PRACTICE MANAGEMENT

Incorporating Quality Measurement and Improvement Into a Gastroenterology Practice

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Am J Gastroenterol 2010;105:252–254; doi:10.1038/ajg.2009.475

The concept of quality measurement is foreign to medical practice. Quality has generally been taken for granted by physicians because patient care could not be conceived without total commitment and dedication. It has become clear, however, that a large variation in outcome and inconsistent application of recommendations and guidelines often result in care whose quality is less than optimal. In the past two decades, physicians have been under more pressure to increase their "output," and gastroenterologists have not escaped this pressure. The increased workload may be a reflection of the increased demand for specialty services but is due in part to a decline in reimbursement. Indeed, between 1989 and 2004, the average medical reimbursement for colonoscopy fell by more than 50%. A review of the experience of one of the authors in a large specialty gastroenterology practice from 1994 to 2004 showed an increase of 60% in visits and 90% in procedures. Rushing through the day may lead to breaks in protocol that result in overlooked diagnoses or adverse outcome, as Cohen has reported (1). It has also been demonstrated that performing colonoscopy rapidly may lead to detection of fewer adenomas (2).

It is important for gastroenterologists to ensure that efficiency does not compete with work quality. Monitoring of quality indicators through a simple form of reporting on a regular basis might be helpful.

A new focus on quality

A recognition of this fast pace of medical care in general and of a significant number of adverse events led the Institute of Medicine to publish, in 1999, *To Err Is Human: Building a Safer Health System*. This document raised a national awareness of medical complications and what were claimed to be nearly 100,000 unnecessary deaths each year due to medical errors (3). A follow-up document in 2001 issued a call to action and for transparency of quality in health care (4).

Gastroenterology is responding to this call to focus on quality. In 2005, the American Gastroenterological Association published its Task Force on Quality in Practice recommendations. The task force concluded that if gastroenterologists do not develop and implement meaningful quality measures, the purchasers and users of gastroenterology services will define both how this type of medicine should be practiced and the relative value of gastroenterologists (5). The American College of Gastroenterology (ACG) and the American Society for Gastrointestinal Endoscopy (ASGE) came to a similar conclusion and, in 2005, formed a joint Task Force for the Development of Gastrointestinal Endoscopy Quality Indicators. These indicators, published in 2006, are meant to be a guide by which gastroenterologists can begin measuring this aspect of their practice (6–10). In a follow-up to their original article on the relationship between time of withdrawal from the cecum and rate of adenoma detection, Barclay *et al.*, of Rockford Gastroenterology Associates (RGA), reported a significant improvement in adenoma detection rate by implementing a requirement that a minimum of 8 minutes be allowed for withdrawal from the cecum (11).

Pay for performance

The Centers for Medicare and Medicaid Services (CMS) has issued numerous bulletins and requests to physicians to begin focusing on quality (12). The agency seems to be test-driving quality measures with the Physician Quality Reporting Initiative (PQRI). The current plan is to develop a website for reporting physician quality performance. Although PQRI participation is voluntary, one measure that the CMS plans to post on the website is whether a physician participates in collecting PQRI quality measures. Participation by gastroenterologists in the PQRI prior to 2009 was quite low. The intention of the 2009 HITECH (Health Information Technology) Act is to encourage a higher adoption rate of electronic health records (EHRs) by physicians. One driver of this is the belief that EHRs will facilitate measuring quality and practicing at a higher level of quality. Initial indications are that this stimulus bill will allow some practices to receive up to $44,000 per physician over a several-year period. The qualifying requirements include meaningful use of a certified EHR. The certification standards are still undefined at the time of the writing of this article, but, at minimum, the certified EHRs will need to be able to provide clinical decision support, support physician order entry, capture and query information relevant to health-care quality, and exchange EHRs from other

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sources. "Meaningful use" will include electronic exchange of information to improve quality and care coordination, including e-prescribing and reporting on quality measures. This stimulus package will be welcome relief to physicians wondering how they will afford the additional expense of measuring and reporting quality data about their practices.

Gastroenterologists' experience with the PQRI and commercial pay for performance (P4P) programs has been confusing, frustrating, and unappealing. Both systems appear to place economic incentives above true quality measurement. The PQRI lacks consistency in reportable measures from year to year and uses a complex formula to determine payment to physicians, and payments to physicians are small. Commercial P4P is even less appealing than the PQRI. Use of outdated, nonvalidated data to determine quality measures; publication of physician profiles without a clear plan for incentives or penalties; start-up costs; and, in general, lack of reimbursement leave little incentive for physician participation.

