Professionalism and Evolving Concepts of Quality

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For much of the twentieth century, quality of care was defined specifically in terms of physician characteristics and behaviors. High-quality physicians were well trained, knowledgeable, skillful, and compassionate. More recently, quality of care has been defined in terms of systems of care. High-quality organizations develop and adopt practices to reduce adverse events and optimize outcomes. This essay discusses this transformation from physician-based to organization-based concepts of quality and the consequences for patient care and medical professionalism.

KEY WORDS: quality of care; professionalism; physicians.
DOI: 10.1007/s11606-006-0031-1
 2007;22:137–139

QUALITY OF CARE: CONTRASTING VIEWS

As medical house officers who trained together in Internal Medicine in the 1980s, we (JNK, SAL) believed we knew who provided the highest-quality care. The best interns were those who spun the urine, gram-stained the sputum, and wrote notes on late-night admissions before the sun rose the next morning. The best residents had deep funds of knowledge, provided pertinent references, and did not leave the hospital until they had checked the radiographs of all patients admitted to their service. The best attending physicians had wise judgment, impeccable integrity, and stayed late at night to discuss difficult cases with families and house officers.

Much has changed. Quality 20 years ago was defined specifically in reference to physicians. Quality doctors were intelligent, empathic, and omnipresent. Today, the medical profession, and society at large, defines quality in terms of the capacity of the physician's health care organization to promote health and prevent error. The physician's distinctive role is diminished; in fact, some argue that medicine should emulate the "equivalent actor" model of commercial air travel, in which passengers have full confidence on boarding a flight without knowing or caring who the pilot is.[1]

Quality today focuses on systems and organizations. The medical community identifies high-quality hospitals as those with computerized order entry systems, online alerts to prevent drug interactions, and intensive care units staffed with fellowship-trained intensivists. Similarly, the present-day high-quality physician practices in a group with reminder systems for identifying patients who should have flu shots, mammograms, and cholesterol and PSA screenings. We expect systems to ensure safe and appropriate care despite human errors. Increasingly, these expectations are leveraged with explicit performance measures.[2,3] These ideas, many embodied in The Institute of Medicine's landmark report on quality, "To err is human,"[4] have fueled initiatives to improve quality at the system level.[5–11]

Quality has become an increasingly frequent concern of health policy makers and researchers. We performed a PubMed review of English language articles on "quality of care" in the United States and documented an increase from 6 articles per year during the period 1966–1979, to 55 per year from 1980 to 1994, and 207 per year from 1995 to 2005. However, the proportion of articles on quality of care that focused solely on the physician dropped from 34% in the first period (1966–1979) to 18% in the latter 2 periods (1980–2005). Meanwhile, we note an increase in the number of articles on quality that focus on the implementation and use of information systems to improve safety. These findings reflect the transformation from physician-oriented to systems- and technology-oriented concepts of quality (see the Appendix for the methodology of the literature review).

How did this transformation occur? The physician-centered concept of quality emerged from a crisis over a century ago. More than 150 schools of medicine existed in the 1800s all over the United States, with no formal accreditation. Schools varied widely in their resources, curricula, and faculty qualifications. Physicians graduated with alarmingly inconsistent skills and knowledge. Charges of charlatanism and quackery were commonplace.[12] In response, the Flexner Report of 1910 called for dramatic reform in medical education with an emphasis on standardization, accreditation, licensing, and commitment to scientific methods.[13] Many medical schools closed following the Flexner Report. Those that survived catalyzed a transformation in medical practice from craft to profession.[12]

As a profession, medicine enjoyed authority and autonomy through the early and middle decades of the twentieth century. During these years, physicians were largely self-governed and self-regulated. Notions of quality care were based on abstract but noble ideals for doctors, including respectful personal relationships with patients.[14] By the middle of the twentieth century, the profession was thriving. Physicians delivered to patients groundbreaking achievements of medical science,

Received March 9, 2006
Revised July 17, 2006
Accepted September 28, 2006
Published online January 9, 2007

including antibiotics, antipsychotics, cardiac revascularization, and orthopedic implants.

However, the end of the twentieth century brought significant changes to the medical practice, with attendant consequences for quality. First, the locus of care shifted from the home and the small physician office to the hospital and the large multispecialty practice. Second, because physicians were reimbursed on a fee-for-service basis, they had no incentive to keep costs in check. Other models of risk sharing arose in response to rising costs, and with them, a corporate presence emerged in medicine. Third, the aging of the population put an increasing proportion of citizens at risk for adverse effects of an ever more aggressive diagnostic and therapeutic armamentarium. Fourth, reports documented an epidemic of medical errors,[5–8,15] spurring thinking about containing and reducing these errors. Thus, medicine became more corporate, complex, and risky. Careful measurement and management of errors thus became a necessity.

The history of quality measurement in the last 30 years provides another lens into the shift from physician-based to systems-based notions of quality. Many initial efforts at quality assurance focused on physician error, typically using a peer review approach. Berwick[16] pointed out that such efforts to identify "bad apples" created anxiety and defensive maneuvering among physicians but did little to improve care. A cornerstone of care improvement initiatives in the late twentieth century was the use of comprehensive information systems that have so far been unaffordable for many small practices and hospitals.[17] Experts in quality of care pointed to the successes in error reduction reported by U.S. and Japanese industries that subscribed to continuous quality improvement techniques.[9] All of these developments favored the creation of large health care delivery systems and the definition of quality as the ability to deliver timely, appropriate, safe, and evidence-based care.

