Health Affairs

Cite this article as:
Michael L. Millenson
The Long Wait For Medical Excellence
Health Affairs, 32, no.10 (2013):1757-1760

doi: 10.1377/hlthaff.2013.0567

The online version of this article, along with updated information and services, is available at:
http://content.healthaffairs.org/content/32/10/1757.full.html

For Reprints, Links & Permissions:
   http://healthaffairs.org/1340_reprints.php
E-mail Alerts : http://content.healthaffairs.org/subscriptions/etoc.dtl
To Subscribe: http://content.healthaffairs.org/subscriptions/online.shtml

By Michael L. Millenson

VIEWPOINT
The Long Wait For Medical Excellence

ABSTRACT In October 1997 the book *Demanding Medical Excellence: Doctors and Accountability in the Information Age* provided a pathbreaking examination of the quality of American health care. It documented rampant medical error and the absence of evidence-based practice, highlighted the potential of electronic health records (EHRs), endorsed what is now known as value purchasing, and showed how patients could exert more control over their care. Although the book suggested that transformational change was imminent, sixteen years later little has changed in some areas (medical error), while in others (evidence-based medicine and population health) change is only now gaining momentum. The exception is technology, where incentives boosted EHR use and the Internet has made a vast array of information available to patients. Paradigm shifts are traumatic, and only recently has intense financial pressure made greater clinical accountability seem less painful than retaining the tradition of untrammeled autonomy. In hearing rooms and hospital hallways, the policy conversation is changing. This shift, though an unavoidable source of anxiety, nonetheless promises a genuine renewal of American medicine.

Michael L. Millenson (mm@healthqualityadvisors.com) is president of Health Quality Advisors, in Highland Park, Illinois, and the Mervin Shalowitz, M.D., Visiting Scholar at the Kellogg School of Management, Northwestern University, in Evanston, Illinois.

At the end of 1993 the Robert Wood Johnson Foundation took a chance on a journalist-turned-academic who wanted to write a book about the quality of American health care.[1] Four years later, with the foundation's support, I published *Demanding Medical Excellence: Doctors and Accountability in the Information Age.*[2]

Although the focus at that time was mostly on expanding access to care, *Demanding Medical Excellence* critically examined what actually happens to patients in the doctor's office or hospital once that access is achieved. The book reported this: "Only a small percentage of contemporary medical practices have been scientifically validated. At the same time, effective therapies can take years to make their way into common use."[2(p350)] "In illness after illness and disease after disease we have seen almost random varia-

tion in how different doctors treat patients with similar clinical symptoms."[2(p350)] "Patients who share responsibility for decisions about their care often enjoy better health than those whose doctors act out a traditional paternalistic role."[2(p354)] "The absence of good information systems in medicine is as intentional as any health plan's budget cuts."[2(p352)] "Substantial waste could be eliminated without harming patient care."[2(p299)]

And most of all, this: "From ulcers to urinary tract infections, tonsils to organ transplants, back pain to breast cancer, asthma to arteriosclerosis, the evidence is irrefutable. Tens of thousands of patients have died or been injured year after year because readily available information was not used—and is not being used today—to guide their care. If one counts the lives lost to preventable medical mistakes, the toll reaches

the hundreds of thousands. The only barrier to saving these lives is the willingness of doctors and hospital administrators to change."[2(p353)]

An activist friend, coming across the book recently, said in surprise, "It reads like it was written yesterday." In part that's because the topics it addresses have only increased in importance. They include medical error, evidence-based medicine, health information technology, population health, the organization of care, and patient empowerment.

But what my friend really meant, of course, was something else. *Demanding Medical Excellence* seems so timely because what it demands still seems so distant. The persistent and pervasive problems documented then are now only starting to be comprehensively addressed.

That's not the scenario that looked likely sixteen years ago. As I listened to optimistic experts back then, the solutions seemed obvious and even imminent. Still, I hedged my bets, writing: "For all the progress that has been made, however, this remains a young and fragile revolution."[2(p363)]

What has changed in health care since that was written? Where did we start, where have we ended up, and why?

The Way We Were

"The great enemy of the truth is very often not the lie—deliberate, contrived, and dishonest—but the myth—persistent, persuasive, and unrealistic," cautioned President John F. Kennedy in a 1962 speech. In health care, one of the most powerful myths is that good doctors instinctively know the right thing to do and will do it.

