



UNIVERSITY OF ARIZONA HEALTH SCIENCES CENTER



Videoconferencing
Technology Helps the
Arizona Telemedicine
Program Deliver Health
Care and Education
Services Statewide

The Arizona Telemedicine Program relies on TANDBERG® videoconferencing equipment to broadcast continuing medical education and deliver health care to underserved areas throughout the state.

CHALLENGE

In 1996, Arizona legislators were faced with inequitable delivery of medical care among the state's rural communities, its prison populations and its numerous tribal nations. To address this issue, as well as concerns about rising health care costs, the state legislature approved funding to establish pilot projects demonstrating the efficacy of telemedicine in delivering better health care to Arizona's medically underserved areas. As a result, the University of Arizona Health Sciences Center created the Arizona Telemedicine Program (ATP).

The Vice President of Medical Affairs at the University of Arizona Health Sciences Center asked Chairman of Pathology Dr. Ronald S. Weinstein — a telemedicine pioneer and the inventor of robotic tele-pathology — to oversee the program. Dr. Weinstein quickly agreed and immediately faced a new challenge: how to create a cost-effective telecommunications infrastructure in rural Arizona.

As Dr. Weinstein explains, "There was no broad telecommunications infrastructure in Arizona, so we created our own utility. As a result, the University owns and operates the entire network."

With the infrastructure portion of the program in place, Dr. Weinstein began an intensive search for a videoconferencing technology partner. He found what he was looking for in Oslo, Norway.





SOLUTION

Dr. Weinstein recalls his visit to Oslo where he met with the president of TANDBERG. "I was extremely impressed with his vision for the future and felt that TANDBERG would be the high-quality videoconferencing company of the future," he says. "Mind you, this was in 1996 when TANDBERG was not nearly the size it is now."

"I shared that we planned to be a very demanding customer," continues Dr. Weinstein. "We talked about the philosophy of the company and the president assured me that we would be a major focus of TANDBERG in terms of developing our initiative. I was very reassured by my visit, so we picked TANDBERG as our long-term corporate partner. This has turned out extremely well for our region."

Using TANDBERG videoconferencing equipment, the Arizona Telemedicine Program offers extensive broadcasting of continuing education to all of its sites. To date, over 15,000 hours of continued medical education have been completed through the program. In addition, the program operates a telemedicine training center for health care professionals throughout the state.

Since its inception in 1996, "The ATP has grown from eight sites to 171 sites, in 71 communities and 55 health care organizations," notes Dr. Weinstein, "We have done over 600,000 cases — mostly radiology, but many other specialties as well. It has become a major academic driver for the University; our affiliates have received over \$25 million in external funding, not including a large recent FCC grant."

Some of that funding includes grants to equip and staff the Institute for Advanced Telemedicine and Telehealth, known as T-Health, to be located in downtown Phoenix.

"T-Health is a center of innovation," Dr. Weinstein remarks. "It is a first-of-its-kind facility specifically designed to meet the objectives of the National Institute of Medicine — to address the lack of interdisciplinary health care training using advanced technology in the United States."

With a mission to create next-generation innovations in health care delivery and education — especially those that leverage advances in medical informatics, wireless telecommunications, telemedicine/ telehealth, simulation and robotics — T-Health has designed a video amphitheatre that will enable "in-the-room" assembly of off-site faculty members and students. The amphitheater will serve as a classroom as well as a unique education research laboratory.

"T-Health is an ambitious initiative," declares Dr. Weinstein. "The TANDBERG component is absolutely critical to its success. We use TANDBERG videoconferencing equipment every day to manage the entire project as well. We looked at a lot of options and the TANDBERG 150 is our appliance of choice for video input into the amphitheatre — it is critical to our concept of interdisciplinary education."

In fact, Dr. Weinstein jokes, "We tell some people that the 'T' in 'T-Health' virtually stands for TANDBERG."

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DIRECTOR, ARIZONA
TELEMEDICINE PROGRAM



RESULTS

While operations at T-Health are just beginning, the ATP has been providing education and delivering health care for more than 11 years. And the return on investment is impressive.

According to Dr. Weinstein, “The ROI for the state of Arizona from the program is high. But that’s actually an underestimation because it doesn’t take into account the service fees and the amount the state allocates annually versus our aggregate funding base, including outside grants and membership fees.”

The service fees and membership fees are a result of the Application Service Provider (ASP) business model that Dr. Weinstein says the ATP “borrowed from the software industry and adapted to telemedicine.”

“That business model is one of the critical reasons for the success of the program. It is an open-staffing model, so there are many sites of origin for providing service,” he explains. “For example, most of the radiology is done here at our University Medical Center; on the other hand, sub-specialty medical services such as dermatology, cardiology and orthopedics are done by other membership organizations. There are 55 organizations paying membership fees. We have many service providers and many service recipients. The program’s success also depends on economies of scale.”

Dr. Weinstein also credits the proprietary network for the success of the ATP, with “a corps of engineers who run the network daily, customizing and prioritizing bandwidth — commercial carriers might not be able to do that as well.”

“Linking in with the state legislature has also been very important in creating a stable program,” he continues, “We created the Arizona Telemedicine Council to function as a non-statutory overarching authority, chaired by a state legislator, Senator Robert ‘Bob’ Burns, who has been a champion of telemedicine since the beginning of the program.”

Of course, the partnership with TANDBERG has also been one of the primary drivers of success. As Dr. Weinstein points out, “TANDBERG continues to be innovative at a pace that matches our own mission. The company is a very reliable partner — a high-quality company that gives us a great product we can rely on. A lot of videoconferencing companies have gone out of business since we started in 1996. Really the only one that has been there for us since the beginning is TANDBERG.”

“I think the quality of TANDBERG is very high,” he continues. “It provides a rock-solid base. That’s one thing we don’t have to worry about. In telemedicine, if you have a product you can’t depend on, you’re betting lives. We always feel we’re secure with respect to the TANDBERG part of our enterprise.”

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Contact TANDBERG today to learn how our solutions can support your business processes.

Email us at tandberg@tandberg.com.