COMMENTARY

Turn Off the Computer and Listen to the Patient

The practice of medicine is a subtle art. Doctors need to give patients their undivided attention.

By CALEB GARDNER, M.D. and JOHN LEVINSON, M.D.

Sept. 21, 2016

Of the many problems facing modern medicine, the deterioration of the patient-doctor relationship is one of the most pernicious. Today our health-care system is losing its humanity amid increasingly automated and computer-driven interactions between doctors and patients. The signs and symptoms of this pathology are everywhere and have been described in these pages: Primary-care appointments are now as short as five minutes, and the physician must spend much of that time typing instead of attending to the patient and performing
a physical examination. Medical students and residents are spending more time with screens than with patients. A 2013 study from Johns Hopkins (copied below) showed that first-year physicians spent a meager eight minutes a day with each of their hospitalized patients while spending hours at the keyboard describing and quantifying those fleeting moments. Meanwhile, fewer doctors would like to see their children enter a career in medicine, and escalating health-care costs are crippling families and the economy without improving public health.

The electronic health record (EHR), once a promising new medical technology, is a major cause of this disconnect. Not long ago, doctors dreamed of a time when unwieldy paper charts would be replaced by streamlined computer systems, freeing them up for more direct patient care. But now these computer systems are distracting and burdensome. Senior physicians are retiring early because of the EHR, while young doctors feel the humanity draining from a profession to which many were drawn because of a desire to interact and connect with people.

How did we get here? One cause is the development of third-party health-care financing, which grew out of the Great Depression and eventually led to the ascendance of insurance corporations with the ability to influence the clinical practice of hospitals. Similar economic forces have decimated private medical practice, as physicians become employees of hospitals and larger hospital systems. Medicine has become corporatized.

In 2009, with this stage set, Congress passed the Health Information Technology for Economic and Clinical Health (Hitech) Act. The act was designed to improve the U.S. health-care system by promoting and standardizing the use of computer technology by physicians. It prescribed, in great detail, a set of federal standardized instructions for how doctors must use computers in medical practice, such as what data to collect from patients. It also provides a mechanism by which hospital systems can prompt doctors to make decisions that are more in line with the hospital goals and practices. These instructions, enforced by financial incentives, are collectively called “meaningful use.”

Computer programs and one-size-fits-all rules for medical practice have thus become central to the care process. Through the EHR, a physician is pushed to start a “preferred” medication, or not to order a test that the computer program deems unnecessary. The system forces doctors to
choose from a set of tens of thousands of billable diagnosis codes before making any clinical decision, no matter how nuanced the individual case and circumstances may be. Even though the rules reflect clinical guidelines produced by medical societies, they can’t be used as unmodified recipes to care for complex and diverse individuals. Computer algorithms don’t result in higher quality care because the practice of medicine remains a subtle art. Careful listening and undivided attention are important, and the incessant electronic reminders and check-boxes that divert a doctor’s attention while the patient sits on the examination table are a distraction equivalent to texting while driving, and will end up hurting patients.

The patient also suffers because medical records are now used primarily as management tools for billing compliance and population-data collection. This hurts communication among doctors who must struggle to find the information they need for basic patient care buried in piles of clinically irrelevant data. Meanwhile, growing medical specialization and restrictions on resident work hours have led to more shift changes and transitions of patient care from one doctor to another, moments when clear and efficient communication is most vital.

According to Arthur Kleinman, a professor at Harvard Medical School, the “great failure of contemporary medicine to promote caregiving” in favor of market efficiency has “diminished professionals, patients, and family caregivers alike.” In reality, however, there isn’t even a trade-off: Medicine is both losing its humanity as Dr. Kleinman observes, and buckling under the weight of massive, ill-designed electronic information systems.

