

## POSTER ABSTRACTS

**244. Organizational Factors Associated with Antibacterial Use Among Academic Medical Centers**

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**Background.** Interhospital comparisons of antibacterial use can inform hospitals of targets for antimicrobial stewardship strategies. Variability in patient mix and organizational features may impact on drug use. Thus, we aimed to identify organizational factors among academic medical centers that impact on the amounts of antibacterials prescribed.

**Methods.** Data concerning antibacterials were obtained from administrative data from 89 University HealthSystem Consortium hospitals for adult patients (age  $\geq 18$ )

for 2011. Antibacterials were measured in Days of Therapy per 100 admissions. The following data were also obtained: case mix index (CMI); bedsize (expressed as  $<$  or  $>$  the median); the % of intensive care unit days; average length of stay (LOS); a marker for market competition, the Herfindahl Index (HHI); region [North-east (NE), South, Midwest, West]. The number of admissions per 35 UHC Clinical Service Lines (CSLs) was collapsed into 4: Surgery; Medicine; Transplant; Other [expressed as  $<$  or  $>$  the median]. Three forward stepwise regression models were conducted to identify factors associated with total antibacterial, total antipseudomonal [antipseudomonal fluoroquinolones, cephalosporins,  $\beta$ -lactam/ $\beta$ -lactamase inhibitors, and carbapenems], and anti-methicillin resistant *S. aureus* (MRSA) [vancomycin + linezolid + daptomycin + tigecycline + ceftaroline + quinupristin/dalfopristin] drug use.

**Results.** For all models, the following variables were statistically significant ( $p < 0.05$ ) and positively associated with antibacterial use: LOS; region South as compared to NE; while HHI and Other CSL were significant and negatively associated with antibacterial use. In addition, Surgery and Transplant CSLs were significant and positively associated with antipseudomonals [ $p = 0.03$  and  $0.01$ , respectively] and the region West as compared to NE was significant and positively associated with anti-MRSA agents [ $p = 0.04$ ].

**Conclusion.** Several factors were associated with total antibacterial, antipseudomonal, and anti-MRSA drug use, including HHI, LOS, region, and CSL type. Incorporation of these factors into interhospital analyses can aid in more meaningful antibacterial comparisons.

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