NSOIP COLLABORATIVES

"Working Together to Improve Surgical Care"

CINTRODUCTION LABORATIVES

Collaboratives are groups of ACS NSQIP participating hospitals that come together to discuss best practices, quality improvement initiatives, and/or compare their surgical outcomes in a positive learning environment. A collaborative group can be highly organized with formal data sharing agreements, payor support, group oversight, and specialized reporting, or it can be an informal group of hospitals coming together to discuss their quality improvement experiences. Belonging to a collaborative group gives your hospital the opportunity to discuss surgical outcomes, quality improvement opportunities, and experiences with other hospitals sharing your interests and concerns.

- Many system-wide and regional groups
- Virtual collaboratives in development
- Support of ACS NSQIP staff
- Groups of all sizes are welcome

Overview

There are currently over 20 ACS NSQIP collaborative groups in existence or in development. These range from small system-wide groups such as Kaiser Permanente Northern California and the Mayo Clinic, to large regional groups such as the Michigan Surgical Quality Collaborative (MSQC) and the Tennessee Surgical Quality Collaborative (TSQC). Whether large or small, each collaborative group receives support and guidance from ACS NSQIP staff in developing data sharing strategies, designing specialized reports, and publicizing the group's efforts, thus allowing them to serve as a model for other emerging collaborative groups.

ACS NSQIP supports the growth of additional regional and system-wide groups, and is creating procedure-specific and outcome-specific "virtual" collaborative groups that will be open to all participating sites. Virtual collaboratives allow hospitals with similar interests to work together remotely via web conference, teleconference, and email toward a common quality improvement goal. Through the use of custom fields technology, virtual collaboratives may collect information on variables not included in standard ACS NSQIP data collection. These virtual collaboratives will allow sites

that are interested in specific procedures or outcomes to come together via conference calls and the internet to design their project, define their variables and definitions, and discuss their results and learn about best practices. A colectomy collaborative is the first virtual collaborative to be developed and additional virtual collaboratives will be made available in the near future. In addition, virtual collaboratives may be formed by hospitals interested in spearheading their own projects.

Working Together

The exchange of ideas between collaborative sites can lead to new quality improvement initiatives and the sharing of best practices. Collaborative groups can meet in person, via conference call, or through web conference to compare their results in a cooperative and learning environment.

Current collaborative groups have discovered that regularly scheduled meetings give their sites an opportunity to network, learn about the impact of the ACS NSQIP at other hospitals in the group, and become knowledgeable about current surgical outcomes research and quality improvement initiatives. For example, MSQC meets quarterly to discuss outcomes, areas of concern based on their ACS NSQIP data, and how the sites are working to improve their performance. MSQC invites surgeons and SCRs to share their experiences, and welcomes hospital staff from areas such as quality improvement, anesthesia, and infection control to offer ideas and share in the goal of surgical quality improvement.

Groups can also focus on procedures or outcomes that the collaborative has identified as an area of interest or concern. The custom fields can be utilized in these special projects, giving the collaborative control over the variables to be collected and the definitions of those variables. Once the collaborative determines the variables and definitions, it can distribute the criteria to its member hospitals along with directions on how to record the results in the custom fields available on the SCR Workstation. The group and the hospitals participating in the collaborative have full control over the custom fields and how they are utilized.

- Compare results and experiences
- Cooperative environment
- Learn from hospitals similar to your own
- Share best practices
- Procedure/Outcome based data collection

Data Sharing

Involvement in an ACS NSQIP Collaborative may offer enhanced data sharing options for participating hospitals that go beyond the standard risk-adjusted semiannual reports and non risk-adjusted real time online benchmarking reports. The collaborative group determines parameters that address what data is shared with the group and who has access to the data. ACS can offer data sharing templates and assistance in creating data sharing language for your group.

While standard ACS NSQIP benchmarking reports allow participating sites to compare their own results against those of all participating sites, collaborative benchmarking reports can be set up to compare the results of each collaborating site to the collaborative as a whole, and the collaborative as a whole to all sites nationwide.