The answer isn’t to resist technology. Information systems are central to the future of good doctoring, and industry professionals should continue designing electronic systems to enhance medical care and facilitate the connection between patients and physicians. Meanwhile, however, medical practices should be allowed to turn off the “meaningful use” software prompts and return to the job of taking care of real people. Doctors have an obligation to act as stewards of the medical profession and with humanity toward patients and should insist upon the undivided attention necessary to do so.

*Dr. Gardner is a physician and resident at Cambridge Hospital in Massachusetts. Dr. Levinson is a cardiologist at Massachusetts General Hospital and Harvard Medical School.*
**WSJ Reader Comments:**

*Scott Silverstein:* I am a medical informatics professional (Yale postdoc in that field 1992-4) writing on these issues for almost twenty years, as were others. Like the tobacco industry, our warnings were pushed aside by the industry and its pundits. My mother died of toxic effects of bad health IT in 2011, in fact, resulting in medication continuity failure.

Turning off MU is not a solution. A complete reboot of the thinking about this technology in its entirety is needed, especially the clerical work demanded of clinicians.

What we have in 2016 is not what the pioneers who taught me the science and art of health IT intended.

*John Levinson replies:*

We are very sorry to hear about your mother. We agree with you. Turning off MU is merely a Band-Aid for a patient bleeding to death. However, it is fairly easy to do and will provide a little bit of immediate relief.

Perhaps unexpectedly for an author of this op ed, I am also a deep believer in the beneficially transformative future of medical informatics. I wrote an electronic record in 1988 and 89, published it in 1991 or 92, was Mass General Physician Organization VP for IT from 1994-2004. The software we are being forced to use now, no matter which brand, has nothing to do with the promise medical informatics.

At this point, I am convinced that medical leadership and government are so severely myopic and self-serving that they have set the stage for externally generated truly disruptive innovation which will be embraced by doctors and patients across the country - and so change the entire landscape of healthcare delivery and healthcare delivery organizations.

*Satjiv Kholi:* “Direct” patient care is the foundation of the “art of medicine” and it is during this time spent with the patient, that the physician develops the trust that facilitates shared decision making...Workflow mapping studies have shown that physicians spend only 15-17% of their time on “direct” patient care, whereas, almost 65-67% of their time is spent on “indirect” patient care...."  
[https://apologeehealth.com/2015/09/03/brain-drain/](https://apologeehealth.com/2015/09/03/brain-drain/)

*Stephen Levinson:* The article by Dr. Gardner and Dr. John Levinson (no relation) is well written and on point concerning obstructions our current electronic records create to quality and safe patient care.

However, the final paragraph concludes that all of the flaws with current systems relate to the additional burdens created by the federally mandated "Meaningful Use“ financial incentive system, suggesting that our currently available Electronic Health Records (EHRs) are fundamentally sound and helpful to
promoting patient care and caring. To the contrary, although the Meaningful Use program has exacerbated fundamental problems with current EHR designs and functionality, all of the problems created by these systems (lack of usability, inefficiency, erroneous and conflicting data, patient safety issues, etc.) remain even if Meaningful Use were removed. We need to re-design systems from the ground up to meet physicians’ usability and patient care standards so they can fulfill their promise.

**Dr. Levinson replies:** we agree with you! Google and others are working on ELRs/EHRs that doctors WANT to use and from which patients will actually benefit. Turning off MU prompts is a short term interim step to help patients and doctors - AND do so without bankrupting PHS and others. PHS paid $1.1B to Epic and another $1B in transition costs to install Epic. Epic in my view is a terrible program. Atrocious. And the Partners build, I am told by independent consultants, one of the worst if not the worst ever assembled. Either way, with $2.1B spent, PHS can not walk away anytime soon w/o going under. BTW, am told Epic at PHS was budgeted $800M w 10 year ROI. Now felt to be a 40 year ROI for Partners. Sure makes you wonder who was thinking what and when, doesn’t it?

