

NIH Surgical Services Update: 2019

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Review of “Vision for 2018”

“Re-dedicate the SAC as the primary NIH body responsible for...”

1. Surgical (Peri-Operative) Quality

2. Efficiency & Utilization

3. Contingency Planning



Review of “Vision for 2018”

1. Surgical (Peri-Operative) Quality

- *Critical review of adverse events, near-misses, etc.*
- *Assessment of competency, maintenance of skills (anesthesia & surgery)*
- *Outcomes & peer review processes to support professional development & organizational advancement*

SAC: Quality Working Group

- Bi-weekly surgical case review
 - Structured case and peer review
 - Real-time engagement of near misses and adverse events
- Thematic issues for quarterly NIH-wide surgery conference
 - Massive Transfusion Protocol
 - Best practices for intravenous PCA monitoring
 - Uniform management of Obstructive Sleep Apnea
- Surgery planning meeting
 - Integrated effort by DPM, CCND, Surgery
 - Concise, weekly review of planned operative cases
 - Pre-op concerns, intra-operative needs, patient disposition

*Coordinated
responses by
DPM, CCND,
Surgery*

Capturing Surgical Outcomes

- Previous methods not centralized or standardized
- Outcomes Data are intended to:
 - Demonstrate quality care
 - Improve patient outcomes
 - Identify outliers (*positive & negative*)
 - Identify areas for standardization
 - Support peer review
- Surgical Outcomes Data project
 - Near completion with phased introduction starting July 2019



Example of Surgical Outcomes

The Event and its Severity

Grading: Uniform definitions established, validated and adopted¹

- Gr 1= deviation from normal without need for intervention beyond routine meds or bedside treatment
- Gr 2= requires pharmacotherapy, such as antibiotics, or blood transfusion
- Gr 3= requires surgical, endoscopic, or radiological intervention
- Gr 4= life-threatening, requiring ICU management; may result in single or multi-organ dysfunction
- Gr 5= mortality

The event (complication):

- Patient-specific
- Procedure-specific
- Operation (encounter)-specific
- Surgeon-specific



¹Dindo et al. *Ann Surg* 2004;240(2):205-13

Example of Surgical Outcomes

Surgical Complications Database List (Past 6 Months)

Surgical Complications Database List (Past 6 Months)											
				Group			Totals				
				Grade 1 and 2			325				
				Grade 3			52				
				Procedures			382				
				Operations			174				
MRN	Patient ID	Last Name	First Name	SRG_ID	Surgery Date	Complication Date	Complication	Grade	COMPL_ID		
	126			283	1/8/2019 0:00	1/9/2018 0:00	Tachycardia	2	542		
	126			283	1/8/2019 0:00	1/10/2018 0:00	Fever	1	543		
	126			283	1/8/2019 0:00	1/10/2018 0:00	Tachycardia	2	544		
	126			283	1/8/2019 0:00	1/13/2018 0:00	Anemia	2	546		
	126			283	1/8/2019 0:00	1/13/2018 0:00	Nausea	1	545		
	171			267	1/2/2019 0:00	1/12/2018 0:00	Diarrhea	1	484		
	189			246	1/9/2019 0:00	1/10/2019 0:00	Hypotension	2	504		
	189			246	1/9/2019 0:00	1/11/2019 0:00	Hypoglycemia	2	505		
	190			247	1/9/2019 0:00	1/10/2019 0:00	Anemia	2	507		
	190			247	1/9/2019 0:00	1/10/2019 0:00	Fever	1	506		
	190			247	1/9/2019 0:00	1/15/2019 0:00	Fever	1	508		

Data Specificity

- Report to specific service/specialty (*multiple surgeons*)
- Report data to a specific **surgeon** with:
 - Organ-specific complications (e.g. respiratory tract)
 - Procedure-related complications (e.g. gastrectomy)
 - Quality indicators (e.g. catheter-associated urinary tract infection)

Outcomes Report

	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Surg. ID	Surgery Date	Surgery Indication	Sur	Procedure C	Procedure Name	Proc	Body Site	Location	Comp. ID	Complication Date	Complication	Grade	Surgeon
31	10		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	10		3 Ventricular tachycardia	2	Davis
35	10		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	11		3 Ileus	1	Davis
48	13		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	13		3 Psychiatric, other (Trans	1	Davis
72	19		Risk Reducing		Primary	Gastrectomy, total		Stomach, Mucosa only	N/A	16		3 Fever	1	Davis
75	19		Risk Reducing		Primary	Gastrectomy, total		Stomach, Mucosa only	N/A	43		3 Intra-abdominal hemorr	3	Davis
78	19		Risk Reducing		Primary	Gastrectomy, total		Stomach, Mucosa only	N/A	42		3 Splenic vein thrombosis	3	Davis
566	56		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	79		3 Fever	1	Davis
606	71		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	99		3 Nausea	1	Davis
609	71		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	100		3 Vomiting	1	Davis
645	71		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	102		3 Fever	1	Davis
648	71		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	369		3 Tachycardia	2	Davis
651	71		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	625		3 Abdominal pain	1	Davis
654	76		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	103		3 Wound infection	3	Davis
656	77		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	104		3 Fever	1	Davis
659	77		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	105		3 Nausea	1	Davis
662	77		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	370		3 Vomiting	1	Davis
665	77		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	371		3 Cough	2	Davis
668	77		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	372		3 Hypoxia	2	Davis
671	77		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	373		3 Infection, other (Haemo)	2	Davis
720	84		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	107		3 Cough	1	Davis
721	84		Risk Reducing		Primary	Gastrectomy, total		Abdomen/Pelvis	Body	108		3 Vomiting	1	Davis

Outcomes Reporting

Outcomes report, 12-month period

Total Operations (patients)	Total Procedures	Grade 1-2	Grade 3-4
157	375	275	47

Gastrectomy-specific, major (\geq grade 3) adverse events

Total Operations (patients)	Total Procedures	Grade 3-4	Grade 5
28	28	18	0

7 patients experienced at least one major (\geq grade 3) adverse event:

- Anastomotic leak
- Sepsis
- Small bowel obstruction
- Wound hematoma

Thank you