Some collaboratives choose not to share data. For example, virtual collaboratives focus on learning by participating in specific data collection and sharing findings on quality improvement experiences via webinars or teleconferences. Though benchmarking is an option, it is not required to form a collaborative.

- Enhanced data sharing
- More specific benchmarking
- Specialized Reports

Online Reports

Post-Operative O	ccuri	rence S	Summa	ry						
Sample Collaborative										
Operation Date Range:	1/1/2008 to 12/31/2008									
Searched by Subspecialty:	: General Surgery,Vascular									
Comparison Sites	All Hos	pital Type	s, All Hospi	ital Beds						
Total # Of Cases:	Collab= 1,941 / Comparison= 228,970 OE Cases Report Generated On 40088									
VARIABLES							AY FOLLOW	-UP CASES		
		Сс	llab	СОМ	PARISON		Collab	COMP	ARISON	
Number of Cases		1,941		228,970		1,883		214,118		
30-Day Documented Follow-Up Rate							97.0%		93.5%	
I. Outcome										
Cases Alive @ 30 Days		1,908	98.3%	224,699	98.1%	1,850	98.2%	210,132	98.1%	
Cases Dead w/in 30 Days		33	1.7%	4,271	1.9%	33	1.8%	3,986	1.9%	
Note: Cases represent procedure	es perfor	med on diffe	erent dates. P	lease refer	to the detail m	ortality list t	o identify individ	dual patients v	vho died.	
II. Post-Op Occurrences										
Cases with 0 Occurrences		1,748	90.1%	202,348	88.4%	1,690	89.8%	188,347	88.0%	
Cases with 1 Occurrence		127	6.5%	15,895	6.9%	127	6.7%	15,387	7.2%	
Cases with 2 Occurrences		38	2.0%	5,515	2.4%	38	2.0%	5,349	2.5%	
Cases with 3 Occurrences		18	0.9%	2,585	1.1%	18	1.0%	2,493	1.2%	
Cases with 4 Occurrences		7	0.4%	1.357	0.6%	7	0.4%	1.314	0.6%	

Sample of online report comparing aggregate collaborative results to all ACS NSQIP participating sites

While the ACS NSQIP has collaborative data sharing models in place, the exact benchmarking reports and data sharing agreements can be customized to meet the needs of your collaborative. Although there is no cost to join or start an ACS NSQIP Collaborative, there may be a fee for extensive customized data analysis or collaborative reporting conducted by ACS on behalf of the collaborative group.

ACS NSQIP Semiannual Report 01/01/08 to 12/31/08

Sample Collaborative Summary

General & Vascular Surgery 30-Day Morbidity O/E Ratios									
Site #	Follow Up Rate	Audit Result	Observed	d %	Expected n	%	O/E Ratio	C.I. a	ıt 99%
1	82.7%	Pass	143	14.7%	252	13.1%	1.12	.94	1.23
2	91.3%	Pass	283	8.3%	146	10.2%	.81	.63	1.51
3	87.9%	N/A	171	8.4%	131	9.7%	.86	.74	1.17
4	82.2%	N/A	98	7.1%	155	9.2%	.71	.52	. 98

Sample of report comparing blinded risk-adjusted O/E ratios of hospital to other sites in collaborative group

Specialized reports can also be developed from the seminannual report to pull out selected O/E results of all hospitals participating in the collaborative.

Resources Required

The opportunity for payor involvement is a benefit to ACS NSQIP collaborative groups, but not a requirement for forming a group. Many payors realize that supporting a pay for participation model for hospitals participating in the ACS NSQIP is very beneficial to the hospitals and the payors themselves. The payors are able to reduce their costs from complications and lengthy hospital stays while supporting surgical quality improvement initiatives that reduce morbidities and mortalities. The collaborative group and the payor form a partnership in which the payor may or may not receive blinded ACS NSQIP reports from the group. The payor may choose to distribute funds to the hospitals to help offset the cost of ACS NSQIP participation, or as they reach specific quality improvement goals. The payor may also support a coordinating center to organize and manage the collaborative.

