antimicrobial consumption and the rate of CDI-HA, a Poisson regression model was used. HA-CDI annually new cases have been defined as a dependent variable, the stays as an offset of the model and the HA-MRSA rates and antimicrobial consumption (measured in DDD) as independent factors. The exponents of model coefficients are equal to incidence rate ratios (IRR). Results: The regression model showed an association of with antimicrobial consumption with HA-CDI (IRR,1.05; 95% CI, 1.03–1.07; $P < .001$) and a lack of association with HA-MRSA (IRR, 0.83; 95% CI, 0.46–1.48; $P = .52$). **Conclusions:** The HA-CDI incidence rate grew annually by 5% for an increase of 1 DDD in annual antibiotic consumption. No association HA-MRSA rates was detected, suggesting that antimicrobial stewardship programs are urgently needed to improve the control of HA-CDI in Catalonia, a geographical area with a low prevalence of epidemic ribotypes.

Presentation Type:
Poster Presentation

Infection Preventionist Run *Clostridioides difficile* Testing Diagnostic Stewardship Protocol- Experience From a Rural Community Hospital

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Background: Distinguishing active *Clostridioides difficile* infection (CDI) from asymptomatic colonization remains a challenging task in the era of PCR testing. Inappropriate testing leads to overtesting and overdiagnosis, inadvertent treatment, and isolation in addition to laboratory identified (LabID) events, leading to increased incidence to hospital-onset CDI (HO-CDI). The institution has a nurse-driven *C. difficile* test ordering protocol, and we noted a significant increase in the HO-CDI incidence in 2017 due to inappropriate testing, with rates as high as 0.94 per 1,000 patient days. **Methods:** In September 2017, a multidisciplinary team reviewed and initiated algorithm-based testing with mandatory audit and review by infection preventionists (IPs) under the guidance of an ID physician of all ordered tests. They reviewed the adequacy and legitimacy of order for multiple parameters, including minimum 3 loose stools in 24 hours, use of laxatives in last 24 hours, consistency of the sample, presence of at least 1 clinical parameters (ie, fever, abdominal pain, leukocytosis, sepsis, or septic shock), recent or concomitant antibiotic use, recent PCR testing in the last 14 days, and chart review for medical and/or surgical history. The IPs served as the gatekeepers to testing and rejected the samples that were deemed inappropriate. Ambiguous cases were discussed with the ID specialist. On the microscope lab side, all specimens sent were batched to be run twice a day at 8:30 A.M. and 2:30 P.M., and testing was performed only on the samples cleared by infection preventionists. **Results:** The number of PCR tests completed in the comparison quarter of 2016 was 220, which decreased to 157 tests in 2017 with a reduction of 28%. After a full year of implementation of the diagnostic stewardship protocol, the number of completed PCR tests decreased to 626 from 940 PCR tests in 2016, with an overall 34% decrease in testing. In the year following the implementation of diagnostic stewardship, HO-CDI decreased from 60 events in 2017 to 43 events in 2018, with a reduction of 28%. Subsequently, HO-CDI further decreased in 2019 from 43 to 28, with a reduction of 35%. Since the implementation of the project in 2017, HO-CDIs have decreased by 54% overall. The reduction in 314 *C. difficile* PCR tests in the first year led to a savings of $8,300 in laboratory testing supplies. The reduction of HO CDI by 17 led to cost avoidance of $293,420. **Conclusions:** Our experience shows that the IP-run diagnostic stewardship program was highly successful in streamlining testing, with cost savings on several fronts.
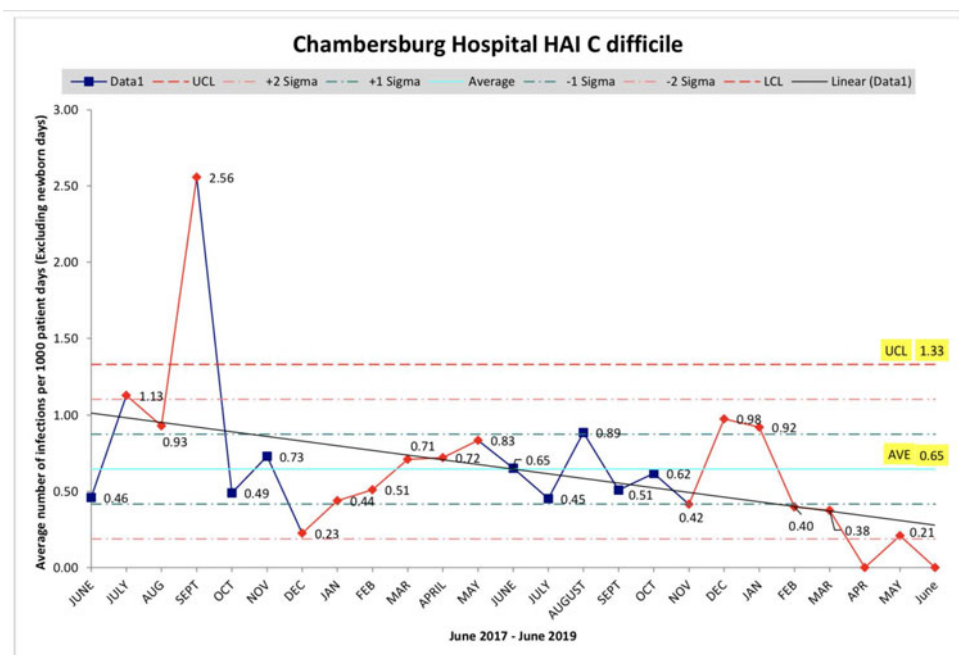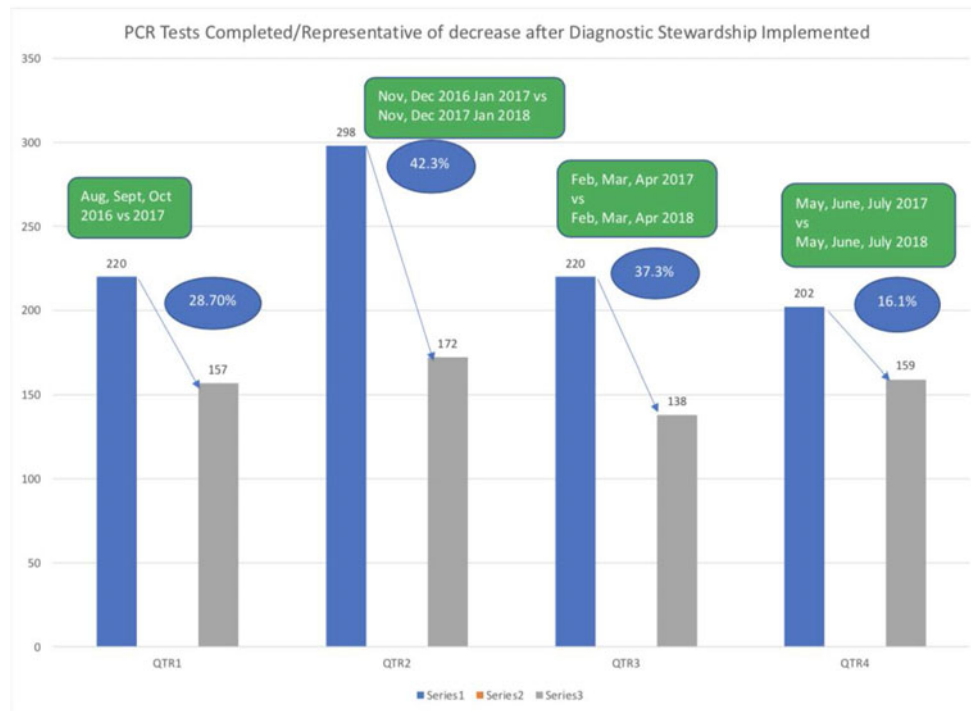
Fig. 1.

