Figure 2: Gonorrhea (GC) Infections by Site

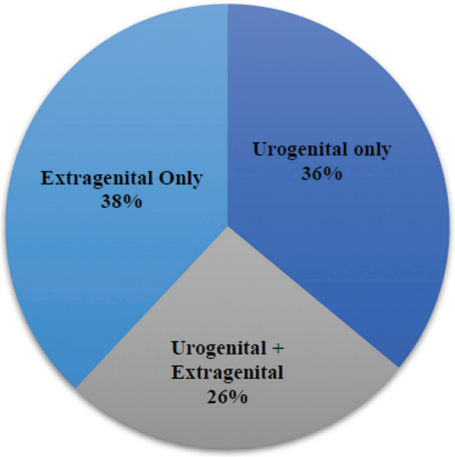

Table 1. Demographic, behavioral, and clinical attributes of female patients presenting to an STD clinic, 2014-2018

	Total N (%)	2014 N (%)	2015 N (%)	2016 N (%)	2017 N (%)	2018 N (%)
N	2672 (100)	266 (10)	476 (18)	548 (20)	700 (26)	682 (25)
Female Sex	2672 (100)	266 (10)	476 (18)	548 (20)	700 (26)	682 (25)
Gender of Sex Partners						
Men only	2332 (87)	230 (86)	429 (90)	498 (91)	593 (85)	582 (85)
Women and men	212 (8)	25 (9)	40 (8)	40 (7)	49 (7)	58 (9)
Women only	40 (1)	6 (2)	7 (1)	10 (2)	7 (1)	10 (1)
Race						
Non-Hispanic White/ Caucasian	1007 (38)	123 (46)	209 (44)	228 (42)	228 (33)	219 (32)
Non-Hispanic Black/African-American	529 (20)	48 (18)	89 (19)	84 (15)	146 (21)	162 (24)
Hispanic	753 (28)	66 (25)	108 (23)	159 (29)	223 (32)	197 (29)
Other	338 (13)	24 (9)	63 (13)	73 (13)	90 (13)	88 (13)
Age* (years)	26 (33-22)	25 (31-22)	25 (33-21)	25 (31-21)	26 (35-22)	27 (36-22)
Presented with Symptoms						
Yes	457 (17)	37 (14)	46 (10)	91 (17)	129 (18)	154 (23)
No	2187 (82)	205 (77)	429 (90)	457 (83)	569 (81)	527 (77)
Total Number of Partners, past 12 months*	2 (3-1)	2 (4-1)	2 (4-1)	2 (4-1)	2 (3-1)	2 (3-1)
Vaginal/Anal Sex Partners*	2 (3-1)	2 (4-1)	2 (3-1)	2 (3-1)	2 (3-1)	2 (3-1)
Oral Sex Partners*	1 (3-1)	1 (3-1)	2 (3-1)	2 (3-1)	1 (2-1)	1 (3-1)
STD diagnosis, past 12 months						
Yes	374 (14)	32 (12)	60 (13)	78 (14)	89 (13)	115 (17)
No	2289 (86)	234 (88)	416 (87)	470 (86)	608 (87)	561 (82)
STD diagnosis, lifetime						
Yes	759 (28)	86 (32)	136 (29)	161 (29)	182 (26)	194 (28)
No	1899 (71)	180 (68)	340 (71)	386 (70)	513 (73)	480 (70)
GC/CT Tests Performed						
Urogenital						
Yes	2515 (94)	251 (94)	446 (94)	519 (95)	658 (94)	641 (94)
No	157 (6)	15 (6)	30 (6)	29 (5)	42 (6)	41 (6)
Extragenital						
Yes	1582 (59)	12 (5)	344 (72)	343 (63)	419 (60)	464 (68)
No	1090 (41)	254 (95)	132 (28)	205 (37)	281 (40)	218 (32)

* Median (IQR)

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

964. Journey to Zero Harm: Eliminating Catheter-Associated Urinary Tract Infections (CAUTIs) for 12 Consecutive Months at Two Community Hospitals

