TELEHEALTH: SAVE LIVES, CUT COSTS & DELIVER BETTER CARE







TELEHEALTH:

the use of electronic information & telecommunications technologies to support:

- » LONG-DISTANCE CLINICAL HEALTH CARE
- **» PATIENT AND PROFESSIONAL HEALTH RELATED EDUCATION**
- » PUBLIC HEALTH
- **» HEALTH ADMINISTRATION**



Army Medicine

EXECUTIVE SUMMARY

Doctors are using iPads to record information instead of scribbling notes on a paper pad. Nurses are browsing through electronic medical records instead of file drawers. Hospitals are adopting the cloud to store patient data so that it's accessible to care providers anytime, anywhere.

The entire field of health care has been completely transformed by technology over the past two decades, and the results have vastly altered the manner in which both patients and health care professionals manage patients' well-being. As health care continues to turn to technology to deliver more effective treatments, the practice of telehealth is starting to take center stage.

Telehealth, as defined by Health Resources and Services Administration, is the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration – and it's been around in one form or another since the modern X-ray.

But today, demand for telehealth services like video communications and remote patient monitoring is rapidly increasing as networks and infrastructure are better able to support it. Additionally, as rural care demands increase, and as agencies like Indian Health Services and the Department of Veterans Affairs need to deliver services to larger groups of patients, telehealth is being leveraged more than ever before. In fact, market research firm IHS predicted in a December 2013 study that the U.S. telehealth market will grow from \$240 million in 2013 to \$1.9 billion in 2018.

The telehealth market is clearly poised for explosion, and more and more agencies and health care organizations are looking for guidance as to how to best use these technologies. To help, GovLoop has partnered with York-tel – a video managed services provider that offers telehealth technology connecting doctors, specialists and clinicians to where the patient is – to define this industry perspective.

In this industry perspective, GovLoop and Yorktel will explore telehealth best practices, benefits, and what you need to know to take advantage of the next evolution in technology and health care.

WHY TELEHEALTH MATTERS TODAY

How can telehealth truly make a real-world impact in health care delivery services? Pete McLain, Vice President of Telehealth at Yorktel, offered up one example.

"Let's say that you have a stroke patient but there's not a neurologist in the hospital where the stroke patient is," McLain began. "How do you get treatment to that patient? Before telemedicine, a hospital would just have to send that patient to the nearest place that has a neurologist to assess the stroke patient. That could be a six hour drive."

McLain went on to explain that for most suspected stroke patients, there's a certain drug that can be administered within the first three hours of an onset of stroke that can dramatically improve the outcome and health of the patient. However, not all patients are candidates for that drug; a neurologist must make that assessment within the first crucial hours of symptoms presenting. So if a patient must go to a hospital six hours away for an assessment, it will be too late and he will not receive the drug.

"With telemedicine, however, you have the ability to bring the neurologist to the hospital through live video communications, and that neurologist can see the patient, do an assessment and make the determination right on the spot," said McLain. "Then the local hospital can administer that drug if necessary – and the outcome is much better. This is just one example of telemedicine that has saved lives, and saved the cost and hassle of sending a patient to another facility, and has given quicker access to health care."

Beyond the practical examples of life-saving telehealth techniques, another major driver to embrace telehealth comes from rural-based health providers searching for the best way to treat more patients.

"In some cases, it's even a more of a binary care versus no-care situation," noted Greg Douglas, Yorktel's Executive Vice President of Sales. "In rural areas where you simply can't get to a specialist, this is a way to receive care at home where there might not be any other practical option."

"It's all about the efficient use of limited resources," he continued. "Particularly in the public sector, as with Veterans Affairs or the Department of Defense hospitals, there's a desire to move toward patient-centered home care, where you can potentially extend the clinical environment by the use of sensors and other things for blood pressure or diabetes, for example, so that the patient can stay home, and still receive care."

Telehealth has made an especially large impact in providing care to the nation's veterans. In a recent release, the Department of Veterans' Affairs said that in fiscal year 2014, they served almost 700,000 veterans – with a total of 2 million remote telehealth visits.

