

SCOAP Report: Q1 2009 Hospital XX Thanks for taking the time to be part of the Surgical Care and Outcomes Assessment Program (SCOAP). This report is the product of years of work by hundreds of surgeons and quality improvement experts from hospitals all over Washington State. SCOAP was created by surgeons just like you, with the single goal of improving the delivery of surgical care. While lots of folks are busy telling surgeons what qualifies as a "never event", what we have to do to get payment for the care we deliver and what boxes we have to be check off to meet certain standards of quality, SCOAP stands in distinction. SCOAP is <u>surgeons</u> *defining* best practice, convincing their systems to *track* on the use of these best practices and then working through interventions to actually *deliver* these best practices. We believe this is the future of surgical QI because we are harnessing the collective knowledge and energy of clinicians to tackle the hard issues in healthcare like variability, cost, and appropriateness of care.

Many of us have become conditioned to be wary about data that is collected about our patients. I'm often asked if SCOAP is made for profiling doctors, if it's a scorecard, a grading system, a marketing device, or an insurance scheme. Surgeons sometimes want to know if they'll be "dinged" for underperformance of this or that metric in SCOAP and whether they'll be "punished" for their outcomes. SCOAP is none of these things and SCOAP will never be any of these things. I can say this with confidence because SCOAP is run by surgeons and we have a legal protection and obligation that restricts the use of these data for anything but improving the care of our patients. SCOAP is surgeons and their systems doing the right thing, for the right reasons. It's colleagues learning from colleagues about what does and does not work and acting proactively, not simply responding to the next top-down initiative. Surgeons and systems participate in SCOAP voluntarily and thanks to our community's vision, in just three years over 50 hospitals have joined. This is a truly remarkable accomplishment.

It's been an exciting year for SCOAP. In January we introduced the SCOAP Surgical Checklist, bringing together a coalition of healthcare stakeholders (including WSHA, ACS, WSMA, WSNA, CRNA associations and many others) to encourage its use. Now at over 40 hospitals we aim to have a checklist in every OR by the end of the year. This work has won the endorsement of Governor Gregoire as well as the business community. The Washington Business Round Table, a consortium of the main businesses that drive our State's economy, stands behind us as the program that "has the greatest potential to improve health outcomes and reduce costs".

This year's goals are to work towards universal enrollment, to help hospitals understand the business case for SCOAP and to be more of a vital tool for clinicians and hospital administrators. SCOAP is a work in progress led by surgeons like you and we depend on your involvement. The report you're holding today reflects the evolving interests of the group by including risk adjusted outcomes, more clinical details for surgeons and data on return on investment for administrators. We hope to hear from you about your ideas, your vision and how we can better meet your needs. The healthcare community in Washington State has a lot to be proud of with the success of SCOAP. Thank you for your involvement!

Dave Flum, MD, Medical Director, SCOAP

Table of Contents

Overview	4
Section 1-Performance at a Glance	5
O/E Mortality	8
O/E Operative Intervention	9
O/E Non-Operative Intervention	10
O/E Surgical Site Infections	11
Section 2-Detailed Procedural Data	13
Elective Colon	15
Non-Elective Colon	19
Elective Rectal	22
Non-Elective Rectal	26
Gastric Bypass	29
Adjustable Banding	32
Sleeve Gastrectomy	35
Appendectomy	38
Upcoming SCOAP Modules	40
Pediatric	40
Vascular	40
Pancreas	40
Esophagus	40
Liver	40
Outpatient Surgery	40
Section 3-Resource Impact Data	41
Use of Testing within 72 Hours of Admission	44
Use of Diagnostic Testing and Imaging during Hospitalization	45
Use of Expensive Medications	46
Use of Expensive Supplies	47
Length of Stay	48
Appendices	50

Overview

SCOAP is a grassroots, surgeon-led quality-improvement program working across Washington State to improve outcomes in surgical care. SCOAP surgeons and hospitals define, track and deliver higher quality and more efficient care through benchmarking and intervention. The SCOAP community helps develop and foster best practices through benchmarking, collaboration and intervention.

The quarterly report is an important collaborative tool. This report has undergone significant revision based on feedback we received from the SCOAP community. The purpose of this revised report is to ensure that all stakeholders (QI teams, clinicians and administrators) see the value of SCOAP at your institution.

The report is divided into three sections: 1) Performance "at a glance" using observed/expected ratios of outcomes for all procedures evaluated, 2) Detailed clinical data on each procedure focusing on process of care and including risk-adjusted outcomes, and 3) Resource utilization data that focuses on SCOAP-driven reductions in the use of costly supplies and unrecoverable expenditures.

Section 1 *Performance at a glance*

Benchmarking is an important component of SCOAP. In discussing prior reports with clinicians and QI personnel it became clear that providing a summary measure of risk-adjusted outcomes that could be interpreted "at a glance" was valued. Section 1 provides observed/ expected (O/E) ratios for in-hospital mortality, reoperative complications, major non-reoperative morbidity and surgical site infections. The O/E data is color coded so teams can quickly assess if they are an outlier: red indicates a hospital is more than one standard deviation above the mean (worse than average) and there is an immediate opportunity for improvement, green indicates that a hospital is one standard deviation below the mean (better than average) and gray indicates that improvements can be made compared to the benchmark but that the site is not statistically distinguishable from the mean. These data give you a snapshot of performance over time in SCOAP and helps you compare your hospital's performance to the average. This section also shows you how your hospital is performing over time which may be relevant to ongoing QI initiatives.

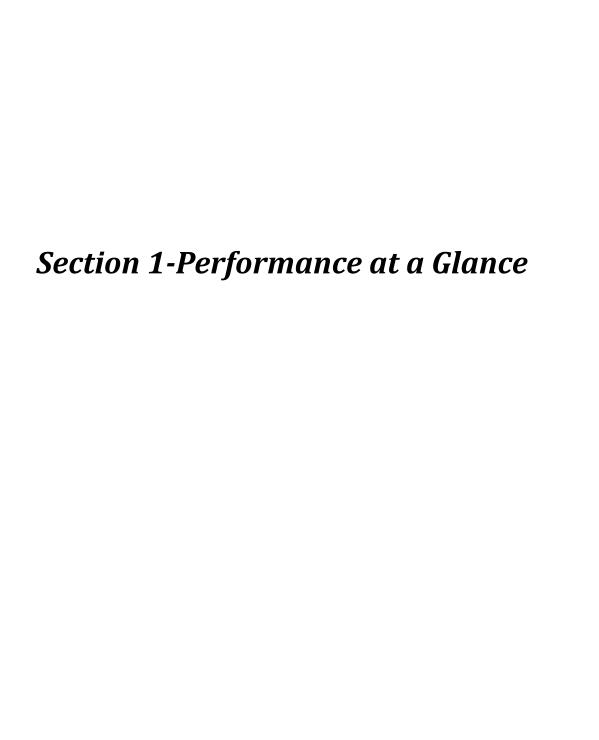
Section 2 Detailed Procedural Data

Outcomes and process of care measures in greater detail and by specific procedure are found in this section. Because surgeons also told us they did not want to simply be compared to "the mean", where appropriate SCOAP provides benchmarks (the performance of the "top 10%") as a comparator. This section of the report is designed to be useful and user-friendly by applying color-coding to measures based on "action needed". The new format (red-negative outlier [one standard deviation from average], yellow-under-performance [compared to average], grey [at or above average but not at "achievable 10%" benchmark] and green-at or above "achievable 10%" benchmark) allows teams to efficiently focus on the important targets for performance improvement. This section also includes risk-adjusted outcomes on specific measures to help teams see the importance of process control. Data on underperformance are used by teams to improve patient care.

Section 3 Resource Utilization Data

SCOAP helps hospitals deliver high quality care in a more efficient manner, improving the bottom line and patient care at the same time. This section focuses on SCOAP metrics that have direct measureable financial impact on hospital "bottom lines" such as the avoidance of un-billable preoperative testing, unnecessary diagnostic testing, and use of expensive OR supplies and medications when there are less expensive, equivalent options. This section helps hospital administrators see the return on their investment in SCOAP.

Changes in this report make SCOAP a more vital tool to improve the quality and efficiency of surgical care within your organization.



Confidential coordinated quality improvement information under RCW 43.70.510. Do not disclose, reproduce, or distribute

without permission.



Observed/expected (O/E) ratios

This section shows O/E ratios for overall in-hospital mortality, re-operative intervention, non-operative intervention and surgical site infections. The observed/expected (O/E) ratio is a convenient way to see the performance of a site compared to the average. These ratios use the average, risk-adjusted performance of the group as a comparator and many find these easily interpretable "at a glance".

Interpreting the O/E figures:

For the following figures the y-axis represents the ratio of observed/expected (O/E) outcomes. The observed rate is calculated as the actual number of patients who experienced an event divided by the total number of cases. The expected rate is the number of patients at an individual site predicted to experience an event based on the patient population. Expected rates were predicted using a logistic regression model that incorporated all cases (Appendectomy, Bariatric & Colon/Rectal) from Quarter 1 2006 through Quarter 4 2008.

The first figure on each page illustrates the performance of SCOAP hospitals that have submitted at least 100 cases between Quarter 1 2006 and Quarter 4 2008. We picked 100 cases because if we included sites with very low numbers (i.e 5) then even a single event might overestimate the rate (i.e 1/5 or 20%). To include as many sites as possible we used 3 years of data. Future reports may vary this time window based on number of cases. This first figure shows SCOAP performance over a larger period of time to provide a more robust estimate of performance but may not reflect changes your system has implemented. To reflect more recent trends, the second figure on each page illustrates the performance of your hospital over time.

The second figure on each page illustrates the performance of a single hospital over time.