Although some physicians have successfully managed the PQRI and P4P, their experience is not typical among gastroenterologists. A review of P4P programs to date indicates mixed findings as to whether the intended result of improving the quality of health care provided is achieved with such programs (13). The ACG has published a guideline for P4P programs calling for meaningful measures (14).

Measuring and reporting quality data

The ACG and the ASGE have established the GI Quality Improvement Consortium, LLC (GIQuIC), a nonprofit organization to build and operate a national gastroenterology quality-data repository to assist gastroenterologists in complying with quality-data collection. It is felt that this method will yield more reliable data than current systems using claims data submitted to government and private insurance companies to assess the quality of clinical practice. A pilot data repository has been found to successfully collect endoscopic quality-indicator data from diverse sites using several endoscopy report writers as well as data extracted from paper charts and submitted via an Access database, and to benchmark the quality measures used by the participating physicians (15).

Current measures being used in this endoscopic quality-indicator benchmarking project are taken from those developed by the ACG–ASGE joint task force and published in 2006, including some from the introductory article dealing with measures common to all gastrointestinal endoscopic procedures (6) and some from the colonoscopy document (7). These include:

1. History and physical documentation on chart
2. Informed consent, including risks
3. Written instructions given
4. Anticoagulation instructions given
5. American Society of Anesthesiologists category (ASA I–VI) documented
6. Adequate bowel-prep rate
7. Written discharge instructions rate
8. Colonoscopy indication documentation rate
9. Adenoma detection rate: women 50 years or older
10. Adenoma detection rate: men 50 years or older
11. Average withdrawal time (minutes)
12. Specimen retrieval rate
13. Polyp morphology described
14. Polyp size described
15. Complications documentation rate

Measuring quality

Gastroenterologists must be proactive and involved in the process of formulating and implementing quality measures at the national level. This process extends to individual practices—as difficult as it may be, we must critically examine our practice patterns to determine compliance with validated quality measures. The development of a "quality culture" within a practice is attainable. It begins with strong physician leaders outlining the merits and benefits of a quality culture to the physicians within the group. Potential benefits include improved patient outcomes and financial incentives for physicians. For example, increasing withdrawal time increases adenoma detection rates. This leads to improved patient outcomes through a likely reduction in colon cancer risk. Patient satisfaction will probably improve, potentially leading to increased referrals through word-of-mouth communication. Financial incentives include increased charges at the time of initial colonoscopy as a result of higher polyp detection rates; a larger surveillance population; and a theoretical reduction in medical malpractice risk by the performance of a more thorough colonoscopy. In addition, measurement and recording of cecal intubation rates and adenoma detection rates may serve as a contract-negotiating tool as they relate to reimbursement rates from insurance carriers.

Measurement of quality can also be used as an effective marketing tool. For example, the RGA physicians published their experience measuring adenoma detection rates and colonoscopic withdrawal time (2). This led to favorable reviews in lay-press publications, and RGA subsequently received numerous requests for colonoscopy. Positive quality data mined from internal and external benchmarking projects can also be posted on a practice's website.

The most difficult and time-consuming aspects of developing a quality culture are the development and implementation of the internal quality-measurement program. At RGA, the program was developed through a journal club, a practice committee, and a research committee. The journal club is used to discuss how the group manages common or difficult cognitive and endoscopic topics. Topics that the group deems worthy of further quality investigation are then referred to the practice committee.

The practice committee consists of six physicians, a clinical nurse coordinator, and a secretary. The committee performs a

thorough evidence-based literature review of the assigned topic. After this review, new management guidelines are presented to all physicians for formal approval and, if passed, implementation. In some instances, RGA collects data on a specific topic to monitor process and progress of quality measurement. Periodic chart reviews may be conducted to allow for any possible intervention that may be necessary regarding physicians' practice patterns.

Finally, clinical topics that RGA believes lack strong evidence-based data may evolve into a formal research project. This process occurs within the research committee. The committee, which consists of seven physicians, a research nurse, and a secretary, develops data sheets, research protocols, publications, and presentations.

Summary

All gastroenterologists should implement quality measurement in their daily practice. This should be done through internal and external benchmarking projects, practice-guideline implementation, and periodic practice/physician reviews. The benefits of building a quality culture within a practice include improved patient outcomes, increased patient satisfaction, and possibly financial rewards. A quality culture is a "win–win" situation for patients and physicians.

CONFLICT OF INTEREST

Guarantor of the article: Irving M. Pike, MD, FACG.

Specific author contributions: Both authors contributed directly to the writing of the paper as well as to organization of the sections.

Financial support: None.

Potential competing interests: None.

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