Antibiotic Prescribing Trends at a College Health Clinic During the 2025-2026 Academic Year

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Background

- Antimicrobial use is one factor driving drug resistance in microorganisms.[1]
- Nationally, at least 28% of antibiotics prescribed in outpatient settings are considered unnecessary.[2]
- Surveillance of antibiotic prescribing practices may reduce unnecessary utilization of these drugs.[3]

Objectives

- Establish a baseline for antibiotic prescribing at UHC.
- Estimate how often antibiotics are used in common diagnoses at UHC.
- Determine how often antibiotic prescriptions meet clinical guidelines at UHC.

Methods

- Retrospective study of 36,805 patient encounters at University Health & Counseling (UHC) in select clinics during the 2025-26 academic year.
- Classified each encounter into 1 of 20 diagnostic categories based on ICD-10-CM billing code.[4]
- Grouped each diagnostic code in 1 of 3 tiers corresponding to always, sometimes, or never indicating antibiotics.[4]
- Performed chart reviews on a tier-stratified sample of 350 encounters to determine appropriateness of antibiotic use and verify diagnosis and treatment.
- Calculated the proportion of antibiotic encounters and rates of antibiotic prescribing overall and within each category.

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Results

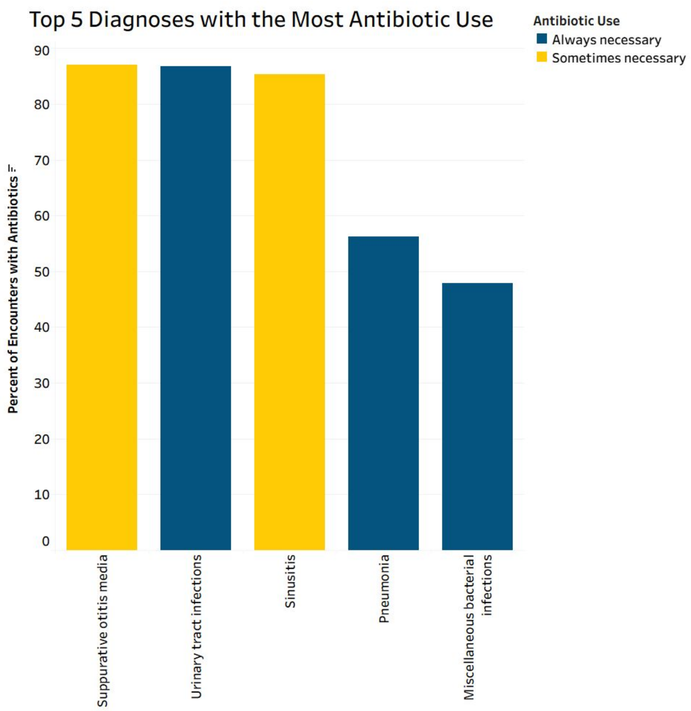

Figure 1: Diagnoses with the most antibiotic use

Tier	Follows Guidelines	Does Not Follow Guidelines	% Adherence
Always	38	1	97.4%
Sometimes	153	29	84.1%
Never	0	113	0%

Figure 2: Chart review results

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- 3,063 oral antibiotics prescribed at UHC during AY25-26.
- 7.8% of all UHC visits resulted in at least one antibiotic prescription.
- Encounters with diagnoses of suppurative otitis media had the highest prevalence of antibiotic prescription encounters at 87%, higher than encounters with diagnoses that almost always indicate antibiotics.
- 59.1% of chart reviewed encounters followed guidelines.
- Only 1 out of 39 encounters that required antibiotics did not receive a prescription when clinically necessary.
- 15.9% of encounters for diagnoses that *sometimes* indicate antibiotics received unnecessary prescriptions.
- All (113) chart reviewed encounters for diagnoses that *never* need antibiotic prescriptions but had them, were not justified.

Discussion

- At UHC, conditions that *always* need antibiotics are prescribed antibiotics below benchmarks in antimicrobial stewardship literature.[5,6]
- Some improvement is indicated in conditions where antibiotics are *sometimes* necessary, but the frequency of unnecessary antibiotic use is below national trends in outpatient clinics.[2]
- The greatest opportunity for improvement lies in conditions where antibiotics are *never* needed, as antibiotic use is rarely justified and these conditions make up the majority of patient encounters.

Conclusion

Overall, **antibiotic prescribing at UHC is low** compared to outpatient antimicrobial stewardship literature. However, chart reviews reveal that **clinical guideline adherence must be improved.** This could result in an estimated **reduction in oral antibiotic prescriptions** by over **1,000 prescriptions.**