95% confidence intervals describe the problem of reliably estimating a site's event rate. The 95% confidence interval is the likelihood that the "real" value falls within this range. In these figures we calculate 95% confidence interval for each site and use it to determine if the estimates for each hospital are statistically different from the expected value. While helpful "at a glance" O/E ratios are limiting because they compare sites to average (and average is not the goal of most hospitals) and because they may be falsely reassuring or alarming. A hospital with a seemingly high or low rate of an adverse event but a small number of cases may not show as a "significant" outlier because of wide confidence intervals. This rate may be a real problem that will only be proven as more cases are gathered or simply an aberration that will look more like the average as more cases are gathered. Because rates of infrequent events (like postoperative deaths) are difficult to track using O/E ratios, sites that contribute a small number of cases have to wait until the data are robust enough for this calculation. Hospitals just starting in SCOAP, or who have very low volume of cases, will not have site-specific trend figures or find themselves on the O/E chart until a sufficient number of cases has been gathered.

Key for interpretation

Gray:

Sites where the 95% confidence interval around the O/E ratio includes 1.0. These sites are performing as expected based on their risk adjusted profile and are not statistically distinguishable from the average. Since none of us are striving to be average, surgical teams at hospitals in the gray zone should dig into the data in Section 2 to understand how they can improve and become a better performing outlier.

Green:

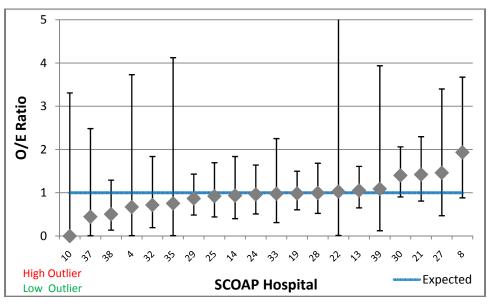
Sites where the O/E ratio and the 95% confidence interval are less than 1.0. These sites are performing statistically better than expected (low outlier) based on their risk adjusted profile.

Red:

Sites where the O/E ratio and the 95% confidence interval are greater than 1.0. These sites are performing statistically worse than expected (high outlier) based on their risk adjusted profile. A site should pay particular attention to this status point and consider immediate action. The procedural data in Section 2 should be used to identify where and how to improve performance.

O/E Mortality

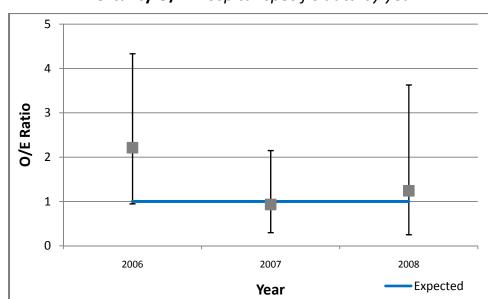
The figure below shows O/E ratios for in-hospital mortality. The O/E ratio is plotted on the y-axis. The SCOAP hospitals are listed on the x-axis. The regression model incorporated all cases (Appendectomy, Bariatric & Colon/Rectal) from Quarter 1 2006 through Quarter 4 2008. Sites included in the figure reported at least 100 operations during that timeframe.



Mortality O/E: 2006 through 2008 data

Data for 2006 through 2008 show no outliers for in-hospital mortality.

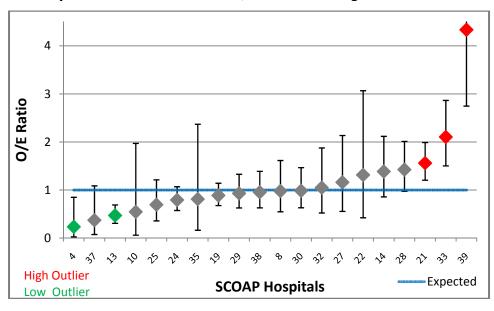
The following figure illustrates your hospital's performance over time



Mortality O/E: Hospital-specific data by year

O/E Operative Intervention

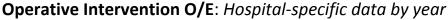
The figure below shows O/E ratios for operative intervention. The O/E ratio is plotted on the y-axis. The SCOAP hospitals are listed on the x-axis. The regression model incorporates all cases (Appendectomy, Bariatric & Colon/Rectal) from Quarter 1 2006 through Quarter 4 2008. Sites included in the figure reported at least 100 operations during that timeframe.

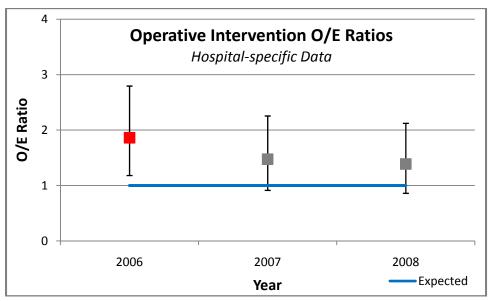


Operative Intervention O/E: 2006 through 2008 data

➤ Data for 2006 through 2008 show 3 high outliers and 2 low outliers with the majority of hospitals performing as expected

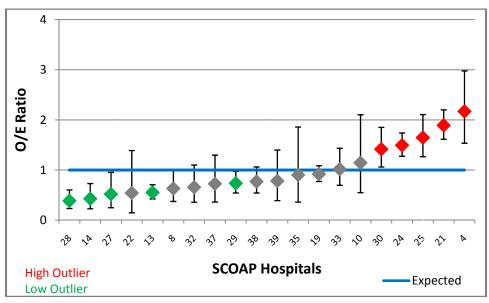
The following figure illustrates your hospital's performance over time





O/E Non-Operative Intervention

The figure below shows O/E ratios for Non-operative Intervention. The O/E ratio is plotted on the y-axis. The SCOAP hospitals are listed on the x-axis. The regression model incorporates all cases (Appendectomy, Bariatric & Colon/Rectal) from Quarter 1 2006 through Quarter 4 2008. Sites included in the figure reported at least 100 operations during that timeframe.

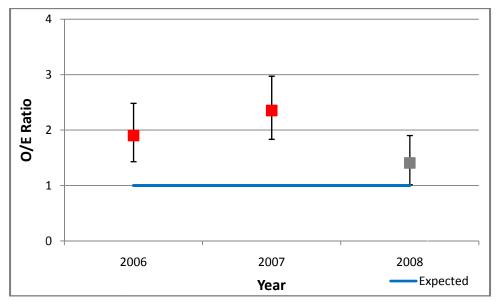


Non-Operative Intervention O/E: 2006 through 2008 data

➤ Data for 2006 through 2008 show 5 high outliers and 5 low outliers.

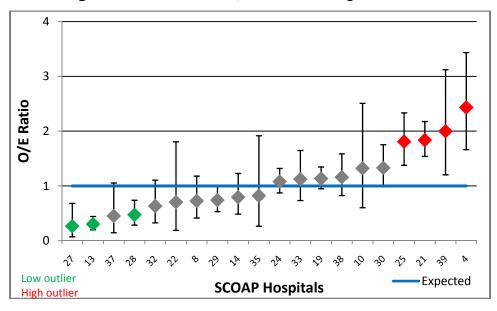
The following figure illustrates your hospital's performance over time





O/E Surgical Site Infections

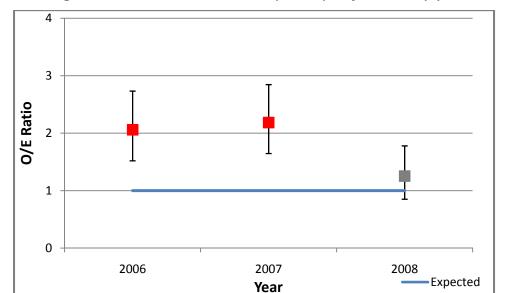
The figure below shows O/E ratios for Surgical Site Infection. The O/E ratio is plotted on the y-axis. The SCOAP hospitals are listed on the x-axis. The regression model incorporates all cases (Appendectomy, Bariatric & Colon/Rectal) from Quarter 1 2006 through Quarter 4 2008. Sites included in the figure reported at least 100 operations during that timeframe.



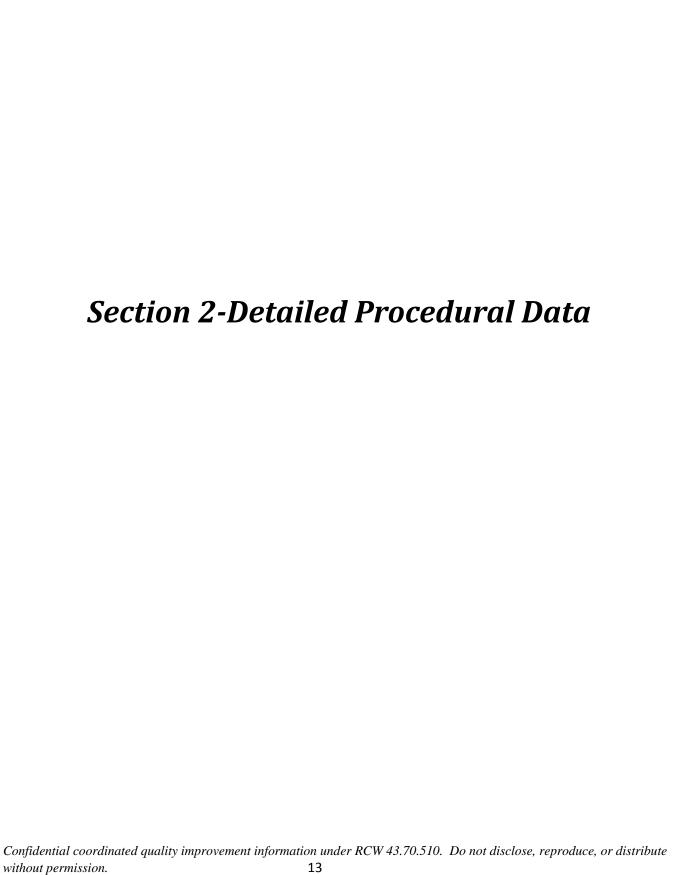
Surgical Site Infection O/E: 2006 through 2008 data

Data for 2006 through 2008 show 4 high outliers and 3 low outliers

The following figure illustrates your hospital's performance over time



Surgical Site Infection O/E: Hospital-specific data by year



Confidential coordinated	auality improvement in	nformation under RCW 43.70.510	. Do not disclose, reproduce, or distribu

