

## **Mobile Alerts Play Key Healthcare Role**

**By Maisie Ramsay**

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On April 10, the psoriasis drug Raptiva was pulled from the market after it was linked to a rare and potentially fatal brain infection called progressive multifocal leukoencephalopathy (PML). Within hours of the drug withdrawal, healthcare software firm Epocrates alerted the 225,000 doctors who were active users of its mobile and online alert service. The news was disseminated at a pace that would not have been possible without wireless technology and highlights the emerging role wireless alerts are playing in the healthcare industry. If the use of mobile alert technology becomes widespread, news of disease outbreaks and unanticipated drug safety issues can fly around the world in a flash. "About 85 percent of people in the world have mobile phone access. The ability to get information out rapidly, information that's important and potentially critical, is going to be potentiated by [wireless technology]," says Dr. Eric J. Topol, chief medical officer of the West Wireless Health Institute. He is also chief academic officer and holder of the Gary and Mary West Chair of Innovative Medicine at Scripps Health.

### **INDIVIDUALIZED ATTENTION**

Topol pictures the role of mobile alerts extending from a worldwide, all-point bulletin for dire, large-scale emergencies to individualized applications on physician and patient devices. "We have to get over this problem of not having contemporary connectivity," he says. "[Right now] connectivity to patients is not ideal; it would be far better to have more contact points."

Mobile alerts have been used in the healthcare industry for decades. Intensive care units have used alerts to instantly update nurses on the status of critically ill patients. Devices provided by companies like Lifeline and Life Alert notify authorities of a potential emergency with the press of a button on a small mobile device.

Opportunities for mobile alerts are exploding thanks to increasing technological advances and the ever-increasing market penetration of smartphones, and companies are taking notice. Aside from Epocrates' alert service and the long-established personal emergency alert companies, new entrants are populating the field. Take, for instance, an application from Onset Technology that brings paging capabilities to smartphones. The technology allows doctors to ditch their pager and receive the information directly on their smartphone, from which they can also access health records, e-mail and calendar updates.

Industry experts expect more applications for secure messaging between patients and doctors to emerge as adoption of wireless alert technology increases. Applications will be created for the specific needs of doctors, healthcare providers and patients, opening a whole new ecosystem of mobile alerts that keep them informed and connected on a real-time basis. Doctors could receive alerts about drug recalls, studies, disease outbreaks and changes in the status of patients. More patients could receive digital reminders to make appointments, do routine self-exams, refill medications.

The quick and efficient dissemination of information between patients, doctors and healthcare providers has definitive potential to increase standards of care. Miscommunications about medication and treatments can be more easily avoided, and patients can stay better informed about their care.

### **ECONOMIC ENGINE**

It also has the possibility to drive business in the healthcare field. "Wireless technology, like text message alerts, can prompt people to do what they need to anyway: appointments and preventative health," says Don Jones, vice president of business development, healthcare, at Qualcomm. After all, profits are directly tied to the number of appointments coming in to doctors' offices. "The business model that will drive this is less altruistic... it can drive health services, which are an economic engine," Jones says.

Still, it may take awhile before these innovations find their way to your local practitioner. The healthcare field is notoriously slow to change its practices. Some doctors only collect home phone numbers and don't see the importance of being able to reach clients by e-mail and text message. The resistance extends beyond family practice physicians. The healthcare industry as a whole is only beginning to accept wireless technology as a

differentiating feature, and Jones thinks it will take significant adoption before the technology really takes off.

“Healthcare tends to change its practices when they think there’s been a change in the standard of care – when they think they’ll get sued and lose,” says Jones. “When 30 percent to 40 percent [of facilities] have adopted a technology, that’s the tipping point because they may be perceived as antiquated and get malpractice exposure.”

While Topol agrees that too few doctors and practices have adopted the use of wireless technology, he sees the push coming from patients. “I think the whole shake-up in medicine is going to come from patient empowerment. They have to expect their physician to be communicative through text messaging and other methods,” he says. “The phone is going to be the foundation for all this, along with lots of different applications.”