Demographic changes among physicians accelerated the transformation from individual- to systems-based care. The physician of the mid-twentieth century worked long hours. In reality, this "golden period" in medicine was trying for physicians and their families. As the century closed, a newer generation of medical professionals was less willing to sacrifice personal and family priorities. The focus on controllable lifestyle increased as couples entered the physician workforce, both partners now needing to juggle professional and home interests.[18–20] The new generation of physicians favored limited working hours, shared practices, night float coverage, Hospitalist care of inpatients, and other structural factors permitting them to lead more balanced lives.

Naturally, physicians have struggled with these issues. Physicians and other scholars have written thoughtfully about the tension between caring for others and caring for themselves,[21] the challenges of humanistic care,[22] and the difficulty of maintaining professional standards in large health care organizations.[23] For example, the Physician Worklife Study explicitly examined relationships between characteristics of the workplace, physician stress, and physicians' physical and mental health.[24] Collaborations between physicians and other professionals (e.g., physician assistants, nurse practitioners) represent but one approach to addressing physician overcommitment while ensuring quality care.

If "quality" today is embodied in a system that delivers, not a physician who cares, what is the physician's role in quality? We fully support the development of health care systems that leverage resources to deliver the right care to the right patient at the right time. We enjoy having less demanding on-call schedules than our own teachers. However, we also wonder whether the focus on effective care systems dilutes the importance of attention to clinical nuance—a patient's fearful glance, a subtle erythematous eruption, an emerging electrolyte disturbance.

Survey data suggest that concerns about patient satisfaction with care are well founded. Five years after *To Err is Human* was released, half of Americans stated that they were dissatisfied with the quality of health care in the United States.[25,26] Patients are distraught when their physicians hurry in the office, do not look them in the eye, or send them home quickly from the hospital. Patients want physicians who are accessible, knowledgeable, meticulous, and patient. They want clear explanations for their health problems and constructive suggestions on how to manage these problems. Thus, patient notions of quality go well beyond error prevention. These dimensions of patient satisfaction have not been measured traditionally, but are now assessed by the National Committee on Quality Assurance[23] through the health plan employer data and information set. If physicians are held accountable for their satisfaction scores, the argument is that they will strive to improve the scores. Patients are taking an active role in shaping health care delivery as well, as witnessed by the emergence of consumer-driven health care. We interpret the popularity of the boutique practice movement as a market expression of patients' preferences for individualized care, and failure of the profession to deliver it.

Thus, the progress made in improving patient safety practices at the organizational level has not translated into patient admiration and trust in the profession. We suggest that the explanation may lie in the dichotomy discussed here between physician-based and systems-based concepts of quality. While the medical community focuses on error reduction, patients continue to seek trust, compassion, information, and reassurance from their physicians. We suggest that organizational efforts to improve quality must be coupled with a recommitment to these core values embodied in the definition of medical professionalism: hard work, mastery of a body of knowledge and skills, and empathic relationships with the patients whom physicians serve, placing patient interests above physician self interest.[27]

We suggest that physicians have, largely unwittingly, abdicated key elements of medical professionalism. Patients have experienced this transition as a loss. While patients may be reassured by the increasing safety of America's hospitals, the Kaiser Foundation Report suggests they still are disappointed with their care.[25,26] In fact, many physicians share this vision and find, regrettably, that they must work increasingly hard to maintain the patient-centered care they provide. The American Board of Internal Medicine (ABIM) has recognized the need to recommit to professionalism and has articulated principles and commitments to guide professionalism in medicine in the present era.[24,28] These principles emphasize the primacy of patient autonomy and social justice and call for integrity, respect, and compassion among physicians. The Society of General Internal Medicine (SGIM) has also addressed these issues through working groups. We applaud the efforts of the ABIM, the SGIM, and other organizations in this area and challenge our leaders to use technology, incentives, and other

levers to reinforce fundamental patient-centered tenets of the profession. More generally, we urge that these essentially separate initiatives to reduce error in our hospitals on the one hand and to increase professionalism among physicians on the other be joined in a more comprehensive effort to improve the quality of medical care.

Acknowledgements: *We thank Drs. David Bates, Paul Cleary, Gary Brandeis, and Robert Witzburg for their thoughtful comments on earlier drafts of this essay. Funding was supported by NIH/NIAMS K24 AR 02123 and NIH/NIAMS P60 AR 47782.*

Potential Financial Conflicts of Interest: *None disclosed.*

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APPENDIX

Methodology for review of the literature

Using the PubMed search engine, we utilized the keyword *quality of care* to identify articles on quality. We performed 3 separate searches for the periods 1966–1979, 1980–1994, and 1995–2000. Citations were excluded if they did not deal with quality of care, did not have an abstract, were not in English, or did not evaluate quality of care in the United States. Within each period, we reviewed randomly selected citations until we found 50 per period that were not excluded. To estimate the number of articles dealing with quality of care in each of the 3 periods, we multiplied the total number of citations ("hits") by the ratio of eligible citations we reviewed to the total (eligible plus ineligible) that we reviewed, and then divided by the number of years in the period. (For example, in the period 1980–1994, *quality of care* generated 1,792 citations. We reviewed 108 randomly selected citations to identify 50 that were eligible. We estimate the number of citations in this period as $1792 \times (50/108)/15$ years $=55$ per year.) We completed a detailed coding form on the abstracts of the 50 eligible citations per period. The coding form classified the abstract as addressing physician-centered aspects of quality (such as credentials, training, or volume) or systems-centered aspects of quality.

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