Two sustained attacks on that comforting belief emerged from within medicine some twenty years ago. The first challenge was to physicians' judgment. Even the best-trained doctors rely upon "intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision-making,"[3(p2420)] the Evidence-Based Medicine Working Group wrote in a seminal 1992 *Journal of the American Medical Association (JAMA)* article. What was needed was a "new paradigm for medical practice" based on "the examination of evidence from clinical research."[3(p2420)]

The second challenge, from the patient-safety movement, was even more troubling. Again in *JAMA*, a 1994 article pointed to "substantial" error rates.[4] An accompanying commentary bluntly accused the profession of an "ostrich-like attitude" toward error and its causes.[5]

Demanding Medical Excellence went a step further, documenting how innovations that threat-ened clinician autonomy were inevitably resisted. At the start of the twentieth century, for example, requiring physicians to keep a paper hospital medical record was opposed as too much work, a danger to privacy, or unnecessary for the good surgeon already providing high-quality care.[6] In midcentury, nascent electronic health records (EHRs) and computerized clinical decision support were scorned because good doctors didn't require support from a machine.[7] Remarkably, in 1995, near the end of the century, EHRs were opposed with reasoning similar to arguments from 1955 or 1925.[7]

Individual autonomy also has trumped professional self-policing. Even at the zenith of their power in the 1950s and 1960s, groups like the American College of Surgeons and the American Medical Association were unable to stop scandals over unnecessary surgeries or skyrocketing Medicare fees.[8]

This context, which strips away myths that have accumulated over decades, is crucial to current policy debates over what kind of clinical accountability society should demand and what clinical autonomy must be preserved. Those decisions will ultimately affect every American's medical care far more profoundly than any insurance card will.

What Has Changed, What Hasn't, And Why

In 1999 the Institute of Medicine reported that 44,000–98,000 Americans die in hospitals each year from preventable medical errors, and another one million are injured.[9] This death-toll sound bite triggered a public uproar.

Nonetheless, a comprehensive study a decade later found little improvement, despite evidence "that focused efforts to reduce discrete harms… can significantly improve safety."[10(p2133)] Separately, the Agency for Healthcare Research and Quality (AHRQ) estimated that there were six million "hospital-acquired conditions" in 2010, of which 97,000 were preventable deaths. There are still no comprehensive and reliable data on the ambulatory care error toll, despite ambulatory care's increasing importance (Carolyn Clancy, then-director, Agency for Healthcare Research and Quality, personal communication, May 24, 2013). The taboo regarding open talk about error has been shattered, but actual improvement has been shockingly slight. Whether the federal government's ambitious (and voluntary) Hospital Engagement Networks patient-safety program will alter that equation remains to be seen.

In a 2010 *Health Affairs Blog* post I suggested that the disturbing lag in improvement was due

to a combination of errors' invisible consequences, the income hospitals quietly reap from substandard care, and professional inertia.[11] A 2013 *JAMA* study underlined the impact of economics, concluding that those surgeries marred by complications more than doubled the hospital's profit margin per patient.[12]

In 1997 I thought employers and health plans would use their buying power to push providers to eliminate unnecessary and unsafe care. Instead, the government has set the pace. President George W. Bush's Executive Order 13410[13] included a no-payment policy for certain "never events" and put some provider quality indicators onto the Internet. Under President Barack Obama, the government has continued to incentivize change as the nation's largest purchaser of care, as a regulator, and as an influencer.

One example highlights the effect of incentives: Strong evidence that computerized physician order entry (CPOE) could reduce adverse drug events began emerging in the mid-1990s,[14] prompting the employer-supported Leapfrog Group to urge hospitals at the end of 2000 to adopt CPOE immediately. Yet only 27 percent of hospitals had done so by 2008. However, just four years later the percentage of hospitals with CPOE had soared to 72 percent. The difference was 2009 federal legislation granting hospitals billions of dollars to buy EHR systems as long as they could show the technology—such as CPOE—was being used to improve quality and safety as defined by "meaningful use" criteria.[15]

In that same vein, the Affordable Care Act contains a host of provisions designed to accelerate quality and safety improvement. They include accountable care organizations, value-based purchasing for hospitals, bundled payment demonstrations for hospital and postacute care, reduced payments for some hospital-acquired conditions, reduced payments for preventable hospital readmissions, and mandatory physician quality reporting.

