Table 1. VAST 12-Month Operating Cost for Staffing Summary and Statistics

Site	Annual operating cost	Sessions	Clinical encounters	Average cost per session	Average cost per clinical encounter	Clinical encounters needed to break even
A	$28,922.32	61	109	$474.14	$265.34	56
B	$41,484.74	18	72	$2304.71	$576.18	81
C	$65,707.38	38	48	$1729.14	$1,368.90	127

characteristics combined with private-sector and Medicare reimbursements to evaluate the cost of implementation and number of clinical encounters needed to offset those costs (breakeven) for each site. **Results:** Three VASTs recorded 229 clinical encounters during 117 sessions (Table 1). Based on CPT codes, the approximate revenue per patient was $516.46. Site A, the only site to break even, had the most sessions and clinical encounters as well as the lowest operating costs. For Site B, a slight increase in the clinical encounters, which might be achieved by 3 additional VAST sessions, would help achieve breakeven. For Site C, increasing the number of clinical encounters to 3-4 per session would have helped their VAST break even without requiring a decrease in operating costs. **Conclusions:** The frequency of VAST sessions, volume of clinical encounters, and low operating costs all contributed the VAST at Site A achieving a financial break-even point within 12 months. Consideration of the potential number of clinical encounters and sessions will help other VASTs achieve financial sustainment, independent of cost-savings related to potential decreases in expenditures for antibiotics and antibiotic-related adverse events. These results also provide insight into possible adoption and diffusion of VAST-like programs in the Medicare hospital setting.

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Impact of an intervention that decreased aztreonam DOT on Enterobacterales' susceptibility to aztreonam

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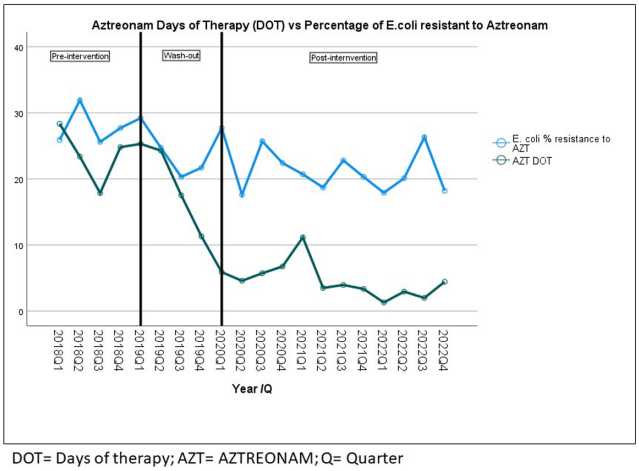
Background: Aztreonam (AZT) is frequently used for the treatment of Enterobacterales-related infections, particularly for patients with penicillin allergy. We aimed to analyze the impact over time of changes in AZT Days of therapy (DOTs) on AZT susceptibility from some Enterobacterales after a multifaceted intervention to improve antibiotic management at a



DOT= Days of therapy; AZT= AZTREONAM; Q= Quarter

Table 1. Changes in AZT DOT and E. coli resistance

	Pre Intervention Mean (SD)	Wash-out Mean (SD)	Post-Intervention Mean (SD)	Overall Mean (SD)	Change Before/after
AZT DOT	23.6 (4.4)	19.6 (6.5)	4.6 (2.6)	11.4 (9.3)	80% ↓
E. coli R to AZT (%)	26.6 (1.4)	23.9 (3.9)	21.5 (3.3)	23.3 (4.1)	19% ↓
Key: AZT= aztreonam; DOT= Days of therapy; SD= standard deviation					

Table 2. Linear regression for aztreonam days of therapy and selected Enterobacterales susceptibility to aztreonam

Simple linear regression					
Aztreonam DOT Independent variable					
				95.0% Confidence Interval for B	
	B	t	p-Value	Lower Bound	Upper Bound
E. cloacae resistant (%) to AZT	0.037	0.155	0.879	-0.46	0.533
E. coli resistant (%) to AZT	0.276	3.418	0.003*	0.106	0.446
K. aerogenes resistant (%) to AZT	-0.185	-0.492	0.628	-0.973	0.604
K. oxytoca resistant (%) to AZT	0.153	0.428	0.674	-0.597	0.902
K. pneumoniae resistant (%) to AZT	0.005	0.032	0.974	-0.296	0.306
M. morganii resistant (%) to AZT	0.02	0.09	0.929	-0.442	0.482
P. mirabilis resistant (%) to AZT	-0.016	-0.173	0.865	-0.205	0.174
S. marcescens resistant (%) to AZT	-0.162	-0.903	0.379	-0.537	0.214

Key: DOT= Days of therapy; AZT= aztreonam; B=slope

University Hospital in Florida. **Methods:** The study took place at a 560-lbed academic hospital in Miami, FL. A multifaceted intervention was implemented in this hospital to improve antibiotic management of patients with reported allergies to penicillin. The intervention included use of algorithm-based guidance, education, and feedback to providers. The analysis period spans from 2018 (pre-intervention) through 2022 (post intervention); 2019 was considered the wash-out period (Figure 1). Quarterly data for AZT-DOT and percentage of resistance to AZT for Enterobacterales were collected as part of the normal operations of the antimicrobial stewardship program (ASP) using the infection control module integrated in the electronic medical record (Epic Bugsy). DOT and Enterobacterales antibiotic resistance to AZT was analyzed using linear regression in SPSS. **Results:** We identified a decrease in DOT AZT and percentage of AZT resistance from E. coli during the study period (Table 1). This intervention led to AZT DOT's decrease from a quarterly average of 24 DOTs in 2018 levels to a sustained quarterly average of 4.3 DOTs for 2020 to Q2 2023 (decrease 80%) Antibiotic resistance to E. coli AZT changed from a 26.6% to 21.5% (19% decrease) (Table1). Simple linear regression identified a decrease in percentage of E. coli resistance to AZT associated with a decrease on AZT DOT (P-value 0.003), there was no association for other Enterobacterales. For each unit of decrease in AZT DOT there was 0.3% decrease in percentage of E. coli resistance to AZT (Table 2.) **Conclusions:** A decrease in AZT DOT during the observation period was associated with a decrease in E. coli resistance to AZT. Interventions aimed to decrease inappropriate antibiotic use are pivotal part of the fight against antimicrobial resistance; in our study we report a decrease in E. coli resistance to aztreonam related to decrease in the use of this antibiotic using education, guidance, and feedback to providers.

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Barriers and Facilitators to Optimal Antibiotic Prescribing on Discharge from the Hospital to Nursing Homes

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