

#### 1044. Impact of Interdisciplinary Rounds on Antimicrobial Use at a Community Hospital

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**Session:** 131. Antibiotic Stewardship: Interventions

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**Background.** Antimicrobial stewardship (AS) implementation is challenging in resource-limited settings such as smaller community hospitals that may lack dedicated personnel resources or have limited access to infectious diseases experts with dedicated time for AS. Few studies have evaluated the impact of interdisciplinary rounds as a strategy to optimize antimicrobial use (AU) in the community hospital setting.

**Methods.** We evaluated the impact of interdisciplinary rounds in a 280-bed acute care nonteaching, community hospital with an established ASP. The primary outcome was facility-wide antibiotic utilization pre- and post-implementation. Rounds included key healthcare personnel (hospitalists, clinical pharmacists, case managers, nurses) reviewing all patients on inpatient wards Monday through Friday, with a discussion of diagnosis, antibiotic selection, dosing, duration, and anticipated discharge plans. AU was compared for a 7-month post-intervention period (June 1, 2018–December 31, 2018) vs. similar months in 2017 based on days of therapy (DOT)/1,000 patient-days and length of therapy (LOT) per antimicrobial use admission. In addition, trends in AU for the post-intervention period were compared with the previous 17 months (January 1, 2017–May 31, 2018) using segmented binomial regression.

**Results.** Interdisciplinary rounds incorporating AS principles was associated with a decrease in overall AU in this facility, with a significant decrease of 16.33% ( $P < 0.0001$ ) in DOT/1,000 pd in the first month and was stable (decrease of 1.1% per month,  $P = 0.15$ ) thereafter (Figure 1). There was no significant change in LOT/admission after the first month of the intervention, but the trend demonstrated a 2% per month decrease ( $P < 0.03$ ) thereafter (Figure 2). Comparing 2018 intervention months with similar months of 2017, the use of antibacterial agents decreased on average by 191.3 (95% CI -128.2 to -254.4) DOT/1,000 patient-days (Figure 3) and 0.546 (95% CI: -0.28 to -0.81) days per admission (Figure 4).

**Conclusion.** In this community hospital with an existing antimicrobial stewardship program, implementation of interdisciplinary rounds was associated with a substantial decrease in antimicrobial use. This was sustained for at least a 7-month period.

Figure 1. Overall Antibiotic Utilization Over Time (2017-2018)

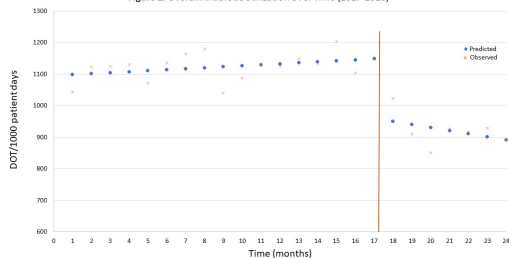


Figure 2. Overall Length of Antibiotic Therapy Per Antimicrobial Use Admission Over Time (2017-2018)

