Technology and Pain Management

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Since the signing of the American Recovery and Reinvestment Act of 2009, which earmarked $19 billion in stimulus funds to encourage health care facilities to make better use of technology and integrate computer systems, there has been increased discussion of the use of health information technology (HIT) (specifically electronic medical/health records) in clinical practice; and with the rapid growth of social media outlets like Facebook and Twitter, this discussion continues. As we started working on this issue, which focuses on different aspects of practice management, we came across volumes of information on technology and its use in healthcare. From a member survey conducted last year, we knew that the use of technology for continuing education was definitely increasing and also that you would be interested in doing more online seminars; we also discovered that most of you preferred using a computer for learning, as opposed to your phone.

In March, we sent an electronic survey regarding the use of HIT and mobile technology in your practices. We received responses from about 4% of our members, which is fairly significant. Most of the responses (42%) were physicians and osteopaths, but we also had good showing from nurses, nurse practitioners, psychologists, chiropractors, and acupuncturists.

Most of the replies (63%) came from practitioners who are office based; another 29% work in hospitals; and 17% in multidisciplinary pain clinics. The majority (48%) have fewer than 5 staff members, and 21% have more than 25. A little more than half (56%) currently use EMTs or EHRs in their practice, 26.4% are planning on converting in the future and 18.8% are flat out not interested. Although 19% were motivated by the stimulus funds available, the majority (65%) wanted to increase efficiency and make it easier to communicate with other healthcare professionals (47%) to coordinate patient care.

There were mixed feelings regarding electronic medical and health record systems among the survey members, ranging from "horrifically poor user interfaces" to "fabulous and time saving!" Most respondents were in between, and many have created their own interfaces and systems, as the currently available pain management modules were insufficient and/or not cost-effective in practice.

We also addressed the use of mobile technology to improve clinical practice. The majority of members in the survey use some sort of hand-held device (i.e., PDA, Blackberry, or iPhone), but about half of these respondents do not currently make use of this technology in clinical practice, either because they have not had the time to start or feel they just don't know where to start. Here are some recommended applications from other members for use in clinical practice:

- Epocrates (http://www.epocrates.com) offers a number of free and premium products for mobile devices, including a mobile drug reference, on-the-go learning center, and clinical news and research.

- Medscape Mobile from WebMD (http://www.medscape.com/public/iphone) includes a drug reference and interaction checker, a multimedia clinical reference, and in-depth medical news and CME/CE.

- eOpioid™ (http://www.sentientware.com) is a powerful opioid dose converter app for the iPhone™ and iPod touch® that includes a suite of functions to help perform complicated opioid pain medication dose conversions.

- MedCalc (http://www.med-ia.ch/medcalc/iphone_description.html) is a free medical calculator that gives you easy access to complicated medical formulas, scores, scales and classifications.

- The website iMedicalApps (http://www.imedicalapps.com) provides medical app reviews by healthcare professionals. The iMedicalApps Team consists of a group of physicians and medical students who provide commentary and reviews of mobile medical technology and applications. Their reviews and commentary are

based on their own experiences in the hospital and clinic setting. Most of the material is based on the iPhone™ and iPod touch® platform, with plans to review Android-based medical apps as well.

Although we may applaud technology and the benefit it brings, there are concerns about its impact on patient care. In an article in *The New York Times*, Pauline W. Chen, MD, said "For every one of us who is using, struggling with, or considering adopting an electronic records system, one thing has become increasingly clear: just because EMR improves information sharing and retrieval, it doesn't necessarily follow that our communication with patients and colleagues will also be better" (1).

The Center for Studying Health System Change published a brief called, *Electronic Medical Records and Communication with Patients and Other Clinicians: Are We Talking Less?* that posits that EMRs both help and hinder physician interpersonal communication with patients and other clinicians. A study based on in-depth interviews with clinicians in 26 physician practices revealed that EMRs are good for immediate access to patient information so that time is spent talking rather than rooting through folders for information. Moreover, the EMR data also are a way to enhance patient education. Clinicians can pull all kinds of data, including problem lists, medications and care plan, or even educational information, from the web while the patient and caregiver are present (2).

On the flip side, some report the technology can be a distraction (2). The data can be gathered but you risk missing the nuances, "including social context, values, preferences, and issues specific to complex patients" (3).

The answer, many believe, is to make the electronic information part of the patient visit. Showing patients portions of their records could facilitate more accurate documentation and joint decision-making, while helping to avoid a sense of alienation for patients while the physician looks at the computer screen. ■

REFERENCES

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