

Driving Meaningful Healthcare Transformation

through Effective Technology Deployment







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Gretchen Jakway Mobile Point of Care Solution Manager PC Connection, Inc. In today's healthcare environment, health systems are faced with significantly changing the way they deliver care in order to remain competitive or even to survive. New care and payment models mean that not only do health systems need a robust IT infrastructure to collect and analyze data to help them meet the triple aim of improving care, improving the patient experience and reducing costs, but they also need a well thought out strategy that puts the right technology in the hands of doctors and nurses at the point of care in order to make their jobs easier and improve patient experience.

It sounds deceptively simple, but the reality is many health systems are struggling to both meet federal requirements as outlined under the HITECH Act and the Affordable Care Act and the rising demand for better, more effective ways to provide services to patients. Throw technology into the mix – which may be one of the few areas evolving even faster than our healthcare system – and you have the perfect storm of trying to deploy point-of-care technology robust enough to serve the needs of healthcare providers amid dynamic and often disruptive changes in care delivery.

Much of the transition is centered on removing reams of paper from the workflow to capturing patient information electronically, while also making it quick and easy for clinicians to access that information at the right time in order to improve care. "As we are making this transition from a paper-based workflow to an electronic one, people should understand it is not always the case that technology makes that workflow or process better," said Ashley Rodrigue, Healthcare Ambassador for computer technology company Lenovo. "Health systems have to look at the whole process and try to figure out if it needs to change based on the fact that we are going to use technology now instead of paper."

An important component of getting a feel for a client's prospective workflow is developed via "discovery conversations" according the Gretchen Jakway, Mobile Point of Care Solutions Manager with PC Connection, Inc. "When we talk about workflows, we take a look at where the customer is today and how do we help them advance to where they want to be next week, next month, next year," said Jakway. "Then we base offerings around budget, time frame, resources and their capabilities to uphold what they implement, therefore building a picture for the customer of what kinds of solutions we can bring forward."

Applying the right technology

Understanding how a device will both affect and potentially improve performance at the point of care is a leading concern at both the C-level and in healthcare IT departments. Gone are the days when delivering technology to the clinic was primarily about making sure the desktop or laptop computer was within specifications that would allow it to perform within the hospital's IT environment. Today's health IT is about mobility, creating ways to do multiple tasks on a single device and determining the right form and function of those devices based on the how a doctor, nurse or other caregiver will use it.

"It's almost no longer about IT," said Michael Ronan, Healthcare Account Executive with Lenovo. "We now ask IT to help bridge the gap with the charge nurse, to bring us in to meet with them so we understand what is important to them. What we are seeing is



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Healthcare Ambassador

physicians and clinicians shaping some of the point-of-care hardware decisions because of their workflow and how it has changed."

The challenge, hospitals find, is determining the most effective tool – from a broad array of devices that can be deployed in the clinical setting – for each employee. To help healthcare providers sort through the myriad options, PC Connection, Inc. engages key stakeholders in a technology and device fair that allows for hands on operation of devices, followed by an interactive survey. This provides real-time data and allows the organization to make data-driven decisions about the devices, Jakway noted.

This approach can help ensure the right device gets into the right hands to be effective. "There are so many different people in a healthcare environment that are using technology in so many different ways," Rodrigue said. "Nowhere is it truer that one size does not fit all than in healthcare."

For instance, the needs for mobile technology vary widely depending on how caregivers interact with patients and how and where they need to access patient information. Nurses in one hospital wing may only need to have a device that is WiFi enabled in order to help them care for patients on that wing, while a physician, who doesn't move just patient to patient, but location to location, will likely need a device that also works on a 3G or 4G wireless network.

While connectivity is a major factor, it is only one of many in determining the proper technology to deploy with a specific clinician. "It's all about the caregiver being comfortable," Rodrigue noted. "Given the fact change is inevitable and technology can improve workflow, create efficiency and even create better patient interactions, that is when clinical people are all ears and say 'show me what you've got.' Because that is what they want – to have a better patient interaction."

Other factors include the weight of a device if the clinician will be carrying it all day, or the ability to easily use the device to show patients their chart or recent medical image. Even providing a device with a longer battery life for doctors who work long shifts plays into how to select the right solution. Finally, finding a way to allow caregivers to perform multiple functions on a single device as opposed to individual devices for each function is a sure way to spur greater use.

Robust security

With the proliferation of mobile devices, health IT departments are challenged with ensuring all these different devices have adequate security to protect the information on them and access to the information on the patient's health record. That said, a health system must secure devices in a way that is robust enough to protect patient information but doesn't interfere with their use.

In most instances, securing devices today should involve two-factor authentication, which requires both specific hardware and an accompanying software application. "The authentication hardware that exists today are things like fingerprint readers where the user swipes their fingerprint, or using smartcards like the ones used to gain access to certain areas of the hospital, as the first step in the authentication process," Ronan said.



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Michael Ronan Healthcare Account Executive The second factor is a password, and the combination of the two is required for users to access the system or web portal with the patient information and applications the clinicians need for their work. "So you create a couple layers of security, but behind that you make it very simple for them to use," Rodrigue said. Single sign-on delivers simplicity, she noted, as once it recognizes and authenticates the user, it allows them to move between such diverse applications as the electronic health record, medical reference and dosing information, medical imaging and whatever other information and applications they are authorized to use. "You can log the user on to six different things at once, as long as they have the right credentials," she added.

This, too, is an area where health systems can benefit from the insights of those looking from the outside in. As Ronan sees it, securing devices for healthcare marks a significant change from the past where hardware and software "lived in their own worlds." Today, it is vital that the hardware and software are compatible where the hardware does one step in the authentication (reading a fingerprint or smartcard) and then the software does the rest. "That makes it important to work with a reseller or vendor that understands both worlds so hardware and software can work seamlessly together," he said.

This also applies to another area where Ronan often sees gaps in security - data encryption. "It still amazes me that there are devices out there that are not encrypted," he said. "This is mainly because of the way encryption worked in the past. It was slow and took a big piece of software to get it done. Laptops being sold into healthcare should use a hard drive that encrypts the data as you write it. There is no cost uptick. It is very efficient and very quick, yet the traditional ways of thinking about things remain."

Finding the right technology path

Between point-of-care functionality and proper security of the host of devices on the market, it's no wonder healthcare organizations struggle to keep up with the pace of change. That's why health systems need to rely on experts in the technology field to help choose the right devices and technologies that will fit each health system's specific needs.

"A lot of it goes back to Lenovo really understanding where a technology will be in the next 18 or 24 months," Ronan concluded. "We help make sure they don't make a bad decision and make one that is going to work with them in the future. It's about asking the right questions to help us to understand their IT environment not just today, but how do they want to be using the technology in the next two to five years."





About PC Connection, Inc.:

The PC Connection, Inc. family of companies has been trusted for more than 30 years to provide and transform technology into complete solutions that increase the value of IT. Our teams at PC Connection, GovConnection and MoreDirect include experts who specialize in customized services and solutions for the healthcare market.

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