Implementation of a standardized OPAT SmartForm was associated with improved post-discharge outcomes.

PROBLEM: The outpatient parenteral antimicrobial therapy (OPAT) plan was frequently omitted or incompletely communicated during transitions of care at our institution.

INTERVENTION: A standardized OPAT documentation tool (SmartForm) was developed in our electronic health record system for use by our inpatient Infectious Disease (ID) consult service.

Antimicrobial therapy		erapy (O	PAT) Reco	mmenda	tions			
IV access	PICC	tunnele	ed line di	alysis acces	ss midline	none	unknown/TBD	
IV Antimicrobial Rx to be	prescribed at discharg	ge 🗋	ampicillin		ceftriaxone	meropenem	piperacillin-tazobactam	
			ampicillin-	sulbactam	daptomycin	nafcillin	vancomycin	
			cefazolin		ertapenem	penicillin	other antibiotic	
			cefepime					
Duration of IV Rx		Days	Weeks	Fr	om date			Ċ.
Last date of IV Rx will be o	on							
This Date	is is not				dependent u	pon follow-up e	valuation in the Infectious	S Disease clinic.
The Patient	is is not				expected to r	need oral antibio	otics after the IV antibiotic	s finish
If needed, the long-term	oral antibiotic regime	en will be	determined	l at the ID f	follow-up visi	t		
PO Antimicrobial Rx to be	prescribed at discha	rge	🗅 a	amoxicillin		fluconazole	rifampin	
			а	moxicillin-o	clavulanate	levofloxacin	trimethoprim-sulfame	thoxazole
			ci	iprofloxacir	n	linezolid	vancomycin	
			d	oxycycline		metronidazole	other antibiotic	
Duration of PO Rx same a	s IV	Yes N	lo					
Duration of PO Rx		Days	Weeks					
From date		_		Ċ.	Last date of F	PO Rx will be on		
This Date	is is not				dependent u	pon follow-up e	valuation in the Infectious	s Disease clinic.
The Patient	is is not				expected to r	need long-term	oral antibiotic suppression	n for this infection
Lab monitoring	creatinine	CBC w	ith diff Al	T BMP	CMP van	comycin trough	CK ESR CRP lac	tic acid
Fax Lab Results to	🗋 U of U ID t	team at 8	801-585-73	15 SLC V	A ID team at	801-588-5949	the following ID provid	er
Infectious Disease O	utpatient Follow-	up						
Provider								
Follow up on date			J]				
Clinic	infectious	disease o	clinic at the	main U of	U hospital	U of U orthope	dic center	
	outside fa	cility						
Provider								
Follow up on date			4					
Clinic	infectious	disease o	linic at the	, main U of	U hospital	U of U orthope	dic center	
	outside fac	cility						



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RESULTS

Post-intervention patients were younger but otherwise similar.

Pre-Intervention (n = 74)	Post-Intervention (n = 231)	P-val
60.0 (14.4)	55.6 (16.1)	0.03
49 (66.2)	130 (56.3)	0.13
3 (1-7)	3 (1-6)	0.19
		0.04
40 (54.1)	148 (64.1)	
14 (18.9)	20 (8.7)	
20 (27.0)	63 (27.3)	
		0.34
37 (50.0)	92 (39.8)	
22 (29.7)	93 (40.3)	
12 (16.2)	39 (16.9)	
2 (2.7)	2 (0.9)	
1 (1.4)	5 (2.2)	
	Pre-Intervention $(n = 74)$ 60.0 (14.4)49 (66.2)3 (1-7)40 (54.1)14 (18.9)20 (27.0)37 (50.0)22 (29.7)12 (16.2)2 (2.7)1 (1.4)	Pre-Intervention (n = 74)Post-Intervention (n = 231) $60.0 (14.4)$ $55.6 (16.1)$ $49 (66.2)$ $130 (56.3)$ $3 (1-7)$ $3 (1-6)$ $40 (54.1)$ $148 (64.1)$ $14 (18.9)$ $20 (8.7)$ $20 (27.0)$ $63 (27.3)$ $37 (50.0)$ $92 (39.8)$ $22 (29.7)$ $93 (40.3)$ $12 (16.2)$ $39 (16.9)$ $2 (2.7)$ $2 (0.9)$ $1 (1.4)$ $5 (2.2)$

Post-intervention: more OPAT notes, more patients enrolled in OPAT...



CONCLUSION: Implementation of an OPAT SmartForm was associated with improved documentation, increased enrollment in the OPAT program, and reduction in hospital readmissions. There was no change in laboratory monitoring (data not shown).

- METHODS: Pre- vs post-intervention comparison of Documentation of an OPAT progress note Enrollment in the OPAT program
- **Outpatient laboratory monitoring frequency** Sixty-day unplanned hospital readmissions

STATISTICAL ANALYSIS: Patient groups from pre- and post-intervention were compared using the chi-square statistic. A multivariate regression was done to analyze the effect of the intervention on readmissions controlling for potential confounders A p-value < 0.05 was considered statistically significant.





Fewer readmissions.

P-Chart - Average Percentage of Patients with Unplanned 60-day Readmissions Before and After Implementation of an OPAT SmartForm



INFECTIOUS DISEASES, PHARMACY, QUALITY



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