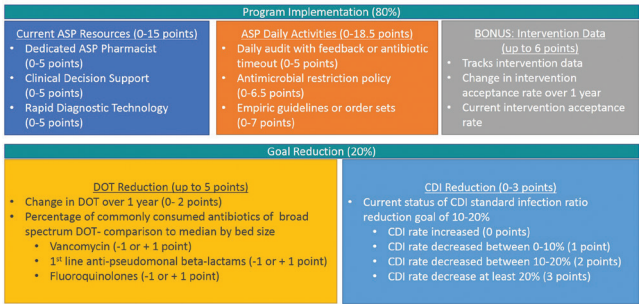
consistent ASP. We sought to develop a tool that would better identify hospitals in need of aggressive AURGs.

Methods. A scoring tool was developed to assess ASP implementation and metric achievement at individual hospitals to determine AURGs. Tool components were developed from ASP best practices and consensus among a multi-disciplinary team. The tool yields a maximal score of 41.5 points, with higher scores corresponding to more established ASPs who require less aggressive AURGs. An additional 6 points could be earned for tracked intervention data.

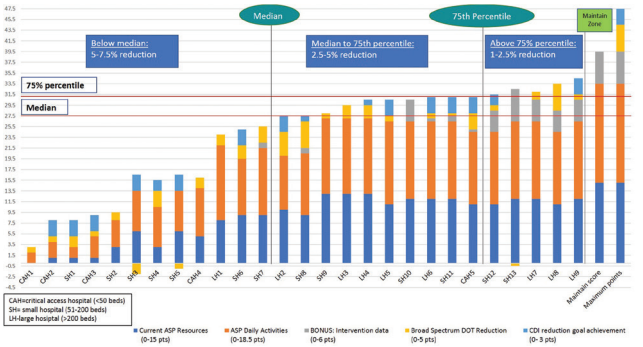
Figure 1. Scoring Tool Components



The tool was applied and a score calculated for each of 27 hospitals. Achieved score placed each hospital into one of 4 AURG ranges: maintain, 1–2.5%, 2.5–5%, and 5–7.5% of DOT/1000 PD. Goals were determined in relation to the median and 75th percentile scores. A minimum score of 39.5, representing full implementation of ASP score components, was required for a maintenance goal.

Results. Scores ranged from 3 to 34.5 points across facilities (median 27.5; 75th percentile 31). Twelve facilities scored below 27.5 points, 10 hospitals between 27.5 and 31 points, and 5 facilities between 31 and 39.5 points corresponding to 5–7.5%, 2.5–5% and 1–2.5% AURGs, respectively.

Figure 2. Facility Scores and AURGs



Conclusion. Scores and corresponding AURGs were generally well accepted by stakeholders at facilities within the AH network. Next steps include examining the feasibility of achieving AURGs and obtaining feedback from facilities to refine the tool. The tool will also be applied to other healthcare networks to assess external validity.

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

1632. Non-Visit-Based and Non-Infection-Related Ambulatory Antibiotic Prescribing

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Background. Many studies have examined or intervened on ambulatory antibiotic prescribing based on infection-related diagnosis codes. However, clinicians may prescribe antibiotics without seeing patients face-to-face or without documenting an infection-related diagnosis.

Methods. We measured the prevalence of non-visit-based and non-infection-related oral, antibacterial–antibiotic prescribing between November 2015 and October 2017 using the EHR of an integrated health delivery system. We examined the visit type (in-person vs. other) and classified prescriptions into 3 mutually exclusive groups based on same-day diagnosis codes: (1) infection-related for prescriptions associated with at least one of 21,730 ICD-10 codes that may signify infection; (2) non-infection-related for prescriptions only associated with the 72,519 ICD-10 codes that do not signify infections; and (3) associated with no diagnosis.

Results. There were 509,534 antibiotic prescriptions made to 279,169 unique patients by 2,413 clinicians in 514 clinics. Patients had a mean age of 43 years old, were 60% women, and 75% white. Clinicians were 54% women; were 63% attending physicians, 18% residents/fellows, 10% nurse practitioners, and 7% physician assistants; and were 41% medical specialists, 21% primary care clinicians, and 7% surgical specialists. The most common antibiotic classes were penicillins (30%), macrolides (23%), cephalosporins (14%), fluoroquinolones (11%), tetracyclines (10%), and sulfonamides (6%). Clinicians prescribed 20% of antibiotics outside of an in-person visit; prescription encounters were in-person (80%), telephone (10%), order-only (4%), refill (4%), and online portal (1%). Clinicians prescribed 46% of antibiotics without an infection-related diagnosis: 54% of antibiotic prescriptions were infection-related, 29% were non-infection-related, and 17% were associated with no diagnosis. Various look-back and look-forward durations for diagnosis codes changed the results only slightly.

Conclusion. Clinicians prescribed 20% of antibiotics outside of in-person visits and 46% of antibiotics without an infection-related diagnosis. Interventions that target visit-based, diagnosis-specific prescriptions miss a large share of antibiotic prescribing.

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

1633. A Multifaceted Intervention to Improve Prescribing for Acute Respiratory Infection in Adults and Children in Emergency Department and Urgent Care Settings (MITIGATE Trial)

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Background. Antibiotics are prescribed in approximately half of emergency department (ED) and urgent care center (UCC) visits for antibiotic inappropriate or presumed viral acute respiratory infection (ARI). Unnecessary antibiotic use increases adverse events, antibiotic resistance, and healthcare costs. Antibiotic stewardship in the ED and UCC requires specific implementation tailored to these unique settings.

Objective. To evaluate the comparative effectiveness of patient and provider education adapted for the acute care setting (adapted intervention) to an intervention with behavioral nudges and individual peer comparisons (enhanced intervention), on reducing inappropriate antibiotic use for ARI in EDs and UCCs.

Methods. Pragmatic, cluster randomized clinical trial conducted in 3 academic health systems (1 pediatric-only, 2 serving adults and children) that included 5 adult and pediatric EDs and 4 UCCs. Sites were block randomized by health system, and providers at each site assigned to receive the adapted or enhanced intervention. Implementation science strategies were employed to tailor interventions at each site. The main outcome was the proportion of antibiotic inappropriate ARI diagnosis visits that received an antibiotic. We estimated a hierarchical mixed effects logistic regression model for visits that occurred between November and February for 2016–2017 (baseline) and 2017–2018 (intervention), controlling for organization and provider fixed effects.

Results. Across all sites, there were 45,160 ARI visits among 534 providers, with overall antibiotic prescribing at 2.6%; the pediatric-only system had a lower baseline rate (1.6%) compared with the other 2 systems (5.0% and 7.1%), $P < 0.001$). Despite the unusually low rate, we found a significant reduction in inappropriate prescribing after adjusting for health-system and provider-level effects from 2.6% to 1.4 % (odds ratio 0.52; 0.38–0.72). Reductions in prescribing between the 2 interventions were in the expected direction, but not significantly different ($P < 0.062$).

Conclusion. Implementation of antimicrobial stewardship for ARI is feasible and effective in the ED and UCC settings. The enhanced behavioral nudging methods were not more effective in high-performance settings.

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

1634. A 9-Point Risk Assessment for Patients Who Inject Drugs Requiring Intravenous Antibiotics May Allow Health Systems to Focus Inpatient Resources on Those at Greatest Risk of Ongoing Drug Use

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