**James Henn, M.D.:** Has caregiving in medical practice really been displaced because of billing-focused, electronic health records? If we abandon the “meaningful use” prompts designed to improve patient quality, safety, efficiency, and reduce health disparities, will doctors suddenly start listening more closely to what patients have to say?

I don’t think so. We providers are at risk of disengaging from our profession and our patients. And, it’s bigger than “meaningful use.” Regaining our footing will require designing “meaningful use” into our data streams, not simply “listing things” on a page. *Designing* meaning into the work we do is long overdue. It should become a disciplinary exercise involving asking the right questions, inventing prototypes, failing and refining, inventing our future as we go along.

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**Peter Dyke**: A glaring error:

"... problems facing modern medicine,..."

There IS no Medicine, modern or whatever with this Industrialization of what once was a Profession. And the good Doctors, the authors? - no, not Drs. at all but mere Providers, Product deliverymen for the Insurance Industry. For the MBAs and Lawyers, the Managers, leaders, policy makers....

Now, physicals are done through sweaters, shirts, underwear, time is toooooo precious for a Hx and a community college 1yr. grad. with white coat and ubiquitous (TV) cervical stethoscope does it via clipboard to be gathered later during wt./height measurement.

**John Dumas, M.D.**: As a practicing internist, I no longer receive a good one-page factual note from a subspecialist in narrative form; I now receive a 7 or 8 page note that is a bunch of clicked garbage that I have to spend extra time trying to ferret out the meaningful nugget of pertinent info. They are just trying to "meet meaningful use", i.e. more payment.

The most common complaint from my patients is that "the doctor you sent me to just looked at a computer screen the whole time and I'm not sure he was listening".

These computer software systems are also very expensive to primary care physicians.

When we had paper charts, we did just fine; most of our medical staff would love to go back to those days. Just use computer systems for scheduling

**Roan Winter**: EHR's aren't just unusable for physicians and distract from patient care. The original intent of the HiTech Act was to achieve an interoperable patient record so patient information was portable. This would allow patients to move easily between providers while maintaining continuity of care, and if they find themselves in an ER, their records would be immediately available to a remote ER Doc. The "Industry", through a concerted lobbying effort, gutted the requirements for interoperability so they could monopolize patient records and force hospital and affiliated medical practices to adopt a monolithic, single source approach to their EHR. This anticompetitive move had a chilling effect on innovation, interoperability and useability. The result is apparent in most of the commercial EHR offerings. Most important to understand... EHR systems are not designed to enable effective patient care, most often they impair it as this opinion piece makes clear

Kim Slocum: I've worked in the health care field for over forty years. Preventable medical errors remain among the leading causes of death in the US. Many of those are in turn caused by physicians making clinical decisions with insufficient knowledge about the patient (e.g. full problem list, active medications, allergies, etc.) That's part of what digitizing health care information is slowing but surely beginning to remedy. My physician uses an EHR and I wouldn't be seen by a physician who didn't use one. Yes, it's a "management tool" but a big part of what it's supposed to manage is the physician's risk of injuring or killing me accidentally due to missing data
Bill Wald: Has anyone noticed that doctors no longer want to touch patients even wearing gloves? Afraid of being accused of sexual molestation?

Alan Kelman: In addition healthcare providers have to look at their patients. Listening is critical but it isn't everything. As a dentist I often can get very important diagnostic and treatment planning information from a patient's body language and facial expressions,

All of us, doctors and laymen, have had the experience of talking to someone and while they are responding appropriately, a look into their eyes tells us that something isn't being communicated or understood.

Eric Ethington: Technology should support the work, not work support the technology.

Charles Smith: I've solved this problem. I no longer go to the doctor, since he is not "there" anyway. My medical answers come from some dedicated searching on Google.

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Doctors-In-Training Spend Very Little Time At Patient Bedside, Study Finds

_Time with patients seems “squeezed out” of training, investigator says_

April 23, 2013

Medical interns spend just 12 percent of their time examining and talking with patients, and more than 40 percent of their time behind a computer, according to a new Johns Hopkins study that closely followed first-year residents at Baltimore’s two large academic medical centers. Indeed, the study found, interns spent nearly as much time walking (7 percent) as they did caring for patients at the bedside.

