antibiotics were administered in the office for pre-procedure prophylaxis. To enhance antibiotic prescribing in these specialized clinics, interventions should focus on non-visit prescriptions and provide education for APPs, alongside adjustments to default durations in electronic orders. Further evaluation is essential to assess the appropriateness of single doses for pre-procedure prophylaxis.

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Evaluation of Predictors Associated with Slow Clinical Response with Extension of Outpatient Parenteral Antimicrobial Therapy

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Background: Outpatient parenteral antimicrobial therapy (OPAT) provides a safe and effective alternative to prolonged hospitalization for patients with infectious diseases requiring elongated antimicrobial therapy. One study found that 35.6% of OPAT episodes met the composite definition for treatment failure, with unplanned extension of OPAT as the most common reason for treatment failure. Our study sought to identify factors predicting higher likelihood of extension of OPAT due to slow clinical response to treatment and determine how therapy extension relates to complications. **Method:** This retrospective cohort study included all patients aged ≥18 years discharged on OPAT between April 2022 and October 2022. Demographic, treatment, outcome, and complications data were extracted through chart review. The primary outcome was the proportion and predictors of OPAT extension due to slow clinical response to treatment. The secondary outcomes were OPAT complication rate, 30-day ED visit and 30-day readmission rates related to OPAT complications. We used univariable and multivariable logistic regression models for the primary outcome of slow clinical response requiring OPAT extension. Variables with $p < 0.1$ in the univariable analyses were included in the multivariable model. **Result:** 231 patients received OPAT during the six-month study. Among them, 40 (17.3%) patients required an extension of therapy. In univariable analysis, patients who had slow clinical response requiring extension of OPAT were more likely to have intraabdominal infection (odds ratio [OR], 2.435; 95% confidence interval[CI], 1.053–5.628), receipt of metronidazole (OR, 3.729; 95% CI, 1.413–9.842), and were more likely to be followed up through office visit (OR, 5.033; 95%CI, 1.164–21.759) or combination of office visit and telemedicine (OR, 2.223; 95%CI 1.041–4.747). Other variable comparisons are detailed in Figure 1. In the multivariable regression analysis, the independent predictor associated with extended of OPAT was follow-up via office visit (adjusted OR, 4.630; 95% CI, 1.024-20.694). Rates of complications related to intravenous access and antibiotic were similar between patients with and without extension; 15% vs. 11% (p=0.430) and 7.5% vs. 7.3% (p=1.000), respectively. There were no significant differences in 30-day ED visits and readmission rates between the 2 groups: 7.5% vs. 5.8%(p=0.715) and 12.5% vs. 7.3% (p=0.338). **Conclusion:** Our study highlights patient's office visit follow-up is associated with the OPAT extension due to slow clinical response. However, extended therapy did not result in a significant increase in complications or hospital readmissions. These findings suggest the importance of careful patient selection and monitoring for OPAT, potentially guiding more efficient and targeted healthcare practices.

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Figure 1. Characteristics and comparison of risk factors of Slow Clinical Response Requiring OPAT Extension

