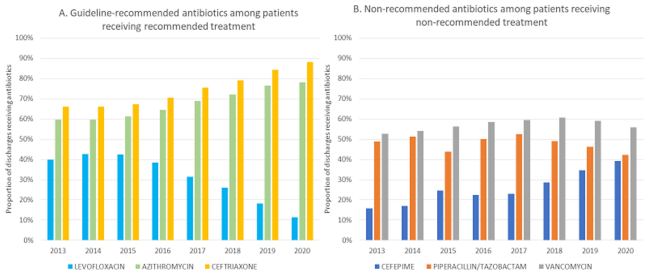
Figure 3. A) The proportion of discharges charged for the most commonly prescribed antibiotics among community-acquired pneumonia (CAP) patients with guideline-recommended treatment. B) The proportion of discharges receiving the most commonly prescribed antibiotics among community-acquired (CAP) pneumonia patients with non-recommended treatment without an antibiotic allergy or MRSA colonization.



tomography (CT) scan was charged during the first 2 days of hospitalization, otherwise it was considered an inadequate CAP evaluation. Administrative billing data were used to identify antibiotics charged within the first 2 days of hospitalization. Empiric guideline-recommended treatment was determined based on 2019 CAP guidelines and more recent studies. Patients who received nonrecommended treatment were evaluated for antibiotic allergies in the current hospitalization or methicillin-resistant *Staphylococcus aureus* (MRSA) colonization or infection in the year prior or on admission using *International Classification of Disease, Tenth Revision* (ICD-10) diagnosis codes. **Results:** We identified 4.47 million adult hospitalizations with CAP from 2013 to 2020; 32% (1.43 million) were included in this analysis (Fig. 1). Among discharges with adequate CAP evaluation (1.37 million), 59.7% received recommended antibiotics in the first 2 days of hospitalization, ranging from 62.6% in 2013 to 57.5% in 2019. Overall, 34.8% of our study population received a nonrecommended antibiotic without documentation of an antibiotic allergy or MRSA colonization (2013: 32.5%; 2018: 36.7%) (Fig. 2). Most patients in our study population received >1 antibiotic (92.3%) in the first 2 days of hospitalization. The most common antibiotics among patients receiving recommended treatment were ceftriaxone (74.2% of patients receiving recommended treatment), azithromycin (67.2%), and levofloxacin (31.8%) (Fig. 3a). The most common nonrecommended antibiotics were vancomycin (57.2% of patients receiving nonrecommended treatment), piperacillin-tazobactam (48.1%), and cefepime (25.7%) (Fig. 3b). From 2013 to 2020, cefepime charges consistently increased among CAP patients treated with nonrecommended antibiotics, whereas levofloxacin charges consistently decreased among CAP patients treated with only recommended antibiotics. **Conclusions:** Approximately one-third of patients with uncomplicated CAP received nonrecommended empiric antibiotics, and from 2013 to 2020 that proportion increased by 9%. Additional strategies are needed to help identify opportunities to optimize antibiotic selection among patients with CAP.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s26–s27
doi:10.1017/ash.2023.249

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Antibiotic Stewardship

Implementing a health-system–wide antibiotic stewardship program in ambulatory surgery centers

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Background: In 2016, the CDC released the Core Elements of Outpatient Antibiotic Stewardship, which extended the requirements previously released for hospital facilities and nursing homes to the outpatient setting. Several regulatory agencies focused on outpatient antimicrobial use. However, The Joint Commission and the Ambulatory Surgery Center (ASC) Leapfrog Group excluded ambulatory surgery centers from their medication management standards and questions. Due to the public health and patient safety benefits of implementing an antimicrobial stewardship program (ASP) and increasing regulatory interest in the matter, the Hospital Corporation of America (HCA) Ambulatory Surgery Division formally launched a nationwide ASP for its ambulatory surgery centers in March 2021. **Methods:** HCA is a large healthcare system with 146 ASCs in 16 states in 2021. The structure of the ASCs are local surgery centers with a medical director, a nurse responsible for infection prevention, and a pharmacist at a regional level. The types of surgeries vary based on location and ASC site. In 2019, a multidisciplinary team formed the corporate planning committee. The program was modeled after the CDC Core Elements and The Joint Commission's requirements for an ASP. Each ASC was asked to build a local ASP team, led by a local physician and a regionally based pharmacist. In addition, a stewardship goal was established to update all preoperative antibiotic surgical-site infection prophylaxis order sets. The corporate committee provided educational resources, including evidence-based guidelines for appropriate antibiotic selection for surgical-site infections. They collected antibiotic cost per case as a baseline metric to track and analyze. Pediatric, ophthalmic, and gastrointestinal endoscopic procedures were excluded from the program. **Results:** From January 1, 2020, through December 31, 2021, including only centers that were operational during this period and excluding single specialty endoscopy centers, antibiotic cost per case decreased annually from $2.38 to $1.84 ($t = 4.157$; $P < .005$), and the postoperative infection rate also declined from 0.370 to 0.304 ($t = 2.079$; $P = .040$). **Conclusions:** Our findings suggest that implementing a health-system–wide outpatient antibiotic stewardship program in the ambulatory surgery center setting is feasible and may contribute to decreased antibiotic cost per case and improved postoperative surgical site infection rates.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s27
doi:10.1017/ash.2023.250

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Antibiotic Stewardship

Prevalence of and risk factors for bacteremic UTIs in hospitalized adults without definitive signs or symptoms of UTI

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Background: IDSA guidelines recommend withholding treatment in patients with asymptomatic bacteriuria in the absence of systemic signs of infection. However, some patients with bacteriuria may not be able to express symptoms either due to presence of indwelling catheter, underlying complicated urologic anatomy, dementia, or altered mental status (AMS). Clinicians frequently treat bacteriuria in this population with antimicrobial therapy due to concern for sepsis. To determine treatment need, we aimed to review prevalence and risk factors for bacteremic urinary tract infection (UTI) in a cohort of hospitalized inpatients without definitive signs and symptoms of a UTI. **Methods:** This retrospective cohort study of inpatients with a positive urine culture who presented without definitive signs or symptoms of a UTI was conducted between July 1, 2017, and June 30, 2022, in 68 academic and community hospitals (Michigan Hospital Medicine Safety Consortium). Signs and symptoms were obtained from medical record review 3 days before and after urine-culture collection. Bacteremic UTI was defined as any positive blood culture growing at least 1 organism matching the urine culture. Risk factors for bacteremic UTI were assessed using multivariable logistic regression models with results expressed as odds ratios (ORs) for dichotomous variables and relative risks (RRs) for continuous variables. **Results:** Of 11,793 patients meeting study criteria, 73.6% were female with a median age of 78.2 years. Overall, 41.8% had AMS, 33.8% had dementia, 15.6% had an indwelling urinary catheter, and 54.6% had complicated urologic history (eg, urologic surgery). Of these, 166 patients (1.4%) developed bacteremic UTI. On adjusted analysis, male sex, hypotension, heart rate >90, urinary retention, fatigue, log of serum leukocytosis [1 log increase in serum WBC = 2.718 × serum white blood cell count (WBC)], and pyuria with >25 WBC per high-powered