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Background: Hand hygiene is one of the most effective measures to prevent healthcare-associated infections and transmission of multidrug-resistant organisms in healthcare settings. The WHO proposes a multimodal intervention strategy to improve hand hygiene in healthcare settings. In 2008, a voluntary national campaign for hand hygiene was implemented in the German healthcare system. The objective of this study was to evaluate participation, practices, and performance of hand hygiene in German acute-care hospitals. **Methods:** In 2008 a national hand hygiene campaign began in Germany. Based on voluntary participation, the campaign's goal was to implement the WHO 5 Moments model, to establish a national surveillance system for compliance to hand hygiene, to improve availability of alcohol-based hand-rub (ABHR) dispensers at points of care, and to implement interdisciplinary executive boards at each hospital to ensure sustainable implementation. Annual data on ABHR consumption and patient days (PD) were collected within the national surveillance system (HAND-KISS) on the individual ward level and were validated. Direct observation of compliance was performed according the recommendations of the WHO. **Results:** Overall, 1,047 of 1,942 acute-care hospitals in Germany participated in the national hand hygiene campaign in 2018, covering 81,571,917 patient days. Moreover, 9,360 regular wards (RWs), 338 intermediate care units (IMCs) and 1,342 intensive care units (ICUs) provided data on ABHR consumption. Between 2007 and 2018 in the ICU, ABHR consumption increased continuously from 70 mL/PD (IQR, 52–98) to 129 mL/PD (IQR, 102–162). In intermediate care units, ABHR consumption increased from 40 mL/PD (IQR, 15–54) to 67 mL/PD (IQR, 46–95), and on regular wards, ABHR consumption increased from 14 mL/PD (IQR, 10–21) to 29 mL/PD (IQR, 22–39). These increases were especially pronounced in wards that continuously provided annual data for ABHR consumption over the past 12 years. In 2014, electronic documentation for direct observation of compliance to hand hygiene was established. From 2014 until 2018, 1,598,209 opportunities were observed on 1,907 wards of 422 hospitals. The median directly observed compliance in 2018 was 76% (IQR, 66%–84%). Median compliance to the 5 Moments was 71% (IQR, 57%–82%) before touching a patient, 68% (IQR, 51%–85%) before clean or aseptic procedures, 83% (IQR, 72%–92%) after body fluid exposure or risk, 84% (IQR, 75%–90%) after touching a patient, and 74% (IQR, 61%–84%) after touching patient surroundings. **Conclusions:** The WHO multimodal intervention strategy has been successfully established in German acute-care hospitals. A surveillance system for ABHR consumption and direct observation of compliance to hand hygiene are widely used by hospitals in Germany. Hand hygiene practices have significantly improved in the German healthcare system.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.799

Presentation Type:
Poster Presentation

Has UTI and *Clostridioides difficile* Testing and Treatment Stewardship Diffused Into Oregon Hospitals? A Survey of the Current State

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Background: Urinary tract infection (UTI) and *Clostridioides difficile* infection (CDI) both pose significant diagnostic challenges. Excess testing has implications for hospital-associated infection surveillance and may also lead to overtreatment and associated patient risk. Accurate diagnosis requires stewardship efforts to ensure that the correct patients are tested appropriately. In coordination with clinicians and microbiology labs, hospital infection prevention departments can aid diagnostic stewardship efforts by creating policies for order indications and proper test collection methods and by developing electronic medical record (EMR) support for diagnostic and treatment algorithms. The prevalence of these practices in Oregon, however, is unknown. **Methods:** We deployed a web-based survey to infection preventionists at all 61 acute-care hospitals in Oregon in January 2019. Responses were collected through April 2019, and a subset of applicable questions were analyzed. **Results:** Of 61 acute-care hospitals, 58 (95%) responded. A response from a single long-term acute-care hospital was excluded. For urinary tract infections (UTIs), a minority of hospitals reported having policies requiring annual sterile urine collection training for registered nurses (n = 7, 12%), annual observation of the RN sterile urine collection procedure (n = 1, 2%), or use of boric acid containers for urine collection (n = 10, 17%). UTI testing and treatment algorithms embedded in the electronic medical record (EMR) were more common (Fig. 1). Regarding urine culture reflex policies, 39 facilities (68%) reported reflexing abnormal urinalyses to culture only if ordered, whereas 14 respondents (25%) reported automatically reflexed all abnormal urinalyses to culture. For *Clostridioides difficile* infection (CDI), respondents reported using a variety of methods to discourage inappropriate testing (Fig. 2). Although almost all facilities (n = 53, 93%) reported having a policy to reject formed stool, less than half (n = 27, 47%) reported having a policy to reject stool in patients receiving laxatives. Furthermore, 74% of respondents (n = 42) had a published testing algorithm, more than twice the 18 (32%) hospitals that reported having a comparable UTI algorithm. **Conclusions:** Infection prevention departments in Oregon acute-care hospitals utilize a variety of tools to contribute to diagnostic and treatment stewardship for UTI and CDI. Our survey revealed many opportunities for improvement in UTI and *C. difficile* testing and treatment stewardship in Oregon hospitals. For example, although most hospitals reject formed stool for CDI

