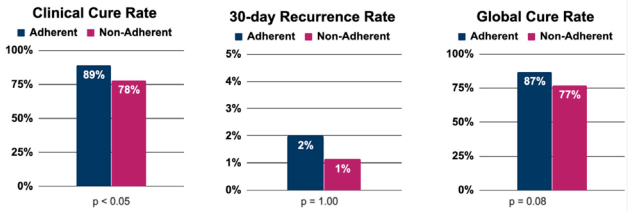
Figure 1. Rates of Clinical Cure, 30-day Recurrence, and Global Cure of *C. difficile* Infection



Disclosures. **All authors:** No reported disclosures.

1984. A Multi-Disciplinary Team-based Quality Improvement Initiative to Reduce *Clostridioides difficile* Rates and Promote Antimicrobial Stewardship in Targeted Surgical Wards

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Background. At Stanford, two surgical wards, E3 and F3, were responsible for 1/5 of hospital-acquired *Clostridioides difficile* infection (HO CDI) cases in the fiscal year 2018 (FY2018). We used a quality improvement framework with a goal to reduce yearly HO CDI episodes by 1/2 on these wards.

Methods. A multidisciplinary quality improvement team was created with front-line nursing leaders and representatives from colorectal surgery, gynecology oncology, antimicrobial stewardship (ASP), infection prevention, and pharmacy. Coaching and instruction on quality improvement were provided as part of Stanford's "Realizing Improvement through Team Empowerment" (RITE) program. Using A3 problem solving, root cause analysis identified key drivers, and interventions were performed. Cumulative HO CDI cases in FY2019 and weekly antibiotic days of therapy (DOT) on E3/F3 were monitored.

Results. Review of FY2018 HO CDI cases (n = 14) revealed the most common key driver as inappropriate antibiotic prescribing (8 cases, 57%). Multiple interventions were instituted (Figure 1). Three ASP interventions began February 2019: nursing questioned antibiotic choice/duration on daily interdisciplinary rounds (Figure 2), automatic infectious disease consultation for > 72 hours of piperacillin/tazobactam on gynecology/oncology patients, and twice-weekly rounds between ASP and a colorectal attending. Data from ASP/colorectal rounds from March 19, 2019 to April 16, 2019 showed means of 18.2 minutes taken for chart review and 4.4 minutes for discussion. 25 charts reviewed led to 16 (64%) ASP recommendations and 14/16 (87.5%) of recommendations accepted. Common interventions included: appropriate duration of antibiotics, clarification of the team's planned duration, and review of microbiology data to narrow therapy. Mean DOT decreased from 35.28 to 21.61 (39%) since July 2018 (Figure 3). Patient volume and case mix index remained stable throughout, suggesting no impact on DOT. Though CDI cases did not decrease, interventions were in place for only 2 months (Figure 4).

Conclusion. While too early to determine its impact on HO CDI rates, a multi-disciplinary team approach utilizing A3 problem solving was successful in implementing effective ASP measures including nursing-led ASP and structured antibiotic timeouts.

Figure 1. Key Drivers and Interventions Targeting HO CDI

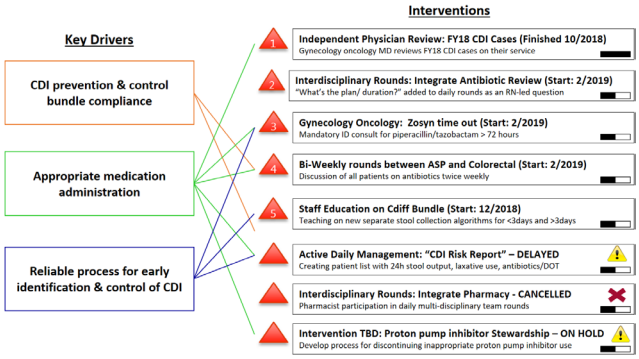


Figure 2. Nursing-led ASP: Integration of "What's the plan/duration" of antibiotics into Interdisciplinary Rounds

