

# Medical Economics<sup>®</sup>

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## Doctors *are* getting more tech savvy

While EHRs remain uncommon, physicians are taking advantage of many new devices and media, our survey shows.

By Ken Terry

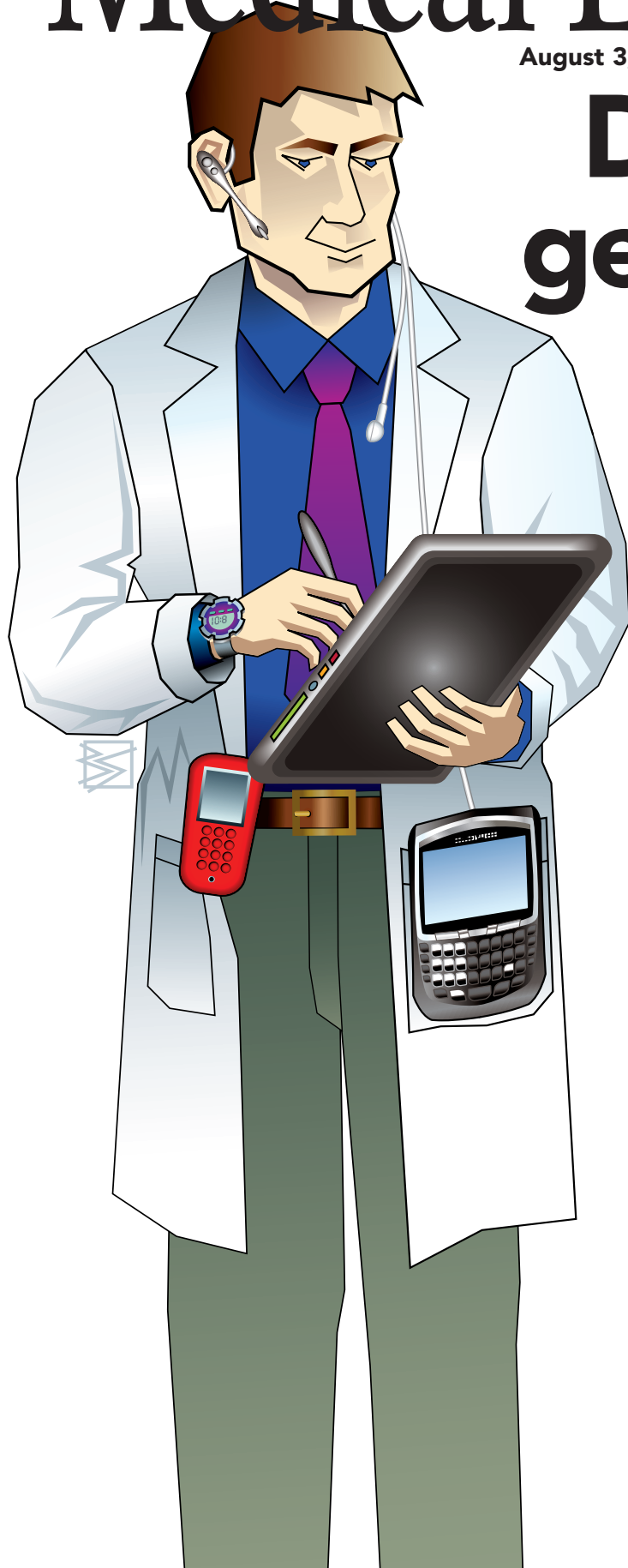
TECHNOLOGY EDITOR

Physicians are often criticized for not making as much use of information technology as other professionals and industries do. But, even though most doctors still don't have electronic health records, they're not Luddites. About 330,000 physicians use PDAs (personal digital assistants), smartphones, or tablet computers, for example, and the majority of doctors get some of their CME online.

To find out how physicians are using information technology, *Medical Economics* recently did a survey with Epocrates, which supplies electronic drug information, decision support tools, and CME to about 200,000 physicians. Nearly all of the 503 respondents are Epocrates users, so they're more technology-oriented than the average physician. In addition, the majority of respondents are male primary care physicians, and doctors in groups of 10 or more physicians are disproportionately represented. More respondents practice in the Northeast, the Southeast, or the Midwest than in the Southwest or the West.

Despite these biases, however, the survey results appear to reflect many characteristics of technology-using physicians. Here's what we found, and what some experts and physicians think it means.

Illustration by Bill Shannon



## power points

» The convenience and power of smartphones are making them popular.

