Surgeon-Specific Reporting: Merging Quality Improvement with Professional Development

Stephanie G. Yi MD, Alexandra Anderson MPH, Barbara L. Bass MD, FACS ,Carol M. Ashton MD, MPH, Nelda P. Wray, MD, MPH

Department of Surgery, The Houston Methodist Hospital, Houston, TX 77030

Introduction

As national quality initiatives are increasing requirements for individual physician data, our department of surgery initiated a surgeon-specific reporting (SSR) program. One of the most effective tools for evaluating individual performance is feedback (1), but only to the extent one adopts the information. It is a widely held belief that individual physicians and surgeons find it difficult or unnecessary to improve their clinical practice without objective, credible, and nearly real-time data of their own clinical performance relative to benchmarks. There are currently only self-reported surgeon-specific reporting systems (2), but no organized program that would allow surgeons to benchmark their performance against others. Little has been published in peer-reviewed literature regarding the implementation of general surgery SSR and the effect of these reports in quality improvement.

We previously evaluated our institutional SSR program to identify barriers to surgeons' use of their reports (3). While many surgeons agreed that reporting of surgeon-specific outcomes may be a powerful tool for continuing professional development, some surgeons negatively received the reports citing relevancy of metrics, understanding of data, and poor sampling. We engaged surgeons to identify pertinent metrics, develop adult learning educational efforts and address the limitations of sample size. We present our preliminary data below. Our goal is to develop a SSR program that can eventually be developed for MOC part 4.

Methods

We performed an IRB-approved observational study utilizing semi-structured interviews and qualitative research methods evaluating surgeon perception of how the SSR program can improve. All board certified general surgeons through the American Board of Surgery (ABS) in the department of surgery at Houston Methodist Hospital (Houston, Tx) were invited to participate. Cardiovascular, vascular, orthopedic, pediatric and plastic surgeons were excluded from the study.

Surgeons who volunteered for the study underwent private, semi-structured interviews of a target length of ≤30 minutes conducted by two investigators. Interview questions were designed to assess surgeon opinion on how to adjust the SSR program to become more relevant to the surgeon, including what type of metrics surgeons what to see (Table 1).

Interviews were recorded and transcribed. Participants were de-identified and their responses were kept confidential. Each transcript was reviewed for common themes utilizing the constant comparative method (4). Themes were identified from transcripts, then coded and refined collectively. Coding fragments relevant to each theme were extracted from individual transcripts and compiled. Fragments were then summarized into important elements.

Table 1 – Interview Questions

1	How would you describe your practice?
2	What type of procedures do you do?
3	In trying to capture your performance, how many patients would you say accurately reflect your practice?
4	Can you talk about some of the outcomes you look at to assess your performance?
5	What type of outcomes measures would help you reflect on your performance?
6	How about process measures - are there any you identify with in your practice?
7	If you could envision a report that would help you improve your surgical process and patient outcomes, what would it look like and how would you act on it?
8	Any other comments or impressions?

Results

Twenty of 33 surgeons (60.6%) ABS board certified general surgeons volunteered to be interviewed. Of those, fourteen (70%) were interviewed. Barriers to obtaining interviews included surgeon schedule and location of practice.

The majority of surgeons interviewed considered themselves to be general surgeons (85.7%), while eight surgeons cited an active practice in subspecialties such as critical care, abdominal transplant and minimally invasive surgery/bariatric surgery (Table 2). Fifty percent of surgeons associated themselves as being part of a group practice, while 43% stated they were part of a multidisciplinary practice involving physicians from other fields (such as nephrology, gastroenterology, cardiology, hepatology and critical care).

All of the surgeons cited knowledge of current metrics used to describe surgical outcomes. The majority (85.7%) expressed interest in seeing changes to the current reporting system. Most wanted to see outcomes not currently provided, such as quality of life and return to activity. Others requested "drill down" information so that patient cases can be reviewed thoroughly. Fifty percent requested benchmark information. Fifty percent believed there was a lack of appropriate comparison data relevant to their practice (Table 4).