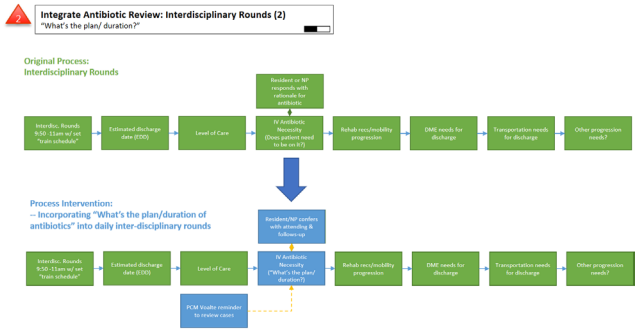


Figure 3. Total Antibiotic DOT Change Over Time: Before and After ASP Interventions

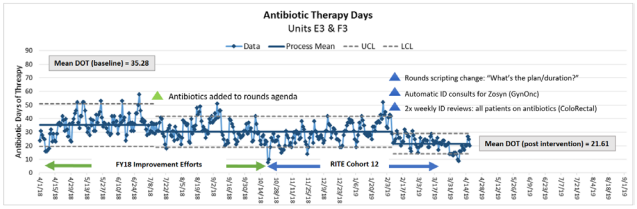
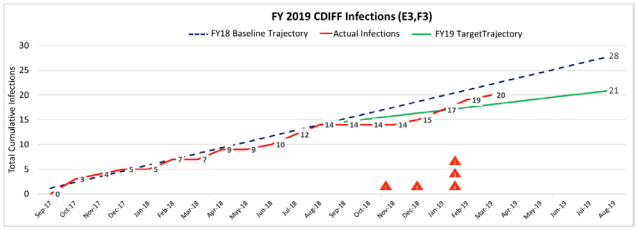


Figure 4. Baseline vs. Goal Trajectory of Cumulative HO CDI Rates on E3/F3 From FY2018 to FY2019



Disclosures. **All authors:** No reported disclosures.

1985. Impact of Suppressing Ciprofloxacin Susceptibility Results on Antibiotic Utilization and Hospital-acquired *Clostridioides difficile* Infection

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Background. Fluoroquinolones (FQs) are broad-spectrum antibiotics associated with multiple adverse effects and an increased risk of *Clostridioides difficile* infections (CDI). Previous data suggest that suppression of FQ susceptibility results decreased FQ use. The purpose of this study was to examine the impact of suppressing ciprofloxacin susceptibility on antibiotic use, susceptibility, and CDI.

Methods. This was a single-center quasi-experimental study of the effect of the suppression of ciprofloxacin susceptibility on pan susceptible urine isolates for *Klebsiella* sp. and *E. coli* starting in March 2018 in the 11 months before and after the intervention. Monthly antibiotic utilization in days of therapy (DOT)/1,000 patient-days for levofloxacin, ciprofloxacin, ceftriaxone, trimethoprim/sulfamethoxazole (TMP/SMZ), fosfomycin, and nitrofurantoin, hospital-acquired CDI (HA-CDI) rates as defined by CDC, and *Pseudomonas aeruginosa* susceptibility was compared with interrupted time series analysis using Stata MP 12.1 before and after the intervention to compare the level, intercept, and rate, slope, of a trend line.

Results. There was no change in the level or rate of ciprofloxacin DOT (0.27, 95% CI: −0.94 to 1.48–3.49; 95% CI: −10.89 to 3.90) and levofloxacin DOT (−5.87, 95% CI: −17.79 to 6.06; −0.98, 95% CI −2.86 to 0.90) with the intervention, respectively. Level of *P. aeruginosa* susceptibility to ciprofloxacin level (8.13, 95% CI: 0.00 to 16.26) had a trend toward increasing and rate (1.65, 95% CI: 0.44 to 2.87) increased after the intervention. Ceftriaxone DOT level decreased after the intervention (P = 0.01), but the rate did not change. Cephalexin (P = 0.01) and nitrofurantoin (P = 0.01) DOT levels increased after the intervention without changes in rates. There was no change in the level or rate of HA-CDI, fosfomycin, or TMP/SMZ DOTs.

Conclusion. Suppressing ciprofloxacin susceptibility results on pan susceptible *Klebsiella* sp. and *E. coli* urine isolates was associated with increased *P. aeruginosa* susceptibility to ciprofloxacin and increased cephalexin and nitrofurantoin DOTs. No changes were seen in FQ use or HA-CDI rates.