

## In Conversation With... Reed V. Tuckson, MD

September 1, 2016

In Conversation With... Reed V. Tuckson, MD. PSNet [internet]. 2016.

<https://psnet.ahrq.gov/perspective/conversation-reed-v-tuckson-md>

---

**Editor's note:** *Dr. Tuckson is Managing Director of Tuckson Health Connections, LLC, and President of the American Telemedicine Association. He served as the American Medical Association's senior vice president of professional standards, and he actively serves on Advisory Committees of the National Institutes of Health. We spoke with him about telemedicine and patient safety.*

**Dr. Robert M. Wachter:** What attracted you to telemedicine?

**Dr. Reed V. Tuckson:** I was particularly excited in a couple of areas. First, many of us throughout our careers have been struggling to expand access to health care for people living in either geographically remote or otherwise underserved communities. When I was doing work as the President of [Charles R. Drew University of Medicine and Science](#), I became interested in how we could bring ophthalmologic services to people that required specialty care but did not have it easily available. So overcoming geographical boundaries of time and space particularly interested me at the beginning. Second, I was excited and energized by the opportunity to use new tools available in the consumer space to make health care more of a natural component of the individual's daily life, as opposed to health and medical care being something that was sectioned off as a distinct activity away from daily life. The more I began to understand what was possible by integrating holistic, person-centered care delivery augmented by these tools, the more I got excited.

**RW:** I guess one could see telemedicine as being evolutionary—rather than seeing you in the office, I'll see you at home—or revolutionary, in that it completely upends the business model and the paradigm of health care. Where do you see it?

**RT:** I see it as both. In some ways, it simply expands how care is delivered today, making it possible for traditional medical care to occur more conveniently or efficiently, but it also turns some of it upside down. It permits innovation in engaging people to give them information that they have never had before and helps them be engaged much more intimately in controlling and managing their own health—whether it is the preventive element of their health or their compliance with the medical care regimen dictated by their clinician. So it does some things evolutionary and some things revolutionary.

**RW:** In your day job now, are the major obstacles technological or are they political and business obstacles? How do you approach both of those as you try to move this field forward?

**RT:** The technology continues to advance rather remarkably. One great thing about America as a whole and the American health care system specifically is that it is characterized by innovation. Innovation will always be relentless. I have no fears or worries about the rate-limiting steps being technological. We are moving forward rapidly. The real challenges in this field are no different than any of the challenges facing all of medicine: to be able to take innovation and use it appropriately to deliver value. To make sure the quality of care is being enhanced, the cost-effectiveness of care is being enhanced, and that patient satisfaction with their care is enhanced. If you're not delivering value, then you really have no business being engaged in the modern health care system.

Additionally, as this field unfolds so rapidly, we are seeing the related challenges of reimbursement policy and generating the evidence necessary to support return on investment and related reimbursement decisions. Most importantly, there is a special concern regarding Medicare reimbursement for telemedicine. Medicare is behind other payers in this area. Demonstrating an adequate return on investment for officials in the Office of Management and Budget, as well as for chief financial officers of major health providing organizations, is important. Finally, we also need more research to develop best practices, to show how telehealth services can be incorporated into the natural flow of medical care, and to do it in a way that enhances value—more work also needs to be done to address these kinds of research questions.

**RW:** Objections to telehealth are often framed in terms of concerns about quality or safety. I assume some of those are from existing franchises worried about the impact of change on them, and some of them probably are quite real. Can you tick off some of the concerns you have heard and how you respond to them?

**RT:** First of all, there is no question that many of the concerns we do hear about telehealth services are from people who have a vested interest in maintaining the status quo. That's unfortunate, but inevitably innovation that proves value will overcome those issues. What people have legitimate questions about, and I think that they're important questions for the nation's health enterprise to grapple with, are issues that relate to the patient–physician relationship. Telehealth will have an impact on patient–physician relationships. We already know that the traditional model of health care has quite significantly been altered over the last 15 years as patient-centered care has emerged and as more players have become involved—care managers, care coordinators, coaches, home-based health care services, and so forth. Many more players are in the game now outside of the duality of the patient–physician relationship. Telehealth certainly puts even more gasoline into that engine.

But not all services are appropriate to be delivered through telehealth means and capabilities. For example, what is the appropriate use of the telephone as an intervention system versus video, and under what clinical conditions, sequelae, and scenario are those? There's a robust debate about whether a first-time visit by a patient that will have a diagnostic and therapeutic component to it would be acceptable by only a telephonic relationship. And by what kinds of engagements would that be? The nation is grappling with these kinds of questions, and I think it is a legitimate conversation.