Compared with similar time-tracking studies done before 2003, when hospitals were first required to limit the number of consecutive working hours for trainees, the researchers found that interns since then spend significantly less time in direct contact with patients. Changes to the 2003 rules limited interns to no more than 30 consecutive hours on duty, and further restrictions in 2011 allow them to work only 16 hours in a row.
“One of the most important learning opportunities in residency is direct interaction with patients,” says Lauren Block, M.D., M.P.H., a clinical fellow in the Division of General Internal Medicine at the Johns Hopkins University School of Medicine and leader of the study published online in the Journal of General Internal Medicine. “Spending an average of eight minutes a day with each patient just doesn’t seem like enough time to me.”

“Most of us went into medicine because we love spending time with the patients. Our systems have squeezed this out of medical training,” says Leonard Feldman, M.D., the study’s senior author and a hospitalist at The Johns Hopkins Hospital (JHH).

For the study, trained observers followed 29 internal medicine interns — doctors in their first year out of medical school — at JHH and the University of Maryland Medical Center for three weeks during January 2012, for a total of 873 hours. The observers used an iPod Touch app to mark down what the interns were doing at every minute of their shifts. If they were multi-tasking, the observers were told to count the activity most closely related to direct patient care.

The researchers found that interns spent 12 percent of their time talking with and examining patients; 64 percent on indirect patient care, such as placing orders, researching patient history and filling out electronic paperwork; 15 percent on educational activities, such as medical rounds; and 9 percent on miscellaneous activities. The researchers acknowledge that it’s unclear what proportion of time spent at the bedside is ideal, or whether the interns they studied in the first year of a three-year internal medicine training program make up the time lost with patients later in residency. But 12 percent, Feldman says, “seems shockingly low at face value. Interns spend almost four more times as long reviewing charts than directly engaging patients.”

Studies in 1989 and 1993 found that interns still spent more time documenting than seeing patients, but they spent between 18 and 22 percent of their time at the bedside. In those studies, however, researchers found that a large chunk of time was spent sleeping at the hospital, something rarely seen today. Reduced intern work hours were designed to lessen trainee fatigue and improve patient safety.
Feldman says questions raised by his study aren’t just about whether the patients are getting enough time with their doctors, but whether the time spent with patients is enough to give interns the experience they need to practice excellent medicine. With fewer hours spent in the hospital, protocols need to be put in place to ensure that vital parts of training aren’t lost, the researchers say.

“As residency changes, we need to find ways to preserve the patient-doctor relationship,” Block says. “Getting to know patients better can improve diagnoses and care and reduce medical errors.”

The researchers say better electronic medical records may help reduce time spent combing through patient histories on the computer. Another improvement could be made by grouping an intern’s patients together on the same hospital unit so the intern doesn’t have to race from floor to floor to see patients, wasting time in transit.

Block says she would like to know how patients feel about how little time they see with interns, who generally are charged with overseeing many aspects of their care. Studies have shown that only 10 percent of hospitalized patients know who their resident doctors are.

“It’s not an easy problem to solve,” Feldman says. “All of us think that interns spend too much time behind the computer. Maybe that’s time well spent because of all of the important information found there, but I think we can do better.”

The study was funded by the Osler Center for Clinical Excellence at Johns Hopkins and the Johns Hopkins Hospitalist Scholars Fund.

Other Johns Hopkins researchers involved in the study include Albert W. Wu, M.D., M.P.H.; Sanjay V. Desai, M.D.; Kevin Wang and Timothy Niessen, N.D., M.P.H. University of Maryland researchers Robert Habicht, M.D.; Kathryn Novello Silva, M.D.; and Nora Oliver, M.D. also contributed.