» More and more physicians are using iPods in their clinical work.

» Webcasts, some with streaming video, are having an impact in CME.

» Few doctors use PDAs to view lab results or other clinical data.

» Tablets, laptops and desktops are the main choices for EHRs.

» Remote access remains poor for mobile devices.

## Growth of some technologies shows doctors are quick learners

Most respondents use PDAs in their clinical work—no surprise, since 91 percent of these Epocrates subscribers look up drugs, dosages, and interactions on their PDAs. An unexpected finding is that 31 percent of the respondents use smartphones (PDAs combined with cell phones). The increasing capabilities of such devices and the convenience of carrying one gadget that performs these functions, instead of two, account for the growth in this area, say experts.

Salvatore S. Volpe, a med-peds specialist in Staten Island, NY, who plans to get a smartphone, notes that the latest models are very fast, are reasonably priced, send and receive e-mail via cellular networks, and can run programs such as Microsoft Word and Excel.

Physicians are quickly adapting to iPods and other MP3 players, as well. Twelve percent of the respondents already use them in clinical work, and 29 percent expect to rely on them more in the future. Among other things, MP3 player owners are using them to store podcasts containing medical information and CME materials. While these are primarily audio programs (which can be played in cars via adapter cassettes or plug-in jacks), some iPods also play video.

“There’s no reason for anyone to send me CDs or DVDs anymore,” says FP Louis E. Spikol of Allentown, PA, who works part time for the American Academy of Family Physicians. “Eventually, they should just make it into a podcast that you can download.”

Today, however, doctors are using old and new technologies side by side. For

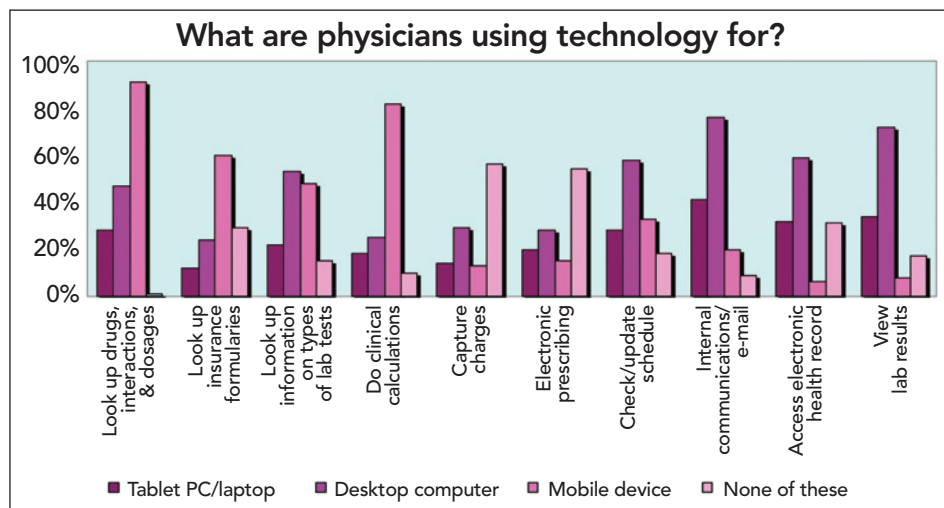
example, 62 percent of respondents obtain medical information on CDs or DVDs, and the CD/DVD category ranks first for CME. Meanwhile, the popularity of live and archived webcasts—a relatively new technology—is on the rise. Around 30 percent and 40 percent of respondents, respectively, employ these media for both medical information and CME, and roughly 60 percent believe they’ll be using them five years from now.

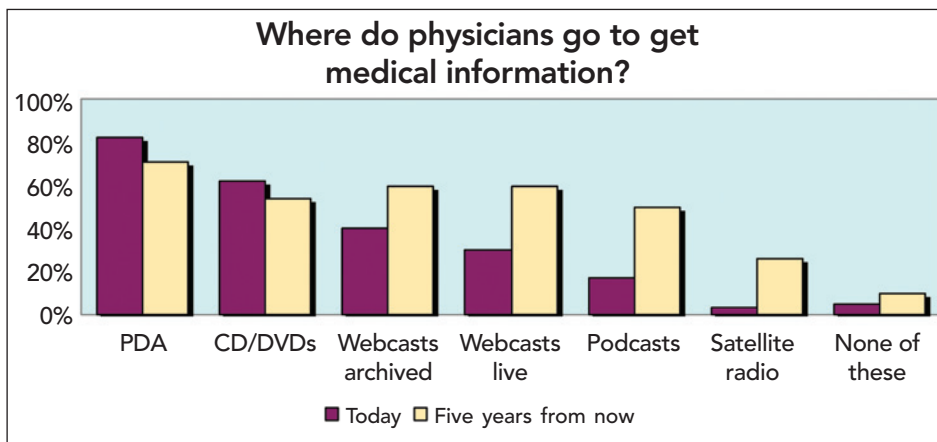
Webcasts increasingly include streaming video, which is played as it arrives on your computer. Streaming video offers some new ways to learn. For instance, FP Timothy W. Allen of Cudahy, WI, says he took a stroke certification course using a streaming video that featured simulated patients.