Elective Colon

Data reported as proportions except where noted

XX	SCOAP Hospital		2008			Q1 2009				
	Variable Description	SCOAP		Н	ospital	SCOAF		Н	ospital	
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%	
Total	Procedures	1361		93		421		33		
1.1	Median Age (years)		62.0	93	58.0		62.0	33	57.0	
1.2	Male		43.9%	93	50.5%		41.6%	33	45.5%	
1.3	Median BMI		27.1	88	25.8		27.3	33	26.3	
1.4	Mean Comorbidity Index		0.4	93	0.4		0.4	33	0.3	
Opera	ition Type									
2.1	Right Hemicolectomy		44.6%	93	35.5%		35.5%	33	27.3%	
2.2	Left Hemicolectomy		19.6%	93	11.8%		21.5%	33	12.1%	
2.3	LAR		28.4%	93	33.3%		32.6%	33	45.5%	
2.5	Total Colectomy		5.6%	93	11.8%		5.8%	33	12.1%	
2.6	Colostomy Takedown		1.9%	93	7.5%		4.6%	33	3.0%	
Indica	tion/Diagnosis									
3.1	Diverticulitis		20.3%	93	12.9%		23.8%	33	6.1%	
3.2	Cancer		34.2%	93	20.4%		32.1%	33	27.3%	
Norm	othermia									
4.1	* Peri-op Body Temp >= 36 C	100.0%	90.3%	78	98.7%	100.0%	93.9%	27	96.3%	
Eugly	cemia									
5.1	Perioperative Blood Glucose Measured		30.3%	93	51.6%		45.1%	33	57.6%	
5.2	* Perioperative Blood Glucose among Diabetics	97.1%	79.3%	18	83.3%	100.0%	83.6%	5	100.0%	
5.3	High Peri-op Blood Glucose (>=200 mg)		15.0%	48	20.8%		7.9%	19	5.3%	
5.4	* Insulin Used Peri-op among those with High PBG	92.9%	51.7%	9	77.8%	100.0%	93.3%	1	100.0%	
5.5	High Post-op Day 1 Blood Glucose >=200 mg		18.8%	17	17.6%		16.7%	5	60.0%	
5.6	High Post-op Day 2 Blood Glucose >=200 mg		13.4%	17	0.0%		12.8%	5	80.0%	

XX	SCOAP Hospital		2008				Q1 2009		
	Variable Description	SCOAP		Н	ospital	SCOAP		Н	lospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Preop	erative Nutritional Status								
6.1	* Albumin Measured	95.7%	51.4%	93	62.4%	87.9%	54.4%	33	69.7%
6.2	* Albumin < 3.0 g/dl	1.2%	22.2%	58	31.0%	0.0%	20.1%	23	21.7%
6.3	* Albumin < 2.5 g/dl	0.0%	11.0%	58	20.7%	0.0%	6.6%	23	4.3%
DVT C	hemoprophylaxis								
7.1	* Any Peri-op DVT Prophylaxis	97.6%	80.3%	89	94.4%	100.0%	87.5%	33	100.0%
7.2	* DVT Prophylaxis w/in 24 hrs of Incision	92.5%	64.9%	89	79.8%	100.0%	68.4%	31	77.4%
7.3	* DVT Prophylaxis Post-Op	94.7%	78.7%	74	91.9%	100.0%	84.0%	33	100.0%
7.4	* DVT Prophylaxis Ordered on Discharge	50.0%	9.5%	15	80.0%	84.6%	15.4%	9	88.9%
Antib	iotic Use								
8.1	* Antibiotics w/in 60 min of Incision	100.0%	97.1%	80	98.8%	100.0%	97.5%	28	100.0%
8.2	* Discontinued w/in 24 hrs of Closure	98.2%	87.3%	75	88.0%	100.0%	87.4%	28	100.0%
Pain (Control								
9.1	* Any Advanced Pain Control Intervention	100.0%	96.4%	84	96.4%	100.0%	94.6%	28	89.3%
9.2	* PCA w/in 24 hrs Post-op	97.1%	82.0%	84	83.3%	100.0%	82.6%	26	76.9%
9.3	* Epidural w/in 24 hrs Post-op	67.0%	24.3%	84	40.5%	83.3%	18.6%	28	28.6%
Gastr	ointestinal Function								
10.1	Opioid Antagonist for Ileus Prevention		0.0%	34	0.0%		1.7%	33	0.0%
10.2	Median Post-op Day of First Feeding (coming soon)			0				0	
10.3	Long-acting Anti-emetic (coming soon)			0				0	
Labor	atory & Blood Bank								
11.1	* Transfusion Free among Elective Procedures	98.8%	90.4%	93	89.2%	100.0%	91.7%	33	93.9%
11.2	Mean Blood Tests: CBC & Chemistry Profiles (coming soon)			0				0	
Posto	perative Respiratory Failure								
12.1	* Mechanical Ventilation Free	100.0%	96.8%	92	92.4%	100.0%	97.1%	33	87.9%
Муос	ardial Infarction Prevention								
13.1	* Beta-Blockers Post-op among Current Users	100.0%	86.8%	23	95.7%	100.0%	88.8%	5	100.0%

Confidential coordinated quality improvement information under RCW 43.70.510. Do not disclose, reproduce, or distribute without permission.

16 Elective Colon

XX	SCOAP Hospital		2008				Q1 2009			
	Variable Description	SCOAP			lospital	SCOAP		Н	ospital	
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%	
Opera	tive Processes									
16.1	All Laparoscopic Procedures		39.9%	93	32.3%		33.2%	33	33.3%	
16.2	Laparoscopic Converted to Open		5.7%	93	5.4%		8.8%	33	3.0%	
16.3	* Nasogastric Tube in place leaving OR	0.8%	16.3%	92	17.4%	0.0%	10.2%	33	27.3%	
16.5	* Left/Low Colon Anastomosis Tested	98.5%	79.4%	38	94.7%	100.0%	87.1%	18	88.9%	
Proce	sses for Colon Cancer									
17.1	* Negative Lymph Nodes Removed: >= 12	100.0%	84.6%	5	60.0%	100.0%	77.8%	2	100.0%	
17.2	* Cancer-free Margins	100.0%	94.9%	19	100.0%	100.0%	98.4%	9	100.0%	
Posto	perative Interventions									
19.1	Any Intervention		12.6%	93	21.5%		13.1%	33	15.2%	
19.2	Operative Re-intervention		4.6%	93	6.5%		4.0%	33	0.0%	
19.3	* Risk-adjusted Operative Re-intervention	0.5%	4.6%	93	4.9%	0.0%	3.4%	33	0.0%	
19.4	* Colostomy	0.0%	1.8%	93	1.1%	0.0%	1.4%	33	0.0%	
19.5	* Non-operative Re-intervention	2.1%	9.6%	93	18.3%	0.0%	11.2%	33	15.2%	
19.6	* Tracheal Reintubation	0.0%	0.7%	93	2.2%	0.0%	1.0%	33	3.0%	
19.7	* VTE Treated	0.0%	0.3%	93	2.2%	0.0%	0.5%	33	0.0%	
19.8	* Wound Opened &/or Antibiotic for Infection	0.9%	5.5%	93	12.9%	0.0%	6.9%	33	9.1%	
Hospi	tal Stay and Discharge Status									
20.1	Mean Length of Hospital Stay (days)		7.9	93	12.0		8.1	33	7.8	
20.2	* Prolonged Length of Stay	0.0%	2.5%	93	7.5%	0.0%	3.6%	33	0.0%	
20.3	* Mean Risk-adjusted LOS (days)	5.5	7.0	93	7.4	5.1	6.8	33	7.3	
20.4	Discharge Home		91.4%	93	86.0%		91.0%	33	93.9%	
20.5	Discharge Death		1.4%	93	2.2%		1.2%	33	0.0%	

17 Elective Colon

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average

18 Elective Colon

Non-Elective Colon

Data reported as proportions except where noted

XX	SCOAP Hospital		2008						
	Variable Description	SCOAP Hospital				SCOAP)	H	lospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Total	Procedures	443		9		155		5	
1.1	Median Age (years)		64.0	9	59.0		62.0	5	56.0
1.2	Male		52.4%	9	55.6%		47.7%	5	40.0%
1.3	Median BMI		26.6	6	27.9		25.1	5	20.1
1.4	Mean Comorbidity Index		0.6	9	0.3		0.5	5	0.2
Opera	ation Type								
2.1	Right Hemicolectomy		42.9%	9	33.3%		40.5%	5	20.0%
2.2	Left Hemicolectomy		31.9%	9	33.3%		28.4%	5	0.0%
2.3	LAR		17.4%	9	33.3%		21.6%	5	40.0%
2.5	Total Colectomy		6.7%	9	0.0%		8.1%	5	40.0%
2.6	Colostomy Takedown		1.1%	9	0.0%		1.4%	5	0.0%
Indica	ation/Diagnosis								
3.1	Diverticulitis		18.8%	9	11.1%		22.6%	5	20.0%
3.2	Cancer		18.5%	9	22.2%		17.4%	5	0.0%
Eugly	cemia								
5.1	Perioperative Blood Glucose Measured		51.2%	9	88.9%		58.1%	5	20.0%
5.2	* Perioperative Blood Glucose among Diabetics	100.0%	80.0%	2	100.0%	100.0%	87.5%	0	
5.3	High Peri-op Blood Glucose (>=200 mg)		14.5%	8	12.5%		10.0%	1	0.0%
5.4	* Insulin Used Peri-op among those with High PBG	100.0%	45.5%	1	0.0%	100.0%	55.6%	0	
5.5	High Post-op Day 1 Blood Glucose >=200 mg		21.2%	1	0.0%		19.8%	0	
5.6	High Post-op Day 2 Blood Glucose >=200 mg		8.3%	1	0.0%		15.7%	0	
DVT (Chemoprophylaxis								
7.1	* Any Peri-op DVT Prophylaxis	100.0%	75.5%	9	88.9%	100.0%	75.2%	5	100.0%
7.2	* DVT Prophylaxis w/in 24 hrs of Incision	100.0%	60.5%	9	66.7%	100.0%	61.2%	5	0.0%

