Conclusion. We identified an outbreak of RSV-B associated with severe disease among urban Minnesota children during a time of expected low RSV circulation. Complete genome sequencing data suggested emergence of a new lineage distinct from viruses circulating in Minnesota during the previous season. Genomic characterization can provide useful insights into epidemiologic variations.

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

1629. Targeted Antimicrobial Use Admission Provides an Actionable Denominator for Antimicrobial Stewardship Programs Evaluating Inpatient Length of Therapy

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Background. Actionable, easy to interpret antibiotic use (AU) metrics provide antimicrobial stewardship programs (ASPs) with clear targets. Current aggregate AU metrics lack the ability to discriminate between long courses in a limited number of patients versus short courses in a large number of patients.

Methods. We developed a novel AU denominator termed "targeted antimicrobial use admission," defined as an inpatient admission in which a selected agent or group of agents was administered. When used with length of therapy (LOT), it provides the average number of days patients receive the targeted agent(s) during inpatient hospital admissions. To demonstrate the added utility of this metric, we used descriptive statistics to compare it to LOT, LOT/1,000 patient days, LOT/1,000 admissions, and LOT/admission to quantify intravenous (IV) vancomycin use among 25 hospitals in the Duke Antimicrobial Stewardship Outreach Network (DASON) for calendar year 2017. The metric was also used to compare hospitals to one another and track durations at an example hospital over time.

Results. Total LOT included 128,680 days of IV vancomycin (table). LOT/targeted antimicrobial use admission is the only metric that allows programs to quickly assess agent durations.

Table: Comparison of IV Vancomycin Consumption by Metric Among 25 Hospitals in DASON, 2017

	LOT (days)	LOT/Admission	LOT/1,000 Patient Days	LOT/Targeted Antimicrobial Use Admission
Mean ± standard deviation	5,147.2 ± 2,994	0.4 ± 0.1	111 ± 24.5	3.2 ± 0.5
Median	5,093	0.4	103.5	3.2
Range	512–13,026	0.2–0.7	68.9–163.6	2.6–4.1

Conclusion. Stewardship programs seeking to shorten durations of therapy can track this metric over time to determine the impact of their ASP efforts (Figure 1). The metric can also be used to compare average durations of IV vancomycin by hospital to determine when and if agent-focused audit and feedback or antibiotic timeouts may be useful (Figure 2). The network mean provides a target for agent-specific de-escalations, in days, for facilities with longer durations. LOT/targeted antimicrobial use admission provides an actionable metric for quantifying antimicrobial durations. This metric is easy to interpret and can feasibly be captured through the electronic prescribing record to aid in selecting ASP strategy.

Figure 1. Length of IV Vancomycin Therapy per Targeted Antimicrobial Use Admission by Quarter (2015-2017) at an Example Hospital H

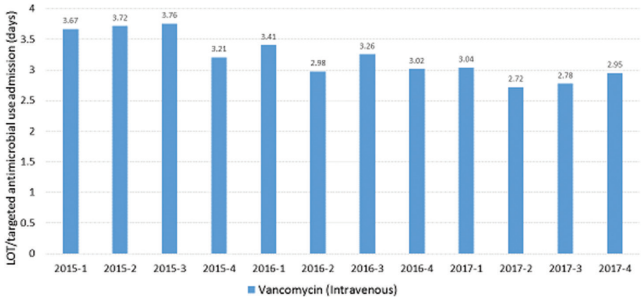
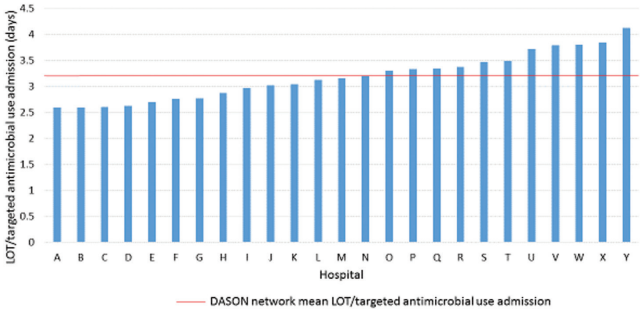


Figure 2. IV Vancomycin Length of Therapy per Targeted Antimicrobial Use Admission by Hospital



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

1630. Antibiotics Prescribed for Infection Prophylaxis Prior to Dental Procedures Are Frequently Unnecessary in the United States

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Background. Antibiotics are recommended prior to certain dental procedures ("antibiotic prophylaxis") in patients with select comorbidities to prevent serious distant site infections. Our objective was to assess the appropriateness of antibiotic prophylaxis by dentists using Truven, a national integrated medical, dental, and prescription (Rx) claims database of 350 commercial plans.

Methods. Cross-sectional study of 8.7 million adult dental visits in 2015. Antibiotic prophylaxis was defined as Rx with <3 days supply dispensed within 7 days before a dental visit. Medical diagnoses were evaluated in medical/hospital claims from 2009 to 2015. Patients with hospitalizations and infection diagnoses 14 days prior to the Rx date were excluded. Appropriate antibiotic prophylaxis was defined as a dental visit with a procedure that manipulated the gingiva/tooth periapex in patients with an appropriate cardiac diagnosis. Chi Square and logistic regression were applied.

Results. In 2015, 30,726 antibiotics were prescribed for dental infection prophylaxis for 21,986 patients (mean age=58.6 + 15.0 years; 55.9% female). Amoxicillin (68.5%) and clindamycin (14.7%) were most common. 29,879 dental visits were associated with 69,639 dental codes ([CDTs]; range 1–14 CDTs/visit). Most dental visits were diagnostic (65.9% of visits with >1 diagnostic CDT), preventative (53.0%), and restorative (11.2%). 98.4% of dental visits had an appropriate CDT for antibiotic prophylaxis. Comorbidities include orthopedic implants (45.4%) and cardiac diagnoses at the highest risk of infective endocarditis (22.2%). Per guidelines, 78.0% of dental visits with antibiotic prophylaxis were inappropriate. Amoxicillin was more likely to be inappropriate than other agents (OR=1.65; 95% CI: 1.55–1.76). Orthopedic implants (OR=3.35; 95% CI: 3.14–3.56), tooth implant procedures (OR=3.30; 95% CI: 2.48–4.39), females (OR=1.35; 95% CI: 1.27–1.43) and the western US (OR=1.22; 95% CI: 1.09–1.36) were associated with inappropriate prescribing.

Conclusion. Antibiotic prophylaxis is prescribed for indicated dental procedures, but is not appropriately limited to patients with cardiac diagnoses per guidelines. Implementing antimicrobial stewardship efforts in dental practices may be an opportunity to improve antibiotic prescribing for infection prophylaxis.

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1631. Made to Measure: Development of a Scoring Tool to Customize Antimicrobial Stewardship Goals Across a Large Health System

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Background. The 2015 National Action Plan for Combating Antimicrobial Resistance called for a 20% decrease in antibiotic use among inpatients. Atrium Health (AH), formerly Carolinas HealthCare System, established reductions in antibiotic use (determined by days of therapy [DOT] per 1,000 patient days [PD]) as a yearly system-wide quality goal since 2016. Hospitals in the AH inpatient network vary by size, scope, and antimicrobial stewardship program (ASP) maturity. Prior to our third year, we recognized the need to develop an objective method for determining antibiotic use reduction goals (AURGs); understanding that as ASPs mature, opportunities for reduction stabilize over time and may eventually plateau with