

addition to an antimicrobial stewardship team responsible for the proper use of antimicrobial agents were included in the study. AMU data (such as DOT [Days of Therapy / 100 patient days]) are entered semi-automatically from medical fee statement (receipt) file at each facility. ASP intervention is divided into four categories 1) pre-authorization, 2) prospective audit and feedback (PAF), 3) PAF and required notification (RN), 4) RN. The Kruskal-Wallis test is performed to see overall difference and the Dunn test with the Bonferroni correction is done for each pair of categories.

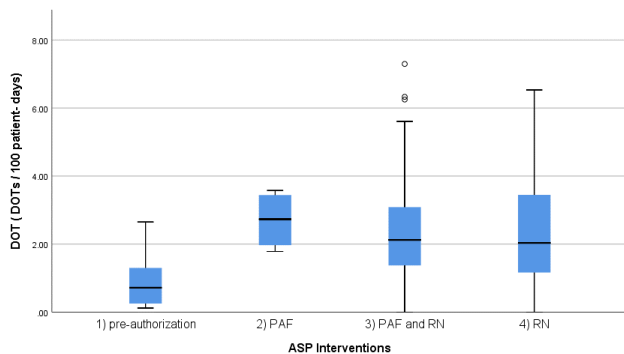
Results: A total of 114 hospitals were included in the analysis. The median number of beds at participating facilities were 430 [IQR: 281–602], the median average hospital stay was 13.0 days [IQR: 11.4–15.2] and total number of inpatients per month was 10087 [6247–14536]. PAF and RN were the most common ASP interventions for carbapenems (62.5%), followed by RN (33.6%). The median DOT [IQR] of participating facilities were 2.1 [1.2–3.1] and 1) 0.7 [0.2–1.1], 2) 2.7 [2.1–3.4], 3) 2.1 [1.4–3.1] and 4) 2.0 [1.2–3.5] by ASP categories. There are significant differences between 1) and 2), 1) and 3), and 1) and 4) ($p=0.014$, $p<0.01$ and $p<0.01$, respectively) while the differences between 2) and 3), 2) and 4), and 3) and 4) are not significant ($p=1.00$).

Table 1. Summary statistics of healthcare facilities by ASP Interventions

Total	ASP Intervention			
	1) pre-authorization	2) PAF	3) PAF and RN	4) RN
Number of data	36 (3.5 %)	4 (0.4 %)	639 (62.5 %)	343 (33.6 %)
Number of beds	430 [281-602]	515 [183-604]	450 [261-639]	440 [300-651]
Total number of inpatients per month	10087 [6247-14536]	12970 [4235-14848]	10881 [7302-14475]	8070 [6160-16692]
DOT (DOTs/100 patient-days)	2.1 [1.2-3.1]	0.7 [0.2-1.1]	2.7 [2.1-3.4]	2.1 [1.4-3.1]

Median and IQR are presented.

Figure 1. DOT by ASP Interventions



Conclusion: Only 3.5% of ASP interventions belong to 1) pre-authorization category and this might be due to the complexity of registration process. This category was found to have the lowest DOT among all ASP interventions in Japanese healthcare facilities. The variances of DOT were especially large in categories 3) and 4), and more detailed analyses would be necessary to evaluate their efficacies accurately.

Disclosures: All Authors: No reported disclosures

224. Effect of Easing Overnight Restrictions on Antimicrobial Starts

Michael E. Yarrington, MD¹; Rebekah Wrenn, PharmD, BCPS²; Justin Spivey, PharmD, BCPS, BCIDP³; Christopher Shoff, MD⁴; Steven S. Spires, MD⁴; Nicholas A. Turner, MD, MHS⁵; Michael J. Smith, MD, MSC.E²; Anthony Diez, n/a⁵; Deverick J. Anderson, MD, MPH¹; Rebekah W. Moehring, MD, MPH¹; ¹Duke Center for Antimicrobial Stewardship and Infection Prevention, Durham, North Carolina ²Duke University, Durham, NC. ³Duke University Medical Center, Durham, North Carolina ⁴Duke University School of Medicine, DURHAM, North Carolina ⁵Duke University Health System, Durham, North Carolina

Session: P-8. Antimicrobial Stewardship: Trends in Antimicrobial Prescribing

Background: Some institutions allow administration of restricted antibiotics overnight until evaluation the following day (i.e. first dose free) to adapt to limitations in personnel resources. Whether this method results in higher number of overnight requests compared to strict 24/7 preauthorization has not been fully described.

Methods: In October 2019, Duke University Hospital (DUH) changed from strict preauthorization to allow initiation of two restricted agents (meropenem and micafungin) between the hours of 11pm to 7am. We performed an interrupted time series (ITS) analysis to evaluate the phase shift and change in trend in the number of new meropenem and micafungin orders per week before (Jan 2019-Oct 2019) and after (Oct 2019- Mar 2020) the process change. First antimicrobial orders for meropenem and micafungin were counted for unique patient encounters. We fit a Gaussian distribution function to the number of orders per hour of day to estimate the percent of orders initiated overnight (11p-7a) and during day/evening hours (7a-11p) before and after the process change.

