HealthBiz Decoded

EHR

For Attending Physicians, Tablets Steadily Replace Slates

June 21, 2013

By Julie A. Jacob

EHR, health IT, hospital staff, hospitals, smartphones, tablets

Tablets have many advantages over basic clipboards for making rounds, but vendors still lag on making EHR software for the devices.

Tablet computers are changing the way physicians interact with other healthcare professionals and patients, allowing them to review medical records, take notes and order medication. It can happen in a patient's room, a conference room or a hallway.

Physicians are enthusiastically adopting mobile computing. In 2013, 69% of hospital-based physicians reported owning or using a tablet, a 7-point increase over 2012, according to data from the research firm Manhattan Research. Many of those doctors are bringing their tablets and smartphones with them to the hospital and using the devices while they make rounds.

In 2010, the University of Chicago Medicine gave iPads to all of its internal medicine residents. A study in the online *Journal of Medical Internet Research* found that 84 percent of residents thought that the iPads were a good investment and 58 percent reported that patients responded favorably to seeing iPads in the hospital.

Three years later, the internal medicine residents, as well as many attending physicians, use iPads for accessing electronic medical records, viewing diagnostic images, entering orders for prescriptions, and sharing educational materials with patients. Feedback from doctors has been positive and the iPads have helped make medical rounds go more smoothly, said Cheng-Kai Kao, MD, an assistant professor of medicine at the University of Chicago Medicine and a self-described iPad advocate.

"[Before iPads], if a nurse paged a doctor, they would have to find a computer to enter orders. Rounding is much more efficient with less interruptions," said Dr. Kao. "They can put in an order and move on to the next patient."

Tablets are making the promise of electronic medical records become a reality, noted Rufus Howe, chief innovation officer for Xerox's healthcare provider business. Currently, EMRs are not being used to their full potential, he said. A nurse, for example, may access an EMR at his or her workstation, but then scribble medication orders and notes on a piece of paper or in a binder and carry it for the whole shift. It is this "paper brain," not the EMR, that nurses still rely on, he noted.

"Hospitals spend millions on EMRs and the work is being done with paper and Post-it notes," said Howe.

With a tablet, however, nurses can constantly refer to EMRs while checking on patients, he said.

Tablets should also improve quality of care, Howe said. A doctor may only check an EMR a few times a day, but with a tablet, doctors can be alerted quickly to changes in a patient's condition via instant messaging or email and can enter orders faster.

"With a tablet, physicians are more readily notified about emerging complications in patients … tablets can alert clinicians to that thing while they are on the move," said Howe.

At Avera Health, a multi-hospital health system based in Sioux Falls, South Dakota, physicians are using their own tablets and smartphones to read medical records, enter medication orders, and share patient education information, said Andrew Burchett, DO, Avera's medical information officer. A $70 monthly stipend helps pay for a data plans.

Working out the kinks

Although tablets offer many advantages over desktop or laptop computers, there are disadvantages. For one thing, not all EMR vendors have developed tablet apps for their software, which means that physicians must rely on clunky virtual desktop systems to access the records in systems that do not yet have mobile versions.

However, these apps will likely be available soon, predicted Dr. Burchett. "We have to embrace this and drive the vendors toward this," he said.

"Mobile is where we have gone everywhere else in our lives, so it just makes sense to bring it into our workflow in medicine."

Battery life can also be an issue when doctors have long days at the hospital, noted Dr. Burchett. Practitioners at Avera clinics use Panasonic Toughbook tablets with swappable batteries, he said, while some doctors who use iPads bring two to the hospital so they have a backup.

Typing on a small, flat tablet screen also can be a challenge, said Dr. Kao, although software apps such as SwiftKey help improve typing accuracy and speed.