Leonardo Girio-Herrera, DO[1]; Colleen M. Clay, RN, BSN, CIC[1]; Faheem Younus, MD[1]; Zafir Ahmed[2] and Paul Zimand[3]; [1]University of Maryland Upper Chesapeake Health, Timonium, Maryland; [2]University of Maryland, College Park, Baltimore, Maryland; [3]University of Maryland Medical System, Baltimore, Maryland

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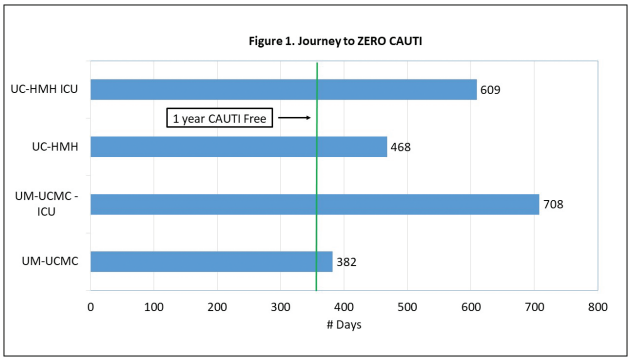
Background. Many US hospitals have implemented CAUTI prevention bundles (CPB) but few have achieved the goal of zero CAUTIs for 12 consecutive months. We report our journey to zero harm at two community hospitals that have each successfully eliminated CAUTIs from all their units, including the intensive care unit (ICU), for over 12 consecutive months.

Methods. From April 2015 to March 17 (Period A), CPB was implemented at University of Maryland-Upper Chesapeake Medical Center (UM-UCMC) and University of Maryland-Harford Memorial Hospital (UM-HMH), each with 195 and 128 beds, respectively. UM-UCMC has a 15-bed ICU while UM-HMH has a 5-bed ICU. The CPB included placement of urinary catheters only for approved indications, use of two persons (buddy system) for catheter insertion, Nurse Driven Protocol for catheter removal, and silver-impregnated cloths for perineal care. A massive frontline engagement campaign "You can't have a CAUTI if you don't have a foley" was launched from April 2017 to March 2019 (Period B). The focus was intensified on reducing catheter utilization rates. Real-time feedback on new CAUTIs cases was provided to leadership at the daily safety briefs and to nurses and physicians at the unit-based huddles. The number of CAUTIs and "days without a CAUTI" was shared with team members via small posters and whiteboards.

Results. A statistically significant decrease in utilization of urinary catheters was observed (Table 1). Both hospitals and their respective ICUs remained CAUTI free for >12-consecutive months (Figure 1).

Conclusion. Eliminating CAUTIs for 12 consecutive months in acute care community hospitals is possible and serves as a step toward the journey to zero harm. Reducing catheter utilization is a key strategy. Humanizing each infection and providing real-time feedback to the frontline staff and leadership in whole numbers (instead of the old paradigm of reporting CAUTI rates) may have resulted in greater engagement.

	UM - UCMC				UM - HMH			
	ICU		Non-ICU		ICU		Non-ICU	
Period	A	B	A	B	A	B	A	B
No. of inpatient-days	8164	8237	118320	112858	3411	3309	53533	52597
No. of catheter days	4371	2588	9330	5323	1921	1280	4248	1865
No. of CAUTIs	6	1	17	4	2	3	5	2
Utilization rate	0.535	0.314	0.079	0.047	0.563	0.387	0.079	0.035
Confidence interval	0.55 - 0.61		0.57 - 0.61		0.63 - 0.73		0.42 - 0.47	
p - value	<0.001		<0.001		<0.001		<0.001	



