

Mobile Tech: Is It Right for Your Organization?

Practical and Legal Considerations for Using Mobile Technologies

Apple has sold over 25 million iPads since its release in April 2010. During Apple's third quarter, iPad sales grew by 183 percent compared to third quarter sales last year.¹ Similarly, according to Nielsen, as of July 2011, approximately 40 percent of mobile consumers over 18 have a smartphone.²

The health care industry has not been immune to this growth in mobile technologies. A 2010 Pew Research study found that out of the 85 percent of adults that use a cell phone, 17 percent have used it to look up health-related information, and 9 percent have health-related software applications (*i.e.*, an "app") on their phones.³ Seeking to capitalize on this growth, health care organizations are increasingly integrating smartphones and tablets into their infrastructure and daily use as well as using these technologies to reach out to existing and potential beneficiaries.



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CONTINUED GROWTH IN MOBILE HEALTH

In the last issue of the *Journal of Health Care Compliance*, I wrote about the growth of the mobile health market. This growth has continued. Since that issue, many more health care organizations have incorporated mobile technologies into their environment. Practice Fusion, an electronic medical records provider, for example, announced new iPhone and Android apps, which are intended to "function as a mobile medical office for viewing patient charts, reviewing lab results, responding to prescription refill requests, [Health Insurance Portability and Accountability Act] HIPAA-compliant messaging and contacting patients."⁴

These organizations have the support of the Department of Health and Human Services (HHS), who itself

has launched initiatives to take advantage of mobile technology. Since January 2010, “HHS has invested \$5 million dollars to develop its eHealth/mHealth smoking cessation resources aimed at increasing quitting attempts among teens, young adults and adults.”⁵ HHS is particularly interested in text messaging because it is popular — in 2010, mobile phone users in the United States sent about 2.2 trillion text messages — and it is a common, easy, and relatively cheap method of communication compared to the alternatives.⁶

In November 2010, HHS established the Text4Health Task Force to provide “recommendations for HHS’ role in encouraging and developing health text messaging initiatives which would deliver health information and resources to individuals via their mobile phones.”⁷ That task force issued its report on September 19, 2011, where it provided seven recommendations, including, for example, that:

1. HHS develop and host evidence-based health text message libraries that leverage HHS’ rich and scientifically based information;
2. HHS explore and develop partnerships to create, implement, and disseminate health text messaging and mHealth programs; and
3. HHS conduct further research into the privacy and security risks associated with text messaging of health information and establish guidelines for managing such privacy/security issues.⁸

HHS has even launched contests to encourage developers. On September 30, 2011, the Office of the National Coordinator and various other stakeholders, including Walgreens Co. and UnitedHealthcare, announced the requirements for the *Million Hearts Challenge*, which is “a multidisciplinary call to innovators and developers to create an application that activates and empowers patients to take charge of their cardiovascular disease.”⁹ Entrants must have at least two participants, and the first prize winner receives \$50,000.¹⁰

PRACTICAL AND LEGAL CONSIDERATIONS FOR USING MOBILE TECHNOLOGIES

There are many benefits to using mobile technologies. With the growing use of these technologies, health care organizations are looking to mobile technologies to reach their consumers while at the same time garnering savings for the organization.

Practical Considerations

1. Cost. Sending text messages and starting a blog are less costly means of communication compared to other more traditional forms of reaching consumers such as mailing brochures and running television commercials. The Mayo Clinic, for example, implemented its blog and podcasts for less than \$1,500.¹¹ Additionally, these technologies are effective in reaching consumers. For example, a growing number of empirical research suggest that text messaging is an effective in reaching consumers.¹² Notably, however, consumers must pay to send and receive text messages. But, given the number of text messages sent (2.2 trillion as noted above), cost does not appear to be a deterrent. Further, these cost concerns will be lessened given the growing number of free texting options.¹³

2. Easy. Mobile technologies are often easy for consumers to use. They generally do not require any special training, other than, for example, watching the iPhone commercial and learning to use a cellular telephone to send and receive a text message. Conversely, they may be difficult for health care organizations to implement. Setting up a blog using Blogger or another similar provider is relatively easy while designing and implementing an app may be more complicated.

3. Fast. Mobile technologies provide a fast way to communicate with consumers. Additionally, if consumers have installed an app or signed up for a text messaging program, the health care or-

ganization has ready access to the consumer. Many universities, for example, have taken advantage of this feature and require that students enroll their cellular telephone numbers into the school's emergency preparedness program, where students receive a text message and an automated phone call if the university is closed (e.g., due to hurricanes in Florida).

Mobile devices also help providers share information amongst each other. For example, using secured email, hospitals share x-rays and other medical test results with providers in other hospitals and on other continents. Many electronic health record providers have also integrated tablets and smart phones with their systems,¹⁴ which minimizes the needs for double entry.

Legal Considerations

1. HIPAA and HITECH. While many organizations are moving toward integrating mobile technologies into their practice, many are hesitating due to the privacy and security concerns. With the federal government's push for use of electronic records, Congress also has expanded the reach of HIPAA through the Health Information Technology for Economic and Clinical Health (HITECH) Act. HITECH sets forth requirements for mandatory breach notification and mandatory penalties under certain circumstances.

The challenge in using mobile technologies is the storage of protected health information (PHI), which complicates compliance with HIPAA. Nonetheless, many HIPAA compliance challenges are not technology specific but rather issues with personnel; according to HHS' list of breach reports, many breaches have resulted from theft or loss of laptops or other portable electronic devices.¹⁵

2. Proper Security. Whether or not wireless devices store or transmit PHI, if health care organizations allow employees to conduct business using such de-

vices, then such devices must be properly secured. Additionally, health care organizations should consider distributing the devices to their employees because, while this is costly, it will give organizations greater control over the technology. In 2006, Trust Digital of McLean in Virginia purchased 10 different phones off eBay to test the security. The company's security experts found information about one company's plans to win a federal transportation contract, bank accounts and passwords, and emails about a \$50,000 license.¹⁶ For security guidance, health care organizations should look to the National Institute of Standards and Technology, which offers guidance on security data at rest and data in transit.¹⁷

3. Training and Compliance. Health care organizations that use mobile technologies must train their employees and must audit activities to ensure compliance. Training should occur regularly, and those that engage in behavior that violates existing policies should be reprimanded appropriately. While human error is unavoidable, the number of incidents and an organization's liability can be minimized through appropriate training and ongoing compliance.

CONCLUSION

There are tremendous opportunities in mobile health. The market is in its beginning stages of growth, and early adopters and entrants can reap great rewards. With the increased use of mobile technologies, health care organizations not taking advantage of the cost savings and other benefits of such technologies will be left behind.

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