Through government, "we the people" are finally demanding medical excellence. Private purchasers have followed suit with innovations that sometimes work synergistically. For example, government and private accountable care organizations together are available to 150 million patients[16]—a potentially powerful force for coordinated care and better population health.

Individuals are also demanding medical excellence. In 1997 I wrote of an information revolution "owing more to laptops than to lab coats"[2(p1)] and predicted the same shattering impact on medicine as the Protestant Reformation had on the Catholic Church. When information once reserved for the priests was shared with the laity, the church changed forever. So, too, with health care.[2(p11)]

In 1997 fewer than one in five households had access to the Internet. Today about three-quarters do. Laptops have ceded the spotlight to smartphones; about half of people ages fifteen and older now have one.[17] The power of online quality, safety, and cost information about specific services and providers is already being felt, and it will only grow as information increases in accuracy, scope (so-called big data), timeliness, and personalization.

Provider control over information continues to weaken. Reliable patient-reported outcomes are now being generated in online communities, such as PatientsLikeMe.com. In 1997 I wrote about patients escaping the "caring custody" of physicians and becoming full partners.[18] Today, concepts such as shared decision making and participatory medicine are winning increasing acceptance as professional norms.

The historian Thomas Kuhn famously wrote about the traumatic nature of a "paradigm shift,"[19(p104)] a revolutionary change inevitably resisted until the defenders of the old ways "can no longer evade anomalies that subvert the existing tradition."[19(p6)] The evidence that we are undertreating and overtreating patients, and even harming them through preventable errors, is more voluminous and more often written and talked about today than in 1997, but the evidence itself was already clear then. The same goes for the hundreds of billions of dollars wasted as a result.[20,21] What has changed is that those who are unable to evade any longer the consequences of ignoring these problems are now willing to change.

In *Demanding Medical Excellence*, I warned: "Superior [physician] performance cannot be rewarded unless it can be identified. The myth of uniformity no longer preserves autonomy. Instead, it encourages the dreaded 'commoditization'—socialism via capitalism's back door."[2(p357)]

That potential commoditization is precisely what has unfolded as spiraling health care costs triggered a formula that would cut Medicare fee-for-service physician payment by 24.4 percent in fiscal year 2014. Even when Congress overrides this reduction, as it is set to do and has always done with similar reductions, legislators will still be searching for ways to reduce costs in light of the $1 trillion deficit, fifty times higher than the deficit in 1997.

In response, a parade of medical society leaders recently asked Congress to move toward linking reimbursement to clinician accountability as a better way to contain costs and preserve quality—in other words, rewarding superior per-

formance by some as an alternative to brutal cuts for all.[22] This same path is being taken in private-payer contracts.

In hearing rooms and in hospital hallways, the conversation has shifted to routinely include concepts such as transparency, accountability, safety, systematic quality improvement, and value. Medical practice is following suit, albeit at an uneven pace. Looking forward and backward, Carolyn Clancy, who was until recently the administrator of AHRQ, declared herself "simultaneously exhilarated and depressed."[23]

At this time when entrenched medical myths are finally being undermined and new traditions established, the hopeful conclusion of *Demanding Medical Excellence* is even more relevant: "The destruction of the old ways of medical practice may be an unavoidable source of anxiety, but it should not be a source of despair. Patients and caregivers alike should celebrate better days ahead. Destruction often precedes renewal, and it is in that renewal that the future of American medicine lies."[2(p369)] ∎

NOTES

1 Robert Wood Johnson Foundation. Opening a door on a life dedicated to improving care [Internet]. Princeton (NJ): RWJF; 2012 Jul 12 [cited 2013 Aug 21]. Available from: http://www.rwjf.org/en/about-rwjf/newsroom/newsroom-content/2012/07/opening-a-door-on-a-life-dedicated-to-improving-care.html

2 Millenson ML. Demanding medical excellence: doctors and accountability in the information age. Chicago (IL): University of Chicago Press; 1997.

3 Evidence-Based Medicine Working Group. Evidence-based medicine. A new approach to teaching the practice of medicine. JAMA. 1992; 68(17):2420–5.