Security is also a concern since tablets are smaller and easier to lose than laptops. However, the University of Chicago Medicine uses a software program called MobileIron, which allows a tablet user to wipe data from a lost or stolen

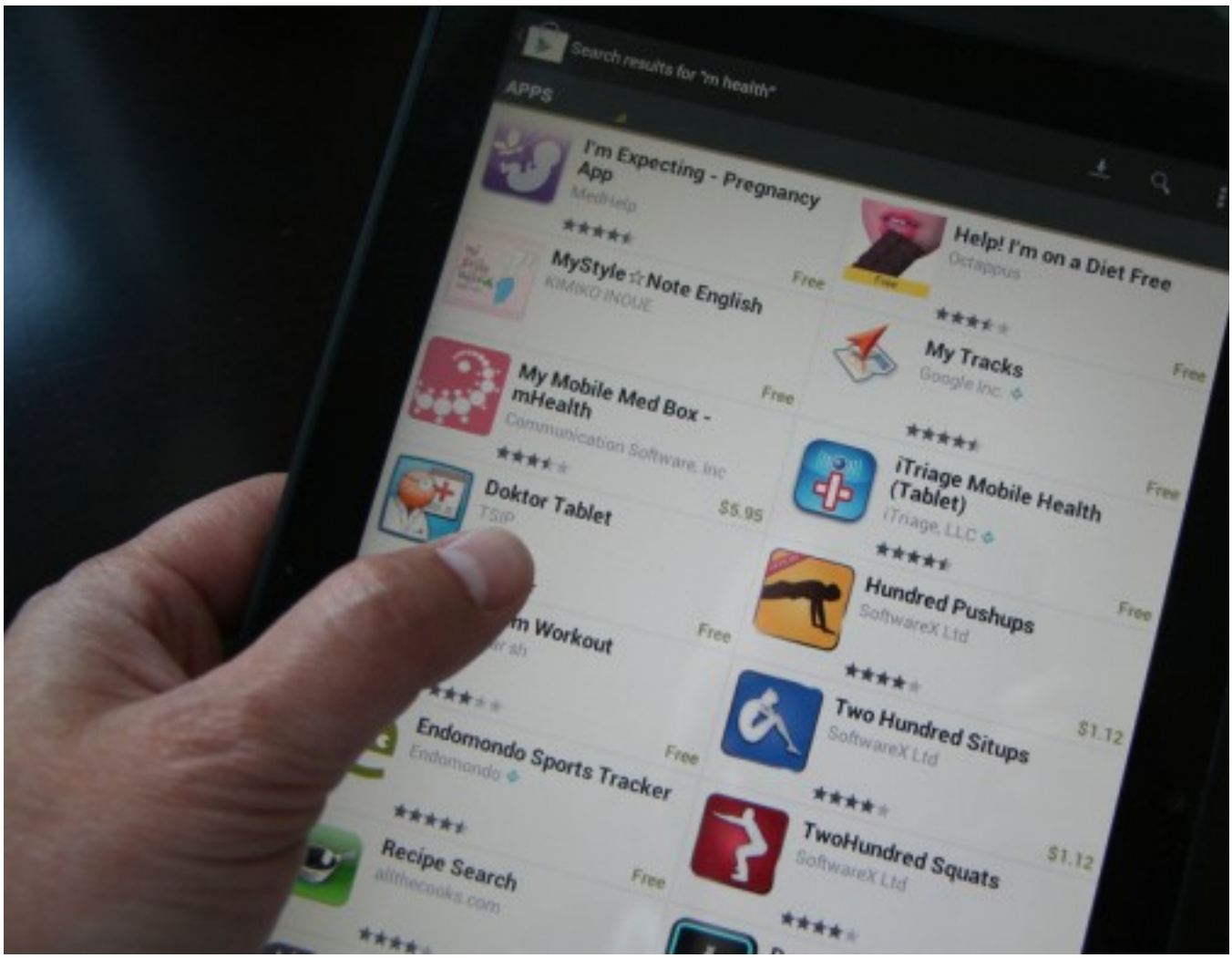
tablet.

For hospitals that issue tablets, maintenance and upgrades may be a challenge, said Howe, simply because every healthcare professional has one, instead of several practitioners sharing one computer.

