

MEDICINE AND SOCIETY

Debra Malina, Ph.D., *Editor***Mistrust in Science — A Threat to the Patient–Physician Relationship**

Richard J. Baron, M.D., and Adam J. Berinsky, Ph.D.

Trust is the foundation of any relationship between a patient and the health care system. Clinicians enter patient encounters with the reasonable presumption that they will be trusted. After all, they have powerful knowledge and good intentions — surely that ought to be enough. But medicine is changing, and individual patient–doctor relationships are now developed within a broader context of health care institutions and an increasingly heterogeneous information environment.

Physicians would do well to adapt to this changing reality. Though they may be tempted to believe that trust building is either unnecessary (given that they base their advice on facts) or purely a natural outgrowth of their own behavior, it's important to recognize that trust in health care is very much up for grabs in the current environment. Traditional assumptions about how trust is created and maintained have to be reexamined on the basis of an understanding of the evolving roles of facts, expertise, and authority in our society.

Princeton sociologist Paul Starr has argued that physicians owe much of their privileged position in American society to the legitimacy they have collectively created as a community of experts and to the trust that this legitimacy has engendered in their patients.¹ But two strands of legitimacy — this professional strand and a personal one — are critical. On the one hand, the legitimacy of the medical community rests on the credibility of medical science and the scientific method on which modern medicine depends. Physicians rely on that foundation in every interaction they have with their patients, knowing that their advice is scientifically grounded and believing that it should therefore be heeded by rational people. On the other hand, the intimate and personal nature of each individual doctor–patient relationship creates a sense of trust that many physicians

believe should transcend any doubts patients may have about the institutions in which their physicians work or about the profession at large. Medical legitimacy arises from both collective expertise and individual trust, as well as from the connection between the two.

EVOLUTIONS OF HEALTH CARE AND TRUST

Over the course of the 19th and 20th centuries, doctors leveraged their individual trust with patients into a collective trust in the institution of medicine. And as medicine became more scientific, this institution linked its authority to that of science more generally. The nature of the transformation over the past 150 years from individual practitioners to more hospital-based institutional structures has been well documented by historians David Rothman and Charles Rosenberg, among others.^{2,3} These historians describe the move away from home-based care provided by known and trusted practitioners to more generic care provided by strangers. In many ways, the 19th century's one-on-one patient–physician relationships were replaced by larger, more institutional relationships.

As similar changes occurred in other industries during the same period, larger entities developed strategies for replacing the individual trust that was no longer possible with a validation that was regional or national in scale. Though the term “branding” provokes aversion in many physicians, the concept became part of a formal strategy for connecting with larger-scale enterprises. Throughout a large segment of the economy, the foundation of trust shifted from one of individual character to one of broader corporate reputation — a brand — that was intentionally created and

curated by growing corporations. “Brands were a way to compensate for the dehumanizing effects of the Industrial Age,” notes Rachel Botsman, an expert on trust and technology.⁴

These growing institutions succeeded by systematically creating relationships with their customers using techniques designed to engender consumer confidence and trust in their product, often in ways that had nothing to do with the product’s “objective quality.” Though the primacy of the individual relationship may have survived in health care longer than it did at corner bookstores, it is rapidly fading now. And though physicians and health care leaders may think they can still rely on authority predicated on the truth of their facts, the trajectory we have seen with other types of large organizations suggests that new strategies are necessary.

It is not news that medical practice is becoming increasingly corporate. Current manifestations include multistate hospital mergers, the emergence of dominant regional health systems, and purchases of large specialty practices by private equity firms.⁵ According to survey data from the American Medical Association, in 2016, for the first time, less than half of practicing physicians owned their own practice.⁶

A fair amount has been written about the way in which physicians experience these changes as a loss of autonomy and control. Less attention has been paid to how corporatization changes patients’ experience and to the challenges it creates for patients who no longer know where to place their trust. In a period of dramatic changes in the practice of medicine, as well as broadly declining trust in various social institutions, it is worthwhile to examine what is happening to trust in medical institutions generally and the connection between trust in institutions and trust in the individuals within them. As the structures of institutions change, the authority ascribed to those institutions may change as well.

Starr argues that legitimacy leads to trust, an effect that has surely held true for the medical profession. But what happens when the legitimacy of expertise — both in medicine and in science more generally — is threatened by new sources of information that are easily accessible but not scientifically vetted, such as social media and alternative-lifestyle websites? There is a real danger that alternative pillars of trust and authority are emerging that are not based in science and

will threaten physicians’ ability to earn the trust of their patients. Trust in individual physicians creates a foundation for trust in the medical profession, but as physicians become increasingly embedded in larger organizations, public perceptions of those organizations’ authority may change — possibly in ways that create new challenges for individual doctors trying to serve their patients.

