

# Why Digital Services for Healthcare Need Better Networks

New digital services in healthcare, whether telemonitoring, augmented reality, or real-time predictive analytics, come with high expectations from patients, clinical staff, and administrators alike. **However, healthcare systems often discