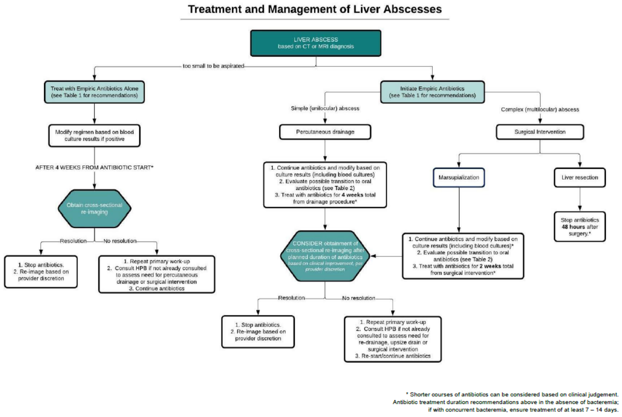


Methods. A retrospective, quasi-experimental cohort study was performed at Carolinas Medical Center in hospitalized patients with PLA with an HPB and/or infectious diseases consult. The primary outcome was antipseudomonal beta-lactam days of therapy (DOT) per 1000 patient days (PD) in the pre-versus post-intervention group. Secondary outcomes included rates of treatment failure at 90 days, 90-day all-cause and abscess-related hospital readmission, *C. difficile* and multi-drug resistant organism (MDRO) colonization at 90 days from diagnosis, and hospital length of stay (LOS). Additional *a priori* subgroup analyses of duration of therapy, treatment failure, all-cause and abscess-related readmissions were also conducted based on surgical intervention.

Results. A total of 93 patients were included, 49 patients in the pre-intervention group and 44 patients in the post-intervention group. Baseline characteristics were similar between the groups. The majority of liver abscesses were unilocular and monomicrobial. Anti-pseudomonal beta-lactam DOT per 1000 PD decreased by 13.8% (507.4 versus 437.5 DOT/1000 PD). Treatment failure occurred in 30.6% of pre-intervention patients and 18.2% of post-intervention patients (p = 0.165). Patients in the post-intervention group were discharged a median of 2.4 days sooner than the pre-intervention period (12.2 days vs. 9.8 days, p = 0.159). No significant differences resulted in 90-day readmission rates or 90-day *C. difficile* or MDRO rates.

Table 1. Primary Outcome for Patients with Pyogenic Liver Abscesses Treated Pre- and Post-Antibiotic Stewardship Algorithm

Efficacy Endpoint	Pre-Intervention n = 49	Post-Intervention n = 44	Percent change
Overall DOT per 1000 patient days			
Anti-pseudomonal beta-lactams	507.4	437.5	-13.8
Novel spectrum anti-pseudomonal	0	62.5	
Meropenem/vaborbactam	0	62.5	
Traditional spectrum anti-pseudomonal	507.4	375	-26.1
Aztreonam	0	4.6	
Cefepime	86.8	34.7	
Ceftazidime	20	0	
Meropenem	41.7	39.4	
Piperacillin/tazobactam	358.9	296.3	
Total patient days	599	432	

Table 2. Secondary Outcomes for Patients with Pyogenic Liver Abscesses Treated Pre- and Post-Antibiotic Stewardship Algorithm