CME courses for PDAs are only a couple of years old. Nevertheless, 48 percent of respondents are using PDAs for CME, and 67 percent expect to be doing so five years from now.

## What doctors use different devices for in their offices

In general, physicians are using PDAs and smartphones for reference tools, calculators, and address books, but not to access or store patient data. The reason isn’t security or HIPAA regulations: Both Palm and Pocket PC handhelds offer encryption and audit trails, notes FP Goutham Rao, director of medical informatics at UPMC St. Margaret hospital in Pittsburgh. Office-based doctors don’t use PDAs to view patient information, he says, because their screens are too small and because these handheld computers are rarely integrated into wireless net-





works. (“Docking” with desktop PCs doesn’t allow real-time access.)

Internist Jeffrey Hertzberg, a medical informatics consultant in Minneapolis, says that EHRs magnify these problems. “The laptop and tablet devices integrate nicely with EHRs, and a subset of EHRs integrate with a handheld wireless device,” says Hertzberg. “But, in general, you can’t just take your PDA and expect it to network well with your office EHR.”

Because of the same drawbacks, only 8 percent of our respondents look at lab results on their PDAs or smartphones, although 83 percent have electronic access to labs. The rest use a tablet PC or laptop (34 percent) or a desktop computer (72 percent).

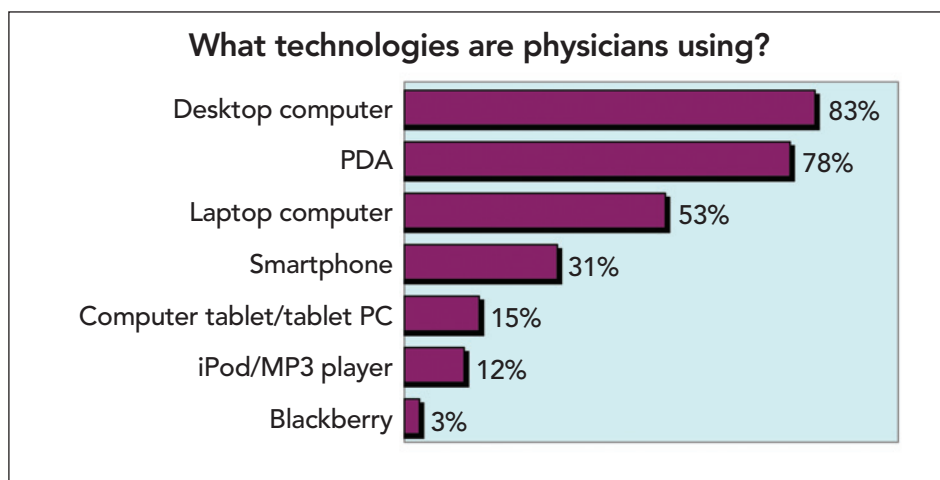
Similarly, while most physicians in our poll use technology for internal communications or e-mail, just 20 percent do it on a PDA or smartphone. Forty-one percent use a tablet PC or laptop and 76 percent, a desktop computer. Lack of networking is one reason; another, says med-peds physician Sal Volpe, is the difficulty of “texting” on a PDA. “If you don’t have a keyboard, it’s hard to do e-mail on a pocket device. It’s awkward.”

