who presented with a urine ADM-HAI – suggestive of HA-UTI – and no other healthcare-associated infection (Urine+ patients), were observed for subsequent HO-CDI. Urine+ patients were compared to patients with no HAI of any type, other than CDI (HAI-free patients), and relative risk (RR) was estimated. The analysis was repeated for the subgroup of patients who received an antimicrobial order for any reason during their stay.

Results: 3,050,525 inpatient admissions were analyzed. 26,634 were identified as Urine+ patients. 188 of those patients subsequently presented with HO-CDI. 2,978,507 were identified as HAI-free patients. 6,238 of those patients presented with HO-CDI. The incidence of HO-CDI was significantly higher in Urine+ patients compared to HAI-free patients (RR=3.37, 95% CL[2.92, 3.89], $p< 0.0001$). When the analysis was repeated to examine only patients who received antimicrobial orders, Urine+ patients continued to be at higher risk of subsequent HO-CDI compared to HAI-free patients (RR=3.28, 95% CL[2.74,3.92], $p< 0.0001$).

Conclusion: The presence of a urine ADM-HAI, suggestive of HA-UTI, was associated with an increased risk of subsequent HO-CDI. This held when only patients with antimicrobial orders were considered. These observations mirror findings from other published studies, however, other factors may have contributed to increased risk for both HA-UTI and HO-CDI.

Disclosures: Timothy Kelly, MS, MBA, BD (Employee) ChinEn Ai, MPH, BD (Employee) John Murray, MPH, BD (Employee) Yan Xiong, n/a, BD (Becton Dickinson) (Employee) Hanna Jokinen-Gordon, PhD, BD (Employee)

795. Impact of Revised Infectious Diseases Society of America and Society for Healthcare Epidemiology of America Guideline on the Classification of *Clostridioides difficile* Infection Severity

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Session: P-32. HAI: C. difficile

Background: The Infectious Diseases Society of America (IDSA) and Society for Healthcare Epidemiology of America (SHEA) revised their *Clostridioides difficile* infection (CDI) severity classification criteria in 2017 to include a serum creatinine (SCr) value above a threshold (≥ 1.5 mg/dL) rather than a relative increase from baseline (≥ 1.5 times the premorbid level). To date, these criteria have not been validated and may overestimate the number of severe CDI cases in patients with underlying renal insufficiency.

Methods: This multicenter, retrospective cohort study included all patients ≥ 18 years of age with CDI diagnosed in two large health systems in the Houston, Texas area between 2016 and 2018. Patients were assessed for presence of acute kidney injury (AKI) and chronic kidney disease (CKD), defined per the Kidney Disease: Improving Global Outcomes (KDIGO) guidelines, and IDSA/SHEA CDI severity classification criteria per the 2010 and 2017 CDI guidelines. The primary outcome was all-cause inpatient mortality.

Results: The study cohort consisted of 770 CDI episodes from 12 hospitals. A large proportion of episodes occurred in patients with preexisting CKD (36.5%) and concomitant AKI (29.6%). Eighty-two episodes (10.6%) showed discordant results when applying the 2017 revised severity classification criteria due to the identification of patients with preexisting CKD. However, the 2017 severity classification criteria were better correlated with all-cause mortality (OR, 5.40; 95% CI, 1.84-15.86; P = 0.002) than were the 2010 severity classification criteria (OR, 3.12; 95% CI, 1.35-7.19; P = 0.008) as the 2017 SCr criterion was an independent predictor of mortality (OR, 3.66; 95% CI, 1.66-8.05; P = 0.001) while the 2010 SCr criterion was not (OR, 1.47; 95% CI, 0.71-3.08; P = 0.30).

Conclusion: Our findings support the inclusion of the 2017 IDSA/SHEA CDI severity classification criteria in future CDI guideline updates.