ХХ	SCOAP Hospital		2008				Q1 2009		
	Variable Description	SCOAP		ŀ	Hospital	SCOAP		H	lospital
	* Benchmarking applied	Benchmark	%	Ν	%	Benchmark	%	N	%
7.3	* DVT Prophylaxis Post-Op	100.0%	73.0%	7	100.0%	100.0%	70.7%	5	100.0%
Pain (Control								
9.1	* Any Advanced Pain Control Intervention	100.0%	91.1%	3	66.7%	100.0%	86.4%	4	100.0%
9.2	* PCA w/in 24 hrs Post-op	100.0%	82.4%	3	66.7%	100.0%	78.0%	4	100.0%
9.3	* Epidural w/in 24 hrs Post-op	58.0%	16.2%	3	0.0%	60.0%	13.6%	4	25.0%
Gastr	ointestinal Function								
10.2	Median Post-op Day of First Feeding (coming soon)			0				0	
10.3	Long-acting Anti-emetic (coming soon)			0				0	
Labor	atory & Blood Bank								
11.2	Mean Blood Tests: CBC & Chemistry Profiles (coming soon)			0				0	
Posto	perative Respiratory Failure								
12.1	* Mechanical Ventilation Free	98.0%	72.6%	9	33.3%	100.0%	77.4%	5	80.0%
Myoc	ardial Infarction Prevention								
13.1	* Beta-Blockers Post-op among Current Users	100.0%	73.1%	3	66.7%	100.0%	80.6%	0	
Opera	ative Processes								
16.1	All Laparoscopic Procedures		13.3%	9	0.0%		6.5%	5	0.0%
16.2	Laparoscopic Converted to Open		4.8%	9	0.0%		3.2%	5	0.0%
16.3	* Nasogastric Tube in place leaving OR	13.7%	49.0%	9	33.3%	0.0%	38.3%	5	40.0%
16.5	* Left/Low Colon Anastomosis Tested	100.0%	68.5%	1	100.0%	100.0%	64.0%	1	100.0%
Proce	sses for Colon Cancer								
17.1	* Negative Lymph Nodes Removed: >= 12	100.0%	58.3%	0		100.0%	83.3%	0	
17.2	* Cancer-free Margins	100.0%	89.0%	2	100.0%	100.0%	84.0%	0	
Posto	perative Interventions								
19.1	Any Intervention		30.5%	9	22.2%		26.5%	5	60.0%
19.2	* Operative Re-intervention	0.0%	12.4%	9	11.1%	0.0%	11.6%	5	20.0%
19.4	* Colostomy	0.0%	2.7%	9	0.0%	0.0%	0.6%	5	0.0%
19.5	* Non-operative Re-intervention	4.0%	21.9%	9	22.2%	0.0%	21.9%	5	60.0%

XX	SCOAP Hospital		2008				Q1 2009		
	Variable Description	SCOAP			Hospital	SCOAP			lospital
	* Benchmarking applied	Benchmark	%	Ν	%	Benchmark	%	N	%
19.6	* Tracheal Reintubation	0.0%	2.7%	9	11.1%	0.0%	3.9%	5	40.0%
19.7	* VTE Treated	0.0%	2.3%	9	0.0%	0.0%	2.6%	5	0.0%
19.8	* Wound Opened &/or Antibiotic for Infection	0.0%	13.1%	9	11.1%	0.0%	14.2%	5	40.0%
Hospi	tal Stay and Discharge Status								
20.1	Mean Length of Hospital Stay (days)		14.7	9	27.9		12.3	5	19.2
20.2	* Prolonged Length of Stay	0.0%	14.0%	9	44.4%	0.0%	9.7%	5	20.0%
20.3	* Mean Risk-adjusted LOS (days)	7.1	9.4	9	12.3	4.7	9.0	5	14.5
20.4	Discharge Home		64.3%	9	44.4%		72.3%	5	40.0%
20.5	Discharge Death		12.4%	9	0.0%		9.7%	5	0.0%

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average

Elective Rectal

Data reported as proportions except where noted

XX	SCOAP Hospital		2008			Q1 2009			
	Variable Description	SCOAP	SCOAP Ho			SCOAF		Н	ospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Total	Procedures	517		48		142		13	
1.1	Median Age (years)		58.0	48	53.0		59.0	13	51.0
1.2	Male		50.1%	48	79.2%		50.7%	13	69.2%
1.3	Median BMI		26.2	47	27.5		26.6	13	26.6
1.4	Mean Comorbidity Index		0.3	48	0.2		0.5	13	0.3
Opera	ation Type								
2.3	LAR		53.6%	48	47.9%		47.2%	13	38.5%
2.4	APR		19.6%	48	33.3%		21.8%	13	23.1%
2.5	Total Colectomy		7.0%	48	12.5%		10.6%	13	23.1%
2.6	Colostomy Takedown		2.7%	48	0.0%		3.5%	13	15.4%
2.7	Proctectomy		3.7%	48	0.0%		9.9%	13	0.0%
Indica	ntion/Diagnosis								
3.1	Diverticulitis		19.2%	48	0.0%		17.6%	13	7.7%
3.2	Cancer		47.0%	48	85.4%		47.2%	13	46.2%
Norm	othermia								
4.1	* Peri-op Body Temp >= 36 C	100.0%	91.9%	41	100.0%	100.0%	95.6%	11	100.0%
Eugly	cemia								
5.1	Perioperative Blood Glucose Measured		27.1%	48	47.9%		38.7%	13	61.5%
5.2	* Perioperative Blood Glucose among Diabetics	100.0%	68.8%	5	60.0%	100.0%	70.6%	1	100.0%
5.3	High Peri-op Blood Glucose (>=200 mg)		6.4%	23	0.0%		7.3%	8	25.0%
5.4	* Insulin Used Peri-op among those with High PBG	100.0%	88.9%	0		50.0%	50.0%	2	50.0%
5.5	High Post-op Day 1 Blood Glucose >=200 mg		23.5%	2	50.0%		19.4%	5	20.0%
5.6	High Post-op Day 2 Blood Glucose >=200 mg		19.2%	2	0.0%		17.4%	5	20.0%

XX	SCOAP Hospital		2008				Q1 2009		
	Variable Description	SCOAP		Н	ospital	SCOAP		Н	ospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Preop	perative Nutritional Status								
6.1	* Albumin Measured	81.7%	37.3%	48	79.2%	90.0%	42.3%	13	84.6%
6.2	* Albumin < 3.0 g/dl	0.0%	13.0%	38	13.2%	0.0%	11.7%	11	18.2%
6.3	* Albumin < 2.5 g/dl	0.0%	5.2%	38	7.9%	0.0%	3.3%	11	0.0%
DVT (Chemoprophylaxis								
7.1	* Any Peri-op DVT Prophylaxis	100.0%	82.7%	48	95.8%	100.0%	83.3%	13	100.0%
7.2	* DVT Prophylaxis w/in 24 hrs of Incision	96.1%	70.7%	48	85.4%	95.5%	68.4%	13	53.8%
7.3	* DVT Prophylaxis Post-Op	100.0%	81.3%	40	100.0%	100.0%	75.2%	13	100.0%
7.4	* DVT Prophylaxis Ordered on Discharge	78.1%	15.7%	32	78.1%	71.4%	11.1%	6	66.7%
Antib	iotic Use								
8.1	* Antibiotics w/in 60 min of Incision	100.0%	97.1%	45	95.6%	100.0%	97.8%	13	92.3%
8.2	* Discontinued w/in 24 hrs of Closure	97.7%	89.0%	44	90.9%	100.0%	81.2%	13	92.3%
Pain (Control								
9.1	* Any Advanced Pain Control Intervention	100.0%	95.0%	42	92.9%	100.0%	92.7%	9	100.0%
9.2	* PCA w/in 24 hrs Post-op	100.0%	75.3%	42	64.3%	100.0%	74.5%	9	88.9%
9.3	* Epidural w/in 24 hrs Post-op	73.9%	31.4%	42	66.7%	76.7%	29.2%	9	66.7%
Gastr	ointestinal Function								
10.1	Opioid Antagonist for Ileus Prevention		1.3%	10	0.0%		1.4%	13	0.0%
10.2	Median Post-op Day of First Feeding (coming soon)			0				0	
10.3	Long-acting Anti-emetic (coming soon)			0				0	
Labor	atory & Blood Bank								
11.1	* Transfusion Free	100.0%	91.4%	48	87.5%	100.0%	90.1%	13	69.2%
11.2	Mean Blood Tests: CBC & Chemistry Profiles (coming soon)			0				0	
Posto	perative Respiratory Failure								
12.1	* Mechanical Ventilation Free	100.0%	96.7%	48	87.5%	100.0%	96.5%	13	69.2%
Myoc	ardial Infarction Prevention								
13.1	* Beta-Blockers Post-op among Current Users	100.0%	78.8%	5	80.0%	100.0%	88.2%	2	100.0%

Confidential coordinated quality improvement information under RCW 43.70.510. Do not disclose, reproduce, or distribute without permission.