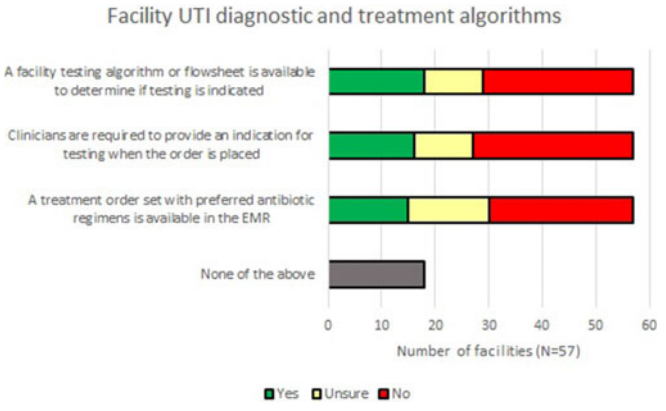

Fig. 1.

https://doi.org/10.1017/ice.2020.800 Published online by Cambridge University Press

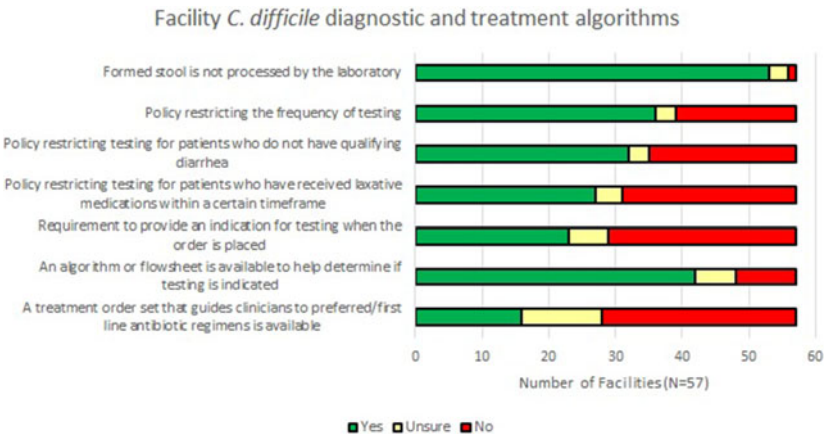

Fig. 2.

testing, policies for other diagnosis and treatment stewardship techniques were much less commonly employed. Future work will compare the results of this survey to a set of similar questions on a statewide microbiology laboratory survey, assess best practices, and form consensus recommendations on stewardship practices for the state.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.800

Presentation Type:
Poster Presentation

Health Department Authorities to Assist Healthcare Facilities with Outbreaks or High HAI Rates—Preliminary Assessment, 2018

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Background: Health departments have been increasingly called upon to monitor healthcare associated-infections (HAIs) at the hospital- or facility-level and provide targeted assistance when high rates are identified. Health department capacity to effectively respond to these types of signals depends not only on technical expertise but also the legal and regulatory authority to intervene. **Methods:** We reviewed annual reports describing HAI and antibiotic resistance (HAI/AR) activities from CDC-funded HAI/AR programs for August 2017 through July 2018. We performed a qualitative data analysis on all 50 state health department responses to a question about their regulatory and legal authority to intervene or assist facilities without invitation when outbreaks are suspected (as determined by the health department) or high HAI rates have been identified (eg, based on NHSN data). **Results:** When an outbreak is identified, 31 health departments (62%) indicated that they have the authority to intervene without invitation from a facility and 8 (16%) did not specify. Among the 11 health departments (22%) that indicated that they do not have this authority, 5 (45%) states noted that they operate under decentralized systems in which the local health department can intervene in outbreak situations and the state health department is available to assist. When a health department identifies high HAI rates, 14 health departments (28%) indicated that they have the authority to intervene without invitation, 22 (44%) indicated that they do not, and 14 (28%) did not specify. Among those in the latter categories, 3 stated they can work through their local health departments, which do have this authority and 8 described working through partners (eg, State Hospital Association, n = 3 or State Healthcare Licensing Agency, n = 5). **Discussion:** Assistance from state health departments (eg, HAI/AR programs) in the context of outbreaks and high HAI rates has value that is usually well recognized and welcomed by healthcare facilities. Nonetheless, there are occasions when a health department might need to exert its authority to intervene. The preliminary analysis described here indicated that this authority was more commonly self-reported in the context of outbreaks than when high HAI rates are identified. These 2 situations are connected, as high rates might be indicative of unrecognized or unreported outbreak activity, and these issues may benefit from further analysis.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.801

Presentation Type:
Poster Presentation

Healthcare Worker Experiences Implementing CRE Infection Control Measures at a vSNF—A Qualitative Analysis

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Background: During 2017–2019 in the Chicago region, several ventilator-capable skilled nursing facilities (vSNFs) participated in a quality improvement project to control the spread of highly prevalent carbapenem-resistant *Enterobacteriaceae* (CRE). With guidance from regional project coordinators and public health departments that involved education, assistance with implementation, and adherence monitoring, the facilities implemented a CRE prevention bundle that included a hand hygiene campaign that promoted alcohol-based hand rub, contact precautions (personal protective equipment with glove/gown) for care of CRE-colonized residents, and 2% chlorhexidine gluconate (CHG) wipes for routine resident bathing. We conducted a qualitative study to better understand the ways that vSNF employees engage with the implementation of such infection control measures. **Methods:** A PhD-candidate medical anthropologist conducted semistructured