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How Do We Measure Quality?

We should not delude ourselves: The science of comparative quality measurement still poses many problems.

by Kathleen N. Lohr

Elizabether McGlynn, in her paper, documents several challenges that policymakers, health care providers, payers, and consumers must address in the coming years. In this Perspective I respond to and expand upon the points made in her overview.

Defining Quality

Quality of care can be defined and measured. In discussing this definition process, four points deserve particular attention because of the continuing challenges they pose to adequate quality measurement, assurance, and improvement.

- **Range of services.** Health care services encompass a broad range of services that affect both physical and mental health. Society will pay dearly if it continues to make artificial divisions and distinctions that reduce access to mental health services (broadly defined) or that de-emphasize concern with the quality of those services. In addition, as managed care organizations put care into the hands of multidisciplinary “teams” and integrate care across sites, this emphasis on the broad spectrum of health services, and thus on continuity of care, becomes increasingly salient.

- **Individual versus population.** Those concerned with assessing and improving the quality of health care must focus on both individuals and populations. Traditionally, the quality-of-care world has targeted the services that “users” receive, but increasingly it must direct attention to the entire community. Thus the definition of community must include “nonusers” of care.

Access to and availability of care are significant correlates of high-quality care. The complex incentives and disincentives of the evolving managed care scene make these correlates increasingly a matter of concern, precisely because of the possibility that the number of nonusers will rise in the future, in lockstep with the increase in the number of uninsured persons to a figure now approaching, if not exceeding, forty-three million. Thus the troublesome question of evaluating nonuse or underuse of needed and appropriate services—arguably the most methodologically demanding quality assurance task because of the difficulty of identifying or assessing “nonevents”—takes on even greater significance than it did in the past.

- **Range of outcomes.** The “end results” of health care that are of concern in quality assurance and improvement efforts must encompass a wide range of clinical and biologic endpoints and, especially, health status and functional outcomes. The Institute of Medicine (IOM) definition that McGlynn cites, in calling attention to “desired health outcomes,” reinforces two ideas: first, that providers and purchasers need to be mindful of people’s overall well-being and welfare, and second, that they must take careful account of people’s preferences and values as they and their families make decisions about alternative health care interventions. Nevertheless, attention to the outcomes of care should not

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drive out study of the processes of care, which for methodological reasons may be the only practical approach in many situations.

Knowledge base. Health professionals must stay abreast of the dynamic knowledge base within their specialties and disciplines, and they must put such information to best use through, for instance, the development and use of good clinical practice guidelines.

The implications of this stance for health professions education are striking, but they do not typically receive much attention in the quality arena. For instance, as the IOM has highlighted in a definitive report on primary care, primary care team practice will increase in future years as managed care organizations put into place innovative teams involving various combinations of generalist physicians, nurse practitioners and other types of advanced practice nurses, and physician assistants. These developments will call for much different approaches to undergraduate and graduate training of the health care workforce. These professionals will need to reach consensus on common core competencies and develop and field new mechanisms for cross-discipline training and continuing education.

Furthermore, specialists or subspecialists are likely to attempt to take on more responsibility for primary care as the “primary” or “principal” physician for their patients with serious chronic illnesses; examples include endocrinologists for persons with diabetes, nephrologists for patients with end-stage renal disease, or neurologists for persons with multiple sclerosis. They will face significant tests in acquiring and maintaining skills in their own specialty as well as in primary care.

These developments raise fresh challenges for the assessment and improvement of health care quality in at least two ways: They complicate the creation of robust practice guidelines that will be appropriate for all principal members of health care teams, and they potentially pose the need for more complicated strategies of quality measurement and intervention.

Continuing Concerns

We typically speak about a triad of problem areas: technical and interpersonal competence; overuse of unnecessary and inappropriate services; and underuse of (or lack of access to) needed and appropriate services. Adequate knowledge and skills are always issues, no matter what type of health care system we might have. Inferior care results when health professionals lack full mastery of their clinical areas or cannot communicate effectively and compassionately. As suggested above about primary care, team practice, and specialty care, this focus on competence and humanistic behaviors will not likely diminish.

In the past and to some extent continuing to the present (despite the rise in various types of managed care arrangements), the nation’s main approach to financing and organizing health care has been fee-for-service. As is generally recognized, the incentives of a fee-for-service system tend to make overuse of health care the major problem. Much progress has been made in the past decade or two in creating a toolbox of measures for evaluating quality of care, but it has aimed chiefly at reducing the use of unnecessary or inappropriate services (and their attendant costs).

