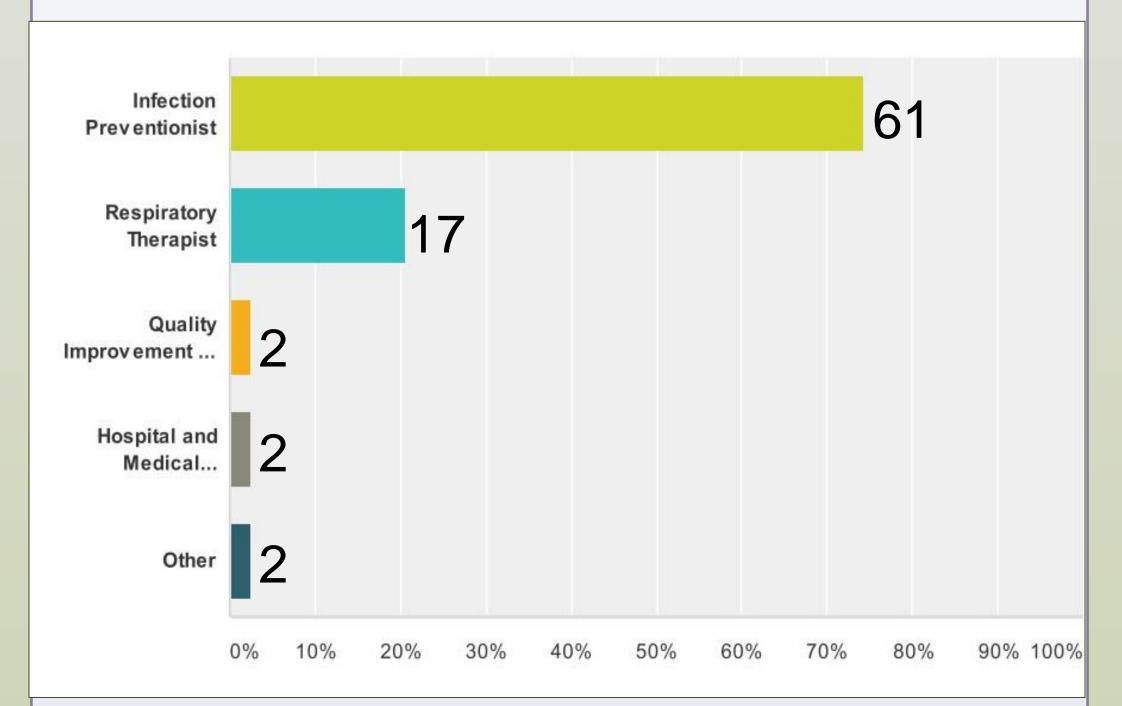
- Ventilator-associated Events (VAE) lead to:
  - Increased morbidity and mortality
  - Longer duration on ventilator
  - Longer duration of hospitalization
  - Increased healthcare costs
- VAE was thus added to the Hospital Infections
   Disclosure Act (HIDA) reporting mandate in
   South Carolina beginning January 2015
- Statute requires reporting of VAE in inpatient critical care and rehabilitation units to the South Carolina Department of Health and Environmental Control (DHEC) via the National Healthcare Safety Network (NHSN) for:
  - Acute care hospitals
  - Long term acute care facilities (LTACs)
  - Inpatient rehabilitation facilities (IRFs)

#### **OBJECTIVES**

The goal of the VAE training was to prepare facilities in South Carolina for mandated VAE reporting and ensure the accuracy of data reported to NHSN by:

- Providing education on NHSN VAE
   definitions and the tiers of the VAE algorithm
   to infection preventionists (IPs) and
   respiratory therapists
- Giving useful tips and tools to assist facilities with initiation of VAE surveillance
- Demonstrating entry of VAE data into NHSN
   and utilization of the analysis tools within
   NHSN
- Introducing infection preventionists to the
   VAE calculator and demonstrating its use
- Reviewing cases to highlight key concepts

Figure 1. Work position of attendees to in-person VAE training among those who completed the post-training survey.



