

the bundle during the patient's hospital stay, resulting in improved clinical care and prevention of infection. **Methods:** In 2019, 3 clinical initiatives were chartered that applied evidence-based bundles for early identification and treatment of sepsis, prevention of health-care-associated pneumonia (HAP), and prevention of surgical site infection. The bundle included the following elements: assessment of sepsis, measurement of lactic acid, collection of blood culture, timely administration of antibiotics. The HAP bundle included the following elements: assessment of aspiration risk, elevation of the head of the bed, oral care twice daily and preoperatively, and incentive spirometry postoperatively. And the SSI bundle included the following elements: preoperative CHG bath, appropriate preoperative antibiotic, perioperative glucose control, and perioperative temperature control. A multidisciplinary team developed and implemented dashboards that extracted bundle elements from the electronic medical record (EMR) nightly. Bundle compliance was calculated at the individual element level as well as the aggregate. Bundle failure data were available at the patient level as well as in aggregate by care location and provider, allowing for real-time feedback to staff and creation of improvement plans. An unanticipated benefit was the identification and correction of charting inconsistencies. **Results:** Collection, aggregation, and analysis of bundle compliance data were displayed in a system dashboard, and data were refreshed nightly. This approach allowed us to display overall bundle compliance at the facility and system level, including a heat map showing each facility's compliance with the bundle and each associated element. Utilization of an EMR dashboard allowed for performance review on 100% of eligible patients rather than a sample, as occurs with manual review and abstraction processes. Routine review of performance via the dashboards with frontline staff, clinical leaders, medical staff, and executives has resulted in month-by-month improvement in bundle compliance. **Conclusions:** Direct data mining, data aggregation and analysis, followed by direct feedback to frontline staff, has resulted in steady improvement in overall bundle compliance, compliance with individual bundle components, and standardization of charting in the EMR. This approach has ultimately resulted in better outcomes for sepsis patients, reduction in health-care-associated pneumonia, and reduction in surgical site infections.

**Funding:** None

**Disclosures:** None

Doi:[10.1017/ice.2020.511](https://doi.org/10.1017/ice.2020.511)

#### **Presentation Type:**

Oral Presentation

#### **Effectiveness of Ultraviolet-C Room Disinfection on Preventing Healthcare-Associated *Clostridioides difficile* Infection**

Michihiko Goto, University of Iowa Carver College of Medicine; Erin Balkenende, Center for Access & Delivery Research & Evaluation (CADRE), Iowa City Veterans Affairs Health Care System; Gosia Clore, University of Iowa; Rajeshwari Nair, The University of Iowa; Loretta Simbartl, Department of Veterans Affairs; Martin Evans, University of Kentucky School of Medicine/VHA; Nasia Safdar, University of Wisconsin, Madison; Eli Perencevich, University of Iowa, Carver College of Medicine

**Background:** Enhanced terminal room cleaning with ultraviolet C (UVC) disinfection has become more commonly used as a strategy to reduce the transmission of important nosocomial pathogens, including *Clostridioides difficile*, but the real-world effectiveness remains unclear. **Objectives:** We aimed to assess the association of

UVC disinfection during terminal cleaning with the incidence of health-care-associated *C. difficile* infection and positive test results for *C. difficile* within the nationwide Veterans Health Administration (VHA) System. **Methods:** Using a nationwide survey of VHA system acute-care hospitals, information on UV-C system utilization and date of implementation was obtained. Hospital-level incidence rates of clinically confirmed hospital-onset *C. difficile* infection (HO-CDI) and positive test results with recent health-care exposures (both hospital-onset [HO-LabID] and community-onset health-care-associated [CO-HA-LabID]) at acute-care units between January 2010 and December 2018 were obtained through routine surveillance with bed days of care (BDOC) as the denominator. We analyzed the association of UVC disinfection with incidence rates of HO-CDI, HO-Lab-ID, and CO-HA-LabID using a nonrandomized, stepped-wedge design, using negative binomial regression model with hospital-specific random intercept, the presence or absence of UVC disinfection use for each month, with baseline trend and seasonality as explanatory variables. **Results:** Among 143 VHA acute-care hospitals, 129 hospitals (90.2%) responded to the survey and were included in the analysis. UVC use was reported from 42 hospitals with various implementation start dates (range, June 2010 through June 2017). We identified 23,021 positive *C. difficile* test results (HO-Lab ID: 5,014) with 16,213 HO-CDI and 24,083,252 BDOC from the 129 hospitals during the study period. There were declining baseline trends nationwide (mean, -0.6% per month) for HO-CDI. The use of UV-C had no statistically significant association with incidence rates of HO-CDI (incidence rate ratio [IRR], 1.032; 95% CI, 0.963–1.106;  $P = .65$ ) or incidence rates of health-care-associated positive *C. difficile* test results (HO-Lab). **Conclusions:** In this large quasi-experimental analysis within the VHA System, the enhanced terminal room cleaning with UVC disinfection was not associated with the change in incidence rates of clinically confirmed hospital-onset CDI or positive test results with recent health-care exposure. Further research is needed to understand reasons for lack of effectiveness, such as understanding barriers to utilization.

**Funding:** None

**Disclosures:** None

Doi:[10.1017/ice.2020.512](https://doi.org/10.1017/ice.2020.512)

#### **Presentation Type:**

Oral Presentation

#### **Effects of Susceptibility Result Suppression on National Healthcare Safety Network Antibiotic Resistance Option Data**

Matthew Estes, Tennessee Department of Health; Youssoufou Ouedraogo, Tennessee Department of Health; Christopher David Evans, TN Department of Health; Daniel Muleta, Tennessee Department of Health; Cullen Adre, Tennessee Department of Health; Amelia Keaton, TN Department of Health; Marion Kainer, Western Health

**Background:** The National Healthcare Safety Network's (NHSN) Antibiotic Resistance (AR) Option offers hospitals a way to report antibiotic resistance data from their facility's laboratory information system and create facility-specific antibiograms. Suppression of select antibiotic susceptibility results may be used by antibiotic stewardship teams to prevent unnecessary use of broad-spectrum therapies by not making those susceptibilities available to providers. To be of use, antibiograms should offer a complete picture of antibiotic resistance. We wanted to understand the impact of data suppression. **Methods:** A retrospective cross-sectional study was conducted including data from 2017 and 2018. The clinical susceptibility data