Nevertheless, with managed care in various forms dominating the U.S. health care system, incentives are growing to put ceilings on use of services; hence, underuse (or complete lack of access to care) threatens to become the major problem. Many people are increasingly sensitive to this issue. For instance, a recent Louis Harris poll indicated that 72 percent of a sample of health care experts interviewed believe that in ten years it is “very likely” that insured persons will have less coverage and have to pay more out of pocket than they do today. When we combine that observation with the known effects of higher cost sharing—namely, that cost sharing will depress demand for both unnecessary and necessary care—we do have reason for concern, especially for the one in five nonelderly Americans who have little or no health insurance.

In my view, among the most worrisome
areas are mental health and substance abuse care, services for persons with rare or complex diseases, and long-term care for the disabled and elderly. For instance, health maintenance organizations (HMOs) may spend no more than 1 percent of their total expenditures on alcohol and other drug treatment. They may also severely limit the length of treatment and the use of ancillary (wrap-around) services, which some experts in the substance abuse field believe are the two most important elements of a high-quality, comprehensive approach to care for persons with such problems. How quality is to be maintained in such circumstances and for such populations remains a significant unanswered question.

Provision of preventive services presents similar questions about future quality of care. Health promotion and disease prevention comprise standard screening tests as well as various services that might forestall significant sequelae of chronic physical or emotional disorders. Although managed care organizations (MCOs) may have a true commitment to screening and to primary or secondary prevention, providing these services is a cost in the short term. If MCOs do not believe that these patients and consumers will be members of their plans over the long run, then they may doubt that they can or will recoup those outlays in the future by virtue of having, on average, a healthier membership. In fact, to the extent that people do not stay with plans over extended periods, a competitor may gain from the prevention-related expenditures of the original plan, which makes it even less attractive for a given plan to make such services easily accessible. This clearly has important quality-of-care ramifications.

This line of reasoning on the part of MCOs may have other downsides as well. For example, some plans may reason that it would be better to engage in various types of risk selection, such as recruiting healthier members or discriminating against less healthy persons, than to pursue aggressive preventive programs. McGlynn correctly implies that a more comprehensive view of quality of care must employ quality measures—probably process-of-care measures—that can take account of strategies driven by these complex fiscal incentives.

A Traditional Assessment Model

More than three decades after Avedis Donabedian’s authoritative conceptualization, experts accept the view that quality measurement or assessment calls for observing and collecting information on three aspects of care: the “structural” elements of care, such as professional credentials or accreditation status of a hospital or health plan; the “processes” of care, or essentially what practitioners do to and for their patients from prevention and screening through diagnosis, treatment, and palliation or counseling; and the “outcomes” of care, both short- and long-term. McGlynn accentuates the need for explicit, clinical criteria by which to judge any of these aspects of health care quality, a well-justified position in my view.

I emphasize a related point. Quality measurement should involve both processes and outcomes of care; a focus on only one will be a mistake. Today’s emphasis on “outcomes management” will not be the answer to all of the quality problems likely to arise tomorrow. Furthermore, comparisons of practitioners, providers, or plans on any measures of quality—whether process-oriented or outcomes-related—risk being wrong, or at least misleading, if they are not done with proper adjustments for what is known as case-mix, severity of illness, and the presence of other conditions (comorbidity). Uncritical reliance on technical adjustments and arbitrary cutoffs said to be statistically significant may, however, produce information that is in the end also misleading with respect to the day-to-day decisions that patients and their families need to make about health care plans, facilities, or physicians. In short, the science of comparative quality measurement still poses many conceptual and technical problems. As the nation moves toward an aggressive
market-oriented health care system, we ought not delude ourselves on this point.

**Accountability**

Finally, responsibility and accountability are watchwords of the current political discourse. For quality of care, this debate plays out at the interface between quality assurance and quality improvement. Traditional quality-assurance programs tend to be oriented toward individual practitioners or facilities, have a more regulatory cast, and be imposed from outside. By contrast, newer continuous quality improvement (CQI) or total quality management (TQM) strategies tend to focus on systems of care, encourage providers to work at continually improving their performance, and be considered more of an internal, data-driven approach. Many observers appear to believe that the CQI/TQM approaches ought to supplant the older types of quality-assurance efforts, especially those of the public sector.

I do not believe that this view is either wise or practical. The nation cannot rely solely on internal quality-improvement programs. It does not do so in many other sectors such as transportation or defense procurement, and there is no obvious reason for it to do so in health care. Rather, we also will always need some forms of external quality assurance, whether regulation by a public-sector agency or rigorous accreditation and certification in the private sector.

**Conclusion**

As the challenges posed by McGlynn clearly indicate, the nation faces major decisions about how it will deliver high-quality care to all of its citizens. The goals of quality assessment and improvement have become integral to the business of health care. What remains to be seen is how successfully they will be translated into fruitful action that brings high-quality services and desired health outcomes to all.