



Rx: Video Conferencing

Avera McKennan TeleHealth Network uses Polycom video communications to raise the bar for patient care, reduce costs.

Hospitals across the nation increasingly face pressure to reduce costs, while simultaneously improving the quality of patient care. These demands are particularly challenging for organizations such as Avera McKennan Hospital and University Health Center, which has a patient base spread across a primarily rural landscape.

The Avera McKennan Telehealth Network, part of the Avera McKennan Hospital and University Health Center, was formed in December 1993 to provide clinical consultations, via video conferencing, for patients and physicians across South Dakota.

The TeleHealth Network uses Polycom video conferencing technology to treat patients in the clinical areas of psychology, pulmonology, internal medicine, obstetrics ultrasound, emergency medicine, dermatology, infectious diseases and oncology. On average, the network conducts between 400 and 500 clinical consults each year using video.

Connecting Patients and Families

One of the primary goals of the Avera McKennan TeleHealth Network is to limit the need for patient and family travel. Treating patients remotely means patients do not have to travel far from home and family. Patients are also able to maintain a relationship with their rural physician, keeping vital revenue within the local community. If a local physician is unable to meet a patient's needs, the patient can participate in a video consultation with a physician located at Avera McKennan Hospital and University Health Center in Sioux Falls, South Dakota.

If a patient must be treated at the Avera McKennan Hospital and University Health Center, **the Telehealth Network uses video communications to connect the patient with distant family member or those who are unable to visit. Video technology is also available to patients who cannot easily accept visitors.**

Recently, a cancer patient's family traveled from Alaska to be with him during his hospital stay. After a few weeks, the family needed to return home but the patient's doctors felt family interaction was crucial to his recovery. Through the Telehealth Network, the hospital arranged for the family to access video conferencing at an Alaskan facility so they could visit the patient virtually. Using video communications meant that this family did not have to compromise visitation, despite the fact that they lived thousands of miles away.

"Patients are the strongest champions for the video conferencing technology," said Mary DeVany, manager for Avera McKennan TeleHealth Network. "It is comforting for them to know that they do not have to travel, especially across the many miles of South Dakota. Our use of Polycom video conferencing assures patients that, regardless of their location, they will have access to the best medical care."

The Telehealth Network also provides distance-learning opportunities for staff and communities, and enables staff members to reduce travel by conducting internal meetings across the network.

A Need for Unwavering Reliability

"In matters of healthcare, video conferencing equipment must connect easily and reliably – and stay connected," DeVany said. "We find a variety of information technology skill levels among our site coordinators and on-site technicians, as they have other duties outside of their involvement with the video conferencing network. We chose Polycom video communication systems because they met and exceeded those requirements. They are of the highest quality and extremely easy to use."

To facilitate its far-reaching video telemedicine network, the Avera McKennan TeleHealth Network uses a combination of Polycom's iPower™ 900 and 600 series PC-based group video conferencing systems and its ViaVideo™ desktop video communications appliances. In addition, the Network utilizes a Polycom MGC-100a for calls involving multiple video communications end-points.

The high quality, reliability, and simplicity of Polycom's video communications technology also helped the network address one of its greatest deployment concerns – the technology "fear factor," according to DeVany.

"In order for the network to achieve the highest level of efficiency, we had to ensure that the staff was completely comfortable and familiar with the technology," DeVany said. "In the matters of healthcare, there is no room for hesitation. Polycom's systems allowed us to reach this level."

Physician acceptance was also of paramount importance, according to DeVany, as doctors are the most critical link in the delivery of exceptional care across the video conferencing network. **Physicians must be confident that the image on the screen is very similar what they would see in-person, and Polycom's video communications technology gives them that confidence.**

A Look Toward the Future

As the Avera McKennan TeleHealth Network looks to the future, its primary focus is growth – growth that will continue to set new standards for healthcare. The network plans to install new sites, involve more physicians as providers of services, and coordinate additional events for the distance education needs of its staff. By early 2002, the network plans to implement video over IP using Quality of Service (QoS).