Several collaborative groups use their own program manager to organize their hospitals, and their own data analysts or researchers to generate specialized reports for their members. Some groups pay a salary for these employees, oftentimes subsidized by a payor or corporate office, while others rely on volunteers from participating sites to perform these functions.

ACS NSQIP does not charge a fee for hospitals or groups to participate in a collaborative group, although there may be additional charges if ACS NSQIP is requested to perform extensive data analysis, host conference calls or web conferences for the group, or develop additional online reports.

- Payor involvement can reduce costs for hospitals and increase number of participants in collaborative
- Management and data analyst staff at group level can help organize hospitals and reporting of results
- Time and resources required varies by size, type, and goal of group
- No additional fee for participation in a collaborative group

Examples of Collaboratives

The following chart provides a sample of ACS NSQIP collaborative groups:

Group	Туре	# of sites	Payor involvement		
Florida Surgical Care Initiative (FSCI)	Regional	TBD	None at this time		
Illinois Surgical Quality Improvement Collaborative (ISQIC)	Regional	10	None at this time		
Michigan Surgical Quality Collaborative (MSQC)	Regional	34	Blue Cross Blue Shield Michigan		
Nebraska Collaborative	Regional	4	Pending		
Oregon NSQIP Consortia (ONC)	Regional	7	None at this time		
Pennsylvania Collaborative	Regional	10	None at this time		
Tennessee Surgical Quality Collaborative (TSQC)	Regional	10	Blue Cross Blue Shield of Tennessee Health Foundation		
Upstate New York Surgical Quality Initiative (UNYSQI)	Regional	6	Excellus		
Virginia Collaborative	Regional	5	None at this time		
Clarian Health System	System-wide	2	Clarian Health System		
Department of Defense/TRICARE	System-wide	16	Department of Defense/TRICARE		
Fraser Health-Canada	System-wide	3	Fraser Health Authority		
Kaiser Permanente Northern California (KPNC)	System-wide	6	Kaiser Permanente Northern California		
Kaiser Permanente Southern California (KPSC)	System-wide	4	Kaiser Permanente Southern California		
Mayo Clinic Surgical Quality Collaborative (MCSQC)	System-wide	4	Mayo Clinic		
Partners HealthCare	System-wide	5	Blue Cross Blue Shield Massachusetts		
ACS NSQIP Colectomy Collaborative	Virtual	TBD	None at this time		
ACS NSQIP Glucose Control Collaborative	Virtual	TBD	None at this time		

Frequently Asked Questions

Q: What is required by ACS NSQIP to start a collaborative?

A: Sites that want to join together informally to start a collaborative and share information with one another without any data sharing privileges may do so without any involvement required from ACS NSQIP. If your group wishes to share data with the collaborative and its member hospitals, it is important to contact ACS NSQIP on establishing parameters for the data sharing. Although we can not offer legal advice, we can work with you on a data sharing addendum that indicates what information can be shared with the group, who can access the information, and how the information can be used.

Q: Do we need payor support to be in a collaborative?

A: Although many groups do have payor support, it is by no means a requirement to start or join an ACS NSQIP collaborative. Many groups form without payor support and then try to receive payor involvement once they can show the group's surgical quality improvement and cost reduction to payors.

Q: What types of data can be shared?

A: The data to be shared is up to the collaborative group. We currently have groups that share only non risk-adjusted de-identified data, only risk-adjusted de-identified data, or both. Once the group determines what data it would like to share, ACS NSQIP will assist in the creation of the appropriate data sharing addendums for each site. Groups could also opt to not share any data, and instead focus on the sharing of quality improvement experiences and ideas.

Q: Is there an additional cost involved in joining a collaborative?

A: There are no additional costs for belonging to an ACS NSQIP collaborative. However, some extensive analysis or reports that go beyond standard ACS NSQIP reporting may require a nominal fee from ACS NSQIP. In addition, some larger ACS NSQIP collaborative groups support their own staff and data analysts.

Q: Is a Business Associate Agreement (BAA) between the participating hospital and the collaborative group required?