What do we know about the level of consumer trust and confidence that we can expect for the health care enterprise writ large? Over the past four decades, Gallup polling has revealed that confidence in almost all institutions in the United States, such as Congress and the news media, has deteriorated greatly, but the most dramatic decline has occurred in “confidence in the medical system,” which fell from 80% in 1975 to 37% in 2015.⁷ Confirming this trend, data from the General Social Survey show that confidence in the people running medical institutions has steadily dropped from over 60% in 1974 to just 36% in 2016.⁸

ALTERNATIVE INFORMATION SOURCES

Even as confidence in medical institutions has declined, alternative sources of “authority” have emerged to fill the gap. Increasingly, patients are obtaining information, including medical information, on a variety of electronic platforms that do not effectively distinguish among its sources. On social media platforms, friends, relatives, and like-minded people share health-related information from a plethora of sources. Medical information that may have originated anywhere on the Internet — be it peer-reviewed medical journals or “lifestyle brand” websites such as Gwyneth Paltrow’s goop.com — is passed along and implicitly “authorized” by the fact that it came from a friend.

Such information, be it true or false, can have a powerful influence. In emerging social media communities, participants may trust each other more than they trust experts.⁹ In such an environment, physicians providing medical advice do not necessarily start off with any advantage over whatever has just come across their patient’s Facebook or Twitter feed. The stubborn persistence of antivaccination parents in the face of overwhelming evidence that vaccines do not cause autism is a familiar case example.

How can health care institutions and physicians ensure that high-quality, accurate health information is given greater prominence, so that their patients know their advice can be trusted? Given the decline in trust in the institution of medicine, simply asserting medical authority or citing evidence is unlikely to win adherents. Indeed, skepticism regarding facts and expertise is a widespread phenomenon today. One of us has done research showing that appealing to a neutral or independent “referee” of the truth — an individual or group whose expertise and experience should prove their authority on a given subject — does not actually change minds.¹⁰ In fact, under certain circumstances, attempts by experts to correct misinformation may further entrench erroneous beliefs.

PATHWAYS TO TRUST

Still, all is not lost. It’s possible to find another way forward, but only if health care institutions and practitioners take seriously the threat to their science-based professional authority and learn to systematically deploy other approaches to building trust. For instance, individuals and groups that speak against their own apparent interest — not experts — are the most effective messengers of facts and accumulated expertise. When the American Board of Internal Medicine Foundation (for which one of us serves as president) developed the Choosing Wisely campaign, physicians and their professional societies were the ones who conveyed the message that more medical intervention is not always better; the very fact that it was physicians making recommendations to do less, not more, accounted for much of the campaign’s traction.¹¹

In setting the record straight on rumors of “death panels” — false claims that elderly and sick people would be allocated health care on the basis of their supposed value to society — corrections from Republican politicians were more effective than “authoritative” quotes from American Medical Association and AARP experts discrediting the rumor.⁸ Similar strategies have proven effective in communication about climate change and about the prevalence of voter fraud.^{12,13} Thus, intentionally recruiting civic-minded people to deliver medical and scientific facts that run counter to the public’s expectations of those people’s own interests might be effective.

In today’s environment of generalized skepti-

cism, intentional, systematic institutional and clinical efforts to create trust will become ever more important — analogous to, and perhaps informed by, the branding efforts of large corporations; Lee and colleagues have recently offered specific guidance to health care organizations to increase trust.¹⁴ In a world where large most successful U.S. commercial organizations — for example, Google, Facebook, Apple, and Amazon — have harnessed technology intentionally to “get to know their customers” and use that “knowledge” to persuade us that they already know what we want, health care lags far behind. Our patients often have the trust-destroying experience of being strangers in the health care system — unrecognized as individuals and needing to repeat key parts of their stories over and over again. Knowing and recognizing patients’ unique contexts and circumstances seems to be a powerful way to build trust; feeling recognized is a precondition for trust. Intentional use of information systems and registration protocols to capture meaningful personal information that can be accessed by the many staff members whom patients will encounter may be one strategy for clinicians and institutions to earn the trust of their patients.

