The Washington Post

New Tool in the MD's Bag: A Smartphone

Advertisement » Your Ad Here

By Sindya N. Bhanoo
Special to The Washington Post
Tuesday, May 19, 2009

To his frustration, Steven Schwartz often encounters patients who have no idea what each of the pills they've been popping is called.

"But usually they can tell you what it looks like," the Georgetown University Medical Center family practitioner said. "They might say it's a blue, triangular pill for hypertension."

Armed with an iPhone, Schwartz is able to play detective.

He uses an application called Epocrates to input pill characteristics, such as color, shape and clarity. The software replies with a list of medications and images that match those criteria, allowing him to deduce what the patient is taking.

Schwartz says his iPhone has become indispensable: He uses it to pull up instructional diagrams and videos for patients, write electronic prescriptions and check basic information, with the patient beside him.

" 'This is how often you need a colonoscopy,' I'll say to a patient," Schwartz said. "I'm just double-checking on my phone to make sure I don't make a mistake."

Doctors are also using smartphones to look up drug-to-drug interactions, to view X-rays and MRI scans, and even to stream music from the Internet during surgery.

The power and versatility of smartphones, Schwartz said, is leading more doctors to abandon their pagers and PDAs. Of the various smartphones on the market, such as the ones made by BlackBerry and T-Mobile, the iPhone's graphic, audio, video and memory capabilities are helping it take the lead in the medical field.

Schwartz's use of his iPhone speaks to a larger trend: Nationally, about 64 percent of doctors are now using smartphones, according to a recent report by the market research company Manhattan Research.

At George Washington University Hospital and the Johns Hopkins Health System, BlackBerrys are more popular than iPhones among physicians, according to officials at both institutions. Of the 700-plus smartphones in use by doctors, nurses and other hospital staff members at Johns Hopkins,

only about 5 percent are iPhones, said Mike McCarty, the chief network officer at Hopkins; the rest are BlackBerrys. Although there are many applications being developed for the iPhone (the iTunes app store lists 674 applications related to medicine available), a lot of medical software used at Hopkins runs on the Windows operating system, which is what the BlackBerry uses, McCarty said.

McCarty believes that smartphones will soon assume a permanent place in medicine. "I think over time we will be replacing pagers with these devices," he said. "Every clinician I meet says they want to be carrying one device, rather than two or three."

Georgetown's medical school recently required students, after their first year, to use an iPhone or iPod Touch, which is essentially an iPhone without phone capabilities. The school receives a bulk discount on the devices and builds the cost into students' tuition. Students had pushed for such a requirement, according to Schwartz, and they use the devices to look up information during clinical rotations, to study medical vocabulary and to take quizzes.

"We saw that a lot of the physicians were using them in the clinic," said Joseph Murray, one of the Georgetown students who pushed for the iPhone's adoption. "And it seemed like a useful tool."

Ohio State University's medical school pledged last December to give every medical student an iPod Touch. Some have already been handed out, and by this fall all of the students and residents (more than 1,400 in total) will have the device, according to Catherine Lucey, the vice dean for education at the school.

"It allows the residents and the students to ask questions at the bedside, and not rely on memory and not guess," Lucey said. "They can actually sit with the patient if they wish and use a number of online sources."

Students are also encouraged to download instructional videos, Lucey said, such as the free videos put out by the New England Journal of Medicine. The videos demonstrate simple procedures such as taking blood pressure, as well as more complex surgical procedures.

"I predict that in a couple years, all medical schools will be using them," Lucey said of the devices.

For those already practicing medicine, smart devices can be lifesaving. One Saturday afternoon not long ago, George Washington University cardiologist Jonathan Reiner was having lunch at a deli when his BlackBerry began beeping.

It was a patient's EKG, sent to him by an emergency room physician.

Reiner pulled up the graphic on his handheld device and saw that the patient was on the brink of a severe heart attack. He rushed to the hospital to perform surgery.

"In the past, if I were at home, the ER doc could send me a fax, but if I were anywhere else, probably not," Reiner said. "In the digital age, it's sort of archaic to rely on conventional fax technology."

Some patient advocacy groups have expressed privacy concerns about the use of smartphones in medical practices.

"The technology can be used for good purposes, to improve health, we're hoping," said Lilley Coney, associate director of the Electronic Privacy Information Center, a Washington-based watchdog group. "But with these small devices, physicians and staff are taking them and using them all the time. . . . We're going to have to make sure that every individual can only access the information they need to access." The key is to make sure the systems are secure and encrypted, she said.

There is something else that gives pause about the shift to smartphones, doctors and medical students say.

If physicians are using their devices during a consultation, looking down at a screen for formulas or research, a certain sense of intimacy may be lost between doctor and patient. "We as medical educators have to teach students to use technology and still stay patient-focused," said Ohio State's Lucey, adding that as smartphones grow in popularity, protocols will evolve in how to use them with patients.

For now, common sense will have to do.

"If you go into a room and instead of talking to the patient you tap into the device, there's a problem," Lucey said. "On the other hand, you can choose to pull up images and diagrams that can really engage the patient."

Comments: health@washpost.com.

View all comments that have been posted about this article.

Post a Comment

View all comments that have been posted about this article.

You must be logged in to leave a comment. Login | Register

Submit

Comments that include profanity or personal attacks or other inappropriate comments or material will be removed from the site. Additionally, entries that are unsigned or contain "signatures" by someone other than the actual author will be removed. Finally, we will take steps to block users who violate any of our posting standards, terms of use or privacy policies or any other policies governing this site. Please review the full rules governing commentaries and discussions. You are fully responsible for the content that you post.

© 2009 The Washington Post Company

Ads by Google

Real Estate Washington Dc
Real Estate Washington Dc sites Save on Real Estate Washington Dc
sortprice.com

Real Estate Washington Dc
Real Estate Washington Dc guides. Find Real Estate Washington Dc now.
jayde.com

Did Jesus Christ Exist?
"The God Who Wasn't There" Acclaimed documentary now on DVD
www.TheGodMovie.com