

Abstract Form	
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Project Title:	It Depends on the Vibes: An Investigation Into Resident Antibiotic Prescribing Practices
Research Category (please check one):	
Original Research	Clinical Vignette D Quality Improvement D Medical Education Innovation
Abstract	

## Intro

The CDC estimates that more than half of antibiotic prescribing events in hospitals are not consistent with recommended guidelines. Given the overall ubiquity of antimicrobials in the acute care hospital setting, efforts at curbing the inappropriate use of broad-spectrum antimicrobials have been difficult to implement. A noted challenge to this is a lack of insight into the heuristics and thought processes that influence the complicated decisions around antimicrobial use. Most recent studies investigating this topic have focused on attending physicians, with a paucity of investigation into physician trainees despite them representing a significant proportion of the prescribers at large academic institutions. A better understanding of the antimicrobial decision-making process specific to those in training could not only enhance residency educational initiatives, but also improve overall antibiotic stewardship for large academic hospitals.

## Methods

We performed a qualitative study with a constructivist paradigm employing semi-structured, in-person focus groups of Internal Medicine interns and residents. We asked participants to complete a general demographic pre-survey at the start of each focus group. We designed the focus group script after literature review and utilized open-ended questions to maximize depth of response, with the intention of creating a participant-driven dialogue on experiences with antibiotics. We conducted focus groups at the UCLA Ronald Reagan and Santa Monica Medical Centers in December 2023 through January 2024. Sessions were recorded, auto-transcribed, and edited for recording accuracy. Two researchers independently performed a thematic analysis of focus group transcripts. We resolved discrepancies through in-depth discussion and negotiated consensus.

## Results

We conducted three distinct focus groups, including a total of 25 residents (8, 9, and 8), of which 18 (72%) completed the demographic pre-survey. Of these 18 participants, there were 7 PGY-1 (38.9%), 8 PGY-2 (44.4%), and 3 PGY-3 (16.7%) residents, with 12 (66.7%) identifying as women, 5 (27.8%) as men, and 1 (5.6%) as non-binary. There were 13 (72.2%) Categorical residents, 3 (16.7%) Primary Care Track, and 2 (11.1%) Med/Peds. 11 (61.1%) participants had completed at least one Night Admitting Resident (NAR) rotation. Qualitative analysis of the focus groups identified many themes vital to the resident cognitive process when prescribing antibiotics, including: oral tradition in a tertiary center with a high case-mix index (the vancomycin/piperacillin-tazobactam paradigm); the role of ID consultants as expert educators and as a safety net; navigating the hierarchical challenges of academic medicine; and the uncertainty and consequences of antibiotic overuse and underuse. Understanding antibiotic duration is a key gap and an unmet need in their therapeutic decision making. Residents identified both internal and external resources that solidified their knowledge base (such as Firstline, ordersets and Up to Date). Lastly, senior residents felt that select experiences, such as working as the NAR, enabled them to explore different decision processes where having the space to see the consequences of antibiotic decision making was critical to their growth.

## Conclusion

This study identified several themes regarding resident decision making around antibiotic use. Further exploration of these themes may allow directed educational interventions to improve the comfort of antibiotic prescribing within the context of antimicrobial stewardship for resident trainees.