1,000 persons) in 2022. During 2020–2022, general dentists prescribed >10% of all outpatient antibiotic prescriptions (range 10.7%–12.1%). In each year, prescription rates were higher for females, patients > 65 years, and among prescribers in the Northeast. In 2022, there were 58 general dentists per 100,000 persons in the United States. The highest general dentist rate was in District of Columbia (100 per 100,000 persons) and the lowest rate was in Delaware (41 per 100,000 persons). **Conclusions:** Despite the ADA's 2019 guidelines, prescribing by general dentists remained stable during 2018–2022. Because the total number of antibiotic prescriptions overall decreased, general dentists' share of all outpatient antibiotic prescriptions increased to >10% in recent years. Rate variation by patient characteristics and prescriber region may reflect differences in dental disease burden or may represent unnecessary antibiotic use. Dental antibiotic stewardship is needed, including dissemination and implementation of current prescribing guidelines. Further evaluation of prescribing indications and access to dental care is needed to inform dental stewardship priorities.

Presentation Type:
Poster Presentation - Oral Presentation
Subject Category: Antibiotic Stewardship
Intervention Targets to Optimize Antibiotic Prescribing on Discharge from the Hospital to Nursing Homes

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Background: Approximately half of antibiotics used in nursing home (NHs) are initiated in acute care hospitals prior to NH admission. Optimizing antibiotic prescribing on hospital discharge to these facilities presents an opportunity to improve NH antibiotic use. We aimed to identify intervention targets to optimize antibiotic use on discharge from the hospital to NHs. **Methods:** This was a multicenter, cross-sectional study across 9 acute care hospitals in Oregon, Wisconsin, and Washington. We selected a 20% random sample of adult (age >18) inpatients prescribed at least one antibiotic on discharge from the hospital to a NH between 2016-2018. We excluded patients discharged from the emergency department or an intensive care unit. Study data were electronically extracted from patients' electronic health records and supplemented with manual chart review. Antibiotic optimization opportunities were determined by an infectious diseases (ID) physician or ID pharmacist and classified as definitely, possibly, or unlikely. Expert reviewers also recorded the type of optimization opportunity and the rationale for each determination. A gamma lasso algorithm was used to identify patient-level characteristics associated with definite optimization opportunity, which were then included in a logistic regression model. **Results:** There were 2761 antibiotic prescriptions among 2215 patients. Mean (standard deviation) age was 71.9 (14.3) years and 48.8% were male. Most discharges (83.1%) were prescribed one antibiotic, 15.2% were prescribed two antibiotics, and 1.8% were prescribed three antibiotics. The most frequently prescribed antibiotics were cephalexin (10.4%), vancomycin (9.8%), and amoxicillin clavulanate (8.4%). Among the 2761 antibiotic prescriptions, expert reviewers determined that 18.4% could definitely be optimized, 36.0% could possibly be optimized, and 45.3% unlikely could have been optimized. Among the 508 definite antibiotic optimization opportunities, 25.2% were to subtract the antibiotic, 56.3% were to change the antibiotic, 11.0% were to change the dose, 25.0% were to change the duration, 0.8% were to change the route, and 1.8% were to change the schedule. Patient-level characteristics found to be associated with definite antibiotic optimization opportunity included age over 80 years (odds ratio (OR)=1.44, 95% confidence interval (CI): [1.14, 1.82]), length of stay < 8 days (OR=1.40, 95% CI: [1.09, 1.81]), discharge with multiple antibiotic prescriptions (OR=1.92, 95% CI: [1.39, 2.63]), and discharge with prescription for oral vs intravenous (IV) antibiotics (OR=2.08, 95% CI: [1.49, 2.95]). **Conclusion:** We identified several patient and antibiotic characteristics which may serve as intervention targets to optimize antibiotic prescribing on discharge from the hospital to nursing homes.

Presentation Type:
Poster Presentation - Oral Presentation
Subject Category: Antibiotic Stewardship
An Examination of Racial/Ethnic Differences in the Antibiotic Treatment of Community Acquired Pneumonia

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Background: Community Acquired Pneumonia (CAP) is the most common reason for antibiotic treatment in hospitalized adults. Some prior studies have found treatment differences by race/ethnicity but research on the topic is limited, results are mixed, and it is unclear if clinical outcomes are affected. We sought to examine whether guideline-concordant CAP care and patient outcomes varied by race/ethnicity. **Methods:** Using the Vizient clinical database, we conducted a cross sectional analysis of all hospitalized patients > = 18 years of age with a primary diagnosis of pneumonia (ICD10 codes: J12-J18) from 2018-2021. Univariate and bivariate analyses examined the distribution of demographic, clinical and hospital characteristics across race/ethnicity. The primary outcome was receipt of therapy concordant with ATS/IDSA Clinical Practice Guideline for CAP. Final models included only patients with bacterial pneumonia and examined the relationship between race/ethnicity and guideline-concordant antibiotic treatment. Secondary analysis examined the interaction between race/ethnicity and concordant antibiotic treatment with length of stay >7 days, 30-day hospital readmission, adverse events or complications in separate models. We used hierarchical multivariable regression models accounting for clustering within patients and among patients hospitalized at the same facility. Due to sample size, significance was assessed with an OR > = 1.2 and p≤ 0.05. All analyses used SAS (v.9.4, SAS Institute Inc. Cary, NC). **Results:** There were 1,277,770 admissions with a primary diagnosis of bacterial CAP. Sixty-nine percent of the sample was White, 18% Black, 8% Hispanic, 2% Asian and 3% identified as other. 56% of the sample received concordant care. In adjusted models Black patients had greater odds of overall concordant care (OR 1.22; p 7 days (OR 0.67 p <.0001), complication or adverse event (OR 0.75 p <.0001), but not readmission within 30 days. **Conclusion:** We observed differences between Black and White patients in the receipt of concordant treatment. Hospital bed size, CMI and region played an important role in both antibiotic treatment decisions and clinical outcomes, indicating that hospital and regional prescribing cultures may play in role in treatment inequities.