40. Impact of an Antimicrobial Intake Process within a Post-acute Medical System

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Session: P-04. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

**Background.** Implementation of antimicrobial stewardship programs (ASPs) within long-term acute care facilities (LTACs) is challenging due to limited resources and missing patient data from transferring facilities. In October 2018, an ASP was established within a 43-hospital system consisting of LTACs and rehabilitation hospitals. Despite the presence of a restricted antimicrobial policy, increased utilization was observed for five restricted antimicrobials. The system ASP committee implemented a multipronged approach to optimize utilization of these five agents. Investigators sought to assess the impact of an antimicrobial intake process on antimicrobial consumption.

**Methods.** This was a retrospective analysis within a 43-hospital system of LTACs and rehabilitation hospitals, comparing use of five restricted antibiotics before (Sept-June 2019) and after (July 20-April 2021) implementation of a data-collection and system review process. An antibiotic intake form and process for review for five restricted antibiotics (ceftriaxone, ceftazidime/avibactam, cefepime/tazobactam, fidaxomicin, meropenem/vaborbactam) was approved at the system ASP committee. The intake form consisted of a restricted antibiotic form, cultures and susceptibilities, physician notes, and other pertinent data. Any orders for the five antibiotics required completion of an intake form and submission to system ASP members for review and recommendations. Antibiotic consumption was measured in cost per acute patient day (cost/pxd) using a 2-sided t-test.

**Results.** Post-implementation, the five restricted antibiotics comprised 29.1% of total antibiotic expenditure for the healthcare system compared to 35.6% pre-implementation. Ten months after program implementation, the total antibiotic cost/pxd decreased 29.4% ([$12.02 ± 2.29 vs. $8.48 ± 1.45]; p = 0.0003). The cost/pxd of the five restricted antibiotics decreased 42.5% ($4.28 ± 1.09 vs. $2.46 ± 0.99; p = 0.0005).

**Conclusion.** Implementation of an antimicrobial intake process within a post-acute medical system resulted in a significant reduction in antibiotic consumption for five targeted antibiotics as well as overall antibiotic expenditure.

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41. Impact of Discharge Antimicrobial Stewardship at an Academic Medical Center

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**Background.** The Centers for Disease Control and Prevention estimates approximately 30% of antimicrobials prescribed in the outpatient setting are unnecessary and up to 50% are inappropriate. Despite this, antimicrobial stewardship (AS) efforts mostly focus on the inpatient setting and limited data describe AS interventions at hospital discharge. The potential for discharge AS, we used our existing resources to review discharge antimicrobial prescriptions sent to our hospital-operated outpatient pharmacy to potentially optimize antimicrobial therapy.