

Quality Story 2

Improving Sedation Service Productivity by Reviewing "Lost Sedation Opportunities"

Description:

Pediatric sedation services (PSS) continuously strive to improve the quality and the efficiency of the service that they provide but a major source of consternation to the sedation services are the "lost sedation opportunities" (LSO), which are those instances in which the sedation team is idle because the patient does not require their services: this could be due to the procedure not occurring as planned, for various reasons, or the patient did not require sedation to complete their procedure. By collating the data on all cases that did not occur as scheduled, and then categorizing them in a uniform and logical manner (Figure 1), one can start to develop solutions to address the issues that influence a service's productivity and efficiency.

Goal:

To collate and categorize our pediatric sedation service's LSO to identify the extent of the problem, and to develop strategies to address issues related to structure and function of our program. This project should improve the overall efficiency and productivity of our program.

IOM Quality Domains:

This project relates to the Institute of Medicine's quality domains of providing patient-centered service while being efficient and providing equitable care.

Metrics Measures:

Every scheduled sedation case that does not occur was identified. Gathered data included the type of procedure and the reason for cancellation or postponement. Each case was coded and then categorized as to whether it was avoidable or unavoidable. The rate of lost opportunities for each month were normalized to the total number of scheduled cases.

Baseline Results:

As displayed in Figure 2 of our baseline of 11 months, we averaged 46 lost opportunities each month without much monthly variation. This was approximately 30% of all of the scheduled cases. We found that 77% were categorized as "avoidable" including patient "no-show" and completed without the services of the PSS (each 28% of the total cases). Approximately 23% of the cases were considered "unavoidable" and mostly included children with acute illness. These cases peaked in the winter months of January and February.

Intervention(s):

Our first intervention is to measure the effect of having a dedicated scheduler with the PSS. Our second intervention is to develop a better triage tool to identify the children who could complete their MRI scan with the assistance of our Child Life Specialists and the video goggles, and not require the PSS. Additionally, we would like to better match up the needs of the child and their procedure with either the procedural sedation service or the anesthesia service.

Challenges:

We do not feel that we can have a significant impact on reducing the "unavoidable" cases, but hopefully we can improve upon the "no show" cases and to screen out those children who could complete their procedure without sedation.

Figure 1.

Reasons for "Lost" Sedation Opportunities with coding										
Category	Code	Avoidable	Code	Unavoidable						
Family-related	NPO	Violation of NPO guidelines	WEA	Inclement weather						
	NSH	Late or no show without 24 hr. notification	FEM	Family emergency (social/medical)						
	FRP	Refusal of procedure/sedation								
	FPP	Wish to postpone/reschedule procedure								
	FLT	Lack of transportation								
	CON	Family/guardian not available for consent								
Medically-related	cws	Procedure completed without sedation	IND	Procedure no longer medically indicated						
	MEV	Incomplete medical evaluation	WMC	Worsening medical condition						
	DOC	Medical documentation not availability	ILL	Acute illness precludes safe sedation						
			CLR	Critical laboratory result						
			VEN	Inability to obtain venous access						
			AWI	Airway issue						
			ANE	Medical condition(s) requires anesthesiologist						
	SCH	Scheduling error	LSP	"Bumped" due to emergency/life-saving prioritization						
Facility-related	PPI	Pre-procedure instructions not properly communicated to family	EQF	Equipment failure/issues						
			BEH	Service is behind schedule						
			SSP	Appropriate sedation service personnel not available						
Referral source	СХО	Cancelled by office/provider NOS	PNA	Provider not available						
neierrai source	PPP	Procedure previously performed	PINA	FIOVIDEI IIUL AVAIIADIE						
	AUT	Lack of prior authorization								
Financial-related	NIC	No insurance coverage	FIN	Inability to pay copay/total cost						
	FIN	Inability to pay copay/total cost								

Figure 2.

Avoidable	Code	Description	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17
	CWS	Completed without sedation	11	18	14	12	14	12	10	14	23	8	4
	NSH	Patient no show	12	14	12	13	15	15	14	9	14	9	16
	FPP	Cancelled - Family wishes to postpone	6	5	5	2	3	4	3	3	0	6	8
	CXO	Cancelled - By office/provider	1	3	0	1	1	3	2	1	2	1	0
	NPO	Cancelled - NPO violation	1	4	2	0	1	2	0	0	0	2	1
	AUT	Cancelled - Lack of ins. authorization	1	2	1	1	1	1	1	3	0	2	1
	PPP	PP Cancelled - Procedure previously performed		1	1	1	0	1	0	0	0	0	1
	FLT Cancelled - Lack of transportation NIC Cancelled - No insurance coverage PPI Cancelled - Pre-proc. Instructions not clear		1	0	0	1	1	2	0	0	0	0	0
			0	1	0	2	0	1	0	0	1	2	1
			0	0	0	0	0	0	0	1	0	0	0
	FRP	Cancelled - Family refused procedure	0	0	1	0	0	0	0	0	0	0	0
		Subtotals	34	48	36	33	36	41	30	31	40	30	32
Unavoidable	Code	Description	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17
	ILL	Cancelled - Acute illness	1	2	6	5	5	4	11	7	6	3	6
	IND	Cancelled - Procedure no longer indicated	0	0	0	2	1	1	3	0	0	1	0
	FEM	Cancelled - Family emergency	1	0	0	1	1	0	2	1	0	1	0
	WMC	Cancelled - Worsening medical condition	1	2	0	0	0	1	0	1	1	0	0
	BCC	Cancelled - Bumped by critical cases(s)	0	0	0	0	0	0	0	0	0	0	0
	EQF	Cancelled - Equipment issue(s)	4	0	0	1	0	0	0	0	0	0	0
	CLR	Cancelled - Critical lab result	0	1	0	0	0	0	3	0	0	5	2
	WEA	Cancelled - Weather issues	0	1	2	0	0	0	0	1	0	0	0
	FIN	Cancelled - Family unable to pay co-pay	0	0	0	0	1	1	1	0	0	0	0
	VEN	Cancelled - Unable to obtain venous access	0	0	0	0	1	1	0	0	0	0	0
	ANE	Cancelled - Requires anesthesiologist	0	1	0	0	0	0	0	0	0	0	0
	POR	Cancelled - Paired with other OR case	0	0	0	1	0	0	0	1	0	0	1
	BEH	Cancelled - sedation team behind schedule	0	1	0	0	0	0	0	0	0	0	1
		Subtotals	7	8	8	10	9	8	20	11	7	10	10





Figure 4.

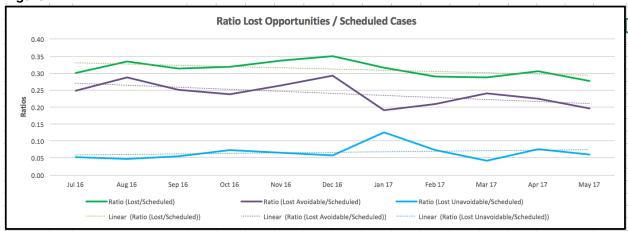


Figure 5.

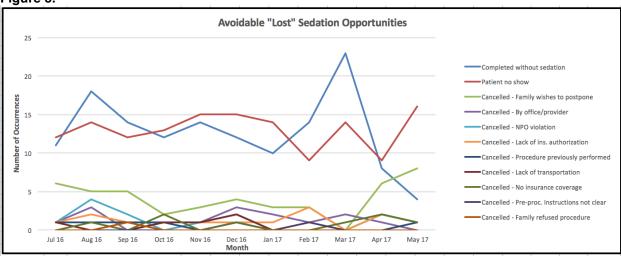


Figure 6.