XX	SCOAP Hospital		2008				Q1 2009		
	Variable Description	SCOAP Hospital				SCOAP		Н	ospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Opera	ative Processes								
16.1	All Laparoscopic Procedures		25.6%	47	6.4%		26.1%	13	7.7%
16.2	Laparoscopic Converted to Open		6.0%	47	0.0%		9.2%	13	0.0%
16.3	* Nasogastric Tube in place leaving OR	0.0%	12.4%	48	27.1%	0.0%	14.8%	13	38.5%
16.5	* Left/Low Colon Anastomosis Tested	100.0%	87.0%	25	100.0%	100.0%	83.1%	8	100.0%
16.6	* Protective Stoma among Cases with Anal Anastomosis	78.9%	33.3%	20	90.0%	75.0%	41.5%	9	66.7%
Proce	sses for Rectal Cancer								
18.1	Abdominal Perineal Resection (APR)		30.1%	38	36.8%		32.1%	6	33.3%
18.2	* TME Performed	100.0%	54.7%	4	50.0%	100.0%	50.0%	5	80.0%
Posto	perative Interventions								
19.1	Any Intervention		15.5%	48	31.3%		15.5%	13	23.1%
19.2	Operative Re-intervention		6.0%	48	4.2%		5.6%	13	7.7%
19.3	* Risk-adjusted Operative Re-intervention	0.9%	7.1%	46	4.0%	0.0%	6.3%	13	6.4%
19.4	* Colostomy	0.0%	1.7%	48	2.1%	0.0%	2.1%	13	7.7%
19.5	* Non-operative Re-intervention	0.0%	11.4%	48	29.2%	0.0%	13.4%	13	23.1%
19.6	* Tracheal Reintubation	0.0%	0.2%	48	2.1%	0.0%	0.0%	13	0.0%
19.7	* VTE Treated	0.0%	0.2%	48	2.1%	0.0%	0.7%	13	7.7%
19.8	* Wound Opened &/or Antibiotic for Infection	0.0%	6.2%	48	16.7%	0.0%	6.3%	13	7.7%
Hospi	tal Stay and Discharge Status								
20.1	Mean Length of Hospital Stay (days)		7.5	48	11.2		7.4	13	8.9
20.2	* Prolonged Length of Stay	0.0%	2.5%	48	6.3%	0.0%	2.1%	13	0.0%
20.3	* Mean Risk-adjusted LOS (days)	4.8	6.2	47	8.4	5.2	7.1	13	8.3
20.4	Discharge Home		92.8%	48	85.4%		88.7%	13	92.3%
20.5	Discharge Death		1.2%	48	2.1%		0.7%	13	0.0%

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average

Non-Elective Rectal

Data reported as proportions except where noted

XX	SCOAP Hospital		2008						
	Variable Description	SCOA	Р	H	lospital	SCOA	Р	Hospita	
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Total	Procedures	57		1		19		1	
1.1	Median Age (years)		67.0	1	56.0		62.0	1	27.0
1.2	Male		52.6%	1	100.0%		57.9%	1	0.0%
1.3	Median BMI		26.3	1	26.9		28.3	1	49.1
1.4	Mean Comorbidity Index		0.6	1	0.0		0.6	1	0.0
Opera	ation Type								
2.3	LAR		50.9%	1	0.0%		47.4%	1	0.0%
2.4	APR		15.8%	1	100.0%		21.1%	1	0.0%
2.5	Total Colectomy		12.3%	1	0.0%		5.3%	1	0.0%
2.6	Colostomy Takedown		1.8%	1	0.0%		10.5%	1	0.0%
2.7	Proctectomy		0.0%	1	0.0%		5.3%	1	100.0%
Indica	tion/Diagnosis								
3.1	Diverticulitis		10.5%	1	0.0%		26.3%	1	0.0%
3.2	Cancer		31.6%	1	0.0%		26.3%	1	0.0%
Eugly	cemia								
5.1	Perioperative Blood Glucose Measured		29.8%	1	100.0%		42.1%	1	0.0%
5.2	* Perioperative Blood Glucose among Diabetics	100.0%	57.1%	0		100.0%	100.0%	0	
5.3	High Peri-op Blood Glucose (>=200 mg)		17.6%	1	0.0%		37.5%	0	
5.4	* Insulin Used Peri-op among those with High PBG	100.0%	100.0%	0		100.0%	66.7%	0	
5.5	High Post-op Day 1 Blood Glucose >=200 mg		0.0%	0			55.6%	0	
5.6	High Post-op Day 2 Blood Glucose >=200 mg		0.0%	0			10.0%	0	
DVT C	hemoprophylaxis								
7.1	* Any Peri-op DVT Prophylaxis	100.0%	75.5%	1	100.0%	100.0%	78.9%	1	100.0%
7.2	* DVT Prophylaxis w/in 24 hrs of Incision	100.0%	52.9%	1	100.0%	100.0%	68.4%	1	100.0%

XX	SCOAP Hospital		2008				Q1 2009		
	Variable Description	SCOA	Р	H	lospital	SCOA	Р	Hospital	
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
7.3	* DVT Prophylaxis Post-Op	100.0%	74.5%	1	100.0%	100.0%	61.1%	1	100.0%
Pain (Control								
9.1	* Any Advanced Pain Control Intervention	100.0%	85.1%	0		100.0%	81.3%	1	100.0%
9.2	* PCA w/in 24 hrs Post-op	100.0%	68.2%	0		100.0%	75.0%	1	100.0%
9.3	* Epidural w/in 24 hrs Post-op	70.0%	28.9%	0		100.0%	18.8%	1	100.0%
Gastr	ointestinal Function								
10.2	Median Post-op Day of First Feeding (coming soon)			0				0	
10.3	Long-acting Anti-emetic (coming soon)			0				0	
Labor	atory & Blood Bank								
11.2	Mean Blood Tests: CBC & Chemistry Profiles (coming soon)			0				0	
Posto	perative Respiratory Failure								
12.1	* Mechanical Ventilation Free	100.0%	85.7%	1	0.0%	100.0%	84.2%	1	100.0%
Myoc	ardial Infarction Prevention								
13.1	* Beta-Blockers Post-op among Current Users	100.0%	80.0%	0		100.0%	100.0%	0	
Opera	tive Processes								
16.1	All Laparoscopic Procedures		14.0%	1	0.0%		5.3%	1	0.0%
16.2	Laparoscopic Converted to Open		1.8%	1	0.0%		5.3%	1	0.0%
16.3	* Nasogastric Tube in place leaving OR	0.0%	29.8%	1	100.0%	0.0%	31.6%	1	0.0%
16.5	* Left/Low Colon Anastomosis Tested	100.0%	90.0%	0		100.0%	91.7%	0	
16.6	* Protective Stoma among Cases with Anal Anastomosis	71.4%	33.3%	0		100.0%	53.8%	0	
Proce	sses for Rectal Cancer								
18.1	Abdominal Perineal Resection (APR)		18.2%	0			33.3%	0	
18.2	* TME Performed	20.0%	16.7%	0		0.0%		0	
Posto	perative Interventions								
19.1	Any Intervention		29.8%	1	0.0%		21.1%	1	0.0%
19.2	* Operative Re-intervention	0.0%	17.5%	1	0.0%	0.0%	5.3%	1	0.0%
19.4	* Colostomy	0.0%	1.8%	1	0.0%	0.0%	0.0%	1	0.0%

XX	SCOAP Hospital		2008						
	Variable Description	SCOA	Р	Hospital		SCOAP		Hospital	
	* Benchmarking applied	Benchmark	%	Ν	%	Benchmark	%	N	%
19.5	* Non-operative Re-intervention	0.0%	12.3%	1	0.0%	0.0%	15.8%	1	0.0%
19.6	* Tracheal Reintubation	0.0%	0.0%	1	0.0%	0.0%	5.3%	1	0.0%
19.7	* VTE Treated	0.0%	1.8%	1	0.0%	0.0%	0.0%	1	0.0%
19.8	* Wound Opened &/or Antibiotic for Infection	0.0%	7.0%	1	0.0%	0.0%	5.3%	1	0.0%
Hospi	tal Stay and Discharge Status								
20.1	Mean Length of Hospital Stay (days)		10.7	1	25.0		12.4	1	8.0
20.2	* Prolonged Length of Stay	0.0%	7.0%	1	100.0%	0.0%	5.3%	1	0.0%
20.3	* Mean Risk-adjusted LOS (days)	5.5	8.9	1		10.0	12.4	0	
20.4	Discharge Home		83.9%	1	100.0%		73.7%	1	0.0%
20.5	Discharge Death		3.6%	1	0.0%		0.0%	1	0.0%

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average

Gastric Bypass

Data reported as proportions except where noted

XX	SCOAP Hospital		2008						
	Variable Description	SCOAP			ospital	SCOAP		Н	lospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Total	Procedures	937		88		248		19	
1.1	Median Age (years)		48.0	88	50.0		47.5	19	47.0
1.2	Male		19.5%	88	17.0%		17.3%	19	26.3%
1.3	Median BMI		45.8	87	51.4		45.1	19	47.5
1.4	Mean Comorbidity Index		0.8	88	1.0		0.7	19	0.5
Opera	ation Type								
2.8	Proximal Bypass		62.2%	88	100.0%		70.6%	19	100.0%
2.9	Distal Bypass		36.0%	88	0.0%		28.2%	19	0.0%
Norm	othermia								
4.1	* Peri-op Body Temp >= 36 C	100.0%	93.9%	80	98.8%	100.0%	97.5%	18	100.0%
Eugly	cemia								
5.1	Perioperative Blood Glucose Measured		52.8%	88	84.1%		67.7%	19	84.2%
5.2	* Perioperative Blood Glucose among Diabetics	97.2%	85.8%	47	91.5%	100.0%	95.8%	7	100.0%
5.3	High Peri-op Blood Glucose (>=200 mg)		30.7%	74	14.9%		22.6%	16	31.3%
5.4	* Insulin Used Peri-op among those with High PBG	95.8%	75.5%	11	100.0%	100.0%	92.1%	5	100.0%
5.5	High Post-op Day 1 Blood Glucose >=200 mg		19.3%	31	9.7%		19.6%	10	20.0%
5.6	High Post-op Day 2 Blood Glucose >=200 mg		14.7%	31	12.9%		19.4%	9	22.2%
DVT (Chemoprophylaxis								
7.1	* Any Peri-op DVT Prophylaxis	100.0%	98.9%	88	100.0%	100.0%	99.6%	19	100.0%
7.2	* DVT Prophylaxis w/in 24 hrs of Incision	99.5%	96.8%	87	94.3%	100.0%	98.4%	19	100.0%
7.3	* DVT Prophylaxis Post-Op	99.3%	95.7%	83	100.0%	100.0%	93.1%	18	100.0%
7.4	* DVT Prophylaxis Ordered on Discharge	82.8%	11.4%	83	90.4%	41.2%	12.6%	18	94.4%