A: Several large collaborative groups, especially those partially funded by payors, have a BAA between the hospital and the collaborative group that details the responsibilities of hospital to the collaborative group, and the responsibilities of the group to the hospital. This is in addition to the standard ACS NSQIP Participation Agreement and data sharing addendum signed between the hospital and ACS NSQIP, which allows the ACS to share the hospital's ACS NSQIP data with the collaborative group. As the ACS NSQIP is not a partner in this data sharing, it does not require a BAA between the hospital and the collaborative group. The decision to have a BAA between the hospital and the collaborative is the responsibility of the collaborative group and the hospitals involved. ACS cannot offer legal advice, but we can provide examples of BAAs that have been used by other groups.

Q: I want my hospital to join a collaborative, but I cannot find other institutions within my region or hospital system that are interested.

A: ACS NSQIP is developing "virtual" collaboratives that will be based on specific procedures or outcomes. The

colectomy collaborative will be the first of the virtual collaboratives. Any interested hospital will be able to join the group, collect the defined data points, and participate in colectomy-based web conferences and calls. ACS NSQIP will create new virtual collaborative groups for procedures or outcomes that are of high interest to participating hospitals. Please let us know your areas of interest by contacting Amy Hart at ahart@facs.org.

Q: I want to start a collaborative in my state that will be supported by a payor, but I don't know where to begin. A: ACS NSQIP can set up conference calls or web conferences to discuss the benefits of collaboration with other sites or payors. We can also review any materials you are presenting to payors and provide a program overview and details on cost savings and surgical quality improvement. We are happy to be a part of discussions and meetings with payors, hospital associations, and hospital systems.

Q: We have a group of hospitals that is interested in starting a collaborative, but we cannot agree on what data should be shared.

A: ACS NSQIP can provide templates for data sharing addendums to help customize a data sharing addendum for your group. If the group of hospitals has difficulty deciding what data they would like to have shared, the collaborative can begin by sharing basic risk-adjusted deidentified data. As the group becomes more comfortable with sharing data, the data sharing addendum could be adjusted. Another option would be to opt out of the option of formally sharing data and instead focus on best practices and ideas for quality improvement, in which case no data sharing addendum is necessary. If the group later decides to include data sharing, ACS NSQIP will

assist your group in determining the data sharing option that best suits your needs.

Q: Can I speak with other collaborative groups about their experience?

A: Yes, ACS NSQIP can provide contact information for the facilitators of collaborative groups.

For more information on collaboratives or to let us know your areas of interest, please contact Amy Hart at ahart@facs.org

Collaboratives Bibliography

These publications provide further information on the benefits of collaboration in the area of surgical quality improvement, as well as details on the experiences of ACS NSQIP collaborative groups.

Birkmeyer NJ, Share D, Campbell DA Jr, Prager RL, Moscucci M, Birkmeyer JD. Partnering with payers to improve surgical quality: the Michigan plan. *Surgery* 2005 Nov; 138(5): 815-20.

Birkmeyer NJ, Birkmeyer JD. Strategies for improving surgical quality--should payers reward excellence or effort? *N Engl J Med*. 2006 Feb 23; 354(8): 864-70.

Campbell DA Jr. Quality Improvement is Local. J Am Coll Surg 2009 Jul; 209(1):141-3.

Englesbe MJ, Dimick JB, Sonnenday CJ, Share DA, Campbell DA Jr. The Michigan Surgical Quality Collaborative: Will a state-wide QI initiative pay for itself? *Annals Surg* 2007; 204(6): 1100-03.

Lindenauer, PK. Effects of quality improvement collaboratives. BMJ 2008 2008 June 28; 336: 1448-1449.

O'Connor GT, Plume SK, Olmstead EM, et al. A regional intervention to improve the hospital mortality associated with coronary artery bypass graft surgery. The Northern New England Cardiovascular Disease Study Group. *JAMA* 1996; 275 (11): 841-6.

Speir AM, Rich JB, Crosby I, Fonner E Jr; Virginia Cardiac Surgery Quality Initiative. Regional collaboration as a model for fostering accountability and transforming health care. *Semin Thorac Cardiovasc Surg.* 2009 Spring; 21(1): 12-9.



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