

ascertainment. However, aggregating antibiotic use data on a unit basis may have variable effects depending on the number of clinical teams providing care. In this study, we examined antibiotic utilization from units at a tertiary-care hospital to illustrate the potential challenges of using unit-based antibiotic utilization to change individual prescribing. **Methods:** We used inpatient pharmacy antibiotic use administration records at an adult tertiary-care academic medical center over a 6-month period from January 2019 through June 2019 to describe the geographic footprints and AU of medical, surgical, and critical care teams. All teams accounting for at least 1 patient day present on each unit during the study period were included in the analysis, as were all teams prescribing at least 1 antibiotic day of therapy (DOT). **Results:** The study population consisted of 24 units: 6 ICUs (25%) and 18 non-ICUs (75%). Over the study period, the average numbers of teams caring for patients in ICU and non-ICU wards were 10.2 (range, 3.2–16.9) and 13.7 (range, 10.4–18.9), respectively. Units were divided into 3 categories by the number of teams, accounting for $\geq 70\%$ of total patient days present (Fig. 1): “homogenous” (≤ 3), “pauciteam” (4–7 teams), and “heterogeneous” (>7 teams). In total, 12 (50%) units were “pauciteam”; 7 (29%) were “homogeneous”; and 5 (21%) were “heterogeneous.” Units could also be classified as “homogenous,”

“pauciteam,” or “heterogeneous” based on team-level antibiotic utilization or DOT for specific antibiotics. Different patterns emerged based on antibiotic restriction status. Classifying units based on vancomycin DOT (unrestricted) exhibited fewer “heterogeneous” units, whereas using meropenem DOT (restricted) revealed no “heterogeneous” units. Furthermore, the average number of units where individual clinical teams prescribed an antibiotic varied widely (range, 1.4–12.3 units per team). **Conclusions:** Unit-based antibiotic utilization data may encounter limitations in affecting prescriber behavior, particularly on units where a large number of clinical teams contribute to antibiotic utilization. Additionally, some services prescribing antibiotics across many hospital units may be minimally influenced by unit-level data. Team-based antibiotic utilization may allow for a more targeted metric to drive individual team prescribing.

Funding: None

Disclosures: None

Doi:10.1017/ice.2020.695

Presentation Type:

Poster Presentation

Clostridioides difficile Testing Stewardship for Laxative Use Is Effective and Safe When Combined With Expert Clinical Input

Francesca Torriani, UC San Diego Health; Frank Myers Robert El-Kareh; Minji Kang, University of California San Diego; Randy Taplitz; Shira Abeles, UCSD

Background: In January 2019, our large academic medical center implemented “hard stops” for ordering *Clostridioides difficile* nucleic acid amplification testing (NAAT), and required a discussion with an infectious diseases physician if the order was placed in a clinical scenario not consistent with the 2017 IDSA/SHEA *C. difficile* infection (CDI) testing guidelines. Recently, some groups have expressed concerns that requiring the discontinuation of laxatives may delay the diagnosis of CDI and result in serious adverse outcomes. **Methods:** *C. difficile* testing stewardship interventions were performed at 2 hospitals within the same university health system to reduce inappropriate testing. In January 2019, a best practice advisory (BPA) was implemented to alert providers ordering *C. difficile* NAAT if patients had received laxatives within 24 hours, requiring a discussion with the ID physician to override the hard stop. We reviewed clinical outcomes of patients who had a BPA alert due to laxative use within the past 24 hours April 23 to October 23, 2019. **Results:** During the study period, there were 235 patients with a BPA because of laxative use within the past 24 hours. Moreover, 55 (23.4%) continued to experience diarrhea after the discontinuation of laxatives and were retested for CDI within 7 days. Only 8 tests returned positive, suggesting that, at most, 3.4% of cases had delayed diagnoses because of the hard stop. This finding is supported by the increase in the percentage of tests positive from 11.6% observed overall to 14.6% (8 of 55) after this intervention. There were no severe CDI cases (ICU admission, colectomy, or death) among patients who had delayed testing due to laxative use. **Conclusions:** In the setting of laxative use, *C. difficile* testing stewardship interventions with *C. difficile* NAAT using a hard-stop BPA are effective in reducing unnecessary testing and safe if they are used in combination with a real-time expert input of the risk of clinical disease.

