

Improving Sedation Service Productivity by Reviewing “Lost” Sedation Opportunities: A Proposed Quality Improvement Project

Authors: DJ Sedillo¹, PD Scherrer¹, Crystal Davenport², Krista Preisberga³, J Reynolds¹

Affiliation: ¹Section of Pediatric Sedation Medicine & ²Section of Pediatric Hospital Medicine, The Children’s Hospital of San Antonio & Baylor College of Medicine, San Antonio, TX and ³Section of Pediatric Hospital Medicine, Texas Children’s Hospital & Baylor College of Medicine, Houston, TX

Introduction: Pediatric sedation programs continuously strive to improve the quality and the efficiency of the service they provide to the communities that they serve. A major source of consternation to the sedation services are the “lost” sedation opportunities, which are those instances in which the sedation team is idle because the patient does not require their services: either due to cancellation of the procedure (and/or the sedation), the patient was able to complete the procedure without sedation, or the patient simply did not show up as scheduled. These reasons for “lost” sedation opportunities can be classified in many ways: by whether the reason was for an avoidable vs unavoidable reason or by broad categories related to family, patient, facility, referral source, or financial issues (Table 1). The Society for Pediatric Sedation could provide tools to its membership to conduct a quality improvement project.

Methods: This project includes a project charter template (Figure 1) and spreadsheet templates to allow the user to input their data, based upon their own needs. It allows the project team to narrow their focus, which helps guide the project, the reporting of the results, improvement in their service, and possibly manuscript preparation. More specifically in terms of the spreadsheet, the user chooses their own monthly periods to enter both baseline and post-intervention data. The user then classifies the lost opportunities utilizing standardized codes and terminology. The user can choose their own rapid-cycle interventions using the PDSA model (process-do-study-act) to improve their services’ processes. Lastly, the project features a reporting mechanism with tables (Table 2) and graphs (Figure 2).

Discussion:

Hopefully this can be one of many quality improvement projects available for SPS members as the Society strives to improve the quality of the sedation experience for all children.

Table 1. Reasons for “Lost” Sedation Opportunities

	Avoidable	Unavoidable
Family-related	<ul style="list-style-type: none">• Violation of NPO guidelines• Late or no show without notification• Refusal of procedure/sedation• Wish to postpone procedure• Lack of transportation• Family/guardian not available for consent	<ul style="list-style-type: none">• Inclement weather• Family emergency (social/medical)
Medically-related	<ul style="list-style-type: none">• Procedure completed without sedation• Incomplete medical evaluation• Medical documentation not availability	<ul style="list-style-type: none">• Procedure no longer medically indicated• Worsening medical condition• Acute illness precludes safe sedation• Critical laboratory result• Paired with other OR case• Inability to obtain venous access• Airway issue• Medical condition(s) requires anesthesiologist
Facility-related	<ul style="list-style-type: none">• Scheduling error• Pre-procedure instructions not properly communicated to family	<ul style="list-style-type: none">• “Bumped” due to emergency/life-saving prioritization• Equipment failure• Service is behind schedule• Appropriate sedation service personnel not available
Referral source	<ul style="list-style-type: none">• Cancelled by office/provider NOS• Procedure previously performed	<ul style="list-style-type: none">• Provider not available
Financial-related	<ul style="list-style-type: none">• Lack of prior authorization• No insurance coverage	<ul style="list-style-type: none">• Inability to pay copay

Lost Sedation Opportunities																	
Avoidable vs Unavoidable	Code	Month	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Total	Avg.	%tage
Avoidable	CWS	Completed without sedation	11	18	14	12	14	12	10	14					105	13	28%
Avoidable	NSH	Patient no show	12	14	12	13	15	15	14	9					104	13	28%
Avoidable	FPP	Cancelled - Family wishes to postpone	6	5	5	2	3	4	3	3					31	4	8%
Avoidable	CXO	Cancelled - By office/provider	1	3	0	1	1	3	2	1					12	2	3%
Avoidable	NPO	Cancelled - NPO violation	1	4	2	0	1	2	0	0					10	1	3%
Avoidable	AUT	Cancelled - Lack of ins. authorization	1	2	1	1	1	1	1	3					11	1	3%
Avoidable	PPP	Cancelled - Procedure previously performed	1	1	1	1	0	1	0	0					5	1	1%
Avoidable	FLT	Cancelled - Lack of transportation	1	0	0	1	1	2	0	0					5	1	1%
Avoidable	NIC	Cancelled - No insurance coverage	0	1	0	2	0	1	0	0					4	1	1%
Avoidable	PPI	Cancelled - Pre-proc. Instructions not clear	0	0	0	0	0	0	0	1					1	0	0%
Avoidable	FRP	Cancelled - Family refused procedure	0	0	1	0	0	0	0	0					1	0	0%
Unavoidable	ILL	Cancelled - Acute illness	1	2	6	5	5	4	11	7					41	5	11%
Unavoidable	IND	Cancelled - Procedure no longer indicated	0	0	0	2	1	1	3	0					7	1	2%
Unavoidable	FEM	Cancelled - Family emergency	1	0	0	1	1	0	2	1					6	1	2%
Unavoidable	WMC	Cancelled - Worsening medical condition	1	2	0	0	0	1	0	1					5	1	1%
Unavoidable	EQF	Cancelled - Equipment issue(s)	4	0	0	1	0	0	0	0					5	1	1%
Unavoidable	CLR	Cancelled - Critical lab result	0	1	0	0	0	0	3	0					4	1	1%
Unavoidable	WEA	Cancelled - Weather issues	0	1	2	0	0	0	0	1					4	1	1%
Unavoidable	FIN	Cancelled - Family unable to pay co-pay	0	0	0	0	1	1	1	0					3	0	1%
Unavoidable	VEN	Cancelled - Unable to obtain venous access	0	0	0	0	1	1	0	0					2	0	1%
Unavoidable	ANE	Cancelled - Requires anesthesiologist	0	1	0	0	0	0	0	0					1	0	0%
Unavoidable	POR	Cancelled - Paired with other OR case	0	0	0	1	0	0	0	1					2	0	1%
Unavoidable	BEH	Cancelled - sedation team behind schedule	0	1	0	0	0	0	0	0					1	0	0%
Unknown	UNK	Cancelled - Unknown reason	0	0	1	1	1	0	0	1					4	1	1%
Unknown	OTH	Cancelled - Other	0	0	0	0	0	0	0	0					0	0	0%
	SP1	Cancelled - Special #1	0	0	0	0	0	0	0	0					0	0	0%
	SP2	Cancelled - Special #2	0	0	0	0	0	0	0	0					0	0	0%
		Totals	41	56	45	44	46	49	50	43					374		100%

[illegible]