The Ultimate Guide to Mobile in Healthcare

iscribe
HEALTH

INTRODUCTION

The world's gone mobile. Personal devices are used and even encouraged in businesses of all types, classroom settings, and, of course, hospitals and healthcare environments. Smartphones make us more dynamic, responsive, and more ready to answer questions. They change the way we present information and share it with others. Finally, and perhaps most importantly, they strengthen our personal and professional connections by leaving a perpetual open door to communication right in our hands and pockets.

Just because the ice has been broken with mobile, however, doesn't mean we're ready to swim. In clinical settings, we've only just begun to effectively use mobile devices for on-demand diagnosis and educational assistance. There's even more untapped potential for mobile when we look at its integration with electronic health record (EHR) systems, which are playing an increasingly more important role in practices due to the launch of the Medicare Access & CHIP Reauthorization Act (MACRA) and corresponding Merit-Based Incentive Payment System (MIPS). If we examine how mobile is affecting the quality of patient care, we've only just scratched the surface.

In this eBook, we'll focus on the current state of mobile device usage in healthcare, then drill down into how they can improve doctors' and healthcare professionals' EHR use and interactions with patients. Finally, we'll take a look at the industry challenges that are preventing these technologies from more widespread adoption and how technology developers have begun to address them.
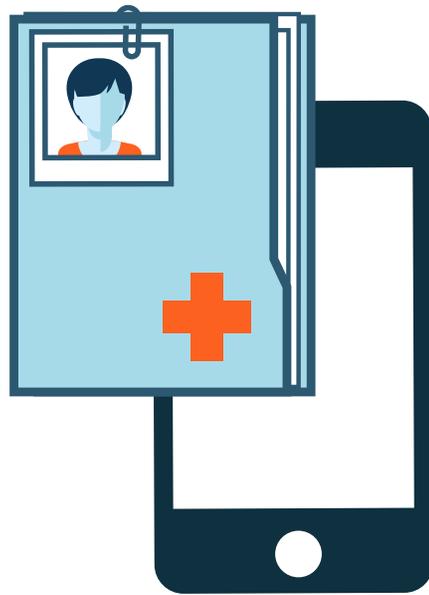
The Current State of Mobile in Healthcare

Doctors and healthcare professionals increasingly been adopting smartphone and tablet use in hospitals and private practices, using them as additional tools to perform their work. Approximately 87% of doctors own or use a smartphone or tablet in the workplace, according to a 2012 study by Manhattan Research examining Physician Channel Adoption.[1] If we consider the fact that the iPhone was introduced in 2007, that's a significant adoption rate in a five year time span. In 2016, at the time of this writing, we can assume that this population of mobile doctor-users has been sustained or even increased, based on general mobile adoption trends.

There are four primary functions that mobile devices serve in clinical environments: a communication method, a reference source, a medium for clinical software, and a way to interact with EHR.

Communication

Smartphones are phones first. Conventional calling, video calling, texting, and push-to-talk functions are heavily used in healthcare. This primarily refers to peer-to-peer communications, though there is some usage between doctors and patients to review results, perform check-ins from long distance, and other administrative-level interactions. If we look at mobile devices as less of a direct communication device and instead as a tool to facilitate discussion and education, however, use in patient care scenarios is more prevalent. Based on Epocrates' 2014 Mobile Trends report, about a third of clinicians and two-thirds of pharmacists report that mobile device usage positively impacted their patient care.[2]

Information Resource

Mobile devices play two roles in regards to information gathering. First, they are used in a searching function. Clinicians are able to pull up journal articles, review medical regulations and policies, and reference pharmaceutical indexes and dosage regimens with online access. This is especially important for fast-paced environments like emergency wings or trauma centers, where recovering information on the fly can make a difference in the successful diagnosis and treatment of patients.

Smartphones and tablets are also used in less high-pressure environments as a professional development medium for doctors. "Physicians were… found to spend an average of three hours per week watching web videos for professional purposes," with mobile devices being used about a third of the time[1].

