

Facing The Fear Of Healthcare Mobility

Industry experts discuss some of the fears and challenges the providers continue to face when it comes to adopting mobile computing strategies.

Compiled by Vicki Amendola, editor, Healthcare Technology Online

PANELISTS



Jeff Fontaine,
healthcare sales executive,
Honeywell Scanning
& Mobility



James Shipley,
healthcare business
development manager,
Unitech



Mike Stinson,
vice president
of marketing,
Motion Computing,



Ron D'Ambrosio,
CEO,
Glacier Computer

Q: WHAT ARE THE BIGGEST DRIVERS FOR MOBILE COMPUTING STRATEGIES IN HEALTHCARE?

Fontaine: Having access to critical patient information, increasing productivity, and demonstrating meaningful use of certified EHR (electronic health record) technology are the largest drivers of mobile computing strategies in healthcare. However, these drivers differ amongst physicians and clinicians. Physicians are often looking for ways to make the patient care process more efficient and mobile devices like smartphones and tablets do provide key efficiencies; while clinicians are also looking to streamline workflow processes with enhanced technology, the patient safety factor plays a larger role. Clinicians need easy-to-use technology that gives them access to the right information at the point-of-care. Mobile devices can meet this need when implemented correctly.

Shipley: Ultimately, patient safety is driving technology adoption. For example, mobile computers with bar code scanners can protect patients from medication errors in the same way seatbelts

Healthcare providers are navigating an increasingly mobile landscape. Offering providers more than just mere convenience, mobile computing devices such as tablets, handheld computers, Smartphones, and bar-code scanners have the potential to reduce medical errors and ultimately improve the patient point-of-care experience. In this Q & A, we discuss some of the other factors driving mobile computing in healthcare and address some of the fears and challenges that providers continue to face when it comes to adopting a mobile computing strategy.

make passengers safer in car crashes. Both are proven tools that save lives. Apparently, however, we needed a government program to incentivize healthcare organizations to adopt patient saving technologies. While this government program does not specifically incentivize the use of mobile technologies, it does require providers to record data to electronic health records. One easy way to record medication administration transactions is by using mobile computer devices for automatic data collection.

Q: WHAT ARE SOME SPECIFIC ADVANTAGES THAT CAN ALLEVIATE A PROVIDER'S FEAR OF MOBILE COMPUTING?

Stinson: It's very common for healthcare providers to be resistant and fearful of change. This is understandable because if not done correctly, technology changes can negatively impact clinician workflows and impede the care delivery process. When done correctly, however, one of the greatest advantages of mobile computing is the ability to electronically document patient data at the point of care. This is the ability to document care prior to leaving the patient without relying on an intermediate source (paper, arm, scrubs) or on memorization. Benefits include:

- Removal of common risks and pitfalls through experienced project management and workflow assessments
- Enhanced productivity through consistent, reliable access to technology
- Improved accuracy through point-of-care documentation processes
- Faster turnaround times through improved team collaboration and faster decision making

D'Ambrosio: Adopting a mobile computing strategy is like dealing with any fear of change; the more education and time spent with a new idea, the easier it becomes to adopt. Have you purchased a new golf club lately? There's a video, a demo club, an analysis of your swing with the club, etc. By the time you make that purchase, you've already reduced your handicap by two strokes. It's no different here. Demo programs to try out the product, educational tips through sales engineers, WebEx for remote training, and support are all current strategies to alleviate some of these fears.

Q: WHAT CHALLENGES DO PROVIDERS FACE WHEN IT COMES TO PUTTING MOBILE COMPUTING HARDWARE INTO PRACTICE?

Fontaine: The process begins and ends with training. The implementation of an EMR (electronic medical record), EMAR (electronic medication administration record), CPOE (computerized physician order entry), and/or lab solution can be incredibly complex, chang-

ing clinician workflows that have been in place for many years. For example, many nurses are used to administering medications using specific protocols. But, when implementing an EMAR, those protocols may change drastically with the introduction of bar code scanning technology on a mobile platform.