Fig. 2.

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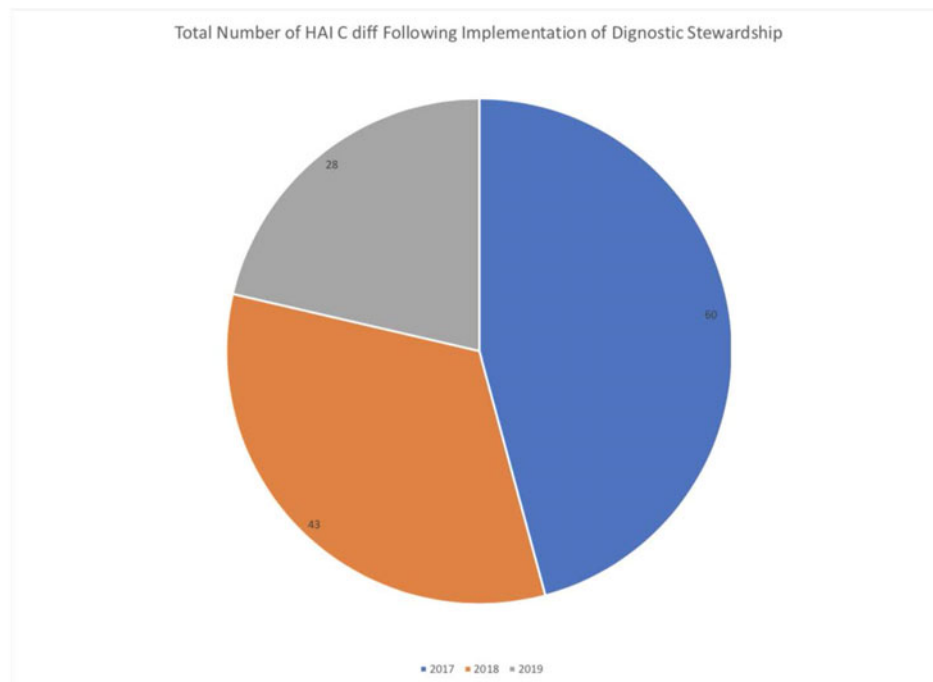**Presentation Type:**
Poster Presentation
Influence of Infectious Disease Physician Approval on Appropriateness of PICC Use and Outcomes

Valerie M Vaughn, University of Michigan Medical School; Megan O'Malley, Michigan Medicine; Scott A. Flanders, University of Michigan Medical School; Tejal N. Gandhi, University of Michigan Medical School; Lindsay A. Petty, University of