Explicitly acknowledging the role — and competence — of other members of the health care team may be another way. Executives at Intermountain Healthcare system noted that one of their several emergency departments (EDs) received higher scores on patient satisfaction than the others. Further investigation of that ED revealed that routinely, when staff members were leaving a patient’s room, they would speak positively about the staff that was going to follow them. This practice had apparently increased patients’ trust and satisfaction.

Such strategies may seem superfluous to scientific clinicians who rely on the power, effectiveness, and scientific basis of their recommendations. But it has been sobering to observe how poorly “facts” and “truth” are faring in the current national discourse, and it would be naive to believe that this state of affairs will not affect health care. Perhaps the problem with facts is that they stand alone, with no context beyond the scientific method used to generate them. Their “objective” nature, revered by physicians, is precisely what disconnects them from patients’ individual predicaments, and such a connection is the only path that facts ever have to meaning.

Richard Weaver, a mid-20th-century conservative thinker, critiqued the ascendance of a fact-based order: “With the scientific revolution, ‘facts’ — particular explanations for how the world works — had replaced ‘truth’ — a general understanding of the meaning of its existence.”¹⁵ If doctors and health care systems are to become more effective in marshaling facts, they will need to become better at giving them meaning by connecting them to individual patients’ predicaments, which will require a more intentional effort to create relationships.

In a world where science is devalued and relationships are more influential, health care providers and institutions will need to do a better job creating trust with patients than has perhaps been necessary in the past. They will need to think intentionally about how to build relationships consistently and reliably.¹⁶ Although much has changed since Peabody’s 1927 admonition that “The secret of the care of the patient is in caring for the patient,” some things remain the same.¹⁷ The solution to the current challenge may lie in intentionally using all the tools we have to build relationships in new ways.

Disclosure forms provided by the authors are available at NEJM.org.

From the American Board of Internal Medicine, Philadelphia (R.J.B.); and the Department of Political Science, Massachusetts Institute of Technology, Cambridge, MA (A.J.B.).

1. Starr P. The social transformation of American medicine. New York: Basic Books, 1982.
2. Rothman DJ. Strangers at the bedside: a history of how law and bioethics transformed medical decision making. New York: Basic Books, 1991.

3. Rosenberg CE. The care of strangers. New York: Basic Books, 1987.
4. Botsman R. Who can you trust: how technology brought us together and why it might drive us apart. New York: PublicAffairs, 2017.
5. Casalino LP, Saiani R, Bhidya S, Khullar D, O’Donnell E. Private equity acquisition of physician practices. *Ann Intern Med* 2019;170:114-5.
6. Kane CK. Policy research perspectives — updated data on physician practice arrangements: physician ownership drops below 50 percent. Chicago: American Medical Association, 2017 (<https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/health-policy/PRP-2016-physician-benchmark-survey.pdf>).
7. Crisis in democracy: renewing trust in America — the report of the Knight Commission on Trust, Media and Democracy. Washington, DC: Aspen Institute, 2019 (<http://csreports.aspeninstitute.org/documents/Knight2019.pdf>).
8. General Social Survey (GSS). Confidence in medicine: trends. Chicago: NORC at the University of Chicago (<https://gssdataexplorer.norc.umd.edu/trends/Politics?measure=conmedic>).
9. Texans for vaccine choice. Facebook page (<https://www.facebook.com/TexansForVaccineChoice/>).
10. Berinsky A. Rumors and health care reform: experiments in political misinformation. *Br J Polit Sci* 2017;47:241-62.
11. Baron RJ, Wolfson DB. Building trust in the profession: what can we learn from choosing wisely? *Am J Med* 2019;132:550-1.
12. Benegal SD, Scruggs LA. Correcting misinformation about climate change: the impact of partisanship in an experimental setting. *Clim Change* 2018;148:61-80.
13. Holma MR, Lay JC. They see dead people (voting): correcting misperceptions about voter fraud in the 2016 U.S. presidential election. *J Polit Mark* 2018;1-2:31-68 (<https://www.tandfonline.com/doi/full/10.1080/15377857.2018.1478656>).
14. Lee TH, McGlynn EA, Safran DG. A framework for increasing trust between patients and the organizations that care for them. *JAMA* 2019;321:539-40.
15. Lepore J. These truths: a history of the United States. New York: Norton, 2018.
16. Chang S, Lee TH. Beyond evidence-based medicine. *N Engl J Med* 2018;379:1983-5.
17. Peabody FW. The care of the patient. *JAMA* 1927;88:877-82.

DOI: 10.1056/NEJMms1813043

Copyright © 2019 Massachusetts Medical Society.