

# Computer Briefs

## Is 21st Century E-Health Care Really Self-Care?

Call it millennium fever. The theme of most professional meetings I have attended this year seems to focus on taking an educated look into the future. For example, at the recent annual meeting of the American Telemedicine Association, session papers covered the deployment of telemedicine systems and the delivery of health care through telemedicine. Issues included interstate licensing, reimbursement for consultations, liability, and data integrity and security. The plenary sessions went beyond that, however. They explored a much larger question, a question that should be of interest to every health care provider and be on every health care provider's mind. The discussion explored the effect of the Internet on the delivery of health care and how a future, faster, smarter, and more reliable Internet might change our current concept of health care delivery.

### CHANGING DEFINITION OF TELEMEDICINE

Such a discussion might seem a bit off the topic of telemedicine. Telemedicine has traditionally been thought of as a form of tele-consultation or video-conferencing between a patient and a provider. That was in the largely analog world of the 20th century, however. The reality of the world of the 21st century, if one can generalize from its first 9A months, is that it is largely a digital world. And in our new digital 21st century, the definition of telemedicine is changing and expanding.

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Telemedicine can be thought of as a means or a channel for the delivery of health care from a distance. If you think about it, however, you really can't deliver health care from a distance. What you are delivering is the information that enables a distant care giver to provide the needed care at the distant site. Telemedicine enables others to deliver health care. I like to think of telemedicine as the use of communications technology for the exchange of information to be used in making a clinical decision. Under this new definition, patients surfing the Internet to get information on which they are going to base a decision about their health care without the assistance of a health care professional should be considered a form of telemedicine.

### CHANGING PHYSICIAN-PATIENT RELATIONSHIP

Empowering the patient with information, whether it is credible information or the 21st century version of 19th century snake oil, is beginning to change the fundamental nature of the doctor-patient relationship. The 20th century model sees the health professional as a trusted authority. The emerging 21st century model sees the health professional as a trusted advisor. Perhaps a better model would be that of a coach. The health professional cannot always advise. He or she

sometimes has to call the plays and insist that they are executed by the book, despite the protestations of the players. No matter what the model, however, it is the patient who ultimately bears most of the responsibility for successfully carrying out the clinical plan.

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In this new model, the health professional will guide and advise the patient concerning treatment options. The patient may have already researched or will research these options before making a decision. The patient will find this information on web sites sponsored by private, nonprofit, or commercial entities, or from people with similar problems through lists or chat rooms. The health professional will have to reason with the patient, a much more difficult and lengthy process. All this in the face of an increasingly capitated practice and the imperative to do more with less and for less.

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Historians of the 22nd century may look back and describe this time of patient empowerment as the age of the medical revolution. In the same sense, we look back 100 years and characterize the empowerment of the factory worker as the industrial revolution.

## INCREASED INTERNET ACCESS

Is patient empowerment through Internet-provided information really happening? Studies show that the Internet is available in 40% of homes in the United States. Additional people have access through work or school. Studies also show that approximately one-third of the people who are searching for information on the Internet are searching for health-related information. Studies also show that these searches are performed generally by more-educated surfers with higher levels of income (evidence of the digital divide).

## FROM INTRODUCTION TO ACCEPTANCE: A THEORY

Dr. Tom Ferguson has done a lot of writing about this subject ([www.fergusonreport.com](http://www.fergusonreport.com)). He suggests that there are five steps that must happen when a new technology is introduced if it is to become accepted. First, the new technology is ignored. If it won't go away, it is resisted. If it cannot be resisted, it is substituted for some previous technology or methodology. Once it is in the system, people begin to make innovations based on the newly available capability. It is these innovations that transform a society. Dr. Ferguson believes that the majority of health practitioners find themselves in one of the three initial states: ignore; resist; or substitute. He believes that more and more patients are in the last three states: substitute; innovate; or transform. If he is correct, and if the trend is real, then health care will no longer be driven by the practitioner but rather by the patient, much as the direction of the factory was driven by the worker 100 years ago.

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## SEPARATING THE WHEAT FROM THE CHAFF

I have written about the abundance of health information available on the Internet. I have discussed the problem of misinformation on the Internet, especially as it effects the delivery of health care. How do you and your patients tell a book by its cover when it has no cover? Is the solution to this problem, at least with respect to health care information, the responsibility of the health care community?

Fortunately, the information industry sees this as a general problem, occurring across the entire information spectrum. A consortium of 19 information deliverers has been formed called the "High Ethics Coalition." Through advisory and review panels, this consortium proposes to provide the information equivalent to the "Good Housekeeping Seal." Health care information will be one of the consortium's early focuses. The proposed seal will not vouch for how correct the information is, for the validity of the information is often a matter of opinion. The seal will indicate that the source of the information is being fully disclosed and that the information is kept separate from advertising. It is up to the reader to make up his or her own mind as to the validity of the advice.

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An information equivalent of the Consumer's Union and its *Consumer Reports* already exists on the Internet at [www.gomez.com](http://www.gomez.com). This web page does not make recommendation or certify anything. Just like *Consumer Reports*, it provides reviews of many web pages that offer information. Health information is one of its areas of focus. And just like *Consumer Reports*, it is up to the reader to use the information provided wisely. n

Michael J. Ackerman, Ph.D.

Assistant Director for High Performance Computing and Communications

National Library of MedicineB

Bethesda, MD 20894

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