The majority of surgeons reported having some type of self improvement process used in their practice (71.4%). This included using the department SSR program, tracking outcomes in a group setting, or employing a formal review of outcomes within their division. The abdominal transplant surgeons and bariatric surgeons had clinical outcomes personnel that tracked metrics and reported their findings during monthly meetings.

Common themes are summarized in Table 5.

Table 2 – Surgeon population

Surgeon population	
General surgery	12/14 (85.7%)
- Critical care	4/14 (28.6%)
- Abdominal transplant	3/14 (21.4%)
- Bariatrics, minimally invasive	3/14 (21.4%)

Table 3 – Surgeon practice

Group data	
Part of a group practice	7/14 (50%)
Mixed practice	6/14 (42.9%)

Table 4 – SSR Improvements

Aware of current metrics used to describe surgeon outcomes	**14/14** (100%)
Interest in different data reporting system	12/14 (85.7%)
Wanted other outcomes not reported	10/12 (83.7%)
Requested patient info	4/12 (33.3%)
Requested benchmark information	6/12 (50%)
Felt comparison data not available	6/12 (50%)
Has self improvement process in place	10/14 (71.4%)
Outcome system in place	2/14 (14.3%)

Table 5 – Common themes

Type of practice/procedure	Laparoscopic vs open Elective vs emergency Practice volume Group vs individual practice
Clinical Observations (CO)	General information on what surgeons think is important Comments that CO do have value Comments about why they are not valuable What physicians look for on daily clinical rounds of their patients including the degree to which they think those outcomes are limited Current effort surgeons to evaluate rates of outcomes across a group of patients
Value or lack of value to patient outcomes reporting to surgeon	Value or lack of value of risk adjustment Value or lack of value of sample size Value or lack of value of current metrics in general Concerns about volume, completeness and accuracy of outcomes assessed Obstacles to doing outcomes assessment (e.g., IRB, etc.) Limitations due to appropriate benchmark Limitations due to group data not surgeon-specific reporting Need for causal data and data on best practices

Summary

We engaged surgeons to identify pertinent metrics, develop adult learning educational efforts and address the limitations of sample size. Our goal is to develop a SSR program that can eventually be developed for MOC part 4.

Although most surgeons identified themselves as general surgeons, 71.4% also identified with a sub-specialty. This denotes one important barrier of SSR that could potentially hinder adoption and implementation, as each surgeon would like to be compared to peers within their subspecialty. This study has identified three sub-categories within general surgery. A solution might be to identify metrics specifically tailored for each sub-specialty.

Most surgeons are interested in other metrics than the ones currently being reported. The diverse answers received from the interviewees will contribute to developing a list of metrics not currently measured that are pertinent to general surgeons; and also those measured that do not have value for surgeons. Depending on the sub-specialty, metrics such as quality of life after surgery and return to normal activity after surgery were found to be valuable for surgeons in determining their performance.

The finding that most surgeons have a feedback mechanism in place for their practice is important. This study has informed that a powerful educational technique to improve surgeons' understanding of their report is to use the system already in place using the same setting and format (i.e., in a group setting with peers in the same practice). We will be able to appropriately build upon this information to develop appropriate learning techniques for each type of practice, using the preexisting system and building upon groups with formal outcomes review processes.

The results of this study emphasizes the eagerness and interest of surgeons to have access to their report and to be able to use those reports to improve their performance. There are several barriers, such as irrelevance of metrics, which could hinder the use of SSR. This study was able to demonstrate that despite these barriers, there are potential solutions such as using relevant and specific metrics for sub-specialties and working with surgeons in group settings, that would surely transform SSR into a continuous learning process for surgeons and a state-of-the-art tool for their ongoing professional development.

References

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Disclosures

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