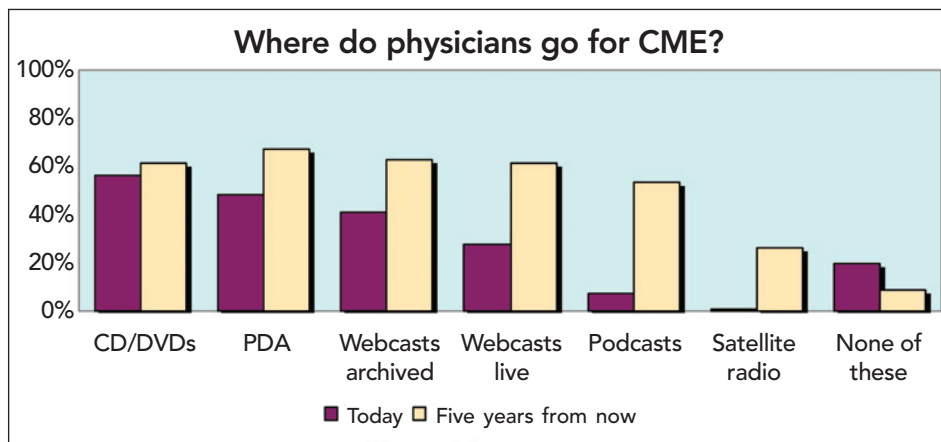
Overall, 15 percent of our respondents use tablet computers and 53 percent, laptops; over 60 percent plan to use these devices more. Experts say these figures reflect the increase in the use of EHRs and respondents’ intention to adopt EHRs in the future. “That’s the main application for tablets,” says Rao. “You don’t see a lot of people using tablets in other contexts for reference information, even the convertible tablets. They’re still pretty pricey, too.”

Although 69 percent of respondents say they use EHRs, the term was not defined in the survey, and many physicians who claim they have EHRs may just be using part of one. Another Epocrates survey last year showed 44 percent of subscribers were using EHRs. However, this is still way above average. Hertzberg notes, “People who are interested in using PDAs and laptops are also the doctors who are interested in EHRs.”

### Will PDA use drop as EHRs take over?

Fewer than half of the respondents do e-prescribing, and just 15 percent write scripts on PDAs. Those who use tablet PCs or laptops





(20 percent) or desktops (28 percent) for this purpose are probably e-prescribing in EHRs, say observers. The question is, why are they continuing to use Epocrates if they have an EHR with an e-prescribing module? One explanation is that not all EHRs have good e-prescribers, or any at all.

Hertzberg sees problems with superimposing one technology—a PDA loaded with Epocrates, for example—on top of another such as an EHR. “Physicians don’t want to have to go to two places for different functionalities,” he notes. “A full-featured EHR is probably going to supersede a lot of the functionality of a PDA.”

Lou Spikol has seen his PDA use drop dramatically since his hospital-owned group got an EHR. “That has made the PDA kind of obsolete for me as far as medicine goes. I used a PDA to prescribe a few years ago—we had Allscripts for a while—and then we moved onto a full functional EHR. When you have that, and you have a tablet or a desktop computer in front of you, I’m not sure you want to use more than one platform.”

But Timothy Allen, whose group is about to implement an EHR, is confident he’ll continue to use his PDA to answer questions that come up while he’s using the EHR and when he’s out of the office. “You’re still going to be on call, and you’re going to have questions asked when you’re out in the field and on rounds.”

Eighty percent of our respondents use mobile devices such as their PDAs or laptops when they’re working outside the office. But only 42 percent are able to connect their mobile devices to any information system on their travels. Firewalls in hospital systems and

technological problems in connecting remotely with office networks are among the reasons, say Volpe and Rao.

### Physicians don’t see money in technology

Only 44 percent of respondents use technology for charge capture, the sole function we asked about that can increase practice revenue. Moreover, just 13 percent capture charges on PDAs or smartphones—the main locus of stand-alone programs. Observers cite the awkwardness of some programs, their lack of interfaces with practice management systems, and sheer force of habit. Allen, who jots his charges on the back of face sheets in hospital charts, comments, “I don’t replace paper with electronics unless the electronics are better than the paper.”

Volpe thinks many physicians are unaware of how much they could save with a charge capture program. “If it integrates with their practice management system, which a lot of the programs do now, then it’s a shame they’re not using it, because it can help them avoid errors in their charges.”

Overall, most respondents adopted information technology to become more efficient, improve care, and get quicker access to data. Relatively few say it was to save money or capture more charges. Of course, that doesn’t mean doctors are uninterested in making money. They just don’t see technology as a means to that end. “The majority of physicians feel that technology is a very big investment,” notes Rao. “And consultants tell them it will take years to recoup costs. For the people I know, saving money is not a big priority initially.” ■