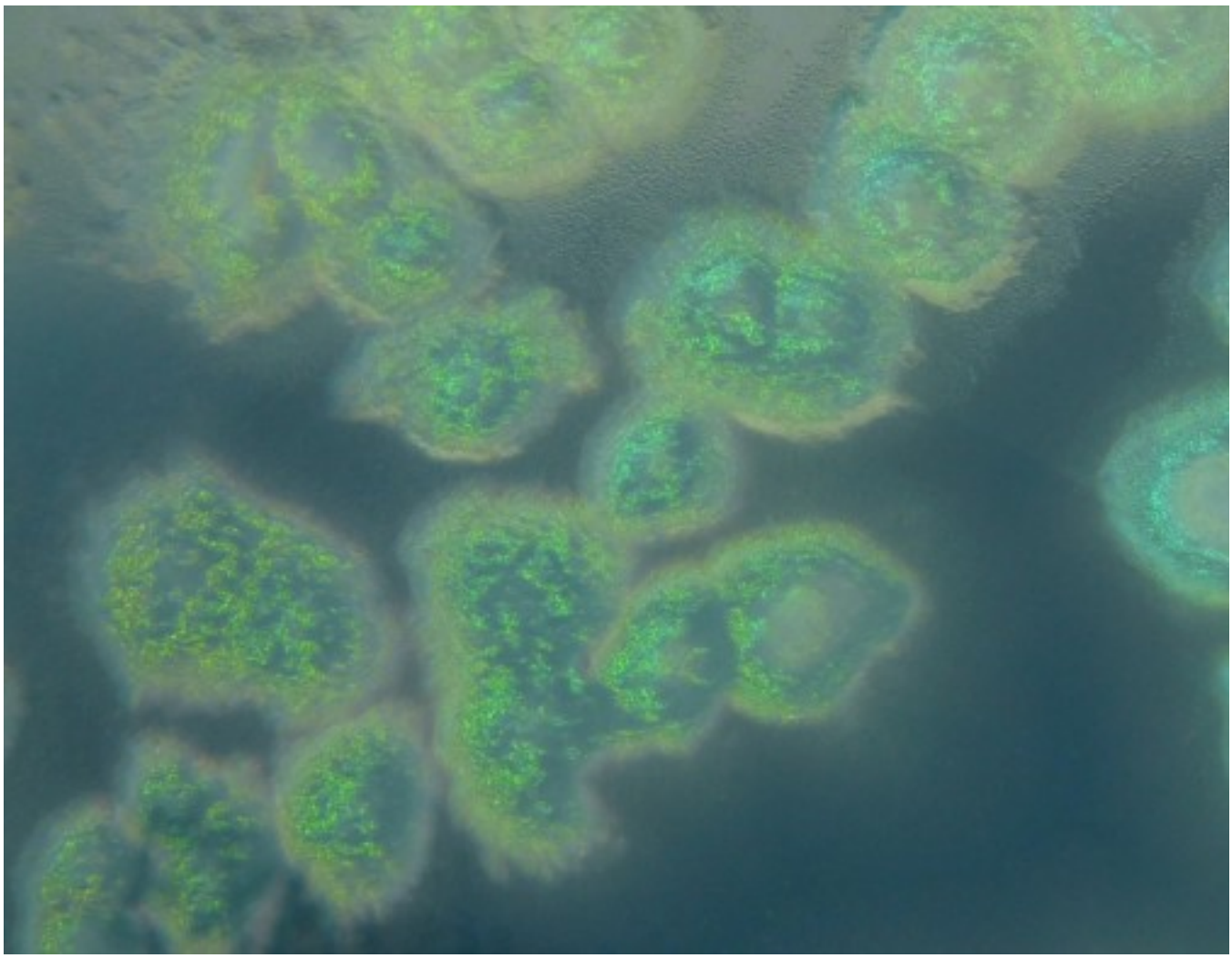
“It is a lot of little pieces … you have 200 to 300 iPads or slates or tablets and it is like having a library of devices out there,” said Howe.

Providers are still learning how to use tablet computers effectively, as well as courteously. At the University of Chicago Medicine, for example, doctors using iPads are reminded to explain to patients what they are using the iPad for so they won’t think the doctor is checking email or playing a computer game, noted Dr. Kao.

