

Telehealth: The Top 3 Obstacles Facing Clinicians Today



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Effective telemedicine solutions must be reliable, secure, and deliver a user-friendly experience.

Shortages of healthcare specialists in rural areas, combined with advances in video communications technology, are driving telemedicine adoption to new heights, according to a report from Research and Markets. The analyst group predicts the global telemedicine market will grow from \$14.2 billion in 2012 to more than \$39 billion in 2018. As more and more health delivery systems incorporate telemedicine strategies, they are discovering that it is not that simple to set up and manage. Many pilot efforts have failed due to poorly designed network connectivity, complicated clinical workflows, confusing technology user experiences, unreliable equipment, and lack of ROI in terms of clinical outcomes or financial benefits. As a result, more than a few telemedicine carts are sitting in storage closets because they failed to work as expected and medical staff moved on to other alternatives.

Health delivery systems could benefit from partnering with an experienced video communications management and service company who has provided a Video Network Operation Center (VNOC) for complex video deployments at large global enterprises and federal government agencies. Best practices gained from years of experience could shorten the learning curve and launch more effective and successful telemedicine networks in healthcare today.

Following are three obstacles that typically result in a failed telemedicine implementation, and explanations of how a reputable VNOC service provider can overcome them.

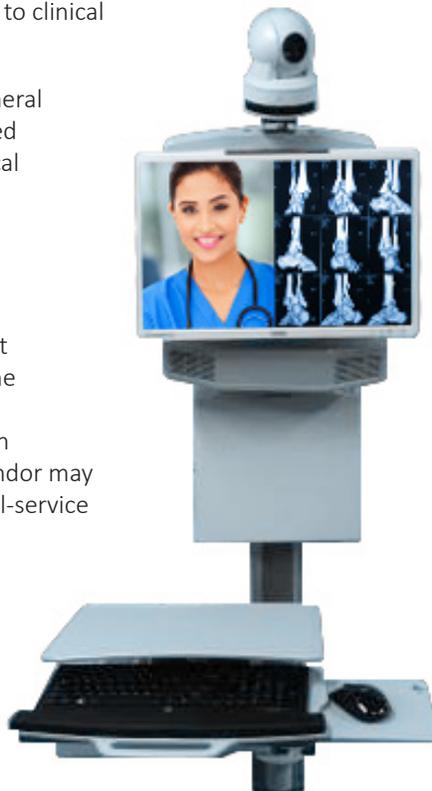
CHALLENGE #1: COMPLEX TELEMEDICINE EQUIPMENT

One of the primary goals of telemedicine is quicker and better access to patient care. When patients and clinicians spend several minutes trying to figure out how to turn on equipment, set up a conference session, and use the system's features, the technology becomes the focus of the encounter rather than the patient. An experienced telemedicine VNOC provider can help healthcare practices avoid this scenario in a couple of ways:

a. User Interface and User Experience. The VNOC provider can provide consultation in the design and implementation of a telemedicine network, optimizing uptime, connectivity and seamless, user-friendly interfaces. Best practices can be deployed from other healthcare clients or from other industries that are applicable to clinical healthcare environments.

Telemedicine endpoints and medical peripheral device integration can be greatly streamlined and simplified to facilitate a smoother clinical workflow.

b. Training. Although a healthcare practice may have general IT support, a detailed, comprehensive understanding of the telemedicine network and devices and what might go wrong is usually lacking, leaving the clinician with little or no help. Lack of good end user training is a common problem with unsuccessful deployments (and the cart vendor may have provided minimal or no training). A full-service VNOC provider can deliver complete onsite end user training prior to and during an implementation. Once up and running, the VNOC provider can offer live training refreshers via a dedicated support number.



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CHALLENGE #2: SYSTEM DOWNTIME

Unfortunately there are a multitude of pieces that must fall into place for a telemedicine deployment to work. The network, firewall, bandwidth, signal strength, connectivity, hardware, software and medical devices all need to work effectively — and work together. When a telemedicine cart goes down it is hard to know where to start troubleshooting the problem. Lack of reliable equipment and connectivity are probably the greatest impediments to successful telemedicine deployments. If the cart is down, the clinical staff stops using telemedicine and is reluctant to try it again. A VNOC provider can avoid this problem by managing the entire system, including:

- a. Proactive Monitoring & 24/7 Real Time Support.** A good VNOC can proactively monitor a telemedicine network, providing diagnostic analysis at regular intervals catching problems and resolving them before a telemedicine encounter even starts.
- b. Instant Triage Support.** If a problem occurs during a patient encounter, the VNOC can rapidly triage the situation with a complete view and understanding of all the various components of the telemedicine network and equipment. Most problems can be solved remotely by the fullservice VNOC provider's 24x7x365 helpdesk within minutes the telemedicine encounter and clinical workflow can be reestablished.
- c. Peace of Mind.** When the situation involves a failed component, a good VNOC provider has comprehensive service level agreements in place to fix or replace the failed component within minutes in emergency situations or next calendar day in non-emergency situations.

Anything short of this level of management from a VNOC will likely mean that a telemedicine network is experiencing too much downtime to be successful over the long haul.

CHALLENGE #3: SECURITY AND PRIVACY

Many healthcare practices choose to implement telemedicine solutions without outside help because they believe they need to keep tight control over the system for security and HIPAA compliance concerns. Unfortunately due to the complexity of video conferencing networks, firewall traversals, encryption and authentication protocols, systems can be deployed improperly, resulting in the exact security and privacy breaches they were attempting to avoid.

Partnering with a VNOC provider that has experience with video conferencing deployments in highly secure environments (e.g. U.S. Department of Defense, NASA, Social Security or Banking) can ensure greater security and privacy controls than can be achieved in-house. The right VNOC provider can improve security and privacy in three ways:

- a. Video Communication Security and Privacy.** Ensuring the telemedicine network is secure and conference sessions are encrypted without compromising the real-time flow of voice and video packets is no easy matter. IT personnel not trained

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in unified communications can easily make mistakes that lead to a compromise in security (e.g. a data port is left open or an authentication step is left out) or performance (e.g. calls have drop outs, echo, jitter, etc.). Conversely, a partner that has experience in configuring video conferencing deployments will be able to optimize security without compromising performance.

- b. ISO 27001:2013 Information Security Accreditation.** A VNOC service provider that is ISO 27001:2013 certified has implemented an Information Security Management System that follows the highest standards and best practices of security protection and safeguards. Such an accreditation ensures that any design, implementation and management of a telemedicine network done will adhere to those security standards and best practices.
- c. Compliance and Accountability.** As a trusted business advisor, the right VNOC partner will assure healthcare practices that it holds its employees to the highest PHI (protected health information) standards by having in place a legally binding HIPAA privacy agreement between the VNOC partner and the healthcare practice. As a result, the healthcare practice can hold the VNOC partner to the same privacy accountability as they do for their own employees.

CREATING A POSITIVE TRANSFORMATION IN HEALTHCARE

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