XX	SCOAP Hospital		2008				Q1 2009		
	Variable Description	SCOAP		Н	ospital	SCOAP		Н	ospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Antib	iotic Use								
8.1	* Antibiotics w/in 60 min of Incision	100.0%	98.3%	83	98.8%	100.0%	98.4%	19	100.0%
8.2	* Discontinued w/in 24 hrs of Closure	100.0%	89.7%	82	100.0%	100.0%	97.6%	19	100.0%
Pain (Control								
9.1	* Any Advanced Pain Control Intervention	100.0%	97.9%	81	96.3%	100.0%	95.0%	16	100.0%
9.2	* PCA w/in 24 hrs Post-op	100.0%	93.3%	81	95.1%	100.0%	93.4%	16	100.0%
9.3	* Epidural w/in 24 hrs Post-op	32.0%	7.2%	81	2.5%	16.3%	2.9%	16	0.0%
Gastr	ointestinal Function								
10.2	Median Post-op Day of First Feeding (coming soon)			0				0	
10.3	Long-acting Anti-emetic (coming soon)			0				0	
Labor	atory & Blood Bank								
11.1	* Transfusion Free	100.0%	98.8%	88	100.0%	100.0%	98.4%	19	100.0%
11.2	Mean Blood Tests: CBC & Chemistry Profiles (coming soon)			0				0	
Posto	perative Respiratory Failure								
12.1	* Mechanical Ventilation Free	100.0%	98.5%	88	92.0%	100.0%	97.2%	19	84.2%
Myoc	ardial Infarction Prevention								
13.1	* Beta-Blockers Post-op among Current Users	100.0%	83.1%	26	100.0%	100.0%	88.9%	6	100.0%
Opera	ative Processes								
16.1	All Laparoscopic Procedures		88.6%	88	95.5%		90.7%	19	89.5%
16.2	Laparoscopic Converted to Open		1.7%	88	4.5%		2.8%	19	5.3%
16.4	* Bariatric Anastomosis Tested	100.0%	96.8%	88	100.0%	100.0%	97.2%	19	100.0%
Posto	perative Interventions								
19.1	Any Intervention		5.4%	88	14.8%		6.5%	19	15.8%
19.2	Operative Re-intervention		2.8%	88	11.4%	0.0%	3.6%	19	15.8%
19.3	* Risk-adjusted Operative Re-intervention	0.7%	3.0%	88	10.2%	0.0%	5.6%	19	22.0%
19.5	* Non-operative Re-intervention	0.7%	3.6%	88	9.1%	1.4%	4.4%	19	10.5%
19.6	* Tracheal Reintubation	0.0%	0.4%	88	2.3%	0.0%	1.2%	19	0.0%

XX	SCOAP Hospital		2008		Q1 2009				
	Variable Description	SCOAP		Hospital		SCOAF		Η	ospital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	2	%
19.7	* VTE Treated	0.0%	0.3%	88	0.0%	0.0%	0.8%	19	0.0%
19.8	* Wound Opened &/or Antibiotic for Infection	0.5%	1.7%	88	5.7%	0.0%	2.4%	19	5.3%
Hospi	tal Stay and Discharge Status								
20.1	Mean Length of Hospital Stay (days)		2.9	88	5.4		3.1	19	6.7
20.2	* Prolonged Length of Stay	0.0%	1.4%	88	6.8%	0.0%	2.8%	19	15.8%
20.3	* Mean Risk-adjusted LOS (days)	2.8	3.3	88	4.1	2.5	3.2	19	2.6
20.4	Discharge Home		98.9%	88	95.5%		99.2%	19	89.5%
20.5	Discharge Death		0.0%	88	0.0%		0.0%	19	0.0%

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average

Adjustable Banding

Data reported as proportions except where noted

XX	SCOAP Hospital		2008			Q1 2009			
	Variable Description	SCOAP		Н	ospital	SCOA	Р	Hospital	
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Total	Procedures	690		69		188		25	
1.1	Median Age (years)		50.0	69	55.0		52.0	25	51.0
1.2	Male		24.5%	69	33.3%		25.5%	25	44.0%
1.3	Median BMI		43.6	67	46.6		42.3	25	47.3
1.4	Mean Comorbidity Index		0.7	69	1.1		0.6	25	0.8
Norm	othermia								
4.1	* Peri-op Body Temp >= 36 C	100.0%	96.1%	64	100.0%	100.0%	96.7%	24	100.0%
Eugly	cemia								
5.1	Perioperative Blood Glucose Measured		38.0%	69	59.4%		57.4%	25	52.0%
5.2	* Perioperative Blood Glucose among Diabetics	100.0%	78.9%	42	85.7%	100.0%	98.3%	11	90.9%
5.3	High Peri-op Blood Glucose (>=200 mg)		19.5%	41	9.8%		13.9%	13	23.1%
5.4	* Insulin Used Peri-op among those with High PBG	100.0%	61.2%	4	100.0%	100.0%	73.3%	3	100.0%
5.5	High Post-op Day 1 Blood Glucose >=200 mg		29.4%	8	12.5%		21.1%	10	20.0%
5.6	High Post-op Day 2 Blood Glucose >=200 mg		26.7%	3	33.3%		30.0%	4	50.0%
DVT (Chemoprophylaxis								
7.1	* Any Peri-op DVT Prophylaxis	100.0%	97.0%	69	98.6%	100.0%	97.9%	25	100.0%
7.2	* DVT Prophylaxis w/in 24 hrs of Incision	100.0%	96.5%	69	91.3%	100.0%	97.9%	25	100.0%
7.3	* DVT Prophylaxis Post-Op	100.0%	37.9%	65	66.2%	100.0%	32.1%	24	66.7%
Antib	iotic Use								
8.1	* Antibiotics w/in 60 min of Incision	100.0%	99.4%	65	100.0%	100.0%	99.5%	25	100.0%
8.2	* Discontinued w/in 24 hrs of Closure	100.0%	98.8%	64	98.4%	100.0%	99.5%	25	100.0%
Labor	atory & Blood Bank								
11.1	* Transfusion Free	100.0%	99.9%	69	100.0%	100.0%	100.0%	25	100.0%
11.2	Mean Blood Tests: CBC & Chemistry Profiles (coming soon)			0				0	

XX	SCOAP Hospital		2008						
	Variable Description	SCOAP			ospital	SCOAP		Hospital	
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Opera	ative Processes								
16.1	All Laparoscopic Procedures		98.5%	69	100.0%		99.5%	25	100.0%
16.2	Laparoscopic Converted to Open		0.4%	69	0.0%		0.0%	25	0.0%
Posto	perative Interventions								
19.1	Any Intervention		1.4%	69	1.4%		1.6%	25	0.0%
19.2	* Operative Re-intervention	0.0%	1.0%	69	1.4%	0.0%	0.5%	25	0.0%
19.5	* Non-operative Re-intervention	0.0%	0.4%	69	0.0%	0.0%	1.1%	25	0.0%
19.6	* Tracheal Reintubation	0.0%	0.0%	69	0.0%	0.0%	0.0%	25	0.0%
19.7	* VTE Treated	0.0%	0.0%	69	0.0%	0.0%	0.5%	25	0.0%
19.8	* Wound Opened &/or Antibiotic for Infection	0.0%	0.1%	69	0.0%	0.0%	0.0%	25	0.0%
Hospi	tal Stay and Discharge Status								
20.1	Mean Length of Hospital Stay (days)		0.7	69	1.3		0.6	25	1.4
20.2	* Prolonged Length of Stay	0.0%	0.0%	69	0.0%	0.0%	0.0%	25	0.0%
20.3	* Mean Risk-adjusted LOS (days)	0.1	0.2	69	0.5	0.1	0.2	25	0.4
20.4	Discharge Home		100.0%	69	100.0%		98.9%	25	92.0%
20.5	Discharge Death		0.0%	69	0.0%		0.0%	25	0.0%

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average

Sleeve Gastrectomy

Data reported as proportions except where noted

XX	SCOAP Hospital		2008			Q1 2009			
	Variable Description	SCOAP			ospital	SCOA	NP	Но	spital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Total	Procedures	27		1		21		0	
1.1	Median Age (years)		48.0	1	44.0		45.0	0	
1.2	Male		14.8%	1	0.0%		14.3%	0	
1.3	Median BMI		42.6	1	64.2		43.0	0	
1.4	Mean Comorbidity Index		0.6	1	2.0		1.0	0	
Norm	othermia								
4.1	* Peri-op Body Temp >= 36 C	84.6%	84.6%	0		100.0%	95.2%	0	
Eugly	cemia								
5.1	Perioperative Blood Glucose Measured		59.3%	1	100.0%		100.0%	0	
5.2	* Perioperative Blood Glucose among Diabetics	100.0%	88.9%	1	100.0%	100.0%	100.0%	0	
5.3	High Peri-op Blood Glucose (>=200 mg)		25.0%	1	0.0%		14.3%	0	
5.4	* Insulin Used Peri-op among those with High PBG	75.0%	75.0%	0		100.0%	66.7%	0	
5.5	High Post-op Day 1 Blood Glucose >=200 mg		25.0%	0			5.3%	0	
5.6	High Post-op Day 2 Blood Glucose >=200 mg		20.0%	0			7.1%	0	
DVT C	hemoprophylaxis								
7.1	* Any Peri-op DVT Prophylaxis	100.0%	100.0%	1	100.0%	100.0%	100.0%	0	
7.2	* DVT Prophylaxis w/in 24 hrs of Incision	100.0%	100.0%	1	100.0%	100.0%	95.2%	0	
7.3	* DVT Prophylaxis Post-Op	80.8%	80.8%	0		100.0%	95.2%	0	
7.4	* DVT Prophylaxis Ordered on Discharge	4.0%	4.0%	0		5.9%	4.8%	0	
Antib	otic Use								
8.1	* Antibiotics w/in 60 min of Incision	96.2%	96.2%	1	100.0%	100.0%	100.0%	0	
8.2	* Discontinued w/in 24 hrs of Closure	80.0%	80.0%	1	100.0%	100.0%	100.0%	0	