Veterans are a group especially well-suited to the benefits of telehealth technology and care. According to Census data, 45 percent of veterans who need regular treatment reside in counties classified as rural, often making it particularly difficult for them to make regular visits to health care facilities.

"The implementation of telehealth brings many efficiencies while improving the quality of care," added McLain. "Bringing specialists to the patient through telehealth dramatically shortens the time to care and eliminates transportation costs. A patient can see a specialist while still in the primary care physician office, instead of scheduling a visit six weeks later with the specialist that might be an hour drive away."

McLain went on to describe some health care providers that are moving completely to a virtual care environment. "There are health systems that are designing a virtual waiting room and conference room concept to be able to see patients, and not having to invest in brick and mortar as much" he explained. "There are a number of ways that it's saving money. In the current environment, and in the public sector, cost containment is a big issue, and telehealth has the unique ability of offering a path to potentially better quality of care, and saving money at the same time."

Though telehealth can potentially offer faster, more convenient care, it is only truly effective when the technology is reliable, accessible, and of a high quality. That's where Yorktel's services shine. One of their core capabilities is a Video Network Operations Center (VNOC) with a highly trained customer support center staff that offers $24\times7\times365$ service with hands-on experience. With 24/7 monitoring and customer support, telehealth efforts can be counted on to be reliable – and patients can count on getting the care they deserve. And nowhere is that more important than in the following case study about Native American communities and their use of telehealth.

TELEHEALTH HAS THE UNIQUE ABILITY BETTER QUALITY OF CARE, & SAVING

TELEHEALTH & INDIAN HEALTH SERVICES: TRANSFORMING MENTAL CARE

In the public sector, telehealth has made a significant impact in providing care to underserved and more remotely located populations like Native Americans. Rich Itkin, Federal Account Manager at Polycom, a leader in conferencing and telemedicine services, spoke about how Indian Health Services in particular is effectively taking advantage of telehealth.

"Indian Health Services and the Phoenix area have taken a proactive role in implementing telecommunications using Polycom solutions," Itkin explained. "We have video conferencing end points and infrastructure all around the country connecting various district offices and also remote clinic locations within Indian Health Services."

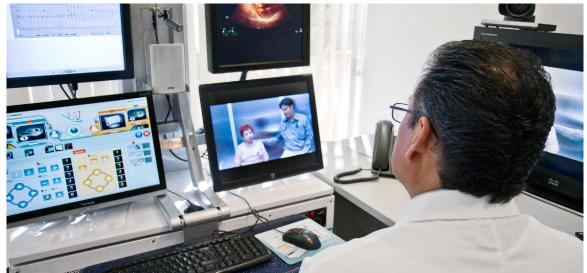
Many small towns and rural Native American tribes in Arizona are hours from the closest clinician, practitioner or psychiatrist, and that often puts the populations beyond the reach of traditional care. That's why a telemedicine network is so crucial to delivering services – especially services like tele-mental health and tele- diabetes checkups and treatment plans.

"The purpose of our video conferencing and telemedicine services is to enable trained medical professionals to communicate with the Native American population at very remote locations all across the Southwest," Itkin said. "They need to have resident experts communicate with them, whether it be a psychiatric evaluation, or to see that they're regularly taking their meds, and if there's any questions in regard to the medications. So

now the patients can actually have face-to-face contact with these specialists, and the practitioners that are communicating with them. It's very important to see a visual of the patient and see how they look, how they're reacting and interacting, in these cases."

Itkin explained that the significantly improved quality of the technology and visuals that are used for mental health evaluations in these communities is particularly important. "Our technology allows superior quality, high definition video and audio communication. Everybody's used Skype – but our solutions launch telemedicine to a new level. These high definition capabilities allow telemedicine professionals to be able to better diagnose, as well as make the experience better and more natural."

Added Itkin, "This is all about comfort level, and when patients are comfortable looking basically at a screen and seeing on the other side somebody very clearly, where it looks very natural, they're going to feel more at ease and be more willing to come back to that facility to interact with that medical professional more frequently."



