

## Increasing Healthcare Access for Children Using School-Based Telemedicine

### Organization:



### Customers:

Dr. Steve North, Founder and Medical Director  
Amanda Martin, Executive Director

### Location:

Spruce Pine, North Carolina

### Application:

School-Based Healthcare

*Center for Rural Health Innovation achieves their goal of improving academic outcomes using AMD Global Telemedicine School-Based Solutions*



The Center for Rural Health Innovation is a non-profit organization focused on applying innovative technologies such as telemedicine, to improve access to health care in rural North Carolina communities. They established the MY Health e-Schools program in 2011 to improve academic outcomes by ensuring students are healthy and ready to learn. Their telemedicine program now supports 14 school-based clinical sites, providing healthcare access for more than 4,000 potential patients.

### Challenges

- Clear visual communication between patient exam site and remote provider in order to properly diagnose and treat the medical issues at hand.
- Multiple school-based health clinics supported by just one nurse practitioner and a small staff of school nurses with frequent turnover.
- Rural site locations require equipment/technology that won't frequently fail or need service - limited on-site IT resources.
- Limited funding for smaller school programs (fewer than 100 students), with flexibility to adapt to growing program needs.

### Results Achieved by Organization:

- More than 4,000 potential patients in a low income, rural area now have immediate access to healthcare.
- Healthcare is delivered to all the students in a school district using a single nurse practitioner, creating a cost-effective alternative to traditional school-based health centers.
- Telemedicine consult process is simplified for the presenter, patient and remote provider through an easy-to-use interface and real-time collaboration.
- Increased program utilization with minimal on-site staff training and real-time access to remote provider.
- Children are connected to pediatric cardiology and psychiatry specialists, improving student's adherence to follow-up schedules with fewer missed school days.
- Expanded telemedicine program from 3 to 14 school-based clinical sites in three years.

**“When evaluating telemedicine solutions for our program, reliability and simplicity were critical. We’re in a mountainous rural area and driving up a mountain to troubleshoot equipment simply isn’t practical. We found everything we needed in the AMD Telemed ED system – it’s easy to use and incredibly reliable.”**



Amanda Martin  
Executive Director  
CRHI

### The AMD Solution

- Telemedicine Program Design and Training
- Telemed ED System
- AGNES™ Encounter Management Software
- General Examination Camera
- Digital Otoscope
- Telephonic Stethoscope



**“I had the eye-opening experience of seeing kids coming to school who were not ready to learn because they were sick ... Trying to teach a kid who has his head down on his desk because he has no access to healthcare is heartbreaking.”**



Dr. Steve North  
Founder & Medical Director  
CRHI



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



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## Where Things Started

Before Dr. Steve North was a family doctor and adolescent medicine specialist, he was a teacher in rural North Carolina. While working in this low-income area, the connection between health and education soon became clear. “I had the eye-opening experience of seeing kids coming to school who were not ready to learn because they were sick,” says North. “Trying to teach a kid who has his head down on his desk because he has no access to healthcare is heartbreaking.”

After completing his medical training, Dr. North returned to North Carolina to practice medicine and founded the Center for Rural Health Innovation (CRHI), with a mission of using innovative technologies to improve access to healthcare in rural communities. One of the first programs the non-profit organization established was MY Health-e-Schools, a program to provide healthcare for students in western North Carolina through telemedicine – and one of the first steps toward launching that program was choosing a telemedicine system.

## Evaluating the Options

The service area of My Health-e-Schools is a mountainous, rural two-county area. Because the students are spread out over many schools and a large geographical area, a traditional school-based health center would not be sustainable. Instead, the CRHI program is based on a hub-and-spoke model: one medical professional would ‘see’ patients from across region from a central location using a telemedicine system.

CRHI looked at several vendors and types of telemedicine systems, with a focus on choosing a system that was affordable, simple and reliable. “We knew it wouldn’t always be practical to drive up a mountain to troubleshoot equipment,” says CRHI Executive Director Amanda Martin. “Above all, we needed a reliable system that would work when it was needed.”

They chose a system and installed it at three test locations – and quickly found it didn’t fit the bill. “The first systems we purchased were more like video-conferencing on wheels as opposed to telemedicine, and they were harder to operate than they should have been,” says Martin. “We also had to purchase and install a server and hosting equipment which was very expensive and has since been outdated.”

## Finding Success

For the next locations, CRHI purchased AMD Global Telemedicine’s Telemed ED (Telemedicine for Education Deployment) systems; the difference was night and day. “When we first started using Telemed ED with AGNES software, it was a game changer for us,” says Martin. “Our school nurses are extremely busy and don’t have time to learn and operate a complex system, it has to work every time and be straightforward. Telemed ED looks and works just like a desktop – everything is streamlined through a single program.”

CRHI also saw tremendous success using AMD’s specialty medical devices and equipment including the general examination cameras, digital otoscopes and telephonic stethoscopes. “The cardiologist we work with says he can hear heart sounds better through the AMD stethoscope than he can with the stethoscope in his own office,” says Martin. “The general examination camera has been great for seeing things you can’t see with a regular camera, such as poison ivy on the back of a knee.”

## Charting the Results

Today, MY Health-e-Schools serves 4,000 students at 14 school-based clinical sites – most of which are now equipped with Telemed ED. The program not only provides primary care for students and teachers with acute problems, it is also connecting patients with specialists like cardiologists. School nurses and other trained users perform the clinical exam on the child, a physician or nurse practitioner diagnoses the problem and then prescribes medication and treatment plans as needed.

“Using the Telemed ED systems, we can offer live, interactive telemedicine,” says Martin. “It lets the provider guide the exam and ask questions – it doesn’t assume the presenter knows the questions to ask. In our state, services provided by live telemedicine are also eligible for insurance reimbursement, which helps make it financially sustainable.”

In the coming years, MY Health-e-Schools will continue to expand and achieve its mission of ensuring students are healthy and ready to learn. “We will continue to use and recommend the AMD AGNES software, medical devices and the Telemed ED systems because we know we can count on this technology to allow us to reliably provide comprehensive medical care right in our schools where students and teachers can get it,” says Martin. “AMD Global Telemedicine has really allowed us to achieve our dreams and goals as an organization – we had a need and they provided a reliable solution we have come to know that we can count on.”

For more information about the Center for Rural Health Innovation, visit [www.crhi.org](http://www.crhi.org), email [info@crhi.org](mailto:info@crhi.org) or call 828-467-8815.