XX	SCOAP Hospital		2008			Q1 2009			
	Variable Description	SCOAP Hospital				SCOA	\P	Но	spital
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
Pain (Control								
9.1	* Any Advanced Pain Control Intervention	100.0%	100.0%	1	100.0%	100.0%	95.2%	0	
9.2	* PCA w/in 24 hrs Post-op	96.3%	96.3%	1	100.0%	100.0%	95.2%	0	
9.3	* Epidural w/in 24 hrs Post-op	3.8%	3.7%	1	0.0%	0.0%	0.0%	0	
Gastr	pintestinal Function								
10.2	Median Post-op Day of First Feeding (coming soon)			0				0	
10.3	Long-acting Anti-emetic (coming soon)			0				0	
Labor	atory & Blood Bank								
11.1	* Transfusion Free	100.0%	100.0%	1	100.0%	100.0%	100.0%	0	
11.2	Mean Blood Tests: CBC & Chemistry Profiles (coming soon)			0				0	
Posto	perative Respiratory Failure								
12.1	* Mechanical Ventilation Free	100.0%	100.0%	1	100.0%	100.0%	100.0%	0	
Муос	ardial Infarction Prevention								
13.1	* Beta-Blockers Post-op among Current Users	66.7%	66.7%	0		100.0%	100.0%	0	
Opera	tive Processes								
16.1	All Laparoscopic Procedures		96.3%	1	100.0%		100.0%	0	
16.2	Laparoscopic Converted to Open		0.0%	1	0.0%		4.8%	0	
16.4	* Bariatric Anastomosis Tested	80.8%	80.8%	0		100.0%	100.0%	0	
Posto	perative Interventions								
19.1	Any Intervention		0.0%	1	0.0%		0.0%	0	
19.2	* Operative Re-intervention	0.0%	0.0%	1	0.0%	0.0%	0.0%	0	
19.5	* Non-operative Re-intervention	0.0%	0.0%	1	0.0%	0.0%	0.0%	0	
19.6	* Tracheal Reintubation	0.0%	0.0%	1	0.0%	0.0%	0.0%	0	
19.7	* VTE Treated	0.0%	0.0%	1	0.0%	0.0%	0.0%	0	
19.8	* Wound Opened &/or Antibiotic for Infection	0.0%	0.0%	1	0.0%	0.0%	0.0%	0	

XX	SCOAP Hospital	2008				Q1 2009				
	Variable Description	SCOAP		Hospital		SCOAP		Hospital		
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%	
Hospi	Hospital Stay and Discharge Status									
20.1	Mean Length of Hospital Stay (days)		4.5	1	2.0		2.2	0		
20.2	* Prolonged Length of Stay	7.4%	7.4%	1	0.0%	0.0%	0.0%	0		
20.3	* Mean Risk-adjusted LOS (days)	2.6	2.6	1	1.5	1.5	2.7	0		
20.4	Discharge Home		100.0%	1	100.0%		100.0%	0		
20.5	Discharge Death		0.0%	1	0.0%		0.0%	0		

KEY: Benchmarked metrics

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average

Appendectomy

Data reported as proportions except where noted

XX	SCOAP Hospital	2008				Q1 2009				
	Variable Description	SCOAP		Hospital		SCOAP		Hospital		
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%	
Total	Total Procedures			97		860		30		
1.1	Median Age (years)		36.0	97	27.0		34.0	30	28.5	
1.2	Male		54.5%	97	53.6%		51.7%	30	46.7%	
1.3	Median BMI		26.7	41	23.0		26.8	23	24.4	
1.4	Mean Comorbidity Index		0.2	97	0.2		0.1	30	0.3	
Diagn	ostic Imaging for Appendectomy									
14.1	* Pre-op Imaging	98.7%	90.9%	97	93.8%	100.0%	89.4%	30	96.7%	
14.2	* Imaging among Women	100.0%	92.6%	45	97.8%	100.0%	91.1%	16	100.0%	
14.3	Imaging among Men		89.5%	52	90.4%		87.9%	14	92.9%	
14.4	Pre-op Imaging CT		95.3%	91	95.6%		96.7%	29	96.6%	
14.5	Pre-op Imaging US		4.7%	91	4.4%		3.3%	29	3.4%	
Imagi	ng Accuracy for Appendectomy									
15.1	* Agreement between Imaging and Pathology	98.0%	90.4%	91	84.6%	100.0%	92.6%	29	82.8%	
15.2	* Among CT	97.9%	91.4%	87	86.2%	100.0%	93.0%	28	82.1%	
15.3	* Among Ultra Sound	100.0%	71.7%	4	50.0%	100.0%	80.0%	1	100.0%	
Opera	tive Processes									
16.1	All Laparoscopic Procedures		83.9%	96	68.8%		84.8%	30	90.0%	
16.2	Laparoscopic Converted to Open		2.6%	96	0.0%		3.6%	30	3.3%	
Posto	perative Interventions									
19.1	Any Intervention		7.8%	97	1.0%		1.6%	30	3.3%	
19.2	* Operative Re-intervention	0.0%	0.7%	97	1.0%	0.0%	0.2%	30	0.0%	
19.5	* Non-operative Re-intervention	0.2%	2.5%	97	1.0%	0.0%	1.4%	30	3.3%	
19.6	* Tracheal Reintubation	0.0%	0.1%	97	0.0%	0.0%	0.0%	30	0.0%	
19.7	* VTE Treated	0.0%	0.1%	97	0.0%	0.0%	0.0%	30	0.0%	

Confidential coordinated quality improvement information under RCW 43.70.510. Do not disclose, reproduce, or distribute without permission.

XX	SCOAP Hospital		2008		Q1 2009				
	Variable Description	SCOAP Hosp		lospital SCOAP			Hospital		
	* Benchmarking applied	Benchmark	%	N	%	Benchmark	%	N	%
19.8	* Wound Opened &/or Antibiotic for Infection	0.0%	1.6%	97	0.0%	0.0%	0.8%	30	3.3%
Hospi	Hospital Stay and Discharge Status								
20.1	Mean Length of Hospital Stay (days)		1.8	97	1.5		1.9	30	1.6
20.2	* Prolonged Length of Stay	1.8%	5.5%	97	4.1%	0.0%	5.9%	30	6.7%
20.4	Discharge Home		99.1%	97	100.0%		99.2%	30	100.0%
20.5	Discharge Death		0.1%	97	0.0%		0.0%	30	0.0%
Negat	tive Appendectomy								
21.1	* Negative Appendectomy	1.9%	6.9%	97	8.2%	0.0%	4.8%	30	6.7%
21.2	* Negative Appendectomy among Women	1.6%	10.1%	45	13.3%	0.0%	6.7%	16	12.5%
21.3	* Negative Appendectomy among Men	0.0%	4.3%	52	3.8%	0.0%	2.9%	14	0.0%
21.4	No Imaging among Negative Appendectomies		22.4%	8	0.0%		36.6%	2	0.0%
21.5	Discordant Imaging among Negative Appendectomies		76.7%	8	75.0%		61.5%	2	50.0%
21.6	Concordant Imaging among Negative Appendectomies		23.3%	8	25.0%		38.5%	2	50.0%
21.7	Concurrent Procedure among Concordant Negative Apps		19.4%	2	0.0%		20.0%	1	0.0%
21.8	Perforated Appendix		14.9%	96	9.4%		14.4%	28	3.6%
21.9	ER/urgent Visit w/in 1week among Perforated Appendices		13.9%	9	0.0%		13.2%	1	0.0%

KEY: Benchmarked metrics

GREEN: These metrics meet or exceed the rate reported by the top performing hospitals which account for at least ten percent of the SCOAP population in the procedure category. The benchmark is calculated as the performance rate among cases at the top performing sites.

GRAY: These metrics are at least meeting the SCOAP average, but do not meet the benchmark rate.

YELLOW: These metrics do not reach the SCOAP average.

RED: These metrics are greater than one standard deviation away from the SCOAP average.

Upcoming SCOAP Modules

Pediatric

Appendectomy Gastric Colon/Rectal

Vascular

Carotid Abdominal Aortic Anuerysm Infrainguinal Revascularization

Pancreas

Esophagus

Liver

Outpatient Surgery





Resource Impact Data

SCOAP is a collaborative of surgeons using data to deliver excellence in surgical care. SCOAP has had a significant impact on surgical quality and patient safety across Washington State. Improvements in quality have long term financial impact. For example, a reduction in complications results in avoided OR time assigned to reoperative complications, increased throughput in the OR, fewer staffing requirements, reduction in supply use and reduced maintenance needs for equipment (like CT scans).

Hospital administrators need to justify the cost of discretionary programs like SCOAP. To help administrators see the business case for SCOAP we have partnered with a team of health economists and hospital CFOs. Measuring direct and indirect cost savings that result from improved quality can be a challenge. It may involve modeling the benefits of reduced length of stay, the costs avoided through events that did not happen and the impact of reduced complications on indirect costs. But SCOAP also impacts standardization and efficiency of care and these financial benefits are more directly measureable

Beginning in Q1 2009 at several participating hospitals we have been increasingly using the SCOAP model of benchmarking and intervention to address efficiency of care and standardization. Most hospitals get paid for an episode of surgical care through the Diagnosis Related Group (DRG) prospective payment system (APR-DRG or MS-DRG). The DRG reimbursement pays for an "average" episode of care which includes procedures, medications and all supplies used during an average length of stay. By changing clinician behavior about supply use, focusing on less expensive medications /supplies when they are "therapeutically equivalent" and reducing non-billable care, SCOAP increases a hospital's profitability. Because SCOAP is a clinician-led activity there is more engagement and ownership of the process of resource stewardship and SCOAP hospitals are recognizing significant cost savings throught this activity.

The SCOAP business module focuses on 5 primary areas for efficiency and standardization:

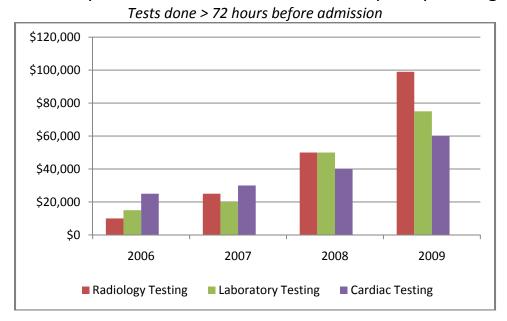
- Recoverable revenue for pre-operative testing
- Use of unnecessary diagnostic testing during hospitalization
- Use of expensive medication during hospitalization when there is a less expensive, equivalent alternative
- Use of more expensive OR and anesthesia supplies when there is a less expensive, equivalent alternative
- Length of Stay

SCOAP shows surgeons how to deliver the highest quality of care in the most cost effective manner. SCOAP encourages clinician stewardship of resources and gives hospital administrators a tool to engage clinicians in improving profitability.

