



Crisis in Medicine: Have We Traded Technology for Our Six Senses?

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Technology creates change, and change is moving fast and is relentless. Physicians, on the other hand, are generally slow to change. Wisely, we question change—we observe it, we study it, and we try to ensure our patients will benefit from it over time. Maybe as a result of this or as a consequence of our often myopic view of the world, we mistakenly let others lead the way and dictate how we must change and what our practices must absorb. We must turn this around and be the agents of change for our profession so we can appropriately use the available technology and create systems for managing the demands of a society that expects instant answers with fewer doctor resources devoted to the answer. The insurance industry is encouraging a wholesale dismantling of the classic patient visit to be replaced by nonphysician interactions, virtual diagnostics, and electronic medical records. We must not allow this and must ensure that we safeguard our profession by employing traditional skills, utilizing our 5 senses, and incorporating technology as a tool for better diagnosis and treatment but not as a substitute for the same.

Great doctors are often described as having a sixth sense—an intuition that guides them in diagnosing and treating patients. It is assumed, therefore, that the good doctor will have the benefit of 5 senses: sight, sound, touch, smell, and taste. Sound: What does the patient tell or neglect to tell the doctor? What sounds does a joint produce when it moves? Sight: How does the patient present? Are they weary from pain or chronic disease? Touch: What

does the joint feel like? How does it move? What is the patient's response to stabilization of a joint? Smell: Is there an odor that helps detect the presence of infection or decay? Is the patient coming into contact with a substance causing harm or preventing healing?

A good doctor must employ these senses first to understand the patient's needs and then to treat the patient. The sixth sense is a gift, one that comes from years of experience, an attention to detail, and a commitment to the craft of medicine. A recent trend toward virtual medicine is a dangerous path that must be walked with care and discretion so that the 6 senses are maintained and nurtured. Technology must be used to enhance and not limit these senses. The patient cannot be reduced to a 2-dimensional version of his/herself so that the doctor's powers of diagnosis and healing are similarly limited.

Change in the office has occurred with mandates for electronic medical records and work-hour restrictions for residents. Data do not support that either change has resulted in a net benefit to patients. We are mandated to invest scarce capital to support new technology, resulting in increased pressure to recoup investment. Where there is a cap on revenue, the only way to increase net profit is to increase volume and decrease services. Physician time is the variable and can be streamlined by performing video conferences or smartphone consultations. Change may bring higher order, as the English philosopher John Locke said, but it is time for all of us as physicians to step back and question that this type of change is the path we must take. An office with a schedule of 80 patients seen at 5-minute intervals by physician assistants has no place in medicine. The pressure imposed by the insurance industry or hospital administrators to meet quotas has gotten out of hand and the time is now to say with a strong but fair voice a resounding NO!

The office visit with a history and physical examination is the most exciting and effective time to meet, console, and relate to our patients. The use of the 5 senses is critical. We must not let technological advancements (eg, smartphones, the Internet, and electronic medical records) destroy what was created and taught to us all through our training. The reward that is accomplished by placing one's hand on a patient's knee to understand its warmth and

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swelling, the tactile feeling of a fluid wave, or performing carefully with compassion a provocative maneuver that gives by sight a grimace of discomfort can tell so much more than a status update on the phone. We must not allow ourselves to be replaced by ancillary services for so-called efficiency and cost saving. Rather, we must be innovative and sharp. We must find the way to use the wonders of the virtual world without giving up the human consult.

Imagine that you are able to travel to Iguazu Falls, South America, to see one of the wonders of our world. You sit in that life raft moving upstream to feel the heat from the water as it crushes the rocks below, and you feel the mist on your face. You see the majesty and hear the screams and breadth of excitement of those around you, while you listen to the deafening sounds created by this waterfall. Now imagine you are required to report on this same experience through a video or some form of technology that the world has convinced us is the best and far cheaper substitute. This is our electronic medical record. A tool we are forced to use, and while it has a purpose, it is a sterile tool that fails to provide information that will give clues to awaken the sixth sense. It is a checklist that could allow for completion of a task—like how to fix a leaky faucet.

How then do we accomplish walking the fine line of working with nonphysicians and technology and yet delivering pinnacle care? The answer isn't simple but it must include education and a commitment to the profession. We must make the public aware that we are one of the few professions that dedicate our lives to others by promoting health and advancing research. My colleagues, the pendulum has swung too far; it is time to take back our great profession through education of ourselves and the public. While technology may help the world connect, it has a limited role unless we first use our 6 senses to help our patients. We must not submit to a compassionless and callous approach that is the inevitable outcome of virtual medicine done with speed. We must maintain our dignity and let the public understand how many years of sacrifice has taken place to earn a sixth sense and not allow a third party to take it away. We are the only source of protection for our patients and we need each one of our senses to perform this task.

Advancing research has been a cornerstone for the orthopedic surgeon. Position statements through meta-analyses and systematic reviews of the literature have recently been utilized with increasing frequency. Combining data of potentially flawed studies can often lead to erroneous conclusions and may stray away from best practices. Is this where we want evidence-based medicine to go? The end result is that decisions are made by insurance companies who rely on these flawed studies to force clinical decisions on the physician, as was most recently seen by the investigation of viscosupplementation for knee osteoarthritis.¹

In a 2007 study published in *JAMA* (*The Journal of the American Medical Association*), only 62% of residents could appropriately interpret a P value.² How can we expect young

clinicians to evaluate, interpret, and apply the multitude of evidence in the literature to everyday practice? We must marry the use of best evidence with our expertise to make the most informed decision while managing the expectations of our patients. In order to achieve that balance, we must rely on our intuition, our sixth sense. There is too much patient individuality and complexity surrounding each individual's situation for a one-size-fits-all approach and for wholesale reliance on research to address each unique situation.

If Nathan Davis in 1845 was able to convince the New York Medical Society to establish a nationwide professional association to assist in regulating the practice of medicine, then it is time for all of us to stand up and insist on a code of ethics that is unrelenting and uncompromising. Our wise leaders of the American Orthopaedic Association (AOA) who founded the formation of orthopedics in America knew guidelines were needed to “foster advances in the care of patients, improve the teaching of orthopae-

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dic surgery in medical schools and formal orthopaedic training, and to promote orthopaedic surgery as a surgical discipline worldwide.”³ It is now our turn to renew the guidelines and encourage our leaders to help educate ourselves and patients as we work with technology and administrators, nurses and physician assistants to deliver pinnacle care. We must reform medical education and the practice of medicine so that technology is used as a companion but not a substitute for our 6 senses.

The next time a patient comes into the exam room, sit down, look the patient in the eye, listen, touch, console anxiety, make a human connection, and form a lasting relationship. By all means apologize to your patients as you fill out the electronic medical record and insurance forms. Discuss how we are in the same crisis together and ask for their help as they have come to you for yours.

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