

Fig. 1.

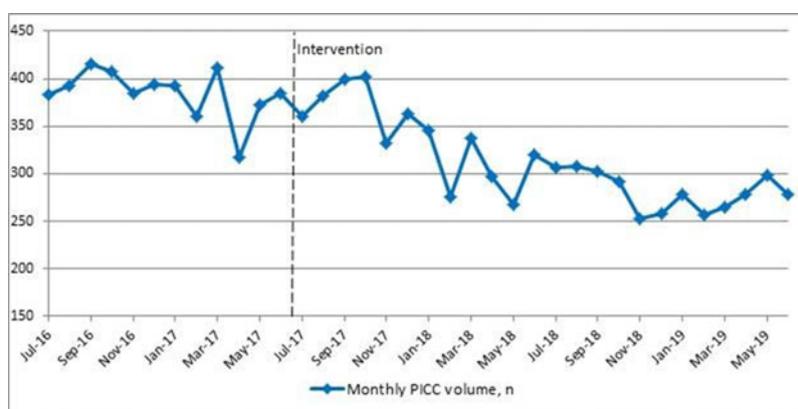


Fig. 2.

929 midlines were placed in the 24 months after the intervention. Following the implementation of the intervention, proportions of triple-lumen catheter utilization decreased from 31.9% to 22.3% ( $P < .0001$ ). Concurrently, the proportion of single-lumen catheters has increased from 28.5% to 41.9% ( $P < .0001$ ). Overall PICC utilization decreased in the postintervention period from an average of 387.9 PICCs placed per month to 310.7. The proportion of midline catheters increased from 8.5% of total lines inserted to 11.4% in the postintervention period ( $P < .001$ ). Conclusions: Our intervention reduced overall PICC use and triple-lumen PICC use and increased relative utilization of single-lumen PICCs and midline catheters. Optimization of electronic orders, in conjunction with targeted education and decision support, can have a sustained impact on provider ordering behaviors and can shift the culture of utilization, even in a large academic medical center with frequent turnover of trainees.

**Funding:** None

**Disclosures:** Consulting fee- Merck (Priya Sampathkumar)

Doi:10.1017/ice.2020.603

#### Presentation Type:

Poster Presentation

#### A Randomized Assessment of a Laxative-Based *Clostridioides difficile* Diagnostic Stewardship Intervention

Chelsea E. Lau, Department of Medicine, University of Virginia Health System; Rena G. Morse, Health Information & Technology, University of Virginia Health System,

Charlottesville, Virginia; Costi Sifri, University of Virginia Medical Center; Gregory Madden, Infectious Diseases Fellowship Program

**Background:** *Clostridioides difficile* is the leading healthcare-associated pathogen, with significant morbidity associated with acute *C. difficile* infection (CDI). However, polymerase chain reaction stool testing is unable to differentiate colonization from infection, leading to frequent overdiagnosis, unnecessary iatrogenesis, and additional costs. As a result, IDSA guidelines do not recommend *C. difficile* testing in patients with diarrheal symptoms attributed to other causes, including laxatives. Our group has previously investigated the use of a computerized clinical decision support (CCDS) tool to reduce inappropriate *C. difficile* testing in a single tertiary-care health system, with a subsequent 41% reduction in testing. We investigated the reduction in proportion of inappropriately completed tests with the randomized addition of a laxative alert to our existing CCDS. **Methods:** An existing electronic medical record-based CCDS tool was augmented by the addition of an automatic alert that notified the user if a patient received any of a set of identified laxative medications within 48 hours. During the 78-day pilot period, users encountered the existing CCDS or the CCDS with laxative alert (CCDS-LA), randomized by patient identification number. A proportional  $\chi^2$  analysis was used to compare the proportion of aborted to completed tests among patients who met laxative criteria in the CCDS versus CCDS-LA groups. **Results:** In total, 187 test orders were attempted during the pilot period in 119

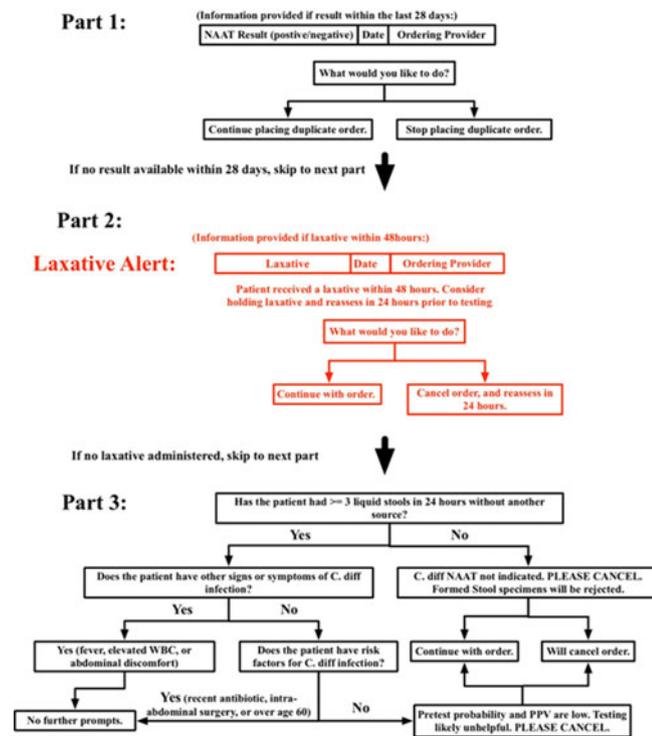


Fig. 1.

