



# Technology and the Patient-Caregiver Relationship: Another Look

February 2015

## BACKGROUND

At a recent panel discussion in Boston, four thought leaders who work at the intersection of medicine and technology discussed how new healthcare technologies are affecting the patient-caregiver relationship. The discussion followed a similar one that took place in New York City in early 2014.



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## INTRODUCTION

The concern that technology may interfere with the patient-caregiver relationship is as old as the hills. When the stethoscope was first invented two centuries ago, some people proclaimed the end of hands-on doctoring—the comforting touch of a physician’s ear on the patient’s chest.

The explosion of new healthcare technologies over the past several decades—in particular the introduction of the computer and tablet in the exam room and at the bedside—has inspired similar concern about the distancing of technology.

In 2013, 78 percent of all office-based physicians used an electronic health record (EHR), up from only 18 percent in 2001, according to the [National Center for Health Statistics](#). And three in five physicians say they use a tablet or smartphone for work every day, according to a [2012 ICF Ironworks survey](#).

To examine the effects of healthcare technology on the patient-caregiver relationship, the Schwartz Center for Compassionate Healthcare convened a panel of thought leaders who have spent their careers at the intersection of medicine and technology. A [similar panel discussion](#) was held in New York City in early 2014.

### Among the major themes and recommendations that emerged from the Boston discussion were:

- Electronic health record (EHR) systems can be powerful tools for advancing patient-caregiver relationships, but they must capture the psychosocial aspects of patients’ lives as well as their medical information.
- New technologies need to be able to capture the warmth and compassion of in-person communication.
- Data capture, which technology does quite well, has its limits. Technology must also be able to convert information into insight.
- Physicians are generally unhappy with their EHR systems—for reasons that include the difficulty of entering data and the time necessary to do so. EHR systems should be made simpler and easier to use, and the burden on physicians should be spread to other clinicians and “scribes” hired to accompany clinicians and collect and enter patient data into the EHR.
- Health information communication gaps must be solved by improving interoperability among EHR systems.

## OPENING REMARKS:

### **Eric Schultz**

President and Chief Executive Officer, Harvard Pilgrim Health Care

### **Julie Rosen**

Executive Director, The Schwartz Center for Compassionate Healthcare

## MODERATOR:

### **Curt Nickisch**

Business and Technology Reporter, WBUR/National Public Radio

## PANELISTS:

### **John Glaser, PhD**

Chief Executive Officer, Siemens Health Services; former Special Advisor to the Office of the National Coordinator for Health Information Technology; Former Chief Information Officer, Partners HealthCare

### **John Halamka, MD**

Chief Information Officer, Beth Israel Deaconess Medical Center; Professor of Medicine, Harvard Medical School

### **Nathalie Majorek, MD**

Chief Executive Officer, MDCapsule; formerly a general internist in private practice for 15 years

### **Charlotte Yeh, MD**

Chief Medical Officer, AARP Health Services; former Chief, Department of Emergency Medicine, Tufts Medical Center

## PRESENTING SPONSOR:



## GETTING IT TO WORK

Healthcare information technology has the potential to strengthen patient-caregiver relationships by improving communication, promoting a shared understanding of patients' needs, making care more efficient, and reducing fragmentation and errors.

Unfortunately, the reality has fallen far short of the promise. According to a [2014 Medical Economics survey](#), 70 percent of physicians say their EHR systems have not added value—mostly because they cost too much and function poorly. Nearly half of physicians said these systems have actually worsened patient care.

“We have to first just get things to work,” said John Glaser, PhD, chief executive officer of the Health Services Business Unit of Siemens Healthcare and the former chief information officer of Boston's Partners HealthCare. “When things don't work in the delivery of care, a lot of time is wasted and a lot of frustration occurs. Patients come out saying, ‘You don't care about me at all.’” Even though technology is supposed to reduce human error, important information and actions can still fall through the cracks, said Glaser.

## CAPTURING THE RICHNESS

While an EHR system theoretically can be an effective tool to facilitate a collective understanding of the patient among various stakeholders, the input can't be business as usual, said Charlotte Yeh, MD, chief medical officer of AARP Health Services and former chief of the Department of Emergency Medicine at Tufts Medical Center in Boston. The electronic health record must be a place to capture the richness of patient information—lifestyles, relationships, struggles and triumphs—that had no place in the traditional paper chart.