Results: Hospital data included 1728 new meropenem and micafungin orders over a 61-week period (~28 per week). The total number of meropenem and micafungin orders was constant between Jan 2019 and October 2019 (+0.07 orders/week, 95% CI -0.13 to 0.27, Figure 1) and the phase shift during the first week of October was non-significant (-4.38 orders, 95% CI -12.34 to 3.58). The number of orders increased

after October 2019 (+0.70 orders/week, 95% CI 0.13 to 1.25), however a sensitivity analysis removing the largest outlier eliminates significance. The percent of total orders between 11am to 7pm increased from 13.3% to 17.2% after the intervention (Figure 2). Overall antibiotic use remained similar through the study period.

Figure 1. Estimated Approvals per Week

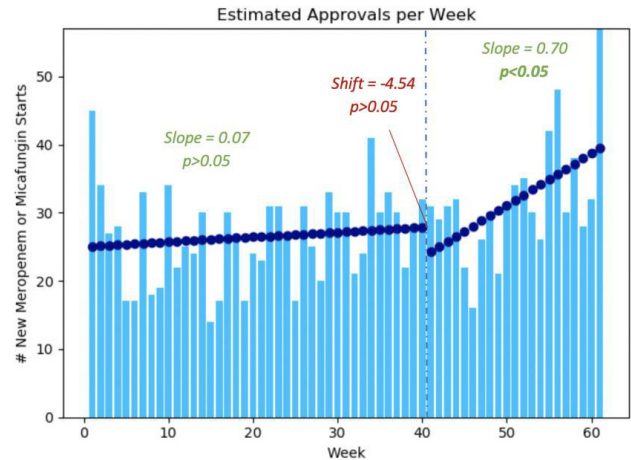
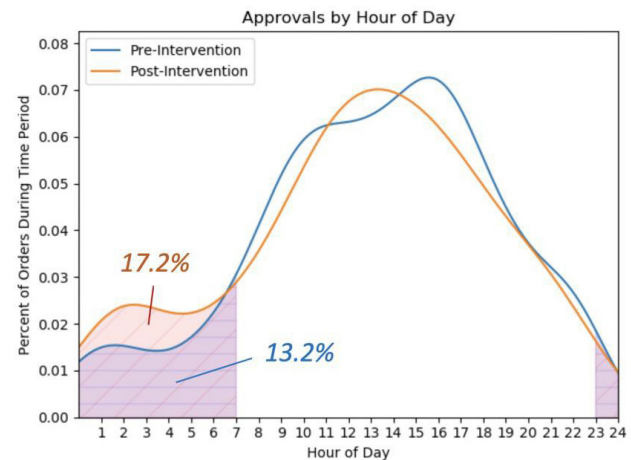


Figure 2. Approvals by Hour of Day



Conclusion: There was no significant immediate change in overnight prescribing of meropenem and micafungin, however a trend towards increased number of orders appeared after removing overnight restriction requirements. Instead of “stealth dosing”, where providers wait to enter restricted antibiotic orders until evening hours, we observed a small increase in starts in early morning hours (1am-6am). Preauthorization approaches must adapt to personnel resources and quality of life for antimicrobial stewards.

Disclosures: Michael J. Smith, MD, MSC.E, Kentucky Medicaid (Grant/Research Support) Merck (Grant/Research Support) Rebekah W. Moehring, MD, MPH, Agency for Healthcare Quality and Research (Grant/Research Support) Centers for Disease Control and Prevention (Grant/Research Support)

225. Evaluating Appropriateness of Antibiotic Prescribing in Pediatric Inpatients

Michael J. Ray, MPH¹; Caitlin M. McCracken, MA²; Kendall J. Tucker, PharmD, MS³; Diana Yu, PharmD, MS³; Margaret Underwood, BS²; Erin Wu, BS²; Kyle Kastelic, PharmD⁴; Dawn Nolt, MD, MPH³; Jessina C. McGregor, PhD, FSHEA⁵; ¹OSU/OHSU College of Pharmacy, Portland, OR; ²Oregon State University College of Pharmacy, Portland, Oregon; ³Oregon Health and Science University/Doernbecher Children’s Hospital, Portland, OR; ⁴Oregon Health & Science University, Portland, Oregon; ⁵Oregon State University, Portland, Oregon

Session: P-8. Antimicrobial Stewardship: Trends in Antimicrobial Prescribing

Background: Antibiotic appropriateness is the gold standard for informing antimicrobial stewardship efforts to optimize prescribing. The objectives of this study were to evaluate appropriateness of antibiotics for resistant gram-positive infections in pediatric inpatients and identify factors associated with inappropriate prescribing.

Methods: We included pediatric inpatients between July 2017 and July 2018 where an antibiotic typically used for resistant Gram-positive infections (per NHSN) was administered. We developed an algorithm based on laboratory data and diagnosis codes to categorize each antibiotic day of therapy as appropriate, inappropriate, or indeterminate. If indeterminate, we reviewed charts to assess appropriateness. We calculated total, appropriate, and inappropriate days of