patients meeting the laxative alert criteria, with 43.3% order attempts randomized to the existing CCDS and 56.7% to the CCDS-LA. Of order attempts via the CCDS-LA, 50.0% were completed, compared to 64.2% of orders completed via the existing CCDS (22.1% relative reduction in test completion;  $P = .0525$ ). **Conclusions:** We demonstrated substantially fewer completed *C. difficile* tests among patients receiving laxatives who were randomized to modified laxative-alert CCDS. Although our result did not reach statistical significance, the trend toward reduced inappropriate testing prompted the CCDS-LA alert to be adopted hospital-wide following completion of the test period. Further analyses of the pre- and postintervention periods are required to determine whether this intervention significantly impacts testing rates over time, as well as to determine the durability and safety of the CCDS-LA. Additional analyses are also needed to assess the impacts on hospital-onset CDI rate and the associated costs.

**Funding:** None

**Disclosures:** None

Doi:10.1017/ice.2020.604

### Presentation Type:

Poster Presentation

### A Self-Reflection Stewardship Workshop Improves Resident Physician Understanding of Ambulatory Antibiotic Stewardship

Julio Nasim, Wake Forest Baptist Health; Christopher Ohl, Wake Forest School of Medicine;

Sean Hernandez, Wake Forest School of Medicine; John Williamson, Wake Forest Baptist Health; James Beardsley, Wake Forest Baptist Health; James Johnson, Wake Forest School of Medicine; Werner Bischoff, Wake Forest School of Medicine; Tyler Stone, Wake Forest Baptist Health; Vera Luther, Wake Forest School of Medicine

**Background:** Antibiotic stewardship programs (ASPs) have traditionally focused on inpatient prescribing, but they are now mandated to involve ambulatory settings. We developed and tested an educational tool in resident physicians to empower outpatient providers to perform self-reflection stewardship (SRS) to improve their antibiotic use. Results of the first SRS workshop are reported. **Methods:** A 90-minute SRS workshop focusing on the evaluation and management of sinusitis in ambulatory care was developed for PGY 2-3 internal medicine residents. Participants received a 15-minute didactic on the evaluation and management of adults with sinusitis, including typical microbiology, differentiation of bacterial sinusitis, and guideline recommendations on antibiotic treatment. In a computer lab, participants were instructed how to review charts of patients they had treated with antibiotics for sinusitis during the past year using the SlicerDicer application in Epic. Over 1 hour, they worked in pairs to complete and discuss a self-reflection inventory for 5 patients from each of their respective reviews. They evaluated pertinent history, comorbidities, presenting symptoms and signs, diagnostic testing performed, and a self-assessment of the subsequent antibiotic prescribing, including appropriateness of using an antibiotic, antibiotic choice and duration. In addition, they reflected on potential patient and prescriber challenges. Residents then identified common themes and developed a personal improvement plan for antibiotic prescribing for sinusitis. The last 15 minutes were spent debriefing with ASP faculty on reasons for overprescription of antibiotics for URIs and individual improvement plans. Residents completed workshop evaluations using a Likert scale and open-ended comments. **Results:** In total, 26 residents participated. All (100%) agreed or strongly agreed that the SRS workshop improved their understanding of how to obtain data on their own practice habits. Moreover, 23 (88%) agreed or strongly agreed that the workshop improved their understanding of when to prescribe antibiotics and how to practice antibiotic stewardship in the outpatient setting. Also, 20 participants (77%) agreed or strongly agreed that the SRS workshop helped them gain insight into reasons why they might overprescribe antibiotics in the outpatient setting. Furthermore, 25 (96%) agreed or strongly agreed that the SRS workshop helped them identify at least 1 way they could improve their antibiotic prescribing in the outpatient setting. **Conclusions:** The SRS workshop was well received by residents and offers a tool to empower primary care resident physicians to access their own antibiotic prescribing data, perform a structured self-reflection, and enhance their understanding of antibiotic stewardship in the ambulatory setting. SRS is a potential tool to improve ambulatory antibiotic use.

**Disclosures:** None

**Funding:** None

Doi:10.1017/ice.2020.605

### Presentation Type:

Poster Presentation

### A Simple Cleaning Intervention to Prevent Transmission of Carbapenemase-Producing Enterobacterales from Hospital Sinks

Jason Kwong, Austin Health; Marcel Leroi, Austin Health, Australia; Trudi Bannam, Austin Health, Australia; Deidre Edmonds, Austin Health, Australia; Elizabeth Grabsch, Austin Health, Australia; Shanti Narayanasamy, Austin Health, Australia; John Greenough, Austin Health, Australia; Courtney Lane, Peter Doherty Institute for Infection and Immunity; Marion Easton, Department of Health and Human Services, Victoria, Australia; Benjamin Howden, University of Melbourne; Paul Johnson, Austin Health, Australia; M. Grayson, Austin Health