Funding: None

Disclosures: None

Doi:10.1017/ice.2020.696

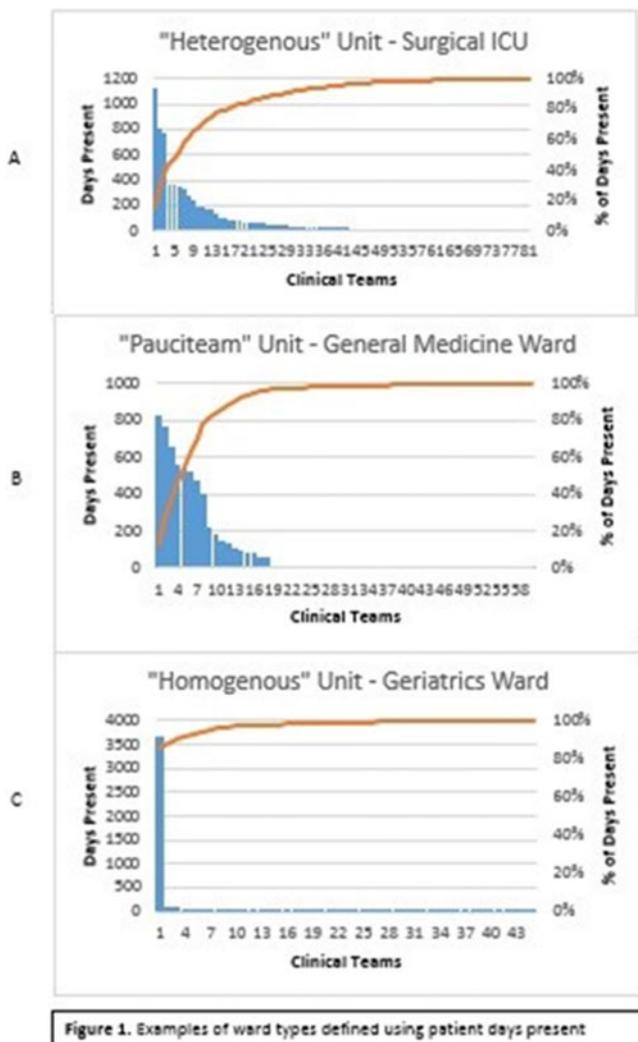


Figure 1. Examples of ward types defined using patient days present

Fig. 1.

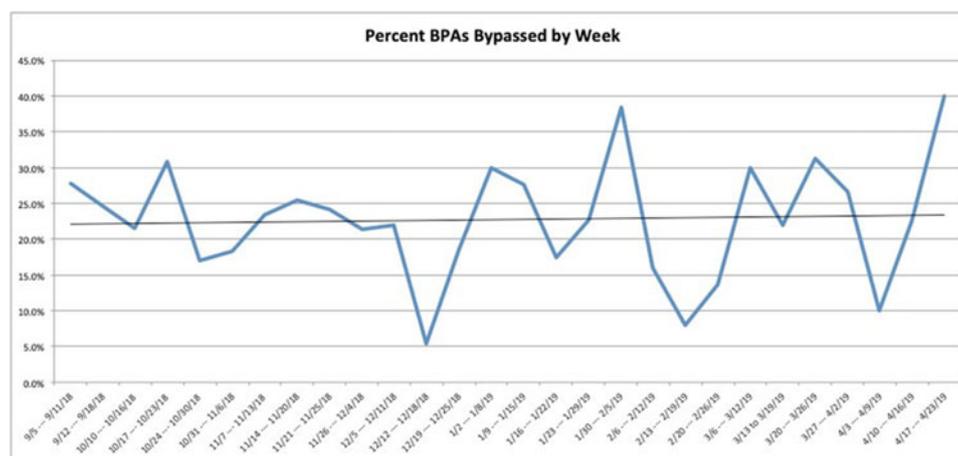


Fig. 1.

