

Choosing the best smart device for a health system requires thinking beyond basic features and functions

Upgrading technology can be overwhelming, and even more so in a healthcare setting. Factors you may not have in a typical office environment are significant when dealing with the health and welfare of patients. This is the first Insight in our 3-part series outlining challenges health systems must consider when choosing smart devices, upgrading security and network reliability to support clinical communication and collaboration technologies.

Devices

Increasing adoption rates of new devices relies on ease of use and its ability to function in the healthcare environment. Health systems must consider both form and function and understand where and how the device will be used. The size and weight of the device are important when employees are carrying it with them all day. Some health systems will want barcode scanning and others want the ability to take photos and videos, so understanding the workflows of the clinicians using the devices is key.

Battery life is another crucial facet which is based upon the number of applications running. Using a clinical communication and collaboration platform that includes messaging, voice, system alerts and scheduling will use more battery life than using a basic EHR app to view records. Healthcare environments also have little to no downtime for the devices, increasing battery usage. Will devices be interchangeable during a shift, or will the batteries themselves – and how easy is it to change out a battery?

It's not just a technology project - understanding the workflows of the clinicians using the devices is the key to successful adoption.

Batteries also have a finite number of recharge cycles and once they reach that limit, they will never fully recharge 100%. This could start draining the internal batteries of devices which will wear them out two to three times faster. Being able to recharge batteries that can be swapped and making more charging stations available will be less costly over the long run.

Health systems also need to consider durability and infection control – the devices must be able to sustain industrial use as they are often dropped or mishandled due to the nature of where they are used. There are healthcare versions of devices which have antimicrobial cases and if they don't, the device needs to be able to withstand being wiped with harsh cleaning chemicals without it affecting the integrity of the device. Additionally, health care employees often wear latex gloves, and the device must be immediately responsive when touched or swiped.

Transitioning to new technology is more than just buying new devices. It requires support and security of those devices and making sure – particularly in a healthcare setting where communication can literally mean life or death – that the clinical staff can perform their duties without having to worry about connectivity within their environment. Our next Insight will cover security and the specific issues health systems face.