4 Leape LL. Error in medicine. JAMA. 1994;272(23):1851–7.

5 Blumenthal D. Making medical errors into "medical treasures." JAMA. 1994;272(23):1867–68.

6 Hospital standardization series. Report of hospital conference held at Chicago, October 22–23, 1923 and survey of hospitals of fifty beds and over for the year 1923. Bull Am Coll Surg. 1924;8(1):24;61–7.

7 Millenson ML. Duty versus interest: the history of quality in health care. Chapter 2 in: Nash DB, Goldfarb N, editors. Closing the quality chasm. Sudbury (MA): Jones and Bartlett Publishers; 2006. p. 15–29.

8 Finch sees no end to health cost rise. Am Med News. 1969 Aug 4. p. 11.

9 Kohn LT, Corrigan JM, Donaldson MS, editors. To err is human: building a safer health system. Washington (DC): National Academies Press; 1999.

10 Landrigan CP, Parry GJ, Bones CB, Hackbarth AD, Goldmann DA, Sharek PJ. Temporal trends in rates of patient harm resulting from medical care. N Engl J Med. 2010;363(22):2124–34.

11 Millenson M. Why we still kill patients: invisibility, inertia, and income. Health Affairs Blog [blog on the Internet]. 2010 Dec 6 [cited 2013 Aug 21]. Available from: http://healthaffairs.org/blog/2010/12/06/why-we-still-kill-patients-invisibility-inertia-and-income/

12 Eappen S, Lane BH, Rosenberg B, Lipsitz SA, Sadoff D, Matheson D, et al. Relationship between occurrence of surgical complications and hospital finances. JAMA. 2013; 309(15):1599–606.

13 Presidential documents: Executive Order 13410 of August 22, 2006: promoting quality and efficient health care in federal government administered or sponsored health care programs. Federal Register [serial on the Internet]. 2006; 71(166):51089–91 [cited 2013 Aug 21]. Available from: http://www.gpo.gov/fdsys/pkg/FR-2006-08-28/pdf/06-7220.pdf

14 Kuperman GJ, Gibson RF. Computer physician order entry: benefits, costs, and issues. Ann Intern Med. 2003;139:31–9.

15 Charles D, King J, Furukawa MF, Patel V. Adoption of electronic health record technology to meet meaningful use objectives: 2008–2012 [Internet]. Washington (DC): Office of the National Coordinator for Health Information Technology; 2013 Mar [cited 2013 Aug 21]. (ONC Data Brief No. 10). Available from: http://www.healthit.gov/sites/default/files/oncdatabrief10final.pdf

16 Gandhi N, Weil R. The ACO surprise [Internet]. New York (NY): Oliver Wyman; 2012 [cited 2013 Sep 17]. Available from: http://www.oliver wyman.com/media/OW_ENG_HLS_PUBL_The_ACO_Surprise.pdf

17 File T. Computer and Internet use in the United States [Internet]. Washington (DC): Census Bureau; 2013 May [cited 2013 Aug 21]. (Current Population Survey Reports, P20-568). Available from: http://www.census.gov/prod/2013pubs/p20-569.pdf

18 Katz J. The silent world of doctor and patient, with a new foreword by Alexander Morgan Capron. Baltimore (MD): Johns Hopkins University Press; 2002. p. 2.

19 Kuhn TS. The structure of scientific revolutions. 3rd ed. Chicago (IL): University of Chicago Press; 1996.

20 Institute of Medicine. Best care at lower cost: the path to continuously learning health care in America [Internet]. Washington (DC): IOM; 2012 Sep [cited 2013 Aug 21]. (Report Brief). Available from: http://www.iom.edu/~/media/Files/Report%20Files/2012/Best-Care/BestCareReportBrief.pdf

21 National Commission on Physician Payment Reform. Report of the National Commission on Physician Payment Reform [Internet]. Alexandria (VA): The Commission; 2013 Mar [cited 2013 Aug 21]. Available from: http://physicianpaymentcommission.org/wp-content/uploads/2012/02/physician_payment_report.pdf

22 Fiegl C. House hearing focuses on quality's role in SGR reform. Am Med News. 2013 May 20.

23 Clancy CM. Sustaining quality and performance in times of austerity. Presentation at: The 5th International Jerusalem Conference on Health Policy; 2013 Jun 5; Jerusalem, Israel.