identify exposed persons, validate measles immunity status and risk factors, order prophylaxis, and track outcomes.
Funding: None
Disclosures: None
Doi:10.1017/ice.2020.1035

Presentation Type:
Poster Presentation

Successfully Sustaining Infection Reductions: A Catheter–Associated Urinary Tract Infection (CAUTI) Prevention Initiative Five Years In

Lisa Teal, UNC Medical Center; Shelley Summerlin-Long, UNC Health Care; Lauren DiBiase, UNC Health Care Brooke Brewer, UNC Healthcare; Christa Clark; Karen Croyle, UNC Healthcare Cynthia Culbreth; Lori Hendrickson, UNC Health Care; Natalie Schnell, UNC Health Care; Katherine Schultz, UNC Health Care; Lisa Stancill, UNC Health Care; David Jay Weber, University of North Carolina at Chapel Hill; Emily Sickbert-Bennett, UNC Health Care

Background: Infection prevention efforts are complex, and sustaining reductions is even more challenging. At the UNC Medical Center, multidisciplinary hospital-wide work groups implement quality improvement initiatives to prevent healthcare-associated infections. The first and most successful initiative has been our catheter-associated urinary tract infection (CAUTI) prevention effort, which started in 2014. The program led to initial dramatic reductions, with continued reductions in CAUTI rates each year since then. **Methods:** A multidisciplinary workgroup formed in 2014 developed an evidence-based CAUTI prevention bundle and partnered with the nursing staff in 2015–2016 to implement practice changes as part of our hospital's quality improvement "Spread of Innovations" model. These changes included (1) creation of a 2-person catheter-insertion checklist; (2) insertion skills validation for all nursing staff and nursing assistants; (3) standardization of a maintenance protocol and subsequent education and skills validation with nurses and nurse assistants; and (4) peer audits of urinary catheter maintenance. Additional initiatives implemented over the past 5 years include (1) routine resident education on CAUTI prevention; (2) annual nurse competencies to reinforce skills around CAUTI prevention; (3) introduction of products (eg, PureWick) as alternatives to indwelling catheters; (4) diagnostic stewardship efforts; (5) revisions to the electronic medical record; and (6) efforts to encourage removal of unnecessary catheters such as the "nurse-driven conversation" and Trial of Void. **Results:** Our CAUTI rates decreased 65% from 2.94 per 1,000 catheter days in the baseline period of 2014 to 1.02 in 2018. In our ICUs (excluding the neonatal ICU), the rate dropped 75% from 4.30 in 2014 to 1.08 per 1,000 catheter days in 2018. **Conclusions:** We attribute our continued reductions and successful sustainment of low CAUTI rates to several factors. First, the use of a multidisciplinary team was critical to obtaining buy-in from key stakeholders including nursing, nurse assistants, physicians, pharmacists, performance improvement specialists, and administration. Second, continuation of the maintenance peer audits outside the initial project year has provided an important framework for this project, giving regular opportunities for frontline staff to evaluate patients' catheter condition and to give feedback to colleagues or "just in time education." These activities potentially prevent infections in real time. Third, with the many competing priorities demanding clinicians' attention, it has been important for the CAUTI workgroup to continue to evaluate the problem, to determine where opportunities for improvement remain, and to tailor initiatives to meet those needs. In this way, new work can focus on priorities identified by staff, and CAUTI prevention initiatives remain relevant.
Funding: None
Disclosures: None
Doi:10.1017/ice.2020.1036

Presentation Type:
Poster Presentation

Supporting Healthcare-Associated Infection (HAI) Surveillance in Resource-Limited Settings: Lessons Learned, 2015–2019

Matthew Westercamp, Centers for Disease Control and Prevention; Paul Malpiedi, US Centers for Disease Control and Prevention; Amber Vasquez, US Centers for Disease Control and Prevention; Danica Gomes, Centers for Disease Control and Prevention; Carmen Hazim, CDC/DDID/NCEZID/DHQP; Benjamin J. Park, Centers for Disease Control and Prevention; Rachel Smith, Centers for Disease Control and Prevention

