Figure 1: Proportion of patients receiving early antibiotics by SIRS score

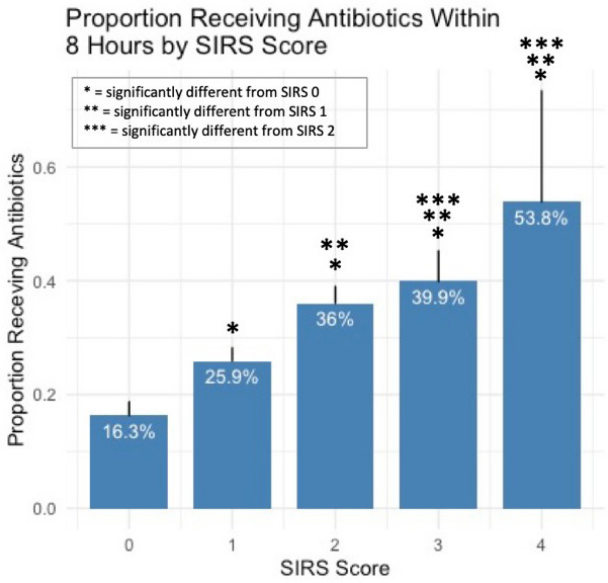


Table 1: SIRS as a predictor of bacteremia

| Parameter | OR ± SE | P-value |
|---|---|---|
| As individual criteria (AUC=0.57): | | |
| **Fever** | **1.8 ± 0.29** | **0.01** |
| **Tachycardia** | **1.4 ± 0.22** | **0.03** |
| Tachypnea | 1.0 ± 0.15 | 0.77 |
| Leukocytosis | 1.2 ± 0.17 | 0.12 |
| As composite score (AUC=0.55): | | |
| **SIRS positive (≥2)** | **1.5 ± 0.21** | **0.003** |

Table 2: Best predictive model of bacteremia

| Parameter | OR ± SE | P-value |
|---|---|---|
| **Temperature (continuous)** | **1.1 ± 0.06** | **0.01** |
| **Heart Rate (continuous)** | **1.01 ± 0.003** | **0.02** |
| Systolic Blood Pressure (continuous) | 1.0 ± 0.004 | 0.68 |
| Diastolic Blood Pressure (continuous) | 0.99 ± 0.007 | 0.09 |
| Respiratory rate (continuous) | 1.0 ± 0.01 | 0.49 |
| Leukopenia | 1.1 ± 0.33 | 0.80 |
| Leukocytosis | 0.88 ± 0.169 | 0.52 |
| Severe Neutropenia | 1.6 ± 0.82 | 0.37 |
| Moderate Neutropenia | 1.2 ± 0.47 | 0.76 |
| **Neutrophilia (ANC >8.0)** | **1.7 ± 0.33** | **0.008** |
| Age | 1.0 ± 0.01 | 0.86 |

AUC=0.61

***Conclusion:*** Clinicians still use SIRS criteria to determine the need for eAnb. However, SIRS criteria are poor predictors of bacteremia in solid tumor pts, who frequently manifest them due to complications of cancer or cancer-directed therapy rather than infection. Furthermore, patients who are SIRS negative may be bacteremic. More reliable models are needed to guide judicious use of Anb in the solid tumor population.

***Disclosures:*** **All Authors**: No reported disclosures

**199. Evaluating long-term care pharmacy dispense data to monitor antibiotic use in U.S. nursing homes**

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**Session:** P-7. Antimicrobial Stewardship: Special Populations

***Background:*** Automated reporting of antibiotic use (AU) in nursing homes (NHs) may help to identify opportunities to improve antibiotic prescribing practices and inform implementation of stewardship activities. The majority of U.S. NHs contract with long-term care (LTC) pharmacies to dispense prescriptions and provide medication monitoring and reviews. We investigated the feasibility of leveraging LTC pharmacy electronic dispensing data to describe AU in NHs.

***Methods:*** We analyzed all NH antibiotic dispenses and monthly resident-days in 2017 reported by a large LTC pharmacy. The dispense-level data included facility and resident identifiers, antibiotic class and agent, dispense date and days of therapy (DOT) dispensed. We identified NH antibiotic courses, inclusive of both antibiotic starts and continuations from hospital-initiated courses, by collapsing dispenses of the same drug to the same resident if the subsequent dispense was within three days of the preceding end date. The course duration was the sum of DOT for all dispenses in the course. The AU rate was reported as DOT and courses per 1,000 resident-days.

