Journal Club

			BAUNGK	OUND AND	UVEKVIE	vv											
Article Title	Stewardship Prompts		ve Antibio	otic Selecti	on for Pn	eumonia:		E Randomized Clinical Tria									
Purpose	Gohil et al (2025) JAMA; DOI: 10.1001/jama.2024.6248 To address the overuse of extended-spectrum antibiotics for pneumonia. Specifically, they aimed to evaluate whether computerized provider order entry (CPOE) prompts providing patient- and pathogen-specific MDRO																
	infection risk estimates could reduce empiric extended-spectrum antibiotics for non-critically ill patients																
	admitted with pneumonia																
Background	 Pneumonia is the most common reason for infection leading to hospitalization, but providers often default to (unnecessary) use of broad-spectrum antibiotics due in low risk patients HCA developed a classification algorithm using Al to predict a patient's risk of various MRDOs (MRSA, pseudomonas, ESBL) based on over 50 variables (including demographics, healthcare exposures, prior antibiotic use, Hx 																
									of MDROs, comorbi	dities, & ho	spital-speci	ific MDRO pre	valence), v	hich the	y incorporat	ed into their CPOE for	
										pneumonia							
													METHOD				
	Design & methods	Cluster-randomized trial			community	hospitals	Phase	s of study	h1: (4/2017 0/2010)								
within the HCA Healthcare system • Hospitals paired based on baseline era data → randomized • Hospitals paired based on baseline era data → randomized • 6-month phase in (10/2018 - 3/2019)																	
hospitals (1:1)		Daseu OII L	Jaseline ei	a uata → ra	Huomizeu			ervention (4/2019 - 6/2020)									
Study arms	Stewardship alone gi	roup (n=30) hospitals) !	St	ewardship		p (n=29 hospitals)									
-	Received standard							OE prompted antimicrobial									
	 Quarterly coachir 	ng calls for	r stewardsł					trum antimicrobial that was ordered)									
	• Prospective deescalation based on micro if patient-pathogen risk <10% → single click option to change ABX																
	results (MRSA screen, sputum cultures) • Pseud risk $<10\% \rightarrow$ click to "change Zosyn to ceftriaxone" • MRSA risk $<10\% \rightarrow$ click to "stop vancomycin"																
Calastian 0	Name and the adviser	h it - li -	مدمد جاعات درام														
Selection & enrollment	Non–critically ill adults hospitalized with pneumonia on admission (based on billing codes w/ present on admission) Exclusion: Incarceration or transferred to ICU within 48h of admission																
Outcome							/ 7	/ / davis / tatal davis									
Outcome measures	Primary outcome: (1) Day	ys of exter	nded-spect	rum antibio	tics in first	72 hours		osyn x3 days = 6 total days)									
Outcome measures	Primary outcome: (1) Day Secondary outcomes: (2)	ys of exter Days of e	nded-spect mperic var	rum antibio nco, (3) days	tics in first of emperi	: 72 hours c antipseu	idomonal, (4)	safety outcomes below									
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