

patient populations and fewer administrative barriers. Hospitals should tailor ASP priorities to their local context, focusing on feasible and sustainable interventions.

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## Presentation Type:

Oral Presentation

Subject Category: Antibiotic Stewardship

US Adults' Perspectives on Antibiotic Durations and Adherence to Therapy for Bacterial Respiratory Infections

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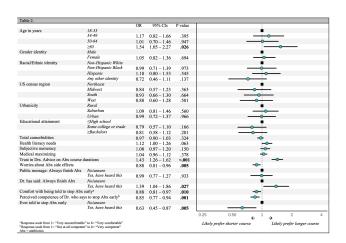
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Background: Calls within the clinical community for revising guidance on the appropriate durations of antibiotic therapy (i.e., shorter is better) and adherence (i.e., no longer advising to always finish a course), reflect important gains in evidence-based prescribing. However, changing medical guidance can have negative public effects (e.g., frustration, distrust, and disengagement) when not communicated in ways that resonate with patients. To inform efforts to effectively communicate evolving evidence on appropriate antibiotic use, we examined US adults' perceptions and preferences regarding antibiotic durations and adherence. Methods: From March to April 2024, we invited US adults, aged ≥18 years, to an online survey about antibiotics. Question topics included durations of antibiotic therapy, adherence to a prescribed course of antibiotics, and demographic characteristics. Results: Table 1 shows the characteristics of the 1,476 respondents [completion=89%]. Most respondents reported they preferred to take a longer course of antibiotics (≥7 days) than a shorter one (3-5 days) for a bacterial respiratory infection (60.4% vs. 39.5%) and rated longer courses as both safer and more effective (Table 2). In open-text questions, respondents who preferred shorter courses described a general aversion to medication and concerns about side effects and resistance, whereas those who preferred longer courses saw them as familiar and a 'better safe than sorry' approach, associating longer durations with greater efficacy. In addition, 88.4% of respondents agreed that 'it is important to always finish a prescribed course of antibiotics, even if you start to feel better' and had either been told this by a medical professional (76.3%) or seen this guidance in a public health message (61.2%). Conversely, only 17.5% said they had ever been told they could stop taking antibiotics early. Preference for longer antibiotic courses was associated with older age, trusting their doctor's advice about antibiotic therapy durations, having been told by their doctor to 'always finish a course of antibiotics', less worry about antibiotic side effects, discomfort about potentially being asked by a clinician to stop taking antibiotics when they start to feel better, and perceiving the clinician suggesting that as less competent. Conclusions: Many US adults prefer longer durations of antibiotic therapy for respiratory infections than are likely necessary. Almost all survey respondents believed it important to always finish a course and many were uncomfortable with advice to the contrary. These findings highlight the need for evidencebased communication strategies for aligning US adults' antibiotic duration and adherence preferences with current guidance.

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		Antibiotic duration preference		
		Prefer shorter (3-5 days)	Prefer longer (≥7 days)	Total
		583 (39.5)	892 (60.5)	1475
Age in years	Mean (SD)	48.3 (17.7)	54.7 (17.7)	52.2 (17.9)
	18-33	163 (28.0)	153 (17.2)	316 (21.4)
	34-49	135 (23.2)	185 (20.7)	320 (21.7)
	50-64	141 (24.2)	194 (21.7)	335 (22.7)
	≥65	144 (24.7)	360 (40.4)	504 (34.2)
Gender identity	Male	289 (49.6)	435 (48.8)	724 (49.1)
	Female	287 (49.2)	451 (50.6)	738 (50.0)
	(Missing)	7 (1.2)	6 (0.7)	13 (0.9)
Racial/Ethnic identity	Non-Hispanic White	148 (25.4)	297 (33.3)	445 (30.2)
	Non-Hispanic Black	190 (32.6)	250 (28.0)	440 (29.8)
	Hispanic	175 (30.0)	268 (30.0)	443 (30.0)
	Any other Non-Hispanic Identity	68 (11.7)	77 (8.6)	145 (9.8)
	(Missing)	2(0.3)	0 (0.0)	2(0.1)
US census region	Northeast	97 (16.6)	158 (17.7)	255 (17.3)
	Midwest	112 (19.2)	184 (20.6)	296 (20.1)
	South	233 (40.0)	342 (38.3)	575 (39.0)
	West	137 (23.5)	207 (23.2)	344 (23.3)
	(Missing)	4 (0.7)	1 (0.1)	5 (0.3)
Urbanicity	Rural	149 (25.6)	239 (26.8)	388 (26.3)
	Suburban	253 (43.4)	404 (45.3)	657 (44.5)
	Urban	180 (30.9)	248 (27.8)	428 (29.0)
	(Missing)	1 (0.2)	1 (0.1)	2 (0.1)
Educational attainment	High School or less	125 (21.4)	176 (19.7)	301 (20.4)
	Some College or Trade	194 (33.3)	293 (32.8)	487 (33.0)
	>Bachelors	263 (45.1)	422 (47.3)	685 (46.4)
	(Missing)	1 (0.2)	1 (0.1)	2 (0.1)
Total comorbidities	0	263 (45.1)	298 (33.4)	561 (38.0)
	i	125 (21.4)	244 (27.4)	369 (25.0)
	2	79 (13.6)	151 (16.9)	230 (15.6)
	3	52 (8.9)	95 (10.7)	147 (10.0)
	4	24 (4.1)	52 (5.8)	76 (5.2)
	≥5	40 (6.9)	52 (5.8)	92 (6.2)
	(Missing)	0 (0.0)	0 (0.0)	0 (0.0)
	Mean (SD)	1.4(2.1)	1.5 (1.7)	1.5 (1.8)