Efficacy Endpoint	Pre-Intervention n = 49	Post-Intervention n = 44	p-value
Treatment failure, n (%)	15 (30.6)	8 (18.2)	0.165
Clinical worsening associated with liver abscess(es) requiring a change in antibiotics and/or additional surgical intervention	8 (16.3)	8 (18.2)	0.813
Abscess recurrence	5 (10.2)	0	0.058
Increase in liver abscess size	4 (8.2)	4 (9.1)	0.873
Development of new or return of bacteremia while on treatment	4 (8.2)	1 (2.3)	0.365
90-day readmission, n (%)	18 (36.7)	12 (27.3)	0.379
All-cause	9 (50.0)	8 (66.7)	0.465
Abscess-related	9 (50.0)	4 (33.3)	0.296
Clostridiodes difficile at 90 days, n (%)	1 (2.0)	0 (0.0)	1.0
MDRO at 90 days, n (%)	7 (14.3)	2 (4.6)	0.164
VRE	4 (8.2)	1 (2.3)	0.365
CRE	2 (4.1)	0 (0.0)	0.496
MRSA	1 (2.0)	0 (0.0)	1.0
ESBL	0 (0.0)	1 (2.3)	0.473
Transition to oral therapy, n (%)	27 (55.1)	20 (45.5)	0.353
Length of hospital stay, median (IQR)	12.2 (6-16)	9.8 (5-13.5)	0.159
Percutaneous drainage	12.4 (7-14)	8.1 (5-8)	0.079
Marsupialization	14 (9-17)	7.9 (3-12)	0.051
Liver resection	15.9 (7-22)	9.2 (5-15)	0.220
No intervention	8.5 (5-8)	15.2 (9-20)	0.013*
Length of therapy, median (IQR)	26.8 (17-30)	24.3 (14.5-32)	0.877
Percutaneous drainage	27.6 (17-30)	22.2 (16-29)	0.460
Marsupialization	24.3 (14-32)	20.4 (12-28)	0.354
Liver resection	27.3 (17-35)	15.8 (11-21)	0.124
No intervention	23.4 (14-29)	33.4 (29-39)	0.010*

Conclusion. The implementation of a PLA treatment and management algorithm led to a decrease in anti-pseudomonal beta-lactams without impacting clinical outcomes and a trend towards decreased LOS.

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

135. Influence of Prescribers on Antibiotic Use among Skilled Nursing Care Residents in 29 U.S. Nursing Homes

Brigid Wilson, PhD[1]; Joseph Marek, RPh/BCGP/FASCP[2]; Robin L. Jump, MD, PhD[3]; Robin L. Jump, MD, PhD[3]; Sunah Song, PhD[4]; [1]Louis Stokes Cleveland VA Medical Center, Cleveland, Ohio; [2]CommuniCare Health Services, Cincinnati, Ohio; [3]Case Western Reserve University, Cleveland, OH; [4]Cleveland Institute for Computational Biology, Clevleand, Ohio

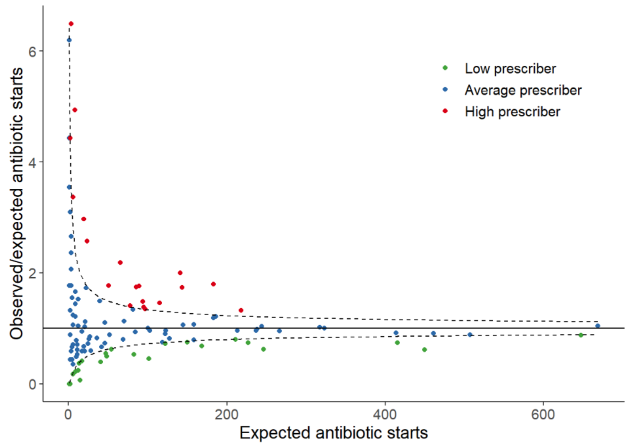
Session: P-08. Antimicrobial Stewardship: Special Populations

Background. In nursing homes, federal mandates call for more judicious use of antibiotics and antipsychotics. Previous research indicates that practice patterns of nursing home practitioners, rather than resident's signs and symptoms or overall medical conditions, drive antibiotic use. We hypothesized that nursing home practitioners who prescribe antibiotics more frequently than their peers may display a similar practice pattern for antipsychotics. Here, we examine similarities in prescribing patterns for antibiotics and antipsychotics among practitioners at 29 U.S. nursing homes.

Methods. Prescription data came from 2016 invoices from a pharmacy common to all 29 nursing homes. We defined practitioners as individuals who prescribed ≥1% of systemic medications at a nursing home and excluded practitioners without no prescriptions for anti-hypertensive drugs assuming they were not treating a general nursing home population (i.e. treating hospice or dementia patients). Using anti-hypertensive starts for standardization, we calculated the expected number of starts for both antibiotics and antipsychotics. Using funnel plots with Poisson 99% control limits for the observed-to-expected ratio, we identified practitioners whose use of either class of drugs exceeded these control limits. Practitioners were classified as high, average, or low prescribers for each class of drugs.