It is critical to provide extensive training on the software application, workflow design, and hardware usage. But, continuing education on each of these items will help ensure the new process is quickly adopted and leveraged going forward, without workarounds. Finally, many healthcare organizations adopted mobile platforms several years ago. We are discovering that many of these hospitals did not develop lifecycle management strategies for their hardware. Therefore, as devices near capable end-of-life, hospitals are realizing they may not have budgeted appropriately or evaluated mobile hardware in the same way that they have evaluated other computing technologies.

Stinson: There are many unique challenges with mobile computing in healthcare environments, including space constraints, fragmented workflows, multiple logons, resistant staff, device access, solution ergonomics and durability, network disconnects/slowness, and the security of patient data. However, by doing your due diligence and asking the right questions, providers can develop a much clearer picture of what their specific requirements are. They can overcome these challenges by selecting the right device and implementing a mobile computing solution that works for them based on this due diligence.

Shipley: One challenge is that many may not be as familiar with mobile technology. For many healthcare workers that are not familiar with using mobile technology in their everyday life, change will be difficult. Some mobile computer vendors have been conscientious of end users' needs and have kept the handheld design sleek, simple, and relatively easy to use. We depend on our software partners to keep application user interfaces as simple as possible too.

Another challenge is choosing between consumer-grade and rugged mobile computers. Many consumer-based mobile computers and Smartphones have short life spans; manufacturers make them for only a year or so and then they fade quickly into obsolescence. Rugged mobile computer manufacturers have done a great job in ensuring longer lifecycles and providing repair parts for up to three years after the end of a products life span, thus lowering the total cost of ownership.

Q: WHAT DO PROVIDERS CITE AS THE MOST IMPORTANT FORM FACTORS IN A MOBILE COMPUTING DEVICE?

Stinson: In today's market, healthcare providers expect devices to fit into their environments, not the other way around. No lon-

ger does the one-size-fits-all approach work; instead, providers are looking for custom-fit solutions that are specifically designed for healthcare environments and that can support essential software or productivity applications, have substantial battery life and enough power to support workflows. There is more demand than ever for:

- **Durability** — the device needs to be rugged enough to withstand the bumps, drops and spills that occur every day in healthcare environments, as well as sealed against dust and moisture and have the ability to be easily cleansed and disinfected.
- **Integrated features** — the device needs to have certain integrated features, such as Bluetooth, wireless, cameras, barcode scanners, RFID readers, finger print readers, etc. to help improve communication, documentation, the access and transfer of data and security.
- **Ergonomics** — the device needs to be built for mobility in that it can't be cumbersome or difficult to use. It needs to be lightweight, have stylus input, have a display that is viewable under any lighting conditions as well as large enough to read and view multiple screens of data, etc.
- **Supporting peripherals** — Many times healthcare providers require docking stations, carts, carrying cases and disinfection solutions to support a device's use in the field.

D'Ambrosio: Once the decision is made as to whether an application needs to be portable or not, everything else becomes a function of the specific use. More than ever, the new tablet explosion has allowed customers to be very specific about their needs and determine what product exactly fits their demands. After the portability decision, the next governing factor is screen size. There is no need for a visiting nurse to carry a 10" tablet if everything can be done on a handheld with a 3.5" display. And it goes on from there in determining the specific needs of that particular application. For example, we have a handheld device that has been specifically designed for a visiting nurse. It has GPS for them to locate the patient's home. It has a scanner to read meds, a camera to capture a current picture of the patient's condition, a keypad, touch screen display, and voice capture to take notes. There are several other handhelds and other tablets devices that were specifically designed to meet the demands of other applications. The trick for suppliers is to understand these specific demands and have the capability to deliver flexible solutions. a current picture of the patient's condition, a keypad, touch screen display, and voice capture to take notes. There are several other handhelds and other tablets devices that were specifically designed to meet the demands of other applications. The trick for suppliers is to understand these specific demands and have the capability to deliver flexible solutions.



Healthcare Technology Online