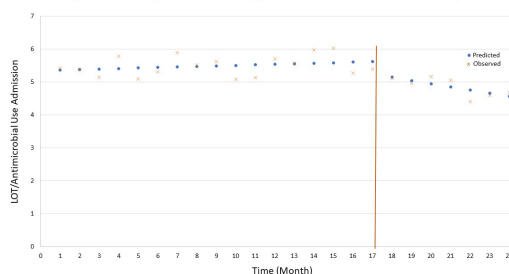


Figure 3. Antibacterial DOT/1,000 Patient Days 2017 vs 2018

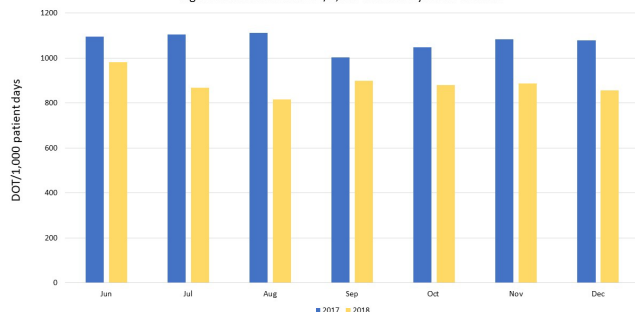
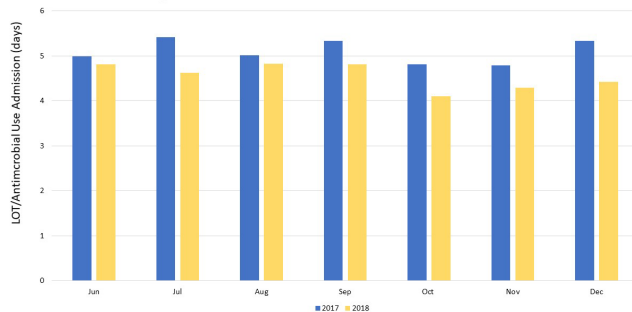


Figure 4. Antibacterial LOT/Antimicrobial Use Admissions 2017 vs 2018



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

#### 1045. Impact of an Antimicrobial Stewardship Pharmacist on Microbiology Rounds

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**Background.** Microbiology rounds is an area for antimicrobial stewardship programs (ASP) to potentially intervene on antimicrobial prescribing in both the inpatient and outpatient settings. The purpose of this study was to describe and evaluate the impact of ASP pharmacist participation in microbiology rounds.

**Methods.** This was a single-center retrospective descriptive study including inpatient and ambulatory adults ( $\geq 18$  years) with a susceptibility request requiring review during microbiology rounds between October 2018 and 3/2019. During daily microbiology rounds, susceptibility or workup requests were reviewed with the multidisciplinary microbiology team. The ASP pharmacist was called for their clinical expertise in assessing complicated or nonstandard susceptibility requests. Number and types of interventions made by ASP pharmacist were recorded (e.g., approval rate, education, ASP referral, ID consult referral). Additionally, number and types of intervention outcomes (unnecessary susceptibility prevented, optimized susceptibility request, treatment recommendation, improved clinician understanding, etc.) were analyzed.

**Results.** There were 66 susceptibility requests reviewed by an ASP pharmacist from October 2018 to 3/2019, of which 84.8% were inpatient. An ID provider was the requestor for 35% of requests. ASP pharmacists completed chart reviews for 92.4% of patients and contacted the requester/primary team 72.7% of the time. Thirty-three (50%) susceptibility requests were approved and, notably, 65.2% of requests from an ID provider were approved. Intervention rates for education provided, ASP referral, and ID consult referral were 50%, 1%, and 7%, respectively. ASP pharmacists were able to impact multiple intervention outcomes, including preventing unnecessary susceptibility requests (45.5%) and improving clinician understanding (39.4%) (Table 1).

**Conclusion.** ASP pharmacists are an important part of the microbiology team and are able to use their clinical expertise to help approve or deny susceptibility requests, make potential recommendations to optimize antimicrobial therapy, and provide education to other healthcare professionals.

Table 1. Intervention Outcomes by Type

Outcome	N (%)
Unnecessary Susceptibility Prevented	30 (45.5)
Improved Clinician Understanding	26 (39.4)
Optimized Susceptibility Request	11 (16.7)
Prevented Treatment of Contaminant	11 (16.7)
Prevented Need for Parenteral Therapy	7 (10.7)
Treatment Recommendation Provided	6 (9.1)
Additional Workup Performed	5 (7.6)

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#### 1046. Evaluating the outcomes of embedding Antimicrobial Stewardship order sets in the General Medicine Admission Electronic Order Set: A Retrospective Study

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**Background.** The use of facility-specific guidelines and clinical decision-making tools are recommended by a number of organizations to improve the appropriateness of empiric antimicrobial prescribing; however, how to increase usage is not clear. We evaluated the impact of embedding antimicrobial stewardship (AS) electronic order