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Oral Presentation

Subject Category: Antibiotic Stewardship

Outcomes associated with azithromycin use among patients hospitalized with non-severe community-acquired pneumonia

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**Introduction:** Community-acquired pneumonia (CAP) is the leading infectious cause for hospitalization. Guidelines recommend use of a macrolide antibiotic with a beta-lactam for coverage of atypical organisms; however, data supporting macrolide coverage disproportionately include patients with severe CAP. Debate remains regarding the benefit of macrolide coverage among patients hospitalized with non-severe CAP. Methods: We emulated a target trial to evaluate outcomes associated with azithromycin use among patients hospitalized with non-severe CAP between 7/2017 and 8/2024 across 69 hospitals in Michigan. Included patients had an ICD-10 discharge diagnosis code of pneumonia, >2 signs or symptoms of CAP, and radiographic findings. Patients with severe CAP, risk factors for multi-drug-resistant organisms, those not started on standard CAP therapy with a narrow-spectrum beta-lactam with or without azithromycin, or those initially receiving doxycycline were excluded. Time zero was the time of first antibiotic administration on encounter day 1 or 2. Groups receiving and not-receiving azithromycin were balanced using inverse probability of treatment weighting (IPTW) assessed using standardized mean differences (SMD). The primary outcome was time to clinical stability. Secondary outcomes included intensive care unit (ICU) transfer, 30-day rehospitalization, 30-day mortality, and protocol deviation (i.e., azithromycin initiation after time zero [no-azithromycin group], patients receiving <5 days of azithromycin [azithromycin group]). We used the Cox model and multivariable Poisson regression for time-toevent and binary outcomes, respectively. Based on point prevalence of outcomes within our cohort, we were well powered to detect the demonstrated relative differences in all outcomes. Results: Of the 59,698 patients meeting criteria for pneumonia, 19,108 patients were included in the final post-exclusion cohort. Of these, 93.7% (17,904/19,108) received azithromycin on day 1 or 2 (median antibiotic duration 4.0 days [IQR 3,5]), while 6.3% (1,204/19,108) did not. After IPTW, groups receiving and not-receiving azithromycin were well balanced (SMDs <0.1). After adjustment, median time to clinical stability did not differ between the azithromycin and no-azithromycin groups (3 vs 3 days; HR 1.01 [95% confidence interval 0.97-1.14], p=0.74), nor did rate of ICU transfer (0.9% vs 1.3%; HR 0.90 [0.51-1.62], p=0.73). Patients receiving azithromycin had lower rates of 30-day rehospitalization (10.8% vs 15.3%, HR 0.69 [0.58-0.82], p<0.001) and 30-day mortality (2.3% vs. 4.0%; HR 0.70 [0.50-0.93), p=0.03). Protocol deviation occurred more commonly in those initially receiving azithromycin (56.5% vs 11.1%; HR 1.58 [1.32-1.82], p<0.001). Conclusions: Addition of azithromycin to betalactam therapy in patients hospitalized with CAP did not influence short-term outcomes but may reduce 30-day rehospitalization and mortality.

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Antimicrobial Consumption and Appropriateness in Australian Hospitals: a Parallel Analysis of 2023 National Surveillance Data Caroline Chen<sup>1</sup>, Erin Connor<sup>2</sup>, Josephine Wen<sup>2</sup>, Karin Thursky<sup>2</sup> and Rodney James<sup>3</sup>

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**Background:** A comprehensive understanding of antimicrobial prescribing practices, requires antimicrobial stewardship (AMS) clinicians to assess both the quantity and quality of antimicrobial prescribing. In Australia, two national programs collect and analyse such data in the hospital setting; the National Antimicrobial Utilisation Surveillance Program (NAUSP) a