Adapting IT Support for the Growth of Mobile Devices in Healthcare

Achieving Better Patient Care and Efficiency through Mobility in the Age of Healthcare Reform
Many factors are influencing the transformation of America’s healthcare system. As forces of reform at the federal level converge with healthcare providers’ efforts to reduce costs, and improve the overall quality of patient care, the demands placed on IT helpdesk professionals supporting these organizations are changing. This white paper explores the drivers of healthcare transformation, identifies the shortcomings of current IT support offerings and provides a look at how forward-thinking healthcare systems are staying ahead of the curve by anticipating the support needs of tomorrow’s healthcare system.

A Brave New World

Healthcare costs continue to rise rapidly in the United States. According to Plunkett Research, Ltd., a Houston-based industry research firm, total U.S. healthcare expenditures are estimated to have grown to $2.6 trillion in 2010. With healthcare spending in the U.S. at about 17.5 percent of Gross Domestic Product (GDP) in 2010—and expected to rise to approximately 20 percent by 2020 absent any changes to federal law—the government has begun taking drastic measures to reign in healthcare-related costs.

Caught between a rock and a hard place, healthcare providers are struggling to satisfy regulatory mandates while competing with one another for patients. Increasingly, their efforts to cut costs and bolster efficiencies to improve quality of care are leading them to adopt technological solutions.

More Productivity from Mobile

Healthcare organizations that manage to do more with less are leading the charge—and mobile point-of-care technologies, including notebook computers, smartphones, tablets and mobile clinical assistants, are making it possible. They also enable workflow optimization, which drives efficiency, improves collaboration among staff for faster decision turnaround, and can help improve quality of care, as well as patient and staff satisfaction.

With so much to gain, the healthcare industry is declaring its love for mobility, implementing a host of mobile devices across the board in an effort to stretch limited resources. A recent survey of more than 5,400 physicians by Knowledge Networks found that 64 percent of physicians have a smartphone and 27 percent of primary care physicians and specialists report having a tablet. An estimated 22 percent of U.S. physicians were using iPads by the end of 2010, according to Chilmark Research analysts. In a February 2011 survey by health marketing firm Aptilon, four out of five physicians said they plan to buy an iPad this year.

With the swift adoption of mobile technology, hospital IT departments are well aware of the mobile divide of more and more clinicians and care givers moving off the local area network to deliver care.

Aberdeen Group’s March 2009 report, entitled “More Mobility – Less Budget; Enterprise Strategies in the Current Economic Downturn,” highlighted the economic pressure for best-in-class organizations to increase mobility activity. In contrast, a mere nine months later, the Aberdeen Group’s report, “Enterprise Mobile Strategies 2010: More Productivity, Same Budget,” emphasizes the shift from increasing mobility activity to increasing the business A recent survey of more than 5,400 physicians by Knowledge Networks for the pharmaceutical industry found that 64 percent of physicians have a smartphone and 27 percent of primary care physicians and specialists report having a tablet.
use of mobile devices throughout the organization and increasing operational efficiency. This shift increases the value proposition of mobility from a “general productivity tool to a core driver of operational efficiency and streamlined business processes.”

Mobility Demands Mobile Support

In this economic environment, hospitals and medical centers—such as Saint Luke’s Health System in Kansas City, Mo.—are arming clinicians and caregivers with mobile devices to deliver quality care with limited resources. At the same time, this strategy will prepare them well for the upcoming cost and quality federal mandates. Capturing information with mobile devices and accessing that information from electronic health record (EHR) systems in real time enables clinicians to develop appropriate treatment plans for their patients. Mobile devices help clinicians and caregivers track, adjust and document the ongoing care of their patient population. These IT capabilities are critical to meeting the requirements to receive federal funding from the Medicare and Medicaid EHR Incentive Program. They are also instrumental in enabling physicians to participate in the Centers for Medicare & Medicaid Services’ Physician Quality Reporting System by helping to track and document quality measures.

The healthcare reform legislation, the Affordable Care Act of 2010, has added additional mandates and programs involving healthcare providers. For Medicare, hospitals will have new incentives to improve quality of care. The Act includes new investments in community health teams to manage chronic disease, which is anticipated to reduce health disparities as minority and low-income groups experience a higher rate of chronic diseases than other groups.

The Act also increases funding for community health centers, which serve more low-income and low-income minority patients than other healthcare organizations. Despite the Act’s support of 16,000 more primary care providers in the healthcare industry, healthcare organizations will need to rely on IT to be able to receive double the number of patients they normally serve, thanks to the legislation’s goal of increasing access and lowering costs for consumers.