Clinical Software

Medical apps have built up a library of more than 200 listings in the iTunes App Store. While some of these apps are patient-facing or proprietary apps for pharmacies or health insurance companies (e.g. CVS Caremark & Anthem Anywhere, respectively), there is a wide selection of provider tools, as well. These include disease diagnosis software, medical calculators & laboratory conversion tools, medical training applications, and others.[3] These tools are optimized for mobile and serve as a more rapid way to access specific information in clinical context.

Interaction with Health IT Systems (EHR)

As stated in the introduction, MACRA has put significant emphasis on delivering quality care to patients. Doctors report evidence of their administered care by recording everything into EHR systems, including patient history, qualitative and quantitative data regarding treatment plans, e-prescription writing, and more. While EHR is heavily integrated into healthcare practices in general - 91% of physicians reported active use of EHR at their practice[4] - it's mostly limited to desktop or laptop usage.

EHR Use on Mobile Devices

Here are some quick statistics on EHR systems' relationships with mobile devices:

More than half of all physicians state that EHR has worsened their face-to-face time with patients and limited the number of patients they can see.[5]

51% of users can manage their EHR by using a tablet PC, but only **7%** use smartphones due to interface difficulties.[6]

Only **17%** of EHR vendors offer mobile-optimized platforms.[6]

EHR has yet to be optimized for smartphone and tablet (e.g. iPad®) use. Most doctors can get by with using tablet PCs with larger screens that rotate or by bringing a laptop into the exam room, but the majority of physicians report that managing documentation in that way leads to a loss of focus on the patient. As a result, their patient satisfaction scores suffer, almost making EHRs a counter-productive component to meeting the quality care standards it's supposed to help with. While there are some EHR vendors that have developed mobile-ready platforms, choices are slim and the changeover from an existing system is costly, time-consuming, and inconvenient to office operations.

As an alternative to switching EHR systems, some technology developers have released mobile EHR apps that avoid the headaches and expense of implementing an entirely new system. Instead, these apps are designed with API functions that allow them to figuratively "sit on top" of the EHR system and present doctors with a more pleasant user experience that is tailored specifically for smartphone and tablet use. It may seem like doctors would be introducing another piece of software, but a re-skin or plug-in would be a more accurate description, as mobile EHR apps would be the only system providers need to interact with to perform documentation. The actual EHR becomes what it should be - a data repository for patient data, billing and reporting.

Benefits of Mobility

With the introduction of mobile EHR apps, doctors, healthcare staff, and even patients gain the benefits of operating on smartphones.

Increased Patient Satisfaction

According to a 2015 Journal of Participatory Medicine research study, the top three criteria that patients look for when identifying a positive experience with their doctor are whether they were really listened to, whether their doctor exhibited compassion and genuine care, and whether their doctor explained their problems and treatment options well.[7] The only way for doctors to demonstrate these behaviors is to get their heads out from behind computer screens and address their patients.

Mobile device usage helps eliminate that physical barrier while giving providers a means to comply with their intended EHR use. If doctors are receiving positive satisfaction scores while maintaining their records, they're successfully meeting two of the four MIPS criteria under MACRA, and compliance becomes that much easier.

Remote EHR Access

An innate advantage of using mobile devices is the fact that they couple power with portability. If doctors need to fill prescriptions or update documentation off-site, they can do so through their mobile EHR app. This also gives providers some options for maintaining records in the event that they perform work off-site through a clinic or some other location that isn't their primary practice facility. Mobile devices make EHR systems lightweight.

Doctors can successfully meet 2 of the 4 MIPS criteria under MACRA by receiving positive patient satisfaction scores.

Accuracy of Data

Doctors literally gain more face-to-face time with patients by bringing a tablet or a smartphone to the exam room rather than a laptop or computer on wheels. More focus on the patient means more accurate record-keeping and a lower potential for diagnosis & treatment oversights. Some mobile EHR apps also integrate predictive terminology and voice recognition software that ensures there are no missed details or unclear entries in the patient's record.

