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Background. A prior investigation alerted us to a common practice of obtaining UAs and UCs for admission to our geriatric psychiatry unit (GPU). These findings compelled us to assess antibiotic use (AU) on our 22-bed unit at Cambridge Health Alliance, Everett, a community-based teaching hospital, from February 1, 2016 to January 31, 2017. Among 427 patients, 115 (27%) received an antibiotic. Urinary tract infection (UTI) was the most common diagnosis (53%); however, only 12 patients (20%) met diagnostic criteria. Contaminated (CT) specimens and asymptomatic bacteriuria (ASB) were more prevalent (26% and 22%, respectively). UC orders were not triggered by symptoms.

Methods. We evaluated the impact of education to the GPU (August 14, 2017), removing a requirement for UA (September 6, 2017) which was communicated to EM leadership, and clinical decision support (CDS) during computerized order entry for UC (October 1, 2017) on UA and UC utilization. AU appropriateness was determined for patients who received at least four doses of an antibiotic for UTI. Pre-(discharge June 3, 2017–August 14, 2017) and post-intervention (admitted after October 1, 2017 and discharged prior to January 17, 2018) periods were compared.

Results. There were nonsignificant (NS) decreases in UAs and UCs and an NS increase in UAs among asymptomatic patients, largely ordered by EM providers. There was a 23% decrease in unjustified AU for UTI (NS). CT specimens and ASB were far more common than UTIs.

	Pre-Intervention Period	Post-Intervention Period	*P*-value
Number of patients	48	109	
UAs ordered	38 (79.2%)	79 (72.5%)	0.74
UAs in asymptomatic patients	19 (50%)	50 (63.3%)	0.49
Urine cultures	15 (31.3%)	25 (22.9%)	0.41
Unjustified antibiotic Rx UTI	4 (8.3%)	7 (6.4%)	0.68
Contaminated	6 (40%)	12 (48%)	0.78
ASB	4 (26.7%)	6 (24%)	0.88
UTI	1 (6.7%)	2 (8%)	0.93

Conclusion. Education, removal of the UA requirement for medical clearance, and CDS were minimally effective in improving UA and UC utilization and reducing inappropriate antibiotic therapy. Efforts are undermined by a requirement for UA by other psychiatric units in our referral network. We intend to collaborate with medical directors in our psychiatry network to expand this improvement work, provide more robust education to our EM providers and implement a UA with reflex to UC for > 10 WBC/hpf.

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

1831. Point Prevalence and Epidemiology of Antimicrobial Use in US Nursing Homes, 2017

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Background. The role of nursing homes (NH) in transmission of antimicrobial-resistant (AR) organisms is of growing concern. AR control requires evidence-based NH stewardship interventions; however, data on antimicrobial use (AU) from US NHs are scant. In the absence of other AU surveillance approaches, NH prevalence surveys can generate essential data, including rationale and indication. In 2017, an AU prevalence survey was conducted through the CDC's Emerging Infections Program (EIP) to determine the prevalence and epidemiology of AU in NH residents.

Methods. NHs from California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New Mexico, New York, Oregon, and Tennessee were randomly selected to participate in a 1-day AU point prevalence survey; participation was voluntary. For NH residents receiving antimicrobial drugs (AD) at the time of the survey, EIP staff reviewed available medical records to collect the AD route, rationale, and infection site(s). AD were categorized using the World Health Organization Anatomical Therapeutic Chemical classification system. Data were analyzed in SAS 9.4.

Results. Of 15,295 residents in 161 NHs, 1,261 (prevalence 8.2%, 95% confidence interval 7.8%-8.7%) received ≥1 AD at the time of the survey (AD range 1–4/resident). Of 1,452 total ADs, 77% were administered for treatment of an active infection, 19% for prophylaxis, 3% for noninfectious reasons, and no rationale documented in 1%. Most AD (80%) were administered by the oral/enteral route and most (87%) were antibacterials. The three most common infection sites were urinary tract (29%, of which 1/4 was for prophylaxis); wound, cellulitis or soft tissue (20%); and respiratory tract (14%). Among the 1,268 antibacterials (figure), fluoroquinolones (15%), combination penicillins (8%), third-generation cephalosporins (8%), and glycopeptides (5%) ranked among the top 10 classes in use.

Conclusion. This large-scale prevalence survey provides insight into AU in US NHs. On a given day, approximately 1 in 12 NH residents was receiving ≥1 AD. Notably, 30% of AD were administered for UTI, and AD in classes recommended for stewardship intervention were common. These findings highlight areas for evaluation to identify unnecessary use in NH. Prevalence survey data are important to inform and track the impact of stewardship interventions.

Figure: Percentage of 1,268 antibacterial drugs by class received by nursing home residents in a 1-day point prevalence survey, United States 2017.
Top 10 classes are shown – 197 antibacterial drugs in 13 classes not shown.
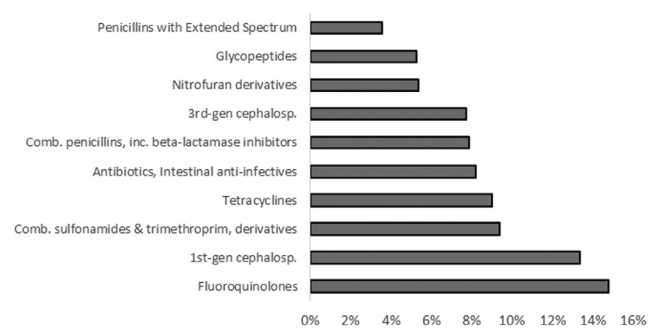
Disclosures. **All authors:** No reported disclosures.

1832. Concordance in End-of-Life Antimicrobial Prescribing Practices among Medicine Subspecialists

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Background. Evaluating end-of-life (EOL) antimicrobial prescribing practices may guide stewardship efforts.

Methods. We conducted a 27-item survey of attending physicians, physician assistants, and nurse practitioners at Yale New Haven Hospital from January 2018 to February 2018 using REDCap.

Results. Of 275 providers surveyed, 109 (40%) responded. Regardless of specialty, most consider withholding antimicrobials at EOL (n = 73/109, 67%), view IV antimicrobials as escalation of care (n = 66/109, 61%), believe decision-making should involve patients and providers (n = 101/109, 93%), and recognize diarrhea as an adverse effect (n = 97/109, 89%; Table 1). However, among the subset who conduct advance care planning (N = 82), only 49% (N = 40/82) discuss antimicrobials.

Conclusion. Despite agreement in EOL prescribing practices across specialties, antimicrobials are not routinely addressed during advance care planning. These data support the integration of antimicrobial use into advance care plans linked to stewardship programs.