A consortium expands healthcare access in underserved rural communities

Consortium members improve patient care with reliable fiber connectivity

Technology has become a vital tool in the healthcare provider's arsenal. Just about every aspect of providing care these days, from accessing medical records to monitoring patients and delivering telehealth services, is heavily dependent on digital systems and applications — all of which require reliable connectivity. But in many areas such as rural Appalachia, connectivity can be hard to come by, making it difficult for healthcare providers to give their patients the level of care they need.

That's why three large healthcare providers in the westernmost reaches of Appalachia came together in 2006 to form a non-profit consortium. Their goal was to improve care in rural areas by expanding access to high-speed connectivity at healthcare facilities throughout their region.

To be successful, however, they needed dependable technology partners that could deliver highly reliable, scalable connectivity services to their members.

A roadblock is encountered

Initially, the Consortium contracted with a technology services company in their local area to provide fiber connectivity services to participating healthcare providers at special rates. The Consortium would help members secure funding through various federal programs such as the Healthcare Connect Fund, then work with

the member and the connectivity provider to get everything up and running.

As the Consortium's member base expanded, they found their existing network provider was unable to run fiber to many member locations. Additionally, the Consortium wanted to offer their members the option of another connectivity provider. This would provide them with the ability to have both a primary network and a secondary backup network that could take over in the event the primary network experienced a service disruption or outage.

"The current state of the healthcare industry is that most providers rely on either a public or private cloud to complete their day-to-day functions," the Consortium project manager explains. "That means, if they lose connectivity, they essentially have to shut their doors. In most cases, there isn't even a paper backup option anymore. So, it's critical for our members to have a backup network."

The Consortium's board of directors set out to find an additional technology partner with a reliable fiber network that had the reach to meet their members' needs.

A cure for lack of connectivity

The Board issued a request for proposal (RFP) that outlined several requirements including cost-effective pricing, extensive network reach and

Unable to connect to members in underserved rural areas, a health care consortium turned to Spectrum Enterprise for a new network solution.

Client profile

Client
An Appalachian healthcare consortium

Industry
Healthcare

Services
Fiber Internet Access

Overview
- A consortium of healthcare providers, focused on improving access to care in rural areas via connectivity, needed a new technology partner that could service members their existing provider could not reach.
- The Consortium turned to Spectrum Enterprise for Fiber Internet Access (FIA) service.

Outcomes
- The Consortium is able to expand healthcare access to those living in rural and underserved communities in Appalachia.
- Healthcare providers can provide more community members with higher quality care via telemedicine and other remote services.

Why it matters
- Consortium patients in rural communities can now access the same level of specialized care that patients receive in urban locations.
- The Consortium can successfully deliver on its mission to improve healthcare in rural areas by expanding access to high-speed connectivity at healthcare facilities in remote areas.

network reliability. They then set up a scoring system and ranked each company that responded on every aspect of those requirements. "When the scores were tallied," says the project manager, "Spectrum Enterprise rose to the top."

Due to its nationwide reach Spectrum Enterprise, which is authorized by the FCC to provide connectivity services under USAC's Rural Health Care Program, could deliver Fiber Internet Access (FIA) service to member locations throughout Appalachia that the other existing provider could not. In addition, Spectrum Enterprise offered a service-level agreement (SLA) with 99.99% uptime, which gave the Board peace of mind that the service would be highly reliable.

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>
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members," says the project manager. "And doing that at a reasonable rate, in line with what rural healthcare facilities can pay, was another key requirement. We chose Spectrum Enterprise because they could deliver on all of that."