“If you're a patient or a consumer, healthcare is about more than the office visit and the trip to the emergency room,” said Yeh. “It's about your everyday decisions at home. It's about what you eat, whether your kids just went off to college, whether you lost your job, just got divorced or just got married. This is what we want to capture— how you live and how you take your medicines. Unless we know what patients are doing at home, all the guidance in the world in the doctor's office isn't going to make it.” AARP has begun changing its health risk assessments to collect more of this type of information, she added.

Glaser suggested borrowing a page from crowdsourcing by tapping into the collective intelligence of the entire care team to populate the EHR with relevant insights.



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**-Charlotte Yeh, MD**



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“We could blow up the record as we know it today and replace it with something like Wikipedia or Facebook,” Glaser explained. “The care team—the medical student, the intern, the resident, the fellow, the attending—could create a Wikipedia entry every day representing each of their interesting observations about the patient. The attending would sign it saying, ‘This is the team’s collective wisdom.’ Get rid of the chart. It’s useless. It’s a medical-legal construct or a billing construct.”

### ORGANIZING AND SHARING DATA

But how do you ensure that EHR data streams—including those emanating from patient-worn telemonitoring equipment— don’t flood clinicians with too much information to process and act on?

John Halamka, MD, an emergency physician and chief information officer at Beth Israel Deaconess Medical Center in Boston, pointed to tools like [QPID](#) (Queriable Patient Interface Dossier), a clinical analytics engine developed at Massachusetts General Hospital that combs through reams of EHR data to extract clinical insights for clinicians. Consumer companies like Apple are also getting into the health data organization business through apps like the [iPhone 6’s HealthKit platform](#), which offers users the ability to track and share their fitness and medical data.

Halamka said he envisions a day when patients can use their iPhones to collect information from all sorts of monitoring devices; for example, a wired bathroom scale might be the main tool for monitoring the health status of a congestive heart failure patient. “Then with your consent, the data is sent off to your care manager, what I would call a ‘care traffic controller,’” he explained. “That person would be able to say, ‘You’ve had a weight gain of seven pounds over the weekend. Let’s arrange a home care visit.’ And that way we can deliver timely, compassionate care. It isn’t a keyboard between you and the doctor.”

These data flows are promising, but the problem of interoperability—IT systems talking to each other so that patient information can be shared whenever and wherever a patient is seen—must be solved in order to have an accurate and complete picture of the patient’s health status and needs, argued Natalie Majorek, MD, chief executive officer of MDCapsule and a former general internist in private practice.

“If patients have four different providers, their information will reside in four different systems, said Majorek. “Each will have just a snippet of your data. They don’t exchange data, and none of them are working for you as a patient.” And patients must have access to this integrated data as well, asserted Majorek.

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“If interoperability just applies to the docs, where does that leave patients when they want their psychologist to be involved, for example, or their dietician or anyone on their care team? I hope that’s the direction we are going,” she said.

Beth Israel Deaconess Medical Center’s [OpenNotes](#) program gives patients access to a portion of their medical record—their physicians’ encounter notes—via a secure website. The program aims to help patients better understand their doctors’ thinking, take more of an interest in their own healthcare and in some cases ask additional questions, perhaps about things that went unaddressed during the visit.

While the computer is sometimes criticized as an intrusion in the exam room, the tablet can be a superb device for making healthcare a joint venture thanks to its size and shape, according to the panelists. Patients can easily look on as physicians share text and images such as an x-ray or electrocardiograph, explained Halamka. “It becomes a shared record with shared decision making.” AARP has found that its members—even those in their 70s and 80s—are very open to using tablets as a healthcare tool, added Yeh.

### LEARNING FROM OLDER AMERICANS

Sharing electronic medical records is one way of forging a bond between patients and caregivers and that connection is critical, especially as we get older: research shows that connectedness and a sense of purpose are two of the key drivers of happy aging, according to Yeh. “Warmth, compassion and empathy have to transmit across the technology,” she asserted. “The doctor sitting there writing in the record must maintain the eye contact, the touch and the hand holding.”

Unfortunately, there’s often a disconnect between what older Americans want from their physicians and what physicians think they should be expected to provide, explained Yeh.