The data in this section are an example of the type of financial information that hospital administrators will see when considering the value of SCOAP. Based on local issues (i.e bed availability, supply contracting, etc), hospitals may quantify the components of SCOAP cost savings differentially. The SCOAP team works with hospitals to ensure they get the information needed to help them see the value of the program.

Use of Testing within 72 Hours of Admission

Your hospital's recoverable revenue from pre-op testing



Recoverable revenue from pre-op testing:

Many clinicians apply a battery of standard tests prior to a surgical procedure and sometimes order diagnostic studies (i.e CT scans and upper GI series) to help plan a procedure or to evaluate a patients readiness for the procedure (i.e cardiac stress testing, nuclear imaging, holter monitoring). These tests are often performed within 72 hours of a surgical procedure and when this testing is performed at the hospital most insurers consider them "bundled" into the episode of care and do not reimburse for themAs non-billable events these impact hospitals negatively by increasing costs and resource availability but not increasing revenue for work provided. Quite often the clinicians ordering these tests do not need them performed within 72 hours for a medical reason. When these tests are done earlier than 72hrs (i.e ≥4 days prior to surgery) this represents an opportunity to recover revenue for the work provided by the hospital. SCOAP educates the clinical community about 72 hr testing rules and helps surgeons change behavior around testing to maximize revenue recovery.

Case studies have demonstrated that eliminating "within 72 hr" testing increases billable charges by over a million dollars each year at some hospiitals. This is part of the business case for SCOAP.

Radiology:

Total increase in recovered costs 2006 – 2009: \$xxxxx

Total increase in recovered costs 2008 – 2009: \$xxxx

2008-2009 recovered cost increase represents x% of total operating revenue Laboratory Testing:

Total increase in recovered costs 2006 – 2009: \$xxxxx

Total increase in recovered costs 2008 – 2009: \$xxxx

2008-2009 recovered cost increase represents x% of total operating revenue

Cardiac Testing:

Total increase in recovered costs 2006 – 2009: \$xxxxx

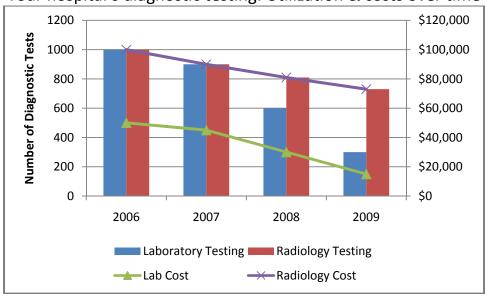
Total increase in recovered costs 2008 – 2009: \$xxxx

2008-2009 recovered cost increase represents x% of total operating revenue

Confidential coordinated quality improvement information under RCW 43.70.510. Do not disclose, reproduce, or distribute without permission.

Use of Diagnostic Testing and Imaging during Hospitalization





Number of Diagnostic Tests:

Routine diagnostic testing during hospitalization (i.e daily blood and radiologic testing) is often unnecessary and represents increased costs of care and non-recoverable events given the DRG payment system. The figure above shows a reduction in the use of diagnostic testing over the four years of SCOAP participation. SCOAP educates surgeons about the role of diagnostic testing after surgery and uses benchmarking and interventions to reduce the use of unnecessary care.

Case studies have identified how exchange of 6 commonly used drugs can reduce costs by thousands of dollars each year. This is part of the business case for SCOAP.

Laboratory Testing:

Total saved 2006 – 2009: \$xxxxx Total saved 2008 – 2009: \$xxxx

2008-2009 cost savings represents x% of total lab operating revenue

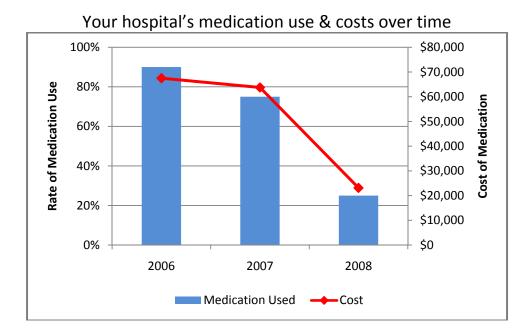
Radiology Testing:

Total costs saved from 2006 – 2009: \$xxxxx

Cost saved from 2008 - 2009: \$xxxx

2008-2009 cost savings represents x% of total operating revenue

Use of Expensive Medications



Rates of medication use:

Medication use is a significant driver of overall healthcare costs to hospitals and insurers. SCOAP tackles this issue in two ways.

- 1. SCOAP is helping to determine the benefit of expensive drugs (like opioid blockade in reducing length of stay) in actual practice where claims of benefit are often less apparent then the findings from the research environment. Where there is expensive medication use without benefit SCOAP educates surgeons about effectiveness, benchmarks their use and then intervenes to reduce the use of those medications.
- 2. When there is a clinically equivalent but less expensive medications substitute SCOAP educates, benchmarks and intervenes to encourage medication substitution.

Case studies have identified that exchange of 6 commonly used drugs can reduce costs by hundreds of thousands of dollars each year. This is part of the business case for SCOAP.

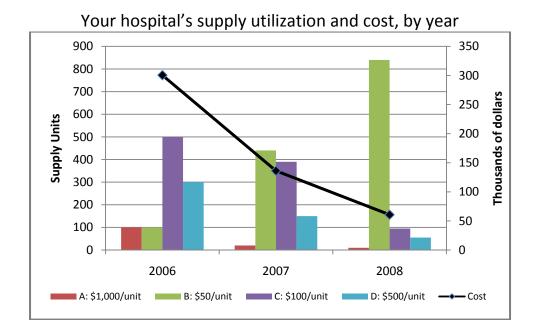
Use of Medication A dropped from 78% use in 2007 to 22% use in 2008.

Total costs saved 2006 – 2009: \$xxxxx

Total costs saved 2008 - 2009: \$xxxx

2008-2009 cost savings represents x% of total operating revenue

Use of Expensive Supplies



Supply Units:

Supplies/implants/devices in the OR are significant drivers of overall healthcare costs to hospitals. SCOAP tackles the use of these expensive supplies issue in two ways.

- 1. SCOAP is helping to determine the benefit of more expensive supplies/implants/devices. Often these more expensive supplies confer limited if any benefit. Where there is use of these more expensive supplies SCOAP benchmarks their use and then intervenes to reduce their use.
- 2. When there is a clinically equivalent but less expensive substitute SCOAP educates through "SCOAP supply price menus" and other communication, benchmarks their use, and intervenes to encourage substitution.

Case studies have identified that exchange/elimination of 10 commonly used supplies can reduce OR costs by millions of dollars. This is part of the business case for SCOAP.

The chart below shows that in 2006 hospital A was using 4 different brands of xxx. Surgeons concurred that these different brands performed the same function and neither brand was significantly better than the other in patient safety or procedural time. SCOAP worked with surgeons to help increase the use of Brand B that not only cost half of the other brands, but also had a higher profit margin for the hospital.

Total costs saved 2006 – 2009: \$xxxxx Total costs saved 2008 – 2009: \$xxxx

2008-2009 cost savings represents x% of total operating revenue

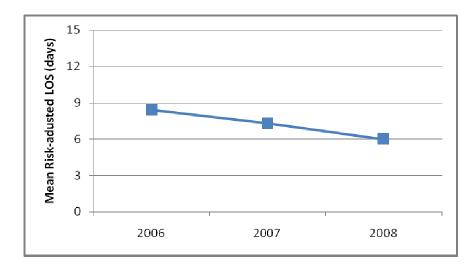
Length of Stay

Cost savings due to shortened length of stay (LOS) have been estimated by case study hospitals to be between \$500 and \$1000 per day. LOS reductions directly impact resource use (supplies, staffing, overhead, etc.) and availability of beds for use by other patients. While it is likely that hospitals estimate the cost impact of a reduction in LOS differentially, SCOAP reporting allows any hospital to apply their cost-calculations to the data. This is part of the business case for SCOAP.

The following figures show the impact of SCOAP on LOS at your hospital.

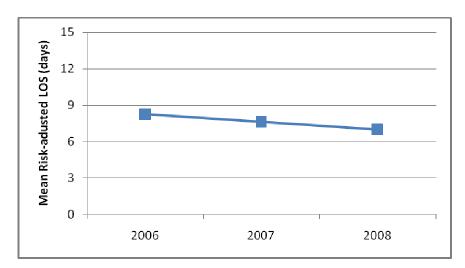
Elective Colectomy: Risk-adjusted length of stay

Hospital-specific data by year



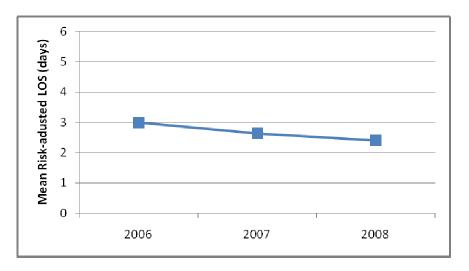
Non-Elective Colectomy: Risk-adjusted length of stay

Hospital-specific data by year



Gastric Bypass: Risk-adjusted length of stay

Hospital-specific data by year



Resource Data Summary

- Recoverable revenue for pre-operative testing-estimated recovered revenue this quarter \$XXXXX
- Use of unnecessary diagnostic testing during hospitalization-estimated recovered revenue this quarter \$XXXXX
- Use of expensive medication during hospitalization when there is a less expensive, equivalent alternative-estimated recovered revenue this quarter \$XXXXX
- Use of more expensive OR and anesthesia supplies when there is a less expensive, equivalent alternative-estimated recovered revenue this guarter \$XXXXX
- Length of Stay-estimated recovered revenue this quarter \$XXXXX

Total recovered with SCOAP-\$XXXXXXXX

Appendices

Appendix 1-For more information on the SCOAP data tool www.scoap.org/documents/index.html

Appendix 2-For more information on the SCOAP data dictionary www.scoap.org/documents/index.html

Appendix 3-For more information on risk adjustment strategies in SCOAP go to www.scoap.org/documents/index.html