Characteristics	Slow Clinical Response with OPAT extension		Univariable regression		Multivariable regression	
	Yes n= 40	No n= 191	OR (95% CI)	*p* value	aOR (95% CI)	*p* value
Age in years, median (IQR)	63 (52, 78)	62 (52, 73)	1.005 (0.982 – 1.028)	0.679	-	-
Gender				0.969	-	-
• Female	15 (37.5)	71 (37.2)	Reference			
• Male	25 (62.5)	120 (62.8)	0.986 (0.488 – 1.994)			
Race				0.734	-	-
• White	30 (75.0)	148 (77.5)	Reference			
• Others	10 (25.0)	43 (22.5)	1.147 (0.550 – 2.533)			
Ethnicity						
• Non-Hispanic	38 (95.0)	173 (90.6)	Reference			
• Hispanic	2 (5.0)	18 (9.4)	0.506 (0.113 – 2.273)	0.374	-	-
Charlson comorbidity index						
• 0	5 (12.5)	21 (11.0)	Reference		-	-
• 1-2	8 (20.0)	49 (25.7)	0.868 (0.201-2.343)	0.547	-	-
• 3-4	8 (20.0)	55 (28.8)	0.611 (0.179 – 2.080)	0.431	-	-
• >5	19 (47.5)	66 (34.6)	1.203 (0.402 – 3.635)	0.735		
SUD	2 (5.0)	16 (8.4)	0.576 (0.127 – 2.609)	0.474	-	-
IVDU	0	9 (4.7)	0	0.999	-	-
Insurance						
• Commercial	13 (32.5)	66 (34.6)	Reference			
• Medicare	22 (55.0)	93 (48.7)	1.201 (0.565 – 2.555)	0.634	-	-
• Medicaid	4 (10.0)	28 (14.7)	0.725 (0.217 – 2.419)	0.601	-	-
• Others	1 (2.5)	4 (2.1)	1.269 (0.131-12.292)	0.837	-	-
Primary language						
• English	36 (90.0)	1175 (91.6)	Reference			
• Non-English	4 (10.0)	16 (8.4)	1.215 (0.384 – 3.849)	0.740	-	-
Penicillin allergy	5 (12.5)	34 (17.8)	0.660 (0.241 – 1.807)	0.418	-	-
Discharge location						
• Home	29 (72.5)	123 (64.4)	Reference			
• SNF	11 (27.5)	68 (35.6)	0.686 (0.323 – 1.459)	0.328	-	-
Indications						
• B&J	14 (35.0)	76 (39.8)	0.815 (0.400 – 1.660)	0.573	-	-
• Primary PSI	9 (22.5)	63 (33.0)	0.590 (0.265 – 1.314)	0.197	-	-
• SSTI	8 (22.0)	29 (15.2)	1.397 (0.585 – 3.332)	0.452	-	-
• IAI	10 (25.0)	23 (12.0)	2.435 (1.053 – 5.628)	0.037	2.181 (0.865 – 5.500)	0.098
• IE/CIED infection	5 (12.5)	17 (8.9)	1.462 (0.506 – 4.225)	0.483	-	-
• Others	5 (12.5)	24 (12.6)	0.994 (0.355 – 2.785)	0.991	-	-
Access						
• Central	30 (75.0)	141 (73.8)	Reference			
• Peripheral	10 (25.0)	50 (26.2)	0.940 (0.429 – 2.061)	0.877	-	-
Antibiotic class						
• Penicillin	8 (20.0)	40 (20.9)	0.944 (0.404 – 2.207)	0.894	-	-
• Cephalosporin	22 (55.0)	93 (48.7)	1.288 (0.650 – 2.554)	0.469	-	-
• Carbapenems	7 (17.5)	24 (12.6)	1.475 (0.588 – 3.707)	0.407	-	-
• Glycopeptides	8 (20.0)	43 (22.5)	0.860 (0.369 – 2.005)	0.728	-	-
• Metronidazole	8 (20.0)	12 (6.3)	3.729 (1.413 – 9.842)	0.008	2.091 (0.605 – 7.230)	0.244
• Others	4 (10.0)	28 (14.7)	0.647 (0.214 – 1.959)	0.441	-	-
Number of Antibiotics						
• 1	21 (52.5)	131 (68.8)	Reference			
• 2	17 (42.5)	56 (29.3)	1.894 (0.929 – 3.859)	0.079	1.490 (0.651 – 3.411)	0.345
• 3	2 (5.0)	4 (2.1)	3.119 (0.537 – 18.107)	0.205	1.390 (0.170 – 11.350)	0.758
Frequency						
• <=2 /day	22 (55.0)	103 (53.9)	Reference			
• >2 /day	18 (45.0)	88 (46.1)	0.958 (0.483 – 1.899)	0.901	-	-
Office visit						
• No (n=42)	2 (4.8)	40 (95.2)	Reference			
• Yes (n=189)	38 (20.1)	151 (79.9)	5.033 (1.164 – 21.759)	0.031	4.630 (1.024 – 20.694)	0.047*
Telehealth visit						
• No (n=161)	25 (15.5)	136 (84.5)	Reference			
• Yes (n=70)	15 (21.4)	55 (78.6)	1.484 (0.728 – 3.026)	0.278	-	-
Both office and telehealth visit						
• No (n=184)	27 (14.7)	157 (85.3)	Reference			
• Yes (n=47)	13 (27.7)	34 (72.3)	2.223 (1.041 – 4.747)	0.039	1.462 (0.645 – 3.312)	0.363
Time from hospital discharge to first OPAT follow up, days, median (IQR)	10 (7, 15)	9 (7, 12)	1.023 (0.984 – 1.063)	0.251	-	-
Missed appointment						
• 0	32 (80.0)	155 (81.2)	Reference			
• 1	6 (15.0)	21 (11.0)	1.384 (0.517 – 3.702)	0.517	-	-
• >1	2 (5.0)	15 (7.9)	0.646 (0.141 – 2.964)	0.574	-	-
Missing OPAT labs	4 (10.0)	32 (16.8)	0.549 (0.128 – 1.649)	0.285	-	-

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Implementing an Antimicrobial Stewardship Lecture Series for Family Medicine Residency Programs in South Carolina

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Background: Family medicine physicians are one of the leading prescribers of antimicrobials in both the inpatient and ambulatory setting, however appropriate education on antimicrobial stewardship (AS) is lacking. The Antimicrobial Stewardship Collaborative of South Carolina (ASC-SC)