Results. We analyzed 129 practitioners who wrote for 113669 systemic medications. For antibiotics, 27 (20%) and 19 (15%) of practitioners were low and high prescribers, respectively. For antipsychotics, 53 (41%) and 14 (11%) were low and high prescribers, respectively (**Figure 1**). Among the low antibiotic prescribers, 59% (16/27) were also low antipsychotic prescribers. Among the high antibiotic prescribers, 21% (4/19) were also high antipsychotic prescribers (**Figure 2**).

Figure 1. (a) Funnel plot for antibiotics



(b) Funnel plot for antipsychotics

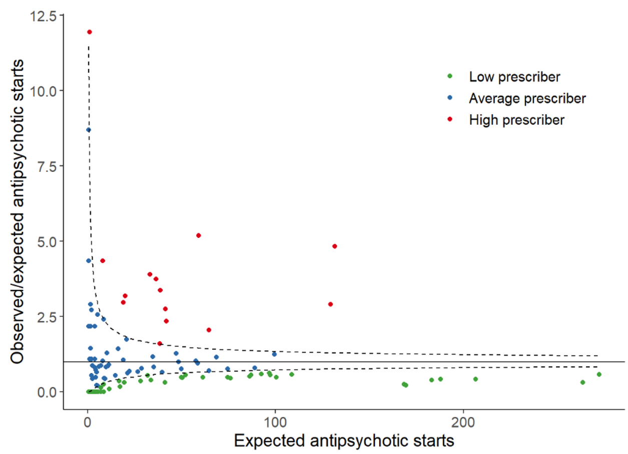
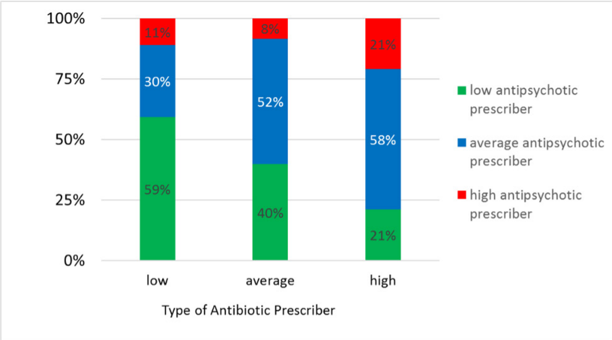


Figure 2. Type of prescriber



Conclusion. Practitioners who were low prescribers for antibiotics were also likely to be low prescribers for antipsychotics, suggesting judicious use for both classes of medications. Further understanding of the behaviors of these individuals, as well as those who are high prescribers for both classes, has implications for improving antibiotic stewardship practices in nursing homes.

Disclosures. **Robin L. Jump, MD, PhD**, Pfizer (Individual(s) Involved: Self): Consultant

136. Attitudes and Practices of Antimicrobial Resistance and Antimicrobial Stewardship at the Uganda Cancer Institute

Elizabeth Gulleen, MD[1]; Margaret Lubwama, MBChB, MMed[2]; Alfred Komakech, MS[3]; Elizabeth M. Krantz, MS[4]; Catherine Liu, MD[5]; Warren Phipps, MD, MPH[5]; [1]Fred Hutchinson Cancer Research Center, Seattle, Washington; [2]Makerere University, Kampala, Kampala, Uganda; [3]Uganda Cancer Institute, Kampala, Kampala, Uganda; [4]Fred Hutch Cancer Research Center, Seattle, Washington; [5]Fred Hutchinson Cancer Research Center; University of Washington, Seattle, Washington