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

965. The Efficacy of Oral B-lactam Antibiotics as Step-down Therapy for Acute Pyelonephritis

Athena L. V. Hobbs, PharmD, BCIDP[1]; Vagish Hemmige, MD[2]; Theresa Jaso, PharmD, BCPS (AQ-ID)[3]; Katie Lutat, PharmD Candidate[1] and Katherine M. Shea, PharmD, BCIDP[4]; [1]Baptist Memorial Hospital-Memphis, Memphis, Tennessee; [2]Montefiore Medical Center, Bronx, New York; [3]Ascension Texas, Austin, Texas; [4]Cardinal Health, Austin, Texas

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Background. Often, oral β-lactams have been avoided for the treatment of pyelonephritis due to data suggesting lower efficacy vs. currently recommended therapy. However, increasing resistance and concerns for collateral damage of primarily recommended oral agents have increased interest in the use of oral β-lactams for the treatment of pyelonephritis. Authors sought to assess the impact of oral step-down β-lactam therapy compared with an alternative oral agent (fluoroquinolone or trimethoprim-sulfamethoxazole) in patients with acute pyelonephritis requiring hospitalization.

Methods. This is an IRB-approved, multicenter, retrospective study of hospitalized patients with acute pyelonephritis in six hospitals within two healthcare systems who received an IV cephalosporin followed by step-down therapy with either a β-lactam or an alternative agent (i.e., fluoroquinolone or trimethoprim-sulfamethoxazole). We theorize that oral β-lactams are noninferior to alternative oral agents for step-down therapy for pyelonephritis requiring hospitalization. Treatment success was defined as lack of 30-day urinary system-related re-admission. We calculated that 89 patients were required in each group to achieve 80% power with a noninferiority margin of 15% and assuming a cure rate of 85% as reported in previous literature.

Results. A total of 188 patients were included in the study; 115 and 73 who received an oral β-lactam and an alternative oral agent, respectively. There was no difference in treatment success when comparing the two groups (113 [98%] vs. 70 [96%]; $P = 0.38$). The mean length of hospital stay, number of patients treated with ceftriaxone inpatient, and the duration of IV therapy was the same in both groups, though mean duration of oral therapy was longer in the oral alternative group compared with the oral β-lactam group (9.5 [+ 3.7] vs. 8.2 [+ 2.7] days, respectively; $P = 0.02$). Baseline characteristics other than mean age were the same, as reported in Table 1.

Conclusion. When using 30-day urinary system-related readmission as a surrogate for treatment success, we found no difference between β-lactams vs. alternative agents for oral step down therapy for pyelonephritis requiring hospitalization.

Table 1: Baseline Characteristics, Inpatient Treatment, and Results

	Oral Beta-lactam (n=115)	Oral Alternative (n=73)	p-value
Baseline Characteristics			
Mean age, years (SD)	39 (17)	44 (19)	0.04
Male, n (%)	11 (10)	5 (7)	0.52
Mean weight, kg (SD)	79 (27)	76 (23)	0.36
Mean baseline WBC X10^3/mcL (SD)	14.4 (5.3)	13.5 (4.7)	0.22
Mean baseline temperature, ^{0}F (SD)	100.9 (2)	101 (1.8)	0.90
Inpatient Treatment			
Treated with ceftriaxone inpatient, n (%)	55 (48)	45 (62)	0.06
Mean duration of IV therapy, days (SD)	3 (1.6)	3 (1.5)	0.85
Results			
Treatment success, n (%)	113 (98)	70 (96)	0.38
Mean length of stay, days (SD)	3 (1.6)	3 (1.3)	0.18
Mean duration of oral therapy, days (SD)	8.2 (2.7)^	9.5 (3.7)+	0.02

+Data not available for 4 patients
^Data not available for 14 patients

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

966. A Closer Look at Antibiotic Prescribing for Upper Respiratory Illnesses (URI) in People with HIV Compared with People Without HIV

Anum Abbas, MD[1]; Mackenzie R. Keintz, MD[2]; Elizabeth Lyden, MS[2]; Jihyun Ma, MS/MA[2]; Sara H. Bares, MD[2]; Trevor C. Van Schooneveld, MD, FACP[2]; Jasmine R. Marcelin, MD[2] and Jasmine R. Marcelin, MD[2]; [1]Creighton University Medical Center, Omaha, Nebraska; [2]University of Nebraska Medical Center, Omaha, Nebraska