Their new technology partner secured, the Board shared the good news with its members. From the very first implementation, it was clear they had made the right choice: "The Spectrum Enterprise team proved themselves to be attentive and responsive, and the network is reliable," says the project manager.
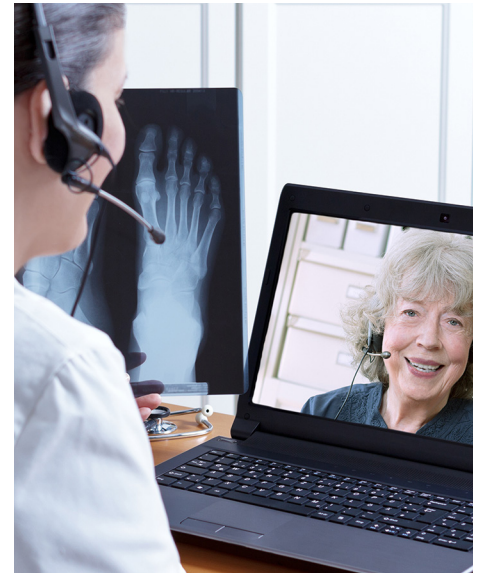
Appalachian healthcare providers can now connect with patients virtually using Fiber Internet Access from Spectrum Enterprise.

Today, every member location is able to take advantage of fiber connectivity, and members with access to both the Spectrum Enterprise network and the network from the original provider have the option to implement a secondary network for backup. And, because the Spectrum Enterprise network has nationwide reach, members that expand into new areas, including bordering states, can obtain connectivity for their new locations.

"Our membership has expanded quite a bit; initially we were only serving members in one area of one state, and now, we're throughout that entire state," says the project manager. "We've also crossed the river and state boundaries in a few places and have new members in Southern Appalachia. We're now up to 16 healthcare providers across 350 locations — and we can service all of them."

Changing lives within the community
Access to fiber connectivity has had a life-changing impact on the healthcare received by community

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Consortium patients in remote, rural areas can now access the same level of care as their urban counterparts.

members. For the first time, many of the more rural Consortium healthcare providers can offer their patients access to specialists and medical research institutes via telemedicine. And with their new technology partner on board, many Consortium members are now able to open up whole new areas of treatment for their patients. Now, they can remotely connect their rural patients with burn support and stroke support units for treatment recommendations and consultation with attending providers. "Our members can also connect with genetic testing services and an Electronic Intensive Care Unit (eICU), a form of telemedicine that uses state-of-the-art technology to provide an additional layer of critical care service," the project manager notes.

In addition to significantly improving patients' treatment options, the FIA service has eliminated dangerous delays related to transportation. Patients who previously had to be transported via ambulance can receive life-saving consultations and treatment recommendations immediately, at rural healthcare providers' locations. "Think about it like this," says the project manager. "If you give birth in a rural area, and there's an issue, the baby may have to be transported two or three hours to a pediatric hospital. A lot can go

wrong in that time. Today, with our network partner Spectrum Enterprise, the parents and their healthcare providers can consult via telemedicine with a neonatal specialist at a nationally recognized hospital."

Connectivity is also helping improve patient outcomes by providing fast, reliable access to electronic health records (EHRs), insurance and benefits information. The EHRs are a key factor, as all of this available information can radically improve the outcomes when doctors and healthcare providers need to make decisions about a patient's care. EHRs contain details of an individual's medical history, their prescribed medications, allergies, x-rays and other radiology images, lab results and any existing treatment plans.

Keeping an eye on future growth

While the Consortium, in partnership with Spectrum Enterprise, has made great strides in bringing network connectivity to rural and underserved areas of Appalachia, there's still work to be done.

"Spectrum Enterprise is uniquely positioned to help expand access to healthcare," says the project manager. "They've won large areas in the Rural Digital Opportunity Fund, and the resulting buildout, which will bring fiber to the most remote communities,

will make a big difference in the number of people we're able to reach with quality care."

For the future, the Consortium keeps it eye on growth. "When we talk about growth, we talk about providing the most support to healthcare providers that we can," he explains. "We plan to continue partnering with Spectrum Enterprise so we can achieve that growth and continue delivering on our mission to improve healthcare outcomes in rural area through connectivity. It's been a positive, collaborative partnership and I absolutely see them as a long-term partner."

About Spectrum Enterprise

Spectrum Enterprise, a part of Charter Communications, Inc., is a national provider of scalable, fiber technology solutions serving many of America's largest businesses and communications service providers. The broad Spectrum Enterprise portfolio includes networking and managed services solutions: Internet access, Ethernet access and networks, Voice and TV solutions. The Spectrum Enterprise team of experts works closely with clients to achieve greater business success by providing solutions designed to meet their evolving needs. For more information, visit enterprise.spectrum.com.

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