Disclosures: **Kevin W. Garey, PharmD, MS, FASHP**, **Merck & Co.** (Grant/Research Support, Scientific Research Study Investigator)

796. Improving *Clostridioides difficile* Infection Treatment and Outcomes Using a Web-based Tool to Support a Care Coordination Intervention

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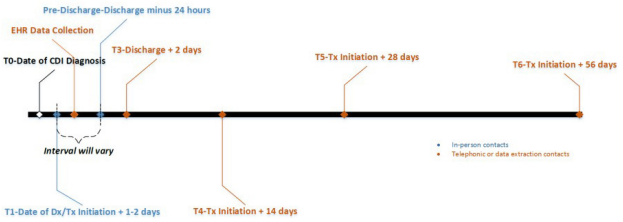
Session: P-32. HAI: C. difficile

Background: *Clostridioides difficile* infection (CDI) is a highly burdensome disease, affecting 500,000 Americans each year. Despite extensive efforts to prevent and treat CDI, variability remains in the treatment guidelines, particularly as new medications are released. Treating CDI is particularly difficult, as approximately 25% of infected individuals experience recurrent CDI (rCDI).

Methods: We used a pre-post design to measure the impact of an intervention on rCDI, CDI readmission, and guideline-adherent treatment rates in adult patients who were admitted with or contracted CDI in the hospital. The intervention included the following:

- Web-based performance platform delivering education and care coordination support
- CDI care coordination for 8 weeks post-discharge (Figure 1)
- Education and tools for addressing CDI guidelines, workflow needs, and patient engagement
- Best practice sharing through peer-to-peer discussion calls

Patient Contacts



Results: Among the 77 patients consented in the Pre-Intervention period, 12 (15.6%) patients reported a recurrence of CDI, compared to 6 (15.4%) of the 39 Intervention patients who provided a response ($P = 0.98$). While a total of 55 patients were consented in the Intervention period, none reported a readmission for CDI, however 9 (11.7%) of Pre-Intervention patients reported a readmission for CDI ($P = 0.03$). There was a significant difference (P < 0.001) between the use of appropriate treatment, as defined by the 2018 SHEA/IDSA guidelines, between the Pre-Intervention and Intervention groups (55.8% vs. 94.3%).

Conclusion: A comprehensive multi-disciplinary team approach to preventing rCDI, including post-discharge care coordination, provides support to patients and caregivers. Future research is needed to evaluate how web-based tools, like those used in this study, could engage patients in the management of CDI and rCDI. Interventions aimed at improving the care of these patients may reduce recurrences and rehospitalizations.

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797. Management of Patients with Multiple *Clostridioides difficile* Infection Recurrences using a Tapered-Pulsed Fidaxomicin Strategy

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Session: P-32. HAI: C. difficile

Background: There is a paucity of data assessing outcomes of alternate fidaxomicin strategies in patients with recurrent *Clostridioides difficile* infection (rCDI). The objective of our study is to evaluate a tapered-pulsed (T-P) fidaxomicin regimen that was administered immediately following a course of CDI treatment with initial symptom resolution in patients with multiple rCDI.

Methods: We reviewed the characteristics and outcomes of 46 consecutive patients who received T-P fidaxomicin between January 1, 2014-June 30, 2019 in a specialty CDI clinic. The first episode in which fidaxomicin T-P was administered was analyzed. Failure was defined as the persistence of diarrhea and/or the need for additional CDI treatment at any time on T-P fidaxomicin. Sustained clinical cure (SCC) was defined as resolution of diarrhea without recurrence. Recurrence was defined as the return of diarrhea requiring retreatment with CDI therapy after completion of T-P fidaxomicin. Both SCC and recurrence were evaluated at 30 and 90 days after completion of T-P fidaxomicin.

Results: The mean±SD age of the 46 patients was 63.2±19.9 years, 71.7% were female, and the mean±SD CDI episodes within the past year was 3±1.4 . Most patients (73.9%) had previously failed a vancomycin tapered and/or pulsed regimen. Prior to administering T-P fidaxomicin, a treatment regimen was given to ensure resolution of symptoms. The CDI treatment most commonly used (58.7%) was vancomycin. The T-P fidaxomicin regimen used consisted of 200 mg given once daily for 7 days followed by 200 mg every other day for a median (min-max) duration of 33 (6-120) days. Two patients (4%) failed to respond to T-P fidaxomicin; 34 (74%) and 28 (61%) achieved SCC at 30