Presentation Type:

Poster Presentation

Clostridioides difficile: Best Practice Alerts & Education to Reduce Unnecessary Testing

Cynthia Murillo, University of Chicago Medicine; Rachel Marrs, University of Chicago Medicine; Allison Bartlett, University of Chicago Comer Children's Hospital; Emily Landon; Jessica Ridgway, University of Chicago

Background: Unnecessary testing for *Clostridioides difficile* can lead facilities to overreport laboratory-identified (LabID) events. Because false-positive LabID tests could dilute infection control resources, we developed best practice alerts (BPAs) in the electronic health record, educational materials as well as a follow-up system to help reduce unnecessary testing and, therefore, reduce false-positive results. **Methods:** Three BPAs were initiated in late August, 2018. Alerts fired when clinicians tried to order repeat *C. difficile* testing after a positive result, testing within 24 hours of laxative administration and to order a multiplex PCR panel for GI pathogens >48 hours after admission. The GI multiplex PCR test consists of 21 targets, including *C. difficile*, but it allows for testing solid stool. All alerts gave suggestions for how to proceed (ie, not test for cure from previous positive, wait until laxatives wear off, or call for approval before GI panel) but could be bypassed by clinicians. Educational emails and signage were distributed to all house staff and clinicians in all clinical areas at the start of the program. For each bypassed BPA, infection control physicians contacted the ordering clinician by email or phone to explain why testing was not advised. **Results:** Between September 5, 2018, and April 23, 2019, 1,217 BPAs were issued: 634 in first half and 583 in the second half. Of these, 268 (22%) were bypassed by clinicians (Fig. 1). There was no significant decrease in bypassing BPAs. In the first half of the intervention, 22% of BPAs were bypassed (141 of 634). In the second 4 months, 22% of BPAs were still bypassed (127 of 583; $P = .85$). Of the 40 ordering services, 8 had no bypassed BPAs in the first half and 9 had no bypassed BPAs in the second half. **Conclusions:** Educating providers and following up after bypassed BPAs did not decrease the number of bypassed BPAs. Although fewer BPAs were issued in the second half of the intervention, more analysis is needed to understand whether this decrease is significant. In this study, 268 unnecessary *C. difficile* tests were ordered over 8 months.

Funding: None**Disclosures:** None

Doi:10.1017/ice.2020.697

Presentation Type:

Poster Presentation

Clostridium difficile Infection Prevention Bundle Implementation

Moi Lin Ling, Singapore General Hospital; Pinhong Jin, Singapore General Hospital; Kwee Yuen Tan, Singapore General Hospital

Background: The optimal prevention of healthcare onset *Clostridium difficile* infection (CDI) has been a challenging one in an acute tertiary-care hospital with limited number of single rooms. Asymptomatic patients with CDI are nursed in open wards but tagged with a green sticker to alert staff of their status. This signal prompts testing to use 5,000 ppm sodium hypochlorite to clean environmental surfaces in the multibed room and to continue with modified contact precautions. **Methods:** We conducted a survey on infection prevention measures used in the management of CDI patients over 2 weeks among senior nurse managers, clinicians, and registered nurses in 38 inpatient wards. We categorized the survey results into 4 types of practices: established practices, nonestablished practices (easy implementation), nonestablished practices (lack of resources), and nonestablished practices (staff resistance). We then identified barriers to determine reasons for resistance to nonestablished practices before the implementation of the CDI bundle in May 2019. The bundle comprised the following components: contact precautions, antimicrobial stewardship, isolation of CDI patient with diarrhea in single room, environment, and equipment hygiene. Following the survey, we enhanced the signage for CDI patients to be more obvious. Monthly, we monitored the incidence of HO-*Clostridium difficile* to assess effectiveness of implementation measures. **Results:** Nonestablished practices (easy implementation) included uncertainty of diarrhea definition and the recommended environmental hygiene disinfectant, lack of understanding of the importance of complying to personal protective equipment (PPE), and inconsistency in conveying CDI status. Among nonestablished practices (lack of resources), shortage of isolation beds for CDI patients with diarrhea and unavailability of electronic alert system for CDI patients within the institution are the major issues faced by clinical staff. Unavailability of CDI indicator stickers, contact precaution posters, and sporicidal wipes were noted in 6 medical and surgical