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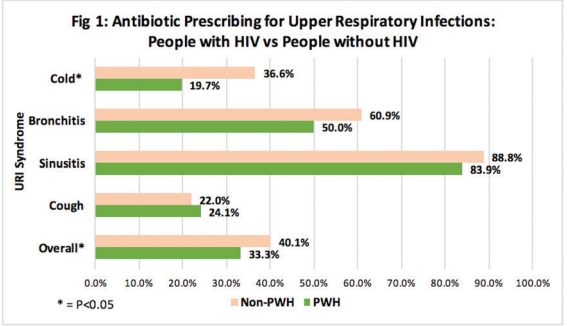
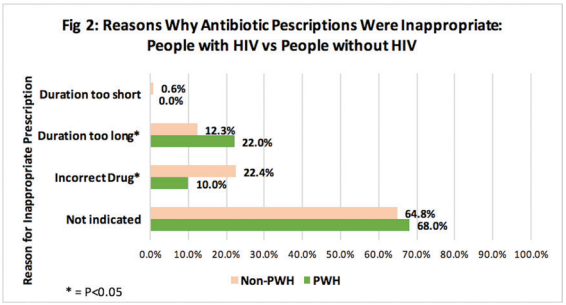
Background. Antibiotic overuse is widespread, increasing healthcare cost and promoting antimicrobial resistance. People with HIV (PWH) who develop URIs may be assumed "higher risk," compared with non-PWH, but comparative antibiotic use evaluations have not been performed. We evaluated antibiotic prescribing patterns for URI diagnoses (cough, sinusitis, bronchitis, and cold) in PWH and non-PWH.

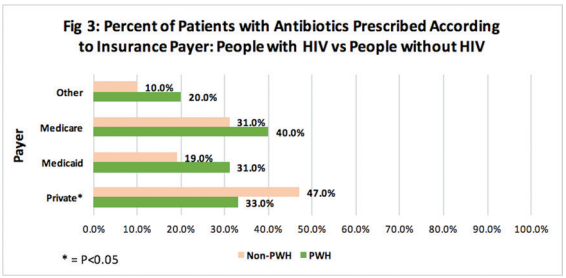
Methods. This was an observational, single-center study comparing PWH and non-PWH diagnosed with URI (using ICD 10 codes for URI syndromes: cough, sinusitis, bronchitis, and cold) between January 1, 2014 and April 30, 2018. Patients were empaneled in an outpatient primary care clinic or specialty care clinic in one healthcare system. Appropriateness of antibiotic prescribing was defined based on published guidelines. Fisher's exact test compared categorical variables with antibiotic prescribing patterns. Each encounter was considered an independent event.

Results. The two groups (PWH and non-PWH) were similar, with 34% of subjects in both groups being female. PWH had median CD4+ count of 610 cells/mm^3 with 91% on antiretrovirals and 77% with HIV RNA < 20 copies/mL. Overall, 37% of visits resulted in antibiotic prescriptions, 92% of which were inappropriate (discordant with guidelines). Antibiotics were prescribed slightly more frequently in non-PWH (40% vs. 33%, $P = 0.056$; Figure 1) and inappropriate more often in non-PWH (37% vs. 30%, $P = 0.029$). Over 20% of PWH antibiotic prescriptions were too long, and 22% of non-PWH received the wrong drug (Figure 2; $P = 0.011$). 47% of the non-PWH receiving antibiotics for URI had private insurance (compared with other payers; $P < 0.0001$) vs. 33% in PWH ($P = 0.32$) (Figure 3).

