

What is Quality Improvement?

In Brief: You can't open a newspaper, Web site, or journal article these days without hearing phrases such as "quality health care," "quality improvement," or "quality initiatives." However, some physicians may not understand what these terms mean, let alone how these initiatives impact their practices. This article is the first in a series that will provide a snapshot of today's environment, what's behind the quality movement, and what the impact is for our nation's physicians. The article was developed by Karen L. Andrews, MD, assistant professor of PM&R at the Mayo Clinic in Rochester, Minnesota, and chair of the AAPM&R Practice Improvement Committee; and Lisa Kaplan, JD, director of health policy and practice services at AAPM&R.

QUALITY IMPROVEMENT is the topic of the day in most US health care institutions, and everyone is looking for ways to improve what they do. Politicians and the media closely follow issues of physician quality and accountability. And since it's here to stay, physiatrists should take a moment to educate themselves about the history of the quality movement and the ways it affects them personally.

Why quality matters

The focus on quality has increased with increasing health care costs. Many factors have contributed to the high cost of health care including advances in health care information and technology, increased demand for innovative medical technologies, the focus on treatment rather than prevention (especially of chronic diseases), costly end-of-life care, and the high administrative costs of providing insurance:

- Currently, approximately 90% of national health care spending goes to treating the sick, only 10% is spent on wellness and prevention.

- Adults do not receive about half of the clinical services that would likely benefit them.
- There is also a certain percentage of fraud and abuse that contributes to the overall cost of health care.

Despite increased spending, the health status of the United States remains low relative to other countries that spend less on health care, suggesting wasteful and inefficient health care resource allocation in America.¹ In fact, other countries achieve better performance on many measures despite higher per capita health care spending in the United States versus other industrialized countries. Spending varies widely among US regions yet there is no evidence that more expensive regions have either better quality or improved health outcomes.

The complexity of health care delivery has increased. As a result, the boundaries between doctors, nurses, and other health professionals have blurred. Interdependence among professionals and other support and managerial personnel has increased.

Quality patient care should be the first priority of every physician. Efforts to measure and reward quality care have grown exponentially over the last decade with the goal to increase the number of patients treated by high-quality health care providers. According to the Institute of Medicine Committee on Quality Health care in America, the nation's health care delivery system is in need of change. Trying harder is not going to work; changing the system of care will. Each of us plays a critical role in maintaining and improving the high quality health care we offer at our institutions.

CQI: A background, a future

Optimal performance in practice is measured by continuous quality improvement (CQI). CQI is the ongoing, organization-wide framework in which employees

are committed to and involved in monitoring all aspects of their organization's activities to continuously improve them. CQI is a method of quality control that is widely accepted in the manufacturing industry. This method creates a culture of shared learning and cooperation and uses repeated data collection to analyze and improve production processes. Adapting these principles to medicine presents unique challenges. Physicians often resist standardizing care, fearing a loss of autonomy, or loss of their ability to provide individualized care. For two decades, health care workers have been struggling with varying degrees of success to use the principles of continuous quality improvement to improve the quality of patient care.²

The objectives of quality improvement are to identify opportunities for expense reduction while simultaneously ensuring access to new technology, good procedural outcomes, and patient satisfaction. The effort includes a critical evaluation of current practice to develop process improvements, reduce practice variation, and optimize resource consumption. A process is broken down into a series of steps and then analyzed to decide what might work better. The effectiveness of an intervention is examined in terms of specific clinical and economic outcomes. Experts using CQI in health care believe it is possible to save money and at the same time improve quality.

In 1991, JCAHO formulated a plan to move hospital quality programs away from quality assurance (QA) and toward CQI. Quality assurance is part of the medical culture. An event triggers an investigation into why it occurred and identifies who is at fault. CQI focuses on improving the process or system rather than placing blame on individuals. A general principle of CQI thinking is that 85% of errors in any system occur because of a suboptimal system and only 15% of errors are attributed to individuals working within the sys-

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tem.³ CQI thinking is “What is wrong with this system and why did an error occur?” (The system failed the employee rather than the reverse). The evidence suggesting quality problems are caused in part by systems failures has led to an emerging focus on the organizational aspects necessary to improve the quality of health care.

CQI tools identify a process to improve, organize a team (making sure all key groups are involved), select and implement the improvement, and then repeat the process. It is not just one process or cycle; it is a repeated cycle of improvement. With small but incremental changes over time, and coordination across health care providers, the quality of care has improved.⁴

Creating vital measurements

Effective communication and teamwork is essential for high quality, safe patient care. When a mistake is made, a failure of interdisciplinary communication is often to blame. The complexity of medical care coupled with the inherent limitations of human performance make it important to have standardized communication tools, an environment in which individuals feel free to speak up and express concerns, and a common language to alert team members to unsafe situations. It is clearly preferable to develop an approach that protects patient safety and optimizes outcomes without a catastrophic event prompting review of processes of care.

The Institute of Medicine Report, *To Err is Human*, placed a spotlight on preventable medical errors. Since its release, patient safety has become a preeminent issue for health care.⁵ Wrong-site, wrong procedure or wrong person surgery suggest problems with the accuracy and completeness of the information brought to the point of care; the quality of communication; and the degree of teamwork among the members of the team.

The public, hospital leaders, and health care professionals want to reduce the risk of similar system failures occurring in the future. One way to help us all learn what we need to improve is to share very openly – transparently – the metrics that reveal the performance of our care delivery. When patient care is compromised, discussing the case may give us information to improve our processes, and that can help

ensure safety in the future.

One example of a successful quality measure that had a huge impact was related to hand hygiene. The Centers for Disease Control and Prevention (CDC) estimates there are 1.7 million health care associated infections and 99,000 associated deaths each year in the United States. The 2002 CDC Guideline for Hand Hygiene in Health care Settings states that failure to perform appropriate hand hygiene is considered the leading cause of health-care-associated infections and spread of multiresistant organisms. Studies show a temporal relationship between improved hand hygiene practices and reduced infection rates.

In October 2004, a national campaign urged Americans to “Speak Up” and take appropriate steps to reduce the spread of infection. As part of that campaign, a tertiary care center implemented a multimodal infection control program focused on hand hygiene, and reduced the rate of nosocomial infection by more than one-third, and improved both the quality of care and patient outcomes.⁶

Payers and patients are primarily interested in excellent care as defined by measured outcomes (e.g. decreased infections, readmissions, mortality). Good processes of care (evidence-based guidelines) should lead to good outcomes.

Stay tuned...

But payers and patients aren't the only ones interested in quality outcomes. Nearly everyone involved in the health care system cares about outcomes: Patients, purchasers, and health plans have different pressures, perspectives, and expectations. Patients want to see the physicians they want when they want, and they do not want to pay more to have these options. Employers (purchasers of health care) aggressively try to reduce perceived waste (the employers are the drivers actively involved in what they purchase). They would like to keep employees “healthy” because it is cheaper to do so. They want to increase value and contain the rising costs of health care. Health plans want to rein in cost, but they are also working to maintain and regain patients' trust. Health care organizations face pressures from patients to improve the quality of care and clinical outcomes as well as pressures from managed care to do so more efficiently.

In the next issue, we'll take a closer look

at the concept of measuring quality improvement. One thing is sure: Though consensus on what to measure and how to measure it is still being determined, quality movement is here to stay. And in most of our lifetimes, we will watch this concept move from new and abstract to vital and defined. ■

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