Clear Patient Communication

By including patient scheduling into the mobile EHR app platform, doctors can send automated reminders for appointments or other details to their patients. This involves the patient somewhat in the EHR documentation process and prompts them to return to offices for follow-up appointments, regular checkups or physical exams, or other events. By reminding the patient right through their email or text service, there is an increased likelihood of compliance to their specified care regimen and overall quality of care.

Challenges to Mobile Adoption

Even with the introduction of mobile EHR apps and the prominence of mobile devices in medical workplaces, there are still significant challenges that prevent providers from incorporating mobile device usage into their practice.

Intuitive Interface Not Found

Drawing from the statistics cited above, only 17% of EHR vendors have developed a mobile-accessible version of their core EHR application. Combine that with the fact that 83% of physicians would prefer a unique mobile experience over a direct port of the EHR system,[6] and the resulting landscape seems rather grim at the moment. Mobile EHR apps have been attempting to address this issue recently, however, and have made significant progress in producing a user experience that fully incorporates touch technology.

Difficulty of EHR Implementation

In an effort to realize the benefits of mobile-optimized EHR systems, a small percentage of particularly brave providers have opted to switch to new vendors out of dissatisfaction, but the arduous changeover process has left 81% of physicians reluctant to move off of their existing system.[8] Unless their chosen vendor releases an updated version that's optimized for smartphones, providers will be stuck with only computers and tablets to work with.

Security & HIPAA Compliance Concerns

Since mobile devices can be removed from the workplace, especially in settings that follow bring your own device (BYOD) policies, healthcare professionals often voice their concerns that the presence of such devices increases the threat of security breaches. Compliance with HIPAA Privacy and Security Rules dictates how patient information should be protected, but providers must be wary of taking the proper technical and behavioral precautions with regards to security.
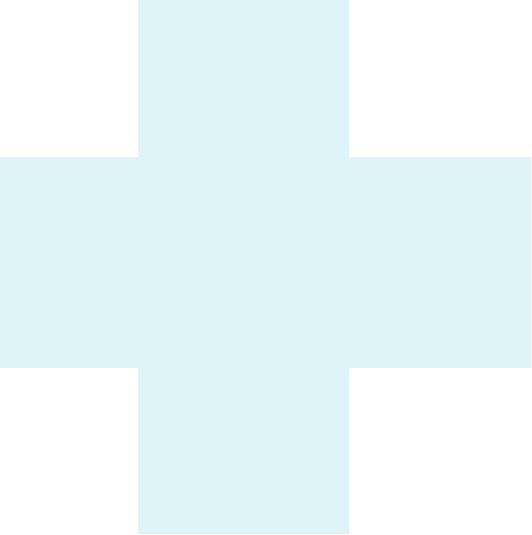
One Mobile EHR App Has Solved It All

In 2016, one mobile EHR app stands out by delivering all the benefits of introducing mobility to practices while also addressing all of the challenges. iScribe is a beautiful and truly intuitive mobile application that minimizes clicks and exchanges them for taps and voice. By integrating the predictive terminology software developed by Intelligent Medical Objects®, it allows doctors to quickly and precisely cite patient health information, then relate it back to ICD-10 billing codes for a smooth patient visit from beginning to end. iScribe even connects providers with patients beyond the doctor's office by leveraging automated appointment reminders and e-prescription capabilities.

From an integration and security standpoint, iScribe easily connects with EHR systems, with setup and training only taking as long as the users need to watch a couple tutorial videos. Once connected, protected health information (PHI) is safe behind 256bit AES encryption while data is at rest or in transit, and is only accessed by the user or authorized staff that must first be authenticated using industry-leading practices.

Smartphone use at your practice is not only powerful and beneficial, but possible with the use of iScribe. Try iScribe today to experience the interface for yourself and unlock the possibilities for efficiency and higher quality care at your practice.

Try It Now

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