Conclusion. Outpatient antibiotic overuse remains prevalent among patients evaluated for URIs. This is the first study, to our knowledge, comparing antibiotic use for URIs in PWH compared with non-PWH. Counterintuitively, we found less-frequent inappropriate antibiotic use in PWH. We speculate that PWH are more likely to be evaluated by infectious disease/HIV specialists, possibly explaining the lower rate of antibiotic prescriptions for URIs in this population. Future analyses will evaluate the association between provider specialty and inappropriate antibiotic use.







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

967. Concordance of Antibiotic Prescribing with the Proposed American Dental Association Acute Oral Infection Guidelines within Veterans Affairs (VA) Dentistry

Daniel Carlsen, PharmD[1]; Katie J. Suda, PhamD, MS[2]; Ursula C. Patel, PharmD, BCPS, AAHIVP[1]; Gretchen Gibson, DDS[3]; Marianne M. Jurasic, DMD, MPH[4]; Linda Poggensee, MS[5]; Margaret A. Fitzpatrick, MD, MS[6]; Kelly Echevarria, PharmD, BCPS AQ-ID[7]; Michael Durkin, MD, MPH[8]; Jessina C. McGregor, PhD, FSHEA[9] and Charlesnika T. Evans, PhD, MPH[10]; [1]Edward Hines, Jr. VA Hospital, Chicago, Illinois; [2]Center of Innovation for Complex Chronic Healthcare (CINCCH), Hines VA Hospital and University of Illinois at Chicago College of Pharmacy, Hines, Illinois; [3]Oral Health Quality Group, Veterans Health Care System of the Ozarks, Fayetteville, Arkansas; [4]VA Office of Dentistry, Oral Health Quality Group and Boston University, Boston, Massachusetts; [5]Hines VA, Hines, Illinois; [6]Center of Innovation for Complex Chronic Healthcare, Edward Hines Jr. VA Hospital, Hines, Illinois; [7]Pharmacy Benefits Management, Department of Veterans Affairs, San Antonio, Texas; [8]Washington University School of Medicine, St. Louis, Missouri; [9]Oregon State University/Oregon Health and Science University, Portland, Oregon; [10]Northwestern University, Chicago, Illinois

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Background. US dentists prescribe 10% of outpatient antibiotics. However, assessing the appropriateness of dental antibiotic prescribing has been challenging due to a lack of guidelines for common infections. In 2019, the American Dental Association proposed clinical practice guidelines (CPG) on the management of common acute oral infections for the first time. Our objective was to describe national baseline antibiotic prescribing for the treatment of irreversible pulpitis, apical periodontitis, and acute apical abscess prior to the release of the proposed CPG.

Methods. We performed a cross-sectional analysis of national VA data from January 1, 2017 to December 31, 2017. We identified cases of irreversible pulpitis, apical periodontitis, and acute apical abscess using ICD-10-CM codes. Patient demographics, facility location, medical conditions, dental procedure codes ("CDTs"), and diagnostic (ICD-10-CM) codes were extracted from the VA Corporate Data Warehouse. Antibiotics prescribed by a dentist within 7 days of a visit were included. Multivariable logistic regression identified variables associated with antibiotic prescribing for each infection.

Results. Of the 470,039 VA dental visits with oral infections coded, 25% of irreversible pulpitis, 41% of apical periodontitis, and 61% of acute apical abscess visits received antibiotics. Amoxicillin was prescribed most frequently. Although the median days' supply was 7 days, prolonged use of antibiotics was frequent (9.2% of irreversible pulpitis, 17.8% of apical periodontitis, 28.7% of acute apical abscess received antibiotics for ≥8 days). Of the irreversible pulpitis visits with antibiotics prescribed, 20.0% received ≥2 antibiotics. Patients with high-risk cardiac conditions, prosthetic joints, and certain dental procedures were associated with receipt of antibiotics (table).

Conclusion. Prior to the release of the ADA guidelines, 75.8% and 59.4% of irreversible pulpitis and apical periodontitis were concordant with proposed recommendations. These data identify opportunities to improve prescribing and serve as a benchmark for future outpatient antimicrobial stewardship efforts. Future work should assess definitive dental treatment and populations without access to oral health care.