Education-Higher Ed

▶ A New Vision of Health in Colorado

▶ **Daily Use**
- Healthcare Administration
- Medical Education
- Telemedicine
- Interviewing

▶ **Solution**
- Polycom® HDX group, VSX® desktop and VSX group video conferencing systems
- MGC™-100 conferencing bridge
- RSS™ 2000 recording, streaming and archiving solution
- Polycom Video Media Center™ – VMC 1000 video content management solution

▶ **Results and Benefits**
- Decreased travel time for meetings
- Greater access to educational content
- Interview cost savings
- In-place medical care for rural residents

The Anschutz Medical Campus in Aurora, Colorado, is the realization of a vision that's been developing since 1995. When the United States Department of Defense announced that the Fitzsimons Army Medical Center in Denver would close, officials from the University of Colorado Hospital and the City of Aurora proposed rebuilding the decommissioned base into a world-class academic health center. The result of their work and an investment of more than US $1.5 billion, is a state-of-the-art, 227-acre campus featuring 3.4 million square feet in more than 45 buildings, all dedicated to education, patient care, and research.

Along with the new state-of-the art facility came a transition from a legacy ISDN network to IP. Associate Director Betty Charles and the Anschutz Medical Campus Educational Support Services Videoconferencing team saw this as an opportunity to build a world-class video network to provide communications and collaboration throughout the large, multibuilding campus, its seven affiliate hospitals, and the dozens of facilities it supports throughout the state.

"We're able to use our Polycom video network to support a number of activities on our campus," says Charles. "Those include interactive distribution of educational and continuing medical education programs such as grand rounds and clinical training sessions for our medical residents who rotate through our affiliated hospitals, research seminars, and clinical consultations for patients in the more rural areas of Colorado."

Video Support When and Where It's Needed
Anschutz was envisioned as a twenty-first-century facility and was built from the ground up to support state-of-the-art technology, including video conferencing. The campus currently has 80 Polycom codecs on site and in remote locations around the state. Users conference over secure dedicated circuits, and, when using video for clinical applications, they deploy the encryption capabilities built in to the Polycom systems.

" We use the RSS solution to record conferences, our grand rounds, educational programs and to evaluate clinical skills for students."

Betty Charles, Associate Director, Educational Support Services
University of Colorado Denver

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"We currently have about 300 rooms set up for video conferencing," says Charles. In those rooms, the campus averages between 18 and 20 conferences a day. "We measure volume by 'port hours,' the period when one port on our bridge is in use by a connection from another site. We log an average of 11,000 port hours a year, with more than 2,000 conferences annually."

The education support services team provides video conferencing bridging services throughout the Anschutz campus and beyond. In addition to serving all of the University of Colorado campuses, the team supports numerous affiliate hospitals including the Denver Children's Hospital, Denver Health Medical Center, the Veterans Administration Medical Center, and National Jewish Medical and Research Center, as well as dozens of centers throughout the state, including many in rural areas, that are dedicated to a range of health services.

In addition to the educational and clinical applications on the video network, Anschutz uses Polycom systems to serve administrative needs, such as training sessions for employees and search committee interviews for recruitment of faculty and staff. "The use of this technology with candidates across the United States results in significant savings in travel costs by allowing the candidates to interview from their respective locations."

Bringing Medical Specialists to Patients Remotely
Using the video network, specialists in Denver are able to consult with patients in remote parts of the state. For the last six years, for example, Anschutz physicians have served many pregnant women in rural areas. These women are often cared for by family practitioners and midwives, and when there's a complication with the pregnancy, Anschutz is able to bring in specialists to assess the situation via video.

In addition, Anschutz audiologists provide audiology consultations for children with hearing impairments. According to Charles, "We connect with schools in rural areas about three times a month to work with teachers, staff and parents, and teach them how to work with the children. The video enables the use of sign language, as well as closed captioning, for training purposes."

Caring for remote patients via video is always convenient and often a necessity, especially during harsh weather. Charles explains, "Using the technology can prevent patients from having to travel during severe weather conditions across the mountains."

Growing Demand for High Definition (HD)
The potential benefits derived from high-definition video technology in the transmission of medical procedures are beginning to be realized at Anschutz. One procedure that would benefit significantly from this technology is spine surgery.

Charles' team recently broadcast a spine surgery procedure live over video to viewers at a convention in Chicago, as well as to sites in California and Texas. The procedure was also recorded using the Polycom RSS 2000 system, so other sites could view it for training purposes.

Charles notes the increasing value of recording, storing and streaming video content. "We use the Polycom RSS unit to record conferences, our grand rounds, educational programs, and to conduct clinical exams for students. By recording these sessions, the students can view and assess their clinical skills. A recording of class lectures allows the students to access the lectures online if they have missed a class or if they need to review lectures for study purposes."

The Best in Support—delivered by Polycom
Though the campus has the benefit of a large and knowledgeable staff, they do rely on Polycom Global Services to resolve specific technical issues. "We have used Polycom Professional Services to assist with operational issues, such as how to incorporate the use of specific medical equipment, and to help resolve questions concerning the use of multiple cameras and remote camera control." Working with Polycom technical support spares Anschutz staff members from having to troubleshoot problems through trial and error, and allows them to focus on providing services throughout the campus.

Looking Forward
"I anticipate that we'll continue to see an increase in video conferencing, as we complete more buildings, like the School of Pharmacy building with construction scheduled to begin soon, and as we continue to consolidate with the downtown Denver campus," says Charles.

In the future, Charles foresees an increased demand for video conferencing services, particularly HD, and hopes her team can expand and improve video services throughout the campus as well as at all the affiliated sites. "I'd like us to become more fully centralized and explore more opportunities to automate and manage content with products like the Polycom Video Media Center."

About UCD, Anschutz Medical Campus
In 1995, when the Fitzsimons Army Medical Center was officially put on the Base Realignment and Closure list, officials from Health Sciences Center, University of Colorado Hospital and the City of Aurora presented an innovative proposal to the Department of Defense in Washington, D.C. The proposal emphasized the benefits of reusing the decommissioned base to build — from the ground up — a world-class, academic health center, including state-of-the-art health care facilities.