Building a Sustainable, Patient-Focused Telemedicine Program

For more than fifteen years, Carle Foundation Hospital has relied on AMD Global Telemedicine to create and expand their successful telemedicine program.

Carle Foundation Hospital is an integrated, not-for-profit regional healthcare provider with facilities across east-central Illinois and a focus on high-quality, patient-centered care. Since the early 1990s, Carle Foundation Hospital has provided telemedicine services to the surrounding region, with a goal of giving the rural patient population greater access to Carle sub-specialties. Currently, Carle offers a growing list of telemedicine services to support seven different medical specialties including sleep medicine, pediatric behavioral health, pediatric surgery, neonatology, endocrinology, infectious disease and cardiology. Additional service lines planned to go live soon are endocrinology, neurosurgery and oncology.

Challenges

- Travel times of up to two hours between Carle’s regional health centers and Carle Foundation Hospital in Urbana creates challenges for both patients and physicians.
- Transferring patients from regional hospitals for specialty care adds to healthcare costs and creates an additional burden for patients and their families.
- Limited in-person office hours to see a specialist at regional facilities can lead to long waits for appointments for rural patients who prefer to receive care locally.

Results Achieved by Organization:

- Delivered more than 1,000 telemedicine consultations since 2011 for inpatient and outpatient services at rural regional hospitals.
- Increased physician utilization by eliminating more than 400 hours of travel time per year for specialist consultations that can be accomplished remotely.
- Reduced patient wait times for specialist appointments and outpatient services.
- Decreased the need to transfer patients from regional hospitals to Carle’s Urbana campus with telemedicine inpatient consultations.
- Lowered total cost of ownership of telemedicine technology and improved program sustainability through the use of web-based telemedicine software.
Congressman John Shimkus visited Carle for a demonstration of the telemedicine technology used for cardiology. Also in the photo is Nurse Julie Curry and on the monitor is Jason Peoples used for cardiology. Also in the photo is Nurse demonstration of the telemedicine technology

Congressman John Shimkus visited Carle for a telemedicine program contact Jason Peoples at 212-383-3216 or visit www.carle.org.

For more information on Carle Foundation Hospital’s telemedicine program contact Jason Peoples at 212-383-3216 or visit www.carle.org.

Contact AMD Global Telemedicine today to speak with a member of our program design team so we can help you with your telemedicine program.

AMD Global Telemedicine 321 Billerica Road Chelmsford, MA 01824 Tel: 866-449-8210 www.amdtelemedicine.com

A Telemedicine Pioneer

When Carle Foundation Hospital began practicing telemedicine in 1994, it was among the first healthcare organizations in the country to pioneer this technology. At the time, the hospital had a single service line with a partner facility to provide specialty care to patients at one of its regional hospitals remotely. Perhaps most impressively, not only did Carle help pioneer telemedicine in its early days, it has managed to sustain and grow its telemedicine practice for more than two decades.

“What motivated us to begin a telemedicine program in the early 1990s is what still motivates us to continue the program today,” says Carle’s Regional e-Health Coordinator Jason Peoples. “Above all, we’re looking to create an environment of patient-focused care and improve specialty access for patients living in rural areas, and telemedicine gives us a way to do that.”

Expanding Access

In 2010, Carle Foundation Hospital saw the opportunity to expand the reach of their existing telemedicine program in order to better serve its patients and utilize its specialty physicians. By that time, the healthcare network had more than a dozen locations throughout east-central Illinois, plus partnerships with other regional hospitals. Much of the area Carle served was rural, with driving times of up to two hours from some of its locations to the main hospital in Urbana. This created a number of challenges for both patients and specialty physicians.

“Specialists can only visit regional locations one or two times a month for office hours, which can lead to long waits for rural patients who prefer to receive care locally,” says Peoples. “Inpatients at regional hospitals who need specialty care or consultations are also affected, because when the care they need isn’t available at their local hospital they’re faced with the cost and inconvenience of transferring.”

To help with the planned telemedicine expansion, Carle turned to a fellow telemedicine pioneer who had helped them since their earlier stages of implementing telemedicine in 1999: AMD Global Telemedicine. Over the next four years, Carle added additional telemedicine service lines connecting a wide variety of medical specialties with seven different locations. Today, Carle offers a growing list of telemedicine services for medical specialties including sleep medicine, pediatric behavioral health, pediatric surgery, neonatology, endocrinology, infectious disease and cardiology.

“What AMD offers today completely shifts the dynamics of how telemedicine can be implemented,” says Peoples. “Until recently, implementing telemedicine meant investing in an enterprise-wide videoconferencing solution, which can cost around $100,000 or more. Today with AGNES software from AMD, the cost of entry is a fraction of that and the encounter management technology fits seamlessly into our existing infrastructure.”

Sustaining Success

With strong administrative support and the enthusiasm of many specialist physicians, Carle Foundation Hospital has been able to sustain and grow the success of its telemedicine program, resulting in improved patient care and access. When specialist physicians are able to conduct office visits via telemedicine it reduces appointment wait times and travel for patients, who may otherwise need to wait several months or travel to Urbana to meet with their physician. For physicians such as interventional cardiologist Dr. Vikas Soma, telemedicine is a way to improve patient care while increasing efficiency.

“I meet with patients face-to-face for their initial consultation,” says Dr. Soma. “Once the patient progresses and needs only follow-up visits, they can have their visits via telemedicine. Using the AMD equipment and AGNES software, we can communicate in real time, and I can to listen to the heart, evaluate the patient’s progress and address any concerns he or she may have. Thanks to telemedicine, I can help more patients each day because this eliminates travel time.”

Patients receiving care at regional hospitals are also benefitting from telemedicine. Because inpatient consultations in a number of specialties such as infectious disease and pediatric surgery can now be performed through telemedicine, patients are increasingly able to remain close to their families and homes at their regional hospital and avoid costly transfers to larger hospitals. In some cases, physicians have even used telemedicine for out-of-the-box solutions to common challenges such as clearing patients for surgery.

“In one case, a patient at a regional hospital needed to be cleared for a surgery by her cardiologist,” says Peoples. “The cardiologist was able to connect with that patient via telemedicine, listen to her heart sounds using the AMD digital stethoscope, and ensure she was healthy enough to undergo the needed surgery.”

According to Peoples, the many benefits of AMD’s latest solutions — including affordability, ease of use, medical device quality and medical workflow integration with AGNES — have been critical to helping Carle achieve its telemedicine goals and prepare for future growth.

“Thanks to AMD Global Telemedicine, the telemedicine solutions available today are better and less expensive than ever before,” says Peoples. “With this technology, we have a tremendous opportunity to improve access to healthcare for everyone — the benefit to a community of having access to outstanding healthcare services right where they live cannot be ignored.”

<table>
<thead>
<tr>
<th>Technology Comparison</th>
<th>Average Cost/ Clinic Site</th>
<th>Average Cost/ Remote Dr. Site</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Conferencing Codes</td>
<td>$10,000 x 6 sites = $60,000</td>
<td>$5,000 x 7 sites = $35,000</td>
<td>$95,000</td>
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<tr>
<td>AGNES software</td>
<td>$3,800 x 6 sites = $22,800</td>
<td>$0 x 7 sites = $0</td>
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