Background: Since 2015, the CDC has supported the development and implementation of healthcare-associated infection (HAI) surveillance in resource-limited settings through technical support of case definitions and methods that are feasible with existing surveillance capacity and integration with clinical care to maximize sustainability and data use for action. **Methods:** Surveillance initiatives included facility-level implementation programs in Kenya, Sierra Leone, Thailand, and Georgia; larger national or

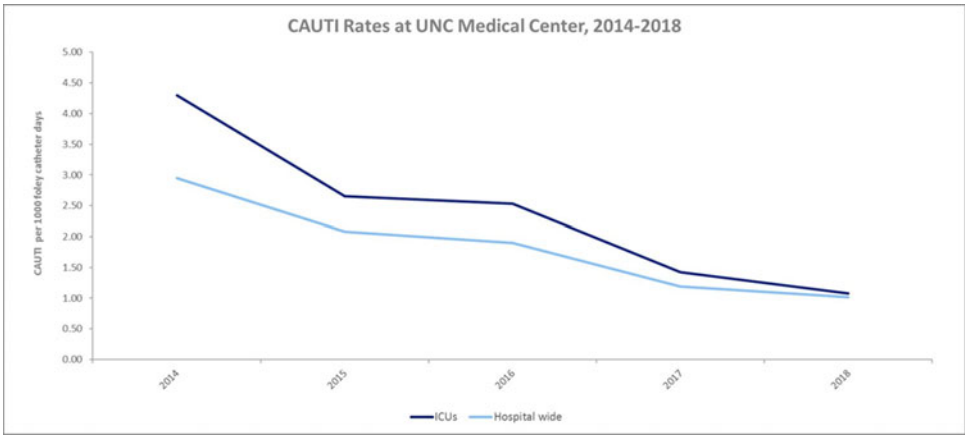

Fig. 1.

regional network-level projects in India and Vietnam were also supported. For assessment and planning, surveillance capacities were grouped into 3 domains: staff, informatics, and diagnostic capacities. Based on these capacities, simplified case definitions surveillance methodologies were devised to balance resources and effort with the anticipated value and use of findings. **Results:** There was broad understanding of the importance of HAI surveillance; however, the required resources and other challenges (eg, training, staffing, quality of available data) were underappreciated. Staff capacities were often influenced by a lack of dedicated surveillance staff and limited experience in systematic data collection and analysis. Informatics capacities were generally limited by the lack of digital data management, nonstandardized clinical data collection and storage, and the inability to assign and maintain unique patient identifiers. We found that capacity for diagnostics, a critical component of traditional HAI surveillance systems, was limited by its availability, frequency of use, and inconsistent rationale in clinical care. We found that successful surveillance strategies were generally simple, matched existing capacities, and targeted specific HAI priorities identified by clinical teams. For example, in Kenya and Sierra Leone, participating facilities established, with minimal external support, simplified SSI surveillance among post–caesarean-delivery patients. These initiatives improved integration of surveillance with clinical care through encouraging participation of the clinical team in surveillance and planning. Furthermore, these models directly linked surveillance activities to improved patient care (eg, combined clinical checklists with surveillance data collection forms). **Discussion:** In resource-limited settings, the local cost and effort required to establish and sustain the necessary infrastructure for HAI surveillance can be substantial. Establishing actionable and sustainable HAI surveillance can be achieved through simplifying HAI surveillance to match existing capacities and can result in valuable surveillance programs, even in very resource-limited settings.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.1037

Presentation Type:
Poster Presentation

Surgical Site Infection Prevention: An Analysis of Compliance With Good Practice in Large Hospitals