***Results:*** AU was described in 326,713 residents admitted to 1,348 NHs (9% of U.S. NHs), covering 38.1 million resident-days. There were 576,228 dispenses for a total of 3.3 million antibiotic DOT at a rate of 86 DOT/1,000 resident-days. After collapsing dispenses, 324,306 antibiotic courses were defined at a rate of 9 courses/1,000 resident-days. During the year, 45% of residents received an antibiotic. The most frequently prescribed classes by DOT and courses were cephalosporins, penicillins, urinary anti-infectives and quinolones (Fig. 1). The top agents by DOT were levofloxacin (12%), sulfamethoxazole/trimethoprim (12%) and cephalexin (11%). Most course durations were 1–7 days (54%) or 8–14 days (35%) (Fig. 2). Long-term antibiotic courses (> 30 days) contributed to 5% of courses and 30% of overall DOT. The mean duration per course was 7.5 days when courses > 30 days were excluded.

Figure 1. Distribution of antibiotic courses and days of therapy by antibiotic class for 324,306 antibiotic courses and 3.3 million days of antibiotic therapy dispensed to 1,348 nursing homes from a long-term care pharmacy in 2017

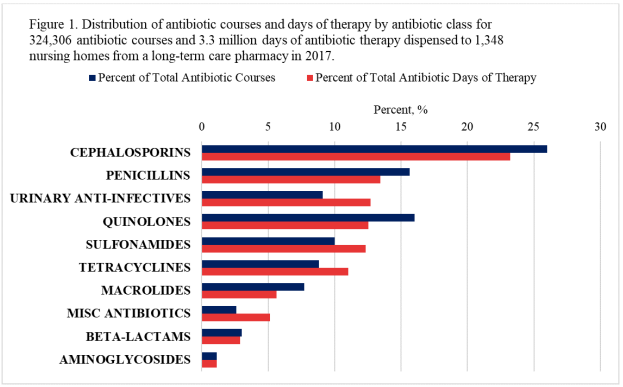
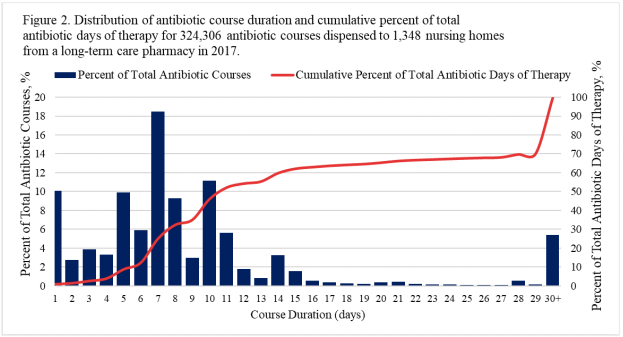



Figure 2. Distribution of antibiotic course duration and cumulative percent of total antibiotic days of therapy for 324,306 antibiotic courses dispensed to 1,348 nursing homes from a long-term care pharmacy in 2017




***Conclusion:*** LTC pharmacy dispenses may be an accessible data source to report NH AU rates and prescribing patterns by antibiotic class and agent. Further evaluation of data sources for facility- and national-level AU reporting in NHs is needed to support stewardship implementation.

***Disclosures:*** **All Authors**: No reported disclosures

**200. Frequency and Characteristics of Patients Switched from Intravenous to Oral Antibiotic Therapy on Discharge to Nursing Homes**

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**Session:** P-7. Antimicrobial Stewardship: Special Populations

***Background:*** Determining eligibility for intravenous (IV) to oral (PO) antibiotic conversion is challenging in patients transitioning to nursing homes (NHs) due to atypical infection presentation, increased diagnostic uncertainty, and multimorbidity. Understanding current practice and patient characteristics influencing prescriber behavior is necessary to provide effective antibiotic stewardship in this vulnerable population. We compared the frequency and characteristics of patients discharged with IV antibiotics to those switched from IV to PO therapy.

***Methods:*** This was a retrospective cohort study of Oregon Health & Science University Hospital patients treated with IV antibiotics and discharged to a NH from 1/1/2016-12/31/2018. We focused on IV to PO antibiotic switch within 48 hours of