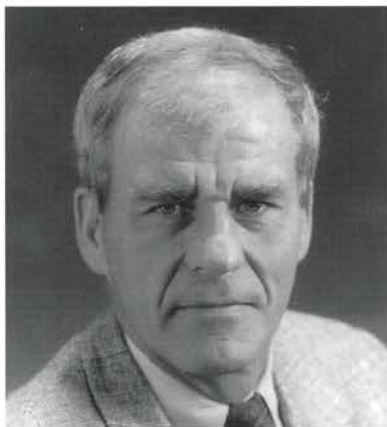


FROM THE DESK OF THE PRESIDENT

The Dawn of Dig



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The element of health care that is most influenced by digital capabilities is the patient. Health-related Web sites have experienced a boom in traffic. It is estimated that about 70 million adult Americans have used the Web to seek health information. Patients look for information on a particular health care condition that affects themselves or someone in their family. Increasingly, patients rely on the Internet rather than on magazines, newspapers or televisions to obtain health care information.

The digital age is here and here to stay. As physicians, not only must we be familiar with computer technology, but we must also be able to use it efficiently and effectively. The Internet is transforming medicine by affecting physicians' daily activities. Health care consumers (that is, patients) use it to educate themselves about their conditions. Patients and physicians can acquire knowledge through Internet conferences, chat rooms, or live or delayed feedback from conventions. The physicians' offices and health centers that understand how the Web is changing medicine will have the best chance of prospering in this digital era.

Certainly, my personal life has changed tremendously because of the computer frenzy. About half of my communications are now received by e-mail rather than by routine mail or telephone calls. Increasingly, my professional talks are presented via PowerPoint on a computer rather than on traditional slides. I use a PalmPilot™ to record my daily routine, to check dosages quickly and to look up many other bits of information that I once looked up in a dictionary or encyclopedia. Board meetings and conferences that once followed a bulky printed agenda are now guided by a file on a laptop in front of the participants.


My office work flow has also changed. Patients' appointments and surgeries are scheduled on the computer, and this information can be accessed by any other office within our group. With a push of a button, my entire schedule as well as those of the other offices can be printed. Financial billing depends on the computer Group Practice Managing System (GPMS). The office is in the process of designing a database that will track all surgeries, a process that improves patient care and facilitates clinical research. Patients are followed via this computer system: all patient information is logged into the program. Communica-

tion with local patients, not to mention those residing outside the country, is easier via e-mail. The practice's Web site is helpful to patients who want more information about our facility and our physicians.

The Internet will influence medical offices in other ways as well. Physicians will be able to download research trial databases for local use and will participate in on-line facilitated clinical trials. Health sites on the Web now provide a host of continuing education and practice management services. For example, Healthon/WebMD offers as many as 400 CME-credited courses. Physicians can also check the eligibility of health care consumers on-line. Insurance claims can be processed on-line. A free schedule analyzer even allows practitioners to develop a fee schedule that fits their community. Practitioners enter their zip code and specialty, and the system provides guidelines and reasonable customary charges.

The element of health care that is most influenced by digital capabilities is the patient. Health-related Web sites have experienced a boom in traffic. It is estimated that about 70 million adult Americans have used the Web to seek health information. Patients look for information on a particular health care condition that affects them or someone in their family. Increasingly, patients rely on the Internet rather than on magazines, newspapers or televisions to obtain health care information. Web sites such as AmericasDoctor.com, drkoop.com and WebMD.com are some of the more popular sites. Via the Internet, patients can talk to physicians, purchase prescription drugs, chat with people with medical problems similar to theirs and even find out if they are eligible for clinical trials.

Health care consumers, however, are concerned about privacy on medical Web sites. A recent survey by a California foundation found that 19 of 21 health sites failed to live up to



their privacy policies, which stated that they would share no information with a third party. Consequently, patients need to be skeptical because some Web sites do make bogus health claims. To protect themselves, patients should observe several precautions: only use a private e-mail account, don't discuss sensitive health issues, only use comprehensive on-line pharmacies and be wary of "scientific breakthroughs," miracle cures and testimonials from "famous" medical experts.

The Internet, of course, also provides new opportunities for physicians. It is estimated that about 85% of doctors now use the Internet. Of those, half use the Internet daily. Physicians also use Web sites to advertise themselves. It is estimated that 50% of physicians have a Web site on the Net. The Internet is especially suited for providing on-line consultation such as in radiology, where the capability of reading films online is almost routine. In the near future, it is also likely that surgical consultation services will be available through the Internet. Surgeons are already able to obtain intraoperative consultations through the Internet from senior surgeons covering on-call schedules. At sites such as CyberDocs.com and AmericasDoctor.com, physicians respond to questions from health care consumers. Physicians, however, need to be aware of individual state laws. Providing consultations to individuals in other states could be interpreted as practicing medicine

without a license if, indeed, the physician consultant has no license in that state.

Other health care providers have also taken advantage of the Internet to improve patient care. Internet drug stores such as DrugStore.com and PlanetRx.com are obtaining licenses to operate in each state. The giant drug store chain Walgreens is already using the Internet to refill about 1,400 prescriptions each day. The \$44 million on-line pharmaceutical sales posted in 1999 are expected to jump to \$2 billion by 2004. The National Association of Boards of Pharmacy recently began to grant a seal of approval to Internet pharmacies that meet the criteria of Verified Internet Pharmacy Practice Sites.

The North American Spine Society (NASS) is also involved in this electronic revolution. The Society, which has had a Web site for several years, is currently redesigning spine.org to be even more user friendly and useful based on members' survey responses. (See page 30 for a summary of survey responses.) A members-only section will allow members to develop on-line advertisements or links to their own Web site. Discussion groups and listservs are being developed. Public information such as the *Back to Health Month* patient handouts will be posted as well as *Contemporary Concepts* papers, coding books, patient education brochures and clinical guidelines. Soon members will be able to order books and register online for NASS courses and

the Annual Meeting. In this year, NASS will conduct 6 on-line courses on the internet. Members will be able to update their membership records on-line. NASS is also sending periodic education bulletins via e-mail to inform its members of upcoming education programs, on-line courses and other services. Finally, a virtual private network that staff and members can use to access NASS documents and databases is being created.

Despite the power of these many innovations, we are only at the beginning of what the digital age promises. Smaller, more powerful computers are available almost every day. In the near future, typing will be unnecessary for communication via the Internet. "Wireless" will be routine. During the next few years, the Internet will continue to transform health care processes. Fortright and efficient execution of many office tasks will decrease the expense of overhead and improve the efficiency of patient care in physicians' offices and hospitals. Even more importantly, health care consumers will become more knowledgeable via the Net. As a consequence, decision-making will increasingly become a partnership between patients and physicians. Health care consumers will become more selective, choosing their providers by using the Internet as a sieve.

The dawn of dig is here and the age of dig is rushing in with a full head of megabytes.