It is also extremely important to solve the problem of integrating telehealth services clinical records into the various electronic medical records that are now available. We are struggling with getting a common capability of uniting robust electronic medical records with all of the data and information regarding a patient's engagement across settings of care and focus on the specific needs of the individual.

The meaningful use debates occurring today are very complex and very important because many physicians and hospitals are often uncomfortable with the available products, the rate of change, and what they view as the potential for untoward, unsafe consequences. Telehealth services very definitely need to be able to plug into robust and interoperative electronic medical record systems so care can be coordinated across settings of care. That is a big challenge. Not to mention the challenge of making sure that all of the various devices that the innovative community is bringing forward can interconnect. We have opportunities to advance this work, but it is definitely occurring inside of a very highly charged political and policy debate.

**RW:** Have you seen examples of really robust integration of telehealth and other consumer-facing IT into electronic health records that tell you this is doable?

**RT:** We are seeing very encouraging examples of this at the local level and institutional level. Early adopters are starting to connect it, and that's terrific. You can see local institutions patching and plugging these things into their electronic environment. We know that it's possible to get this done. This is not beyond the capability of American innovation.

The challenge is: how do you do this at scale? How do you move beyond a particular institution to the community, and then beyond that community to that region, and then nationally—how do you fit that together? So, we are seeing local specific examples based upon robust relationships with either electronic medical record vendors or telehealth product and service providers, but we are not seeing this at real scale.

**RW:** Do you have any sympathy for the argument that, at least for an initial visit, there's something important and maybe irreplaceable about face-to-face contact?

**RT:** I love the question and it's an exciting one. I cherish and still have with me my DeGowin and DeGowin textbook on physical diagnosis.

**RW:** Me too.

**RT:** I was trained by one of the greatest diagnosticians in the modern history of American medicine, a man named [Dr. Proctor Harvey](#), a cardiologist who taught me the value and importance of laying on hands. I respect that part of the art of medicine greatly. That said, I also understand that while I may be very romantic about that, there are people living in parts of this country who very rarely get the opportunity to see even a primary care physician, let alone a specialist, and who don't have the luxury of my romanticism. There are tools today that will enable a remote physician to see the patient and examine the patient in a clinically meaningful way.

I also have great respect for patients, and listening to them, we learn that many people appreciate telehealth clinical encounters. Numerous surveys let us understand that people are prepared for new forms of engaging with their health professionals. A mother should not have to unnecessarily bundle her three

children at dinnertime into a car and drive 45 miles to sit in an emergency room for 3 hours for a condition that did not require either the time or the expense of an emergency room visit and could have been obviated by a very good encounter with a clinician over their Skype chat line. Your question is provocative and exciting, but it's not either/or. There's room inside modern medicine for all of these things. I would never be one to deny the beauty, value, and importance of an in-person physical examination, but it is not always essential to the provision of important interventions on behalf of people.

**RW:** Think a little bit about the perspective of clinicians and the way we have aggregated ourselves. Certainly, there are doctors in solo or dual practices, but a lot of doctors work in a multispecialty group or in a big hospital, and there's something that happens as they bump into each other in the hallway. That also has real value. I wonder if there's a tension there and whether those relationships may be compromised as more clinicians on the other end of these video-conferencing calls or encounters are sitting either at home or geographically dispersed and don't have those collegial relationships. Do you worry about that at all?

**RT:** Well, you have raised two important issues in your question. Let me just first say that you are making an observation of how medical care is being practiced today. Clearly, there is an inexorable movement away from solo practitioners into integrated groups of physicians working with other physicians and other health professionals in aggregated teams. What is also happening though is that increasingly many people in these integrated groups, especially in academic medical centers and other specialty centers, will be the ones conducting the telehealth interventions. So there will be people seeing patients through digital means who are not sitting isolated in bunkers, but in fact are fully engaged with other people because these groups of physicians will be doing so much of the telehealth provision.

Another key thing is that, if you take the example of stroke care, we are finding the volume that telehealth stroke providers are seeing is so huge that an important expertise is being developed. We've learned that physicians who have a lot of experience with particular health interventions usually have a much better track record than those who do very few. The clinicians that are doing stroke management today in many of these telehealth centers are seeing orders of magnitude more cases than neurologists in solo or small group practice did in the past.

Physician collegiality is always important, but remember that physicians who are doing these procedures so often are in groups; they're in centers with other people. They're not necessarily isolated, and they still have the requirement of participating in the life of their profession, continuing medical education, and involvement with their specialty societies. I do not think the collegial nature of medicine is being violated or should be violated by the growing movement of telehealth.

**RW:** How do you see the tension between traditional state licensure and telehealth, which in some ways makes a mockery of state boundaries when it comes to the provision of care?