As part of the Act, the Department of Health and Human Services released its proposed regulations for accountable care organizations (ACOs), which reimburse a collaborative healthcare provider team based on improved clinical outcomes and quality measures for assigned Medicare patient populations across care settings in a cost-efficient manner. The proposed regulations for ACOs will be aligned with the meaningful use of IT, finalized later this year and in effect January 1, 2012. The Medicare Shared Savings Program will reward ACOs that lower healthcare costs and meet performance standards on quality of care and patient centeredness. While involvement in ACOs is voluntary, healthcare organizations wanting to participate in this new model of care will need to leverage IT.

With a greater focus on a patient-centric care model throughout the industry, demand for real-time information by patients and clinicians, the need for delivery of care outside of the traditional sites of care, and operational efficiency, mobile solutions are being seen as an important component of a healthcare organization’s IT strategy.

But these same devices that empower healthcare providers pose a unique challenge to IT helpdesk professionals as they strive to meet their own standards for support: reacting quickly in high-pressure situations; staying focused on the patient experience; enabling a productive workforce; embracing and supporting professional mobility; and, supporting geographically distributed organizations.

Extending care beyond the hospital walls means supporting increasingly mobile healthcare providers who are no longer joined by a local area network. For the IT helpdesk, problems quickly multiply when users are running on a variety of different laptops or mobile devices, when they may—or may not—have a dynamic IP address, and when they are working behind different firewalls.

The constant challenge IT helpdesk professionals face is to deliver real-time support without having to escalate the service call to the next level. In healthcare, getting this right can mean the difference between life and death. Helpdesks need to be sure they have the remote support infrastructure in place to service the kinds of mobile and handheld devices in circulation. Unfortunately, the remote access legacy tools available—including Windows RDP, VNC and
pcAnywhere—come up short for a number of reasons, perhaps because they were built for individuals requiring remote access, not helpdesk professionals. While all three solutions offer remote control/access to a PC, they were designed to allow users to share a desktop, not to provision remote support or to diagnose technology problems.

Legacy offerings cannot reach remote users off the LAN efficiently and tend to offer unreliable connections. They also have problems connecting to devices behind firewalls, in some cases requiring the user to punch a hole in the firewall to allow connectivity—hardly a sound security policy, especially in an industry that must comply with the Health Insurance Portability and Accountability Act (HIPAA) privacy mandates. In addition, dynamic IP addresses can present a problem for older tools, which require the support technician to know the IP address of the remote machine. These legacy tools only address PCs; they cannot help users with mobile devices.

Even IT staff performing their absolute best under this scenario are forced to resign themselves to the limitations of their tools: it takes longer to establish a remote session, assuming a connection can be made at all; service calls take longer; the issue won’t get resolved on the first call; employees and customers will become frustrated; the helpdesk is less efficient than it should be. In the final analysis, legacy tools limit the helpdesk’s effectiveness for user-issue resolution because they do not offer the functionality of a true remote support tool, nor do they address the growing need for on-the-fly mobile support.

A Better Way

The unprecedented level of attention focused on the promise of IT—coupled with the healthcare industry’s need to mobilize its workforce for the sake of cost reductions, efficiency gains and improved patient care—is pressuring IT professionals charged with supporting healthcare organizations to look beyond legacy solutions for more robust remote support tools.

Clearly, a more useful tool to IT staff would be one built specifically for the helpdesk and one that enables IT to solve more issues with fewer resources, thereby slashing department costs. For the technician, handling multiple sessions at one time and advanced capabilities, such as scripting, system diagnostics, collaboration and chat.

A true remote support tool would enhance IT support with routing, reporting and customer surveys, and integrate with helpdesk software, including CRM and ticketing systems. The right tool for the job would also enable IT staff to quickly access and troubleshoot issues from users directly on or off LAN, traverse firewalls without relying on the corporate VPN and deliver real-time support to mobile device and smartphone users.

When Saint Luke’s Health System, a regional healthcare system with 11 hospitals and a number of physician practices serving patients throughout the Kansas City, Mo., area, was having difficulty ensuring round-the-clock support to its 12,000 IT users, systems engineer Travis Crain decided to investigate a remote helpdesk solution.