“A [Merrill Lynch study](#) found that 95% wanted to talk to their doctors about their fears and concerns, but only 10 percent of doctors thought that should be expected,” she said.

Interestingly, added Yeh, there are cases where technology can forge a better connection with patients, giving the example of avatars now being used to manage patients’ mental illnesses via videoconferencing. “If you have an avatar that has very human-like characteristics, who knows how to mimic crossing your arms, leaning back, and that is picked up through the computer screen, you can actually have a very effective way of making that connection,” she said.



Nathalie Majorek, MD.

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**– Nathalie Majorek, MD**



Barbra Rabson of Mass Health Quality Partners asking a question of the panelists

And along similar lines, AARP found that their depression screening was much more accurate when they used interactive voice response rather than a live questioner. “We realized that a voice-automated phone screening was nonjudgmental. Whereas when you are talking to a live person, you’re always aware of the interaction and may be thinking that you’re being judged in the process,” Yeh explained

### EASING THE TIME BURDEN

Since time is often the enemy of compassion, the inefficiency of EHR data entry needs to be addressed, argued audience member Eric Schwartz, MD, brother of Schwartz Center founder Ken Schwartz. “Every physician here struggles with the onerous obligations of trying to hew to very complex algorithms that govern our coding, which in turn govern our billables, which in turn govern our revenues,” he said. “The amount of time we spend with patients is often restricted by how challenging it is to sit down at what is essentially a typewriter, a device that was used 100 years ago, and enter data into a medical record.”

Schwartz’s concern is supported by a [2012 report by IDC Insights](#) showing that 58 percent of surveyed physicians were either very dissatisfied, dissatisfied or neutral about their experience with ambulatory EHR systems. The most frequent reason—85% cited it—was the increased time they had to spend on documentation.

Panelists described technologies that are helping to ease the burden of EHR documentation, including speech recognition software and [Google Glass](#)—still in the beta phase as a healthcare tool—but showing great potential by allowing doctors to record patient encounter information through hands-free videotaping and dictation. The back-to-the future solution of medical scribes—an actual person who sits in on the patient visit and collects and enters information as the physician delivers care—is gaining traction as well, particularly in busy emergency departments. “Scribes are actually more efficient,” asserted Yeh. “Physicians are seeing two and a half times more patients and are more than doubling their reimbursement to cover the cost of the scribe.”

The trend toward team-based care, one of the defining characteristics of accountable care models, should also alleviate some of the onus of documentation for physicians, as other healthcare professionals begin contributing to the medical record, contended Halamka. Regardless of who does the documentation, he said, patient preferences must be incorporated into the medical record.

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Eric Schwartz asking a question of the panelists



## CHANGING WHAT WE VALUE IN CAREGIVERS

As computers become increasingly intelligent and are better able to analyze data and offer treatment recommendations, will the characteristics people look for in physicians and other caregivers change? asked moderator Curt Nickisch. Will patients place a greater value on things like bedside manner and compassion?

In response, Glaser cited a [Fortune magazine article](#) about the nature of work over the coming decades and the elimination of certain categories and areas of work by machines and technology. “And if you play that through, there is this continuing hollowing out of essentially fundamental, cognitive skills which have formed the basis of a lot of what we do,” Glaser said.

In medicine, he suggested, “Empathy and compassion will come to the forefront as valued qualities, as will the ability to motivate, build teams and make things happen. We will rely more on the fundamental human things,” he said.



Moderator Curt Nickisch

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- John Glaser, PhD



From left: Harvard Pilgrim Health Care CEO Eric Schultz; Charlotte Yeh, MD; John Halamka, MD; Schwartz Center Board Chair Lynn Wiatrowski; Schwartz Center Executive Director Julie Rosen; Curt Nickisch; Nathalie Majorek, MD; and John Glaser, PhD

The Schwartz Center for Compassionate Healthcare is a patient-founded nonprofit dedicated to nurturing patient-caregiver relationships to strengthen the human connection at the heart of healthcare. Research shows that when caregivers are compassionate, patients do better and caregivers rediscover their passion for healing. The Center believes that a strong patient-caregiver relationship characterized by effective communication, emotional support, mutual trust and respect, and the involvement of patients and families in healthcare decisions is fundamental to high-quality healthcare. Visit us at [theschwartzcenter.org](http://theschwartzcenter.org) or follow us on [Twitter](#) or [Facebook](#).