

## An Rx for network revitalization

*Throughout the health care ecosystem, aging T1 lines are giving way to high-powered cable connectivity*

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By Stewart Schley



The new prescription for connected healthcare relies on a stronger dose of a critical ingredient: bandwidth. EHR demands, telemedicine applications, regulatory requirements and a rising need for data coordination among multiple facilities are causing enterprises and small practices alike to re-think the way they communicate.

The result: Across the U.S. healthcare providers with multiple locations are jettisoning old and expensive T1 circuits in favor of high-capacity Ethernet and fiber networks provided by local cable companies.

“Just like the human body needs a strong core to achieve a healthy level of fitness, supporting health care technology requires a strong backbone to ensure peak performance,” Comcast Business Executive Director of Enterprise Marketing Alexandra Sewell commented recently in *Electronic Health Care Reporter*.

Today, that backbone increasingly relies on cable-powered Ethernet networks. Their blend of capacity, security and scalability make them ideal to support mission-critical, data-intensive healthcare applications at lower costs than legacy T1 lines.

The cable industry at large has made significant investments in expanding its Ethernet presence, in many cases deploying ring-configured networks that deliver high levels of resiliency and carrier-grade performance. Vertical Systems Inc., which tracks the carrier Ethernet category, notes that cable companies now make up three of the top eight U.S. carrier Ethernet providers. Healthcare, especially, is a significant industry focus.

For example, when the New Jersey providers South Jersey Healthcare and Underwood-Memorial Hospital joined forces in 2012, their merger did more than create a prominent new force in the state’s health care system. It also ushered in a new era for healthcare connectivity.

With 60 facilities across five counties, Inspira Health Network needed a comprehensive solution to connect physicians, administrators, patients and partners at a time when the emergence of electronic health records was placing new demands on network capabilities. “The more we become electronic with our records – and everything we do related to patient care is becoming digital – we can’t afford to have any downtime,” said Inspira Health Network’s Vice President and CIO.



The remedy: a Wide Area Network (WAN) from Comcast Business that combines a range of Ethernet services into a powerful, do-it-all resource. Among its elements:

- Five gigabit per second Ethernet Private Line (EPL) connections
- 11 more EPL connections with speeds of 10-100 Mbps
- Six 6 Mbps EPL over Hybrid Fiber Coax lines
- Two 100 Mbps Ethernet Dedicated Internet connections

The Inspira example ([here’s the full case study](#)) testifies to cable’s ability to customize and implement powerful Ethernet technologies that modernize communications capability for leading healthcare organizations.

A similar story comes from western Tennessee, where the staff of physician-owned McKenzie Medical Center had become frustrated with slow performance of its T1 network. “Productivity was down and frustrations with slow Internet speeds were mounting amongst doctors and nurses,” said the Center’s Manager of IT. That’s no longer the case: A replacement fiber network deployed by the Spectrum Business division of Charter Communications delivers 1 Gbps speeds to a central data center and 50Mbps Internet connectivity for McKenzie’s WAN. “Today, we have the bandwidth we need to serve our patients at a high level,” the individual said. ([Read more here.](#))



The same is true in Orlando, where Bright House Networks has transformed communications functionality for Family Physicians Group, which operates from 26 offices in the area. An end-to-end managed WAN that provides a high-speed data fiber network across all offices is part of a multi-dimensional solution from Bright House that allows central Florida’s largest primary care physicians group to collaborate, coordinate care and ultimately improve patient outcomes.

These are just a few examples among many of how private Ethernet and fiber networks supplied by cable companies are becoming critical components of a new, total health connectivity solution. Anymore, healthcare providers across the U.S. are discovering the best remedy for overcoming slow and expensive legacy circuits happens to come from the cable company that’s already right in the neighborhood.

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