Intel Free Press

OF OFFERING A PATH TO POTENTIALLY MONEY AT THE SAME TIME. Pete McLain Vice President of Telehealth, Yorktel

WHAT YOU NEED TO KNOW WHEN ADOPTING TELEHEALTH

Telehealth is clearly a life-saving technology that can reduce costs and improve patient services – but it must be implemented properly to achieve maximum benefits. Douglas and McLain walked through the top four things health care providers and agencies need to think about when considering telehealth solutions & implementations.

Ensure it actually makes things easier.

"There have been a number of telehealth pilot projects that have launched, and failed - and usually, one of the failure points is around the workflow," explained McLain. "It's either too different than what the doctors are used to and they don't embrace it, or it's just too complicated. Physicians already have too much to do, and if a new way of seeing patients requires even an extra 5 or 10 minutes to get ready, that's just not going to be embraced. It needs to save them some time. It needs to be an improvement on current processes."

Keep clinicians, as well as the IT team, involved during implementation.

Douglas said that though telehealth is a technology implementation, it must be conducted with the advice and perspective of a holistic team involving doctors and clinicians – not just the IT department.

"It's very important to keep the clinicians involved and not jump to the conclusion as to what the solution might look like," Douglas said. "Keep the clinicians involved from the beginning, in the planning process, and thinking in terms of proof of concepts. You have to have all the key stakeholders around the table to properly advance telehealth solutions."

Conduct rigorous training for doctors and clinicians.

"Training is very important for doctors and other clinicians when implementing telehealth properly," Douglas said. "For those of us who use video communications a lot, remote camera control is kind of second nature, but for doctors and other clinicians who are just stepping into telemedicine, remote camera control might be something they have to learn and be properly trained on."

Nurses should also be trained on all the aspects of the equipment, even those as basic as turning it on and off. And care providers should be instructed in how to interact in a virtual face-to-face situation vs. in-person care.

Invest in reliable technology.

Douglas and McLain believe that the reliability of the technology you use when implementing telehealth solutions is the most important point to focus on because it can impact the delivery of health care.

"If a facility without an on-site neurologist has a stroke patient come in Friday night, and the telehealth cart you're using to access that patient is down, you're in trouble," said McLain. "You're not able to access the neurologist who is three hours away and relocating that patient is not an option."

McLain pointed out that because there's an element of emergency to health care, you can't afford to have downtime in any telehealth solutions.

"To me, reliability is the biggest problem that telehealth programs have, and it's quite frankly, the biggest reason why Yorktel is involved in the space," McLain said. "This is our capability – Yorktel has 30 years of experience at bringing managed services around video, video infrastructure, video endpoints, making sure that they're reliable and up, and running all the time, and that if they're down, that they're resolved very quickly and running again. That reliability is a critical piece to successful telehealth programs."

YORKTEL HAS 30 YEARS OF EXPERIENCE... THAT RELIABILITY IS A CRITICAL PIECE TO SUCCESSFUL TELEHEALTH PROGRAMS ??

Pete McLain

Vice President of Telehealth, Yorktel

ABOUT YORKTEL

Yorktel is a leading global provider of UC&C, cloud, and video managed services for large enterprise and federal government customers. Founded in 1985 and headquartered in New Jersey, with offices across the US, UK, and France, Yorktel enables customers to successfully integrate video into their operations – from video conferencing to video event production; on premise or in the cloud. Yorktel designs, integrates, and manages enterprise-wide unified communications solutions.



ABOUT POLYCOM

Polycom is the leader in HD video conferencing, voice conferencing and telepresence enabling open, standards-based video collaboration to over 415,000 customers globally. For over 20 years, Polycom has led the industry in setting the standard for enterprise class communications. From our immersive telepresence systems to our video desktops to our soundstations and accessories, Polycom technology is an integral part of the way businesses around the world do business.



ABOUT GOVLOOP

GovLoop's mission is to "connect government to improve government." We aim to inspire public sector professionals by serving as the knowledge network for government. GovLoop connects more than 150,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C. with a team of dedicated professionals who share a commitment to connect and improve government.

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