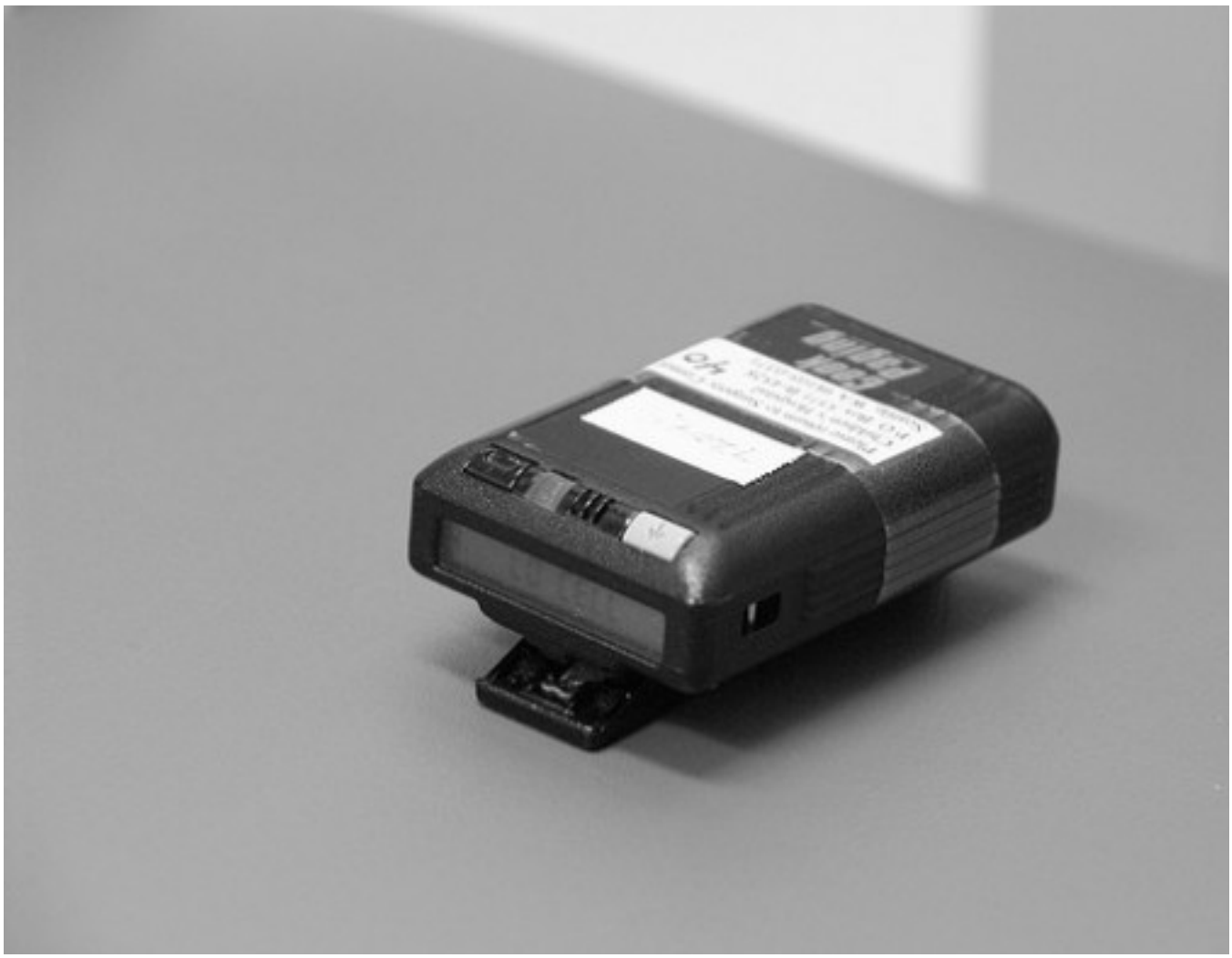
The goal is to make the tablet as ubiquitous and unobtrusive as a doctor’s stethoscope, said Dr. Burchett. “The goal is to make tablet use seamless.”



Convenience at What Cost?



Tech Solutions to Hospital Acquired Infections



Paging Dr. Smartphone: Healthcare Communications at a Crossroad

Q&A with Dr. Ben Miller: Mental Health and EMR