**RT:** This is a very important issue. It's one that we should approach very carefully as a society. On the one hand, as we look at the role of our state medical boards, these are well-meaning and good people. I've served on one myself, and I respected my colleagues' commitment to protect the public by doing everything that they can to ensure the highest standards of medicine are being practiced in their environment to their friends and neighbors who live in their community. That's a sacred and moral obligation. However, there is

also a concern that there could be a motivation that is related to restraint of trade that is designed to protect a particular state's doctors from outside competition.

When it comes to interstate licensure, ideally, the [American Telemedicine Association](#) would like to have reciprocity across the country, but I doubt that we'll be able to get there anytime soon. What the [Federation of State Medical Boards](#) is trying to do with their new strategy, which is organized around creating a Compact between states to ease the licensure burden and expense, seems to be the best compromise. As of our conversation, 11 state legislatures have signed on to the Compact, and we should give it a good try and hope that they will be able to move much more rapidly than they've been moving. I think they're on a reasonable track.

**RW:** When you see innovators come at this from outside the world of health care, what kind of strengths does that bring and what do you find that they don't really get about health care until they confront it?

**RT:** A major ethical fundamental that defines America's traditional medical care has been, as we stated earlier, this sacrosanct relationship between the patient and their physician. That's been so important. But we also know that today's physicians are extremely challenged by the time, tools, or resources necessary to effectively engage patients across the continuum of care that includes protecting and promoting their health, complying with often complex therapeutic regimens, and maximally restoring their health after an illness episode. Even though it may be initially uncomfortable, I think clinicians should be excited by other industries coming forward that have experience, expertise, tools, and capabilities that can help people make better and more personally appropriate health-related choices. As you indicate, a lot of other industries with relevant expertise are now coming into health care with competencies in relevant areas such as the pedagogy of adult learning and expertise in engaging people with modern tools on smartphones, computers, and tablets.

Anytime you look at the prevention-related statistics concerning the epidemiology of chronic disease in America, it makes you want to cry. We have so far to go at stemming the tsunami of preventable chronic illness that washes over a delivery system that we already cannot afford. There's no way to medicalize our way out of the burden of preventable chronic illness, particularly for our seniors, which of course seriously threatens the viability of Medicare. So we should all be cheered by new recruits—new deputies in the health fight who are bringing different kinds of expertise to our challenges. The problem is that some of these people coming from other industries—the engineers, some of the service providers, some of the new consumer-oriented companies—may not truly understand the regulatory responsibilities and requirements designed to make sure that when you are intervening in the health of a person, you're not going to do harm and that your intervention works predictably.

**RW:** It's hard to not be a physician and to truly understand what it's like to look someone in the eye and tell them that they have cancer. That's not to say that physicians are uniquely born to understand those things, but there's something that comes from our training and experience that does give you that sensibility. Do these new entrants get that?

**RT:** This is why I think it is so critical that physicians are taking the lead and must take the lead in this revolution. If America's health professional workforce were to view all of this change as burdensome and

concerning, and therefore adopt a defensive posture, try to do everything in their power to put speed bumps in the way because of not wanting change, then this will be a very negative experience. As we have seen in other areas like performance measurement and changes in reimbursement, these things have happened outside of traditional medicine's leadership. If this were to happen with telehealth, that would be disappointing. However, the level of physician participation and leadership in telehealth encourages me, just as we are seeing physician leadership and engagement propelling the modernization of clinical delivery systems. Our experience with ACOs [accountable care organizations] and [Patient-Centered Medical Homes](#), has taught us the fundamental principle that unless physicians are driving the cultural change at the practice delivery level, innovation cannot easily succeed. We are seeing the same thing in telehealth, where physician early adopters are really driving this forward. Physicians are not going to be replaced. They cannot be replaced. And their leadership is needed more than ever.

**RW:** Having spent a year or two writing about technology, it strikes me that the technology is not the issue here. It really is understanding the values and the workflow and reimagining the work. I don't know if you saw the [piece](#) in *US News & World Report* by the head of eClinicalWorks that talked about how wonderful it's going to be when patients are wearing sensors and their physician will be able to see if their vital signs are off a little bit and react instantaneously. When I read that I thought, what planet is that, where a physician has the time to or wants to do that? The idea is you create the technology and somehow magically it all works out. But it just can't work that way.

**RT:** No, being able to have your tablet take your blood pressure and shoot the systolic and diastolic numbers into the physician's office so they can be tracking you instantaneously—it would just blow the circuits out of the doctor's office. Depending upon the nature of how the market will work and how efficiencies can be produced, we will find intermediaries to come in and serve these functions. They'll be able to package that information, hand it to the physician in a digested way, and give doctors inflight refueling as they move from exam room to exam room. That's why this whole field is so important, because we cannot anticipate all the change, but change is certainly coming.