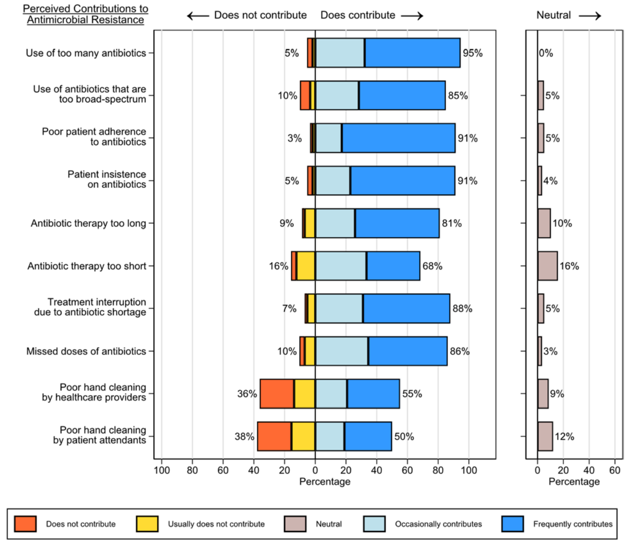
Session: P-08. Antimicrobial Stewardship: Special Populations

Background. As access to cancer treatment has increased in sub-Saharan Africa (sSA), infection-related complications are a growing concern. Little is known about infection management practices in this setting. Understanding the unique challenges to diagnosing and treating infections can inform the development of targeted strategies to improve infection management for cancer treatment programs throughout sSA.

Methods. We conducted a cross-sectional survey of doctors, nurses, and pharmacists at the Uganda Cancer Institute (UCI), a national cancer referral hospital in Kampala, Uganda. The 25-item survey was designed to assess staff knowledge of antimicrobial resistance and antimicrobial stewardship, investigate antibiotic decision-making practices, and identify barriers to diagnosing and treating infections.

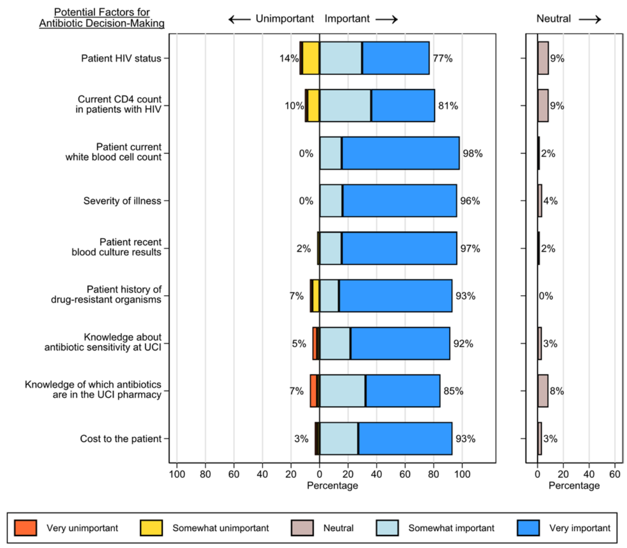
Results. Of the 61 respondents, 25 (41%) were doctors, 7 (11%) were pharmacists, and 29 (48%) were nurses. In total, 98% (60/61) had heard of the term "antimicrobial resistance" and 84% (51/61) agreed that antimicrobial resistance is an important problem at UCI. Multiple factors were felt to contribute to antimicrobial resistance including the use of too many antibiotics, patient insistence on antibiotics, and poor patient adherence (Fig 1). While 72% (44/61) had heard of the term "antimicrobial stewardship", only 25% (15/61) knew a lot about what it meant. Numerous factors were considered important to antibiotic decision-making including patient white blood cell count and severity of illness (Fig 2). Perceived barriers to infection diagnosis included the inability to obtain blood cultures and to regularly measure patient temperatures; perceived barriers to obtaining blood cultures included patient cost and availability of supplies (Fig 3).

Figure 1. Factors that doctors, pharmacists, and nurses working at the Uganda Cancer Institute (UCI) perceive as contributing to antimicrobial resistance at the UCI.



Percentages shown next to bars represent the combined total percentage of respondents reporting that the factor does not or usually does not contribute (left of bars, main chart), occasionally or frequently contributes (right of bars, main chart), or neither contributes nor does not contribute (right of neutral chart).

Figure 2. Factors that doctors, pharmacists, and nurses working at the Uganda Cancer Institute consider to be important when choosing antibiotics to treat infections.



Percentages shown next to bars represent the combined total percentage of respondents reporting that the factor is somewhat or very unimportant (left of bars,