## **METHODS**

- DHEC, in collaboration with the South Carolina Hospital Association (SCHA) and the state's chapter of the Association of Professionals in Infection Control (APIC Palmetto) formed a
   VAE planning workgroup to:
  - Distribute a joint partner letter to serve as notification of VAE mandatory reporting
  - Conduct a full day in-person VAE education conference to infection preventionists and respiratory therapists at no cost before mandated VAE reporting
  - Provide a follow-up webinar on VAE surveillance and reporting
- Conference presentations and webinar topics focused on:
  - NHSN definitions
  - VAE calculator
  - Data collection and entry methods
  - Analysis of data
- Facilities given the opportunity to voluntarily report VAE during 2014
- DHEC provided technical support and feedback data reports to facilities who voluntarily reported VAE data prior to the 2015 mandate.

### **RESULTS**

- Notification letters signed by senior leadership from DHEC, SCHA and APIC Palmetto distributed to facility leadership and infection prevention at all 78 HIDA reporting facilities
- 130 healthcare professionals attended the inperson training
- 67 healthcare facilities were represented at the VAE education conference
- Infection preventionists and respiratory
   therapists were granted 5 hours of continuing
   education credits for attending the training
- 26 individuals attended the VAE webinar
- The in-person training and the webinar were recorded and posted on the SCHA webpage for further dissemination
- 41 facilities voluntarily reported VAE data to
   DHEC via NHSN during 2014, to prepare for the
   2015 mandate

Table 1. Post-training survey results following in-person all day VAE training with 83 attendees responding (Scale 1-4).

Question	Excellent (4)	Good (3)	Average (2)	Poor (1)	Total	Average Rating
How do you rate the program overall?	<b>44</b> (53.0%)	35 (42.2%)	<b>4</b> (4.8%)	0 (0.0%)	83	3.48
The session contributed to my knowledge/skill base.	46 (55.4%)	31 (37.4%)	6 (7.2%)	0 (0.0%)	83	3.48
In general teaching methods were effective.	43 (51.8%)	28 (33.7%)	11 (13.3%)	1 (1.2%)	83	3.36
Sessions were organized and easy to follow.	48 (58.5%)	24 (29.3%)	8 (9.8%)	2 (2.4%)	82	3.44
Questions were answered appropriately.	50 (61.0%)	27 (32.9%)	5 (6.1%)	0 (0.0%)	82	3.55
The setting was conducive to learning.	49 (59.0%)	31 (37.4%)	3 (3.6%)	0 (0.0%)	83	3.55
Amount of new information and ideas provided.	33 (39.8%)	41 (49.4%)	7 (8.4%)	2 (2.4%)	83	3.27
Usefulness to my hospital of the new information and ideas provided.	50 (60.2%)	27 (32.5%)	5 (6.0%)	1 (1.2%)	83	3.52
Chance that the information and ideas provided will improve my effectiveness and results.	46 (55.4%)	32 (38.6%)	3 (3.6%)	2 (2.4%)	83	3.47

#### **CONCLUSIONS**

- Partnership between stakeholders DHEC,
  SCHA, and APIC Palmetto enabled pooling of
  resources and facilitated state wide training on
  VAE surveillance and reporting
- Essential to prepare facilities in order to maximize the accuracy of data reported to NHSN through:
- Advanced notice of reporting mandate
- Thorough training
- Technical support and data feedback
- Continued collaboration and coordination as well as leveraging of resources through these partnerships will further be utilized to guide prevention efforts to reduce VAE in South Carolina

#### REFERENCES

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#### **CONTACT INFORMATION**

Matthew Crist, MD, MPH
HAI Section Director
South Carolina Department of Health
and Environmental Control
2100 Bull St. Columbia, SC
Phone: (803) 898-2110

Email: cristmb@dhec.sc.gov