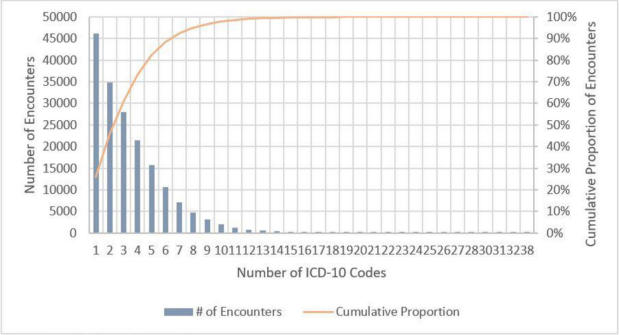

Figure 2: ICD-10 Codes per Encounter

Table 1: Classification of Encounters

	Urgent Care ICD-10 Dictionary	Expanded ICD-10 Dictionary
Included ICD-10s (No.)	1,400	2,839
Encounters classified (No., %)	147,085/177,531 (**82.9%**)	169,124/177,531 (**95.3%**)
Tier (No., %)		
1	3,418 (**2.3%**)	4,121 (**2.4%**)
2	11,348 (**7.7%**)	18,377 (**10.9%**)
3	132,319 (**90.0%**)	146,626 (**86.7%**)

Table 2: Antibiotic Prescribing Rate (APR) of Classified Encounters

	Urgent Care ICD-10 Dictionary	Expanded ICD-10 Dictionary
Overall APR	5,347/147,085 (**3.6%**)	5,741/169,124 (**3.4%**)
2019	2,981/74,512 (**4.0%**)	3,228/84,826 (**3.8%**)
2020	2,366/72,573 (**3.3%**)	2,513/84,298 (**3.0%**)
APR by Tier		
1	1,513/3,418 (**44.3%**)	1,664/4,121 (**40.4%**)
2	2,012/11,348 (**17.7%**)	2,539/18,377 (**13.8%**)
3	1,822/132,319 (**1.4%**)	1,538/146,626 (**1.0%**)

Table 3: Impact of Expanded Dictionary: Antibiotic Prescribing Rate (APR) of Additionally Categorized and Re-Categorized Encounters

		APR (%)
Additionally categorized encounters (no.)	22,039	1.8%
Tier 1	162 (0.7%)	15.4%
Tier 2	1,260 (5.7%)	17.9%
Tier 3	20,617 (93.5%)	0.7%
Re-categorized encounters (no.)	41,473	1.9%
Change in Tier	6,538 (15.8%)	8.7%
Tier 2 -> 1	190 (2.9%)	47.4%
Tier 3 ->1	351 (5.4%)	10.3%
Tier 3 -> 2	5,988 (91.6%)	6.6%

antibiotic prescribing. A more sophisticated classification system may help to accommodate the diversity and volume of ICD-10 codes used in primary care.

1. Stenehjem E, et al. *Clin Infect Dis* 2020;70:1781–1787.

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s70–s71
doi:10.1017/ash.2022.192

Presentation Type:
Poster Presentation - Oral Presentation
Subject Category: Antibiotic Stewardship

Evaluation of periprocedure antibiotics and infection-related hospitalizations after transrectal prostate biopsies

Tenley Ryan; Neena Thomas-Gosain; Jane Eason; Hanna Akalu; Navila Sharif and Jessica Bennett

Background: Prostate cancer is the leading cancer diagnosis and the second leading cause of cancer deaths in men. Definitive diagnosis is made by prostate biopsy. This procedure poses a risk of infection and, rarely, sepsis. Studies have found the incidence of symptomatic urinary tract infection (UTI) after biopsy to be 2%–3%, and the rate of infection-related hospitalization (IRH) to be 0.6%–4.1%. An initial review at our facility found the IRH rate to be 3.7%. The primary purpose of this study was to determine the incidence of IRH following prostate biopsy in patients at the Memphis VA Medical Center (VAMC) after initial review and education. **Methods:** All transrectal prostate biopsies performed at the Memphis VAMC from October 2017 through May 2021 were analyzed. Patients were excluded if they had a spinal cord injury or concomitant procedure. The primary outcome was IRH occurring within 30 days of the procedure. Variables collected included risk factors, antibiotic choice and duration, and details of postprocedural infections. Analyses were performed on a per-procedure basis. **Results:** Overall, 601 procedures were identified; 13 were excluded, for a total of 588 transrectal prostate biopsies on 533 patients. All patients were given antibiotics. Oral antibiotics alone were provided for 306 procedures (52%) for an average duration of 3 days. A combination of both oral and intramuscular antibiotics were provided for 282 (48%) procedures. The most common oral antibiotics used were cefuroxime (538, 91.4%), ciprofloxacin (17, 2.9%), amoxicillin–clavulanate (16, 2.7%), and sulfamethoxazole–trimethoprim (12, 2%). Intramuscular antibiotics included ceftriaxone (263, 93.3%) and gentamicin (19, 6.7%). An infectious complication occurred in 29 patients (4.9%): 26 (3.4%) were urogenital and 5 (0.8%) required hospitalization. Of the procedures complicated by a postprocedure infection, 22 (75.9%) received an oral antibiotic alone, 21 (95.4%) of which were cefuroxime, and 7 (24.1%) received both an intramuscular and an oral agent. **Conclusions:** In our initial review, the most common antibiotics used were fluroquinolones, with an average duration of 3 days periprocedure and an IRH rate of 3.7%. These findings were used to reinforce practices compliant with American Urological Association (AUA) guidelines. This follow-up review reveals that the first-line choice changed from fluroquinolones to cephalosporins, with average duration remaining at 3 days. Although the overall infection rate was 4.9%, the IRH rate decreased from 3.7% to 0.8%.

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s71
doi:10.1017/ash.2022.193

Presentation Type:
Poster Presentation - Oral Presentation
Subject Category: Antibiotic Stewardship

Rates of intravenous antibiotic starts among outpatient hemodialysis patients using NHSN dialysis event reporting, 2016–2020

William Wilson; Sarah Kabbani; Shannon Novosad; Lucy Fike; Katryna Gouin; Jeneita Bell; Suparna Bagchi; Jonathan Edwards; Ibironke Apata and Susan Cali

Background: Nearly one-third of patients on hemodialysis receive intravenous (IV) antibiotics annually, but national data characterizing antibiotic use in this population are limited. Using NHSN surveillance data for outpatient dialysis facilities, we estimated temporal changes in the rate of IV antibiotic starts (IVAS) among hemodialysis patients as well as the proportion of IVAS that were not supported by a reported clinical indication. **Methods:** IVAS events were obtained from the NHSN Dialysis Event module between 2016 and 2020, excluding patients who were out of network, receiving peritoneal or home dialysis, or with unspecified vascular access. IVAS unsupported by documentation were defined as new IVAS without a collected or positive blood culture, pus, redness or swelling event, or an associated clinical symptom. Pooled mean rates of total and unsupported IVAS were estimated per 100 patient months yearly and stratified by vascular access type. Differences in IVAS rates by year were estimated with negative binomial regression. **Results:** Between 2016 and 2020, 7,278 facilities reported 648,410 IVAS events; 161,317 (25%) were unsupported by documentation (Table 1). In 2016, 3,340 (54%) facilities with ≥1 IVAS event reported an IVAS unsupported by documentation, which increased to 4,994 (73%) in 2020. Total IVAS rates decreased by an average of 8.2% annually (95% CI, 7.1%–9.3%; $P < .001$). The average annual percentage