



EASTERN MAINE HEALTHCARE SYSTEMS



Rural patients across Maine now have access to critical care specialists, thanks to video communications from TANDBERG.

U.S. Commerce Secretary Gary Locke (left) and Eastern Maine Medical Center Dr. Rafael Grossman talk to Dr. Joe Babbitt (on screen) at the Blue Hill Hospital using the video conferencing technology which currently connects EMMC with 11 other hospitals. (Bangor Daily News/Bridget Brown)

CHALLENGE

Serving nine counties in Maine, Eastern Maine Healthcare Systems (EMHS) is committed to ensuring that citizens in all areas of the state receive the same access to high-quality healthcare. However, with a shortage of medical professionals in the state's rural areas, citizens must drive up to three hours one way to receive a full range of primary and specialty care services. In addition, emergency care often necessitates that patients be transferred by ambulance and/or helicopter from the seven EMHS affiliate hospitals to the Eastern Maine Medical Center (EMMC) in Bangor, where the majority of the state's specialists practice.

In 2006, EMHS received two telemedicine grants, followed by a third telemedicine grant in 2007. Having used video conferencing equipment from a variety of vendors since 1996 for education and meetings, EMHS chose TANDBERG equipment for the telemedicine initiative. Now, EMHS provides rural patients with access to critical care and other specialists, thus reducing helicopter and long-distance ambulance transports and delivering significant cost savings to medical facilities and patients alike.





SOLUTION

According to Wanda Pacifici, Telemedicine Program Manager at EMMC, “When we first started with video conferencing, it was used mostly for education and meetings. Over time it grew, and we started offering CME (continuing medical education) programs, which became quite popular, not only among our affiliated hospitals, but other hospitals as well. We put our first TANDBERG endpoint in our main hospital and the second one in our psychiatric hospital, and gradually we put endpoints in all our affiliate hospitals. And, once we received the telemedicine grants, it just exploded.”

Upon learning of the telemedicine grants, EMHS issued a request for proposal to purchase a new multipoint control unit (MCU). As Pacifici recalls, “Five vendors presented, and TANDBERG just blew everybody out the door. In addition to the existing TANDBERG endpoints at each of our eight hospitals, we purchased the TANDBERG MCU, the TANDBERG Management Suite (TMS), the TANDBERG Content Server (TCS) and the TANDBERG Border Controller. We also put endpoints in the homes of three pediatric intensive care specialists and one psychiatrist.” As a result, EMHS is well equipped to deliver telemedicine capabilities across a number of specialties, including:

- Emergency/Trauma
- Pediatrics
- Diabetes
- Endocrinology
- Oncology
- Psychiatry
- Rehabilitation

In addition, says Pacifici, “We are starting a Telestroke program, as well as another program that enables doctors to perform follow-up visits after surgeries. And, we have a psychiatrist who connects to our county jail.”

“Our primary goal,” she continues, “is to reduce patient transfers by ambulance and helicopter by allowing rural patients to go to their local hospitals for specialty care. In our third year, we are seeing the number of telemedicine encounters increasing across all specialties.”

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MANAGER AT EMMC



RESULTS

Since the telemedicine program started in March 2007, there have been more than 5,330 telemedicine encounters across all specialties. Estimating a rate of 55 cents per mile, that translates into almost \$163,000 of savings for patients alone.

The savings realized from reducing air and ground patient transfers are much harder to quantify, as EMHS currently collects only the data for “unnecessary and inappropriate modes of transfer” for emergency cases. However, with each air transport costing approximately \$4,800 and ground transport costing approximately \$800, the savings to date in the emergency category arguably exceeds \$110,000. And, as the telemedicine initiative continues to grow, so too will cost savings.

Meanwhile, EMHS is seeing several additional benefits, from reduced staff travel for education and meetings (thus eliminating travel reimbursement) to faster time to-treatment for critically ill patients.

“The physicians really like video conferencing,” Pacifici notes, “and the patients all seem to like it, especially those who are further away. They don’t want to drive three hours for an appointment — it’s time away from work and family.”

“When a patient does have to be transferred to the EMMC,” she continues, “the staff at the rural hospital is able to reconnect with us to follow the patient’s progress and learn from our specialists.”

Pacifici also provides a heart-warming example of how video conferencing can keep patients from missing important events. “We had a patient in the ICU whose son was graduating. She was very upset that she was going to miss his graduation. We happened at that time to have a home healthcare unit in that area, so they took the video conferencing unit over to the school, we connected the patient from here, and she was able to see her son graduate.”

“The biggest benefit of video conferencing,” Pacifici concludes, “is giving rural patients access to critical care specialists. Video conferencing also saves time for physicians who once had to drive 60 to 90 minutes to do clinics in other hospitals. And, oncologists can perform monthly follow-ups with their rural patients, saving time and addressing the shortage of those physicians in Maine.”

“It all adds up to better patient care for less,” she says.

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