Crain’s 30-person desktop support team oversees more than 6,000 desktops and laptops, running more than 100 applications for everything from ordering prescriptions, to patient medical records, to accounting. Averaging 900 support calls per month, Crain knows his team couldn’t possibly deliver the level of support needed without having the ability to access systems remotely.

Since adopting remote support, Saint Luke’s has cited increases in first-call resolution, reduction in the number of outstanding issues and shortened time to handle those issues. In order to reach remote systems and mobile devices without requiring pre-installed software, the helpdesk is using LogMeIn Rescue to deliver remote support for PCs, Macs and smartphones over the Web.

The organization also has improved overall efficiency and user satisfaction by taking advantage of Rescue’s scripting capabilities, which they have used to automate a number of routine tasks, such as remote printer installation. Since most of the support calls Crain's
group fields involve problems accessing an application, the team uses Rescue to resolve nearly 100 percent of such calls. In addition, the applications that Crain’s team supports often require access to confidential patient information, so they must adhere to HIPAA policies. By using Rescue to capture and store chat logs and videos of support sessions, the IT support group helps meet Saint Luke’s audit tracking requirements.

Remote Support Empowers Training

For Saint Luke’s Health System and others, the value of LogMeIn’s support tools extends beyond simply gaining the ability to troubleshoot remotely and service PCs, laptops, tablets and smartphones. On-the-fly remote training is another key advantage the Rescue product delivers. This training capability also increases the IT department’s efficiency.

Helpdesk operator Jaime McGar agrees. With two hospitals and a number of satellite locations, Orange Regional Medical Center provides inpatient and outpatient care to the people of Orange County, N.Y. The helpdesk is using Rescue to help increase employee productivity by conducting on-the-fly training and demonstrating solutions to known problems via remote control, whiteboarding and the laser pointer. With Rescue, the helpdesk group has been able to increase the number of calls it can resolve without having to escalate to Level Two. McGar credits the remote support tool with slashing 10- to 15-minute phone calls down to three to five minutes. As a result, the helpdesk is now using Rescue on three quarters of its support calls and helping to boost operational efficiency and employee satisfaction.

Parting Wisdom

With the passage of the American Recovery and Reinvestment Act of 2009 and the Affordable Care Act of 2010, the Obama Administration has made it clear that improved quality of care and patient safety, access and affordability of care, operational efficiency, elimination of waste and redundancy, and the reduction of healthcare costs are significant federal priorities. In addition, venture capital firms such as the Psilos Group have affirmed the investment industry’s optimism for the value and growth of IT and medical technology, including mobile technology.

At the same time, Aberdeen Group reminds us: “Enterprise mobility is past the tipping point….the need to keep workers in touch no matter where or when is now a given.” This message bears particular relevance to IT helpdesks supporting healthcare providers, since the need to contain costs, boost operational efficiencies and improve quality of care has become manifest in the proliferation of an ever-expanding selection of mobile devices. Fed up with legacy solutions that fail to provide the tools needed to support an increasingly mobile healthcare workforce, proactive helpdesk professionals are exploring their options.

In choosing the right tool for the job, they are demanding a solution that is specifically built for the helpdesk—one that:

- Solves more issues with fewer resources, to help reduce costs
- Provides console maps to support workflow, handling multiple sessions simultaneously
- Delivers advanced capabilities, such as scripting, system diagnostics, collaboration and chat
- Empowers IT support with routing, reporting and customer surveys
- Integrates with helpdesk software such as CRM and ticketing systems
- Allows technicians to quickly access and troubleshoot issues from users directly, whether on or off the LAN
- Enables technicians to traverse firewalls without relying on the corporate VPN
- Provides real-time support to smartphone and tablet users

With federal stimulus dollars in place to help propel health IT implementation and adoption, hospitals are better poised to take advantage of solutions that will put them ahead of the curve. IT professionals at hospitals and medical centers—including Saint Luke’s Health System and Orange Regional Medical Center—have identified a true remote support tool that enables them to do so. By leveraging LogMeIn Rescue, they are eliminating cost, reaping efficiency gains and raising the bar for quality of care.

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LogMeIn Rescue is a secure, web-based help desk and remote support solution that gives support professionals the ability to connect to a remote computer, smartphone, or tablet without pre-installed software. LogMeIn Rescue works on Windows-based PCs and Macs, as well as mobile devices running Android™, Windows Mobile®, Symbian OS™, Blackberry®, and Apple iOS®. LogMeIn Rescue allows support organizations to cost-effectively deliver high-touch support, training and educational services to customers, partners and employees.