Adriana Oliveira, Universidade Federal de Minas Gerais

Background: Surgical site infection (SSI) is considered one of the most frequent adverse events globally. One of the strategies to mitigate its occurrence was proposed by the WHO in 2008 as part of the Safe Surgery Saves Lives program to reduce the rate of SSI by 25% by 2020. **Objectives:** To evaluate adherence to SSI prevention and control actions in large hospitals using a score. **Methods:** This cross-sectional study was conducted in 30 hospitals in Minas Gerais, Brazil, from February 2018 to April 2019. Data collection was performed through interviews with the coordinator of the hospital infection control service (HICS), situational diagnoses, and observation of a surgical procedures at the time of the visit. Data were analyzed using SPSS software. The variables were described using descriptive statistics. The project was approved by the Research Ethics Committee of the Federal University of Minas Gerais (COEP/UFMG) (CAAE: 30782614.3.00005149). A score was determined to identify the degree of compliance of institutions to SSI prevention practices. **Results:** In 93.3% of the HICSs, routines or protocols for the use of prophylactic antibiotic in surgery and compliance audits were mentioned, 69% reported hair removal with a clipper. SSI surveillance occurred in all institutions; however, only 63.3% disclosed SSI rates. In the situational observations, 60% of the professionals performed hand antisepsis within 3–5 minutes. Most frequently, hair removal was performed inside the operating room in 76.7% of the observed procedures and an electric clipper was used 56.7% of the time. In the surgery audit, prophylactic antimicrobial administration occurred between 30 and 60 minutes before surgical incision in only 63.3% of the observed procedures. The traffic in the operation room was limited to the necessary minimum in only 53.3% of observed procedures and unnecessary opening of the doors occurred in 76.7% of the observations. Patient temperature was not monitored in 70% of the audited procedures. **Conclusions:** According to the proposed score, 1 of the institutions (3.3%) complied with SSI prevention and control measures sufficiently; 25 complied partially (83.3%); and 4 (13.3%) demonstrated poor compliance.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.1038

Presentation Type:
Poster Presentation

Surgical Site Infection Trend Analysis Following Abdominal Hysterectomy, National Healthcare Safety Network, 2009–2018

Qunna Li, Centers for Disease Control and Prevention; Minn Soe, Centers for Disease Control and Prevention; Allan Nkwata, Centers for Disease Control and Prevention; Victoria Russo, Centers for Disease Control and Prevention; Margaret Dudeck, Centers for Disease Control and Prevention; Jonathan Edwards, Centers for Disease Control and Prevention

Background: Surveillance data for surgical site infections (SSIs) following abdominal hysterectomy (HYST) have been reported to the CDC NHSN since 2005. Beginning in 2012, HYST SSI surveillance coverage expanded substantially as a result of a CMS mandatory reporting requirement as part of the Hospital Inpatient Quality Reporting Program. A trend analysis of HYST SSI using data submitted to the NHSN has not been previously reported. To estimate the overall trend of HYST SSI incidence rates, we analyzed data reported from acute-care hospitals with surgery performed between January 1, 2009, and December 31, 2018. **Methods:** We analyzed inpatient adult HYST procedures with primary closure resulting deep incisional primary and organ-space SSIs detected during the same hospitalization or rehospitalization to the same hospital. SSIs reported as infection present at time of surgery (PATOS) were included in the analysis. Due to the surveillance definition changes for primary closure in 2013 and 2015, these were tested separately as interruptions to HYST SSI outcome using an interrupted time-series model with a mixed-effects logistic regression. Because the previously described changes were not significantly associated with changes in HYST SSI risk, mixed-effects logistic regression was used to estimate the annual change in the log odds of HYST SSI. The estimates were adjusted for the following covariates: hospital bed size, general anesthesia, scope, ASA score, wound classification, medical school affiliation type, procedure duration and age. **Results:** The number of hospitals and procedures reported to NHSN for HYST increased and then stabilized after 2012 (Table 1). The unadjusted annual SSI incidence rates ranged from 0.60% to 0.81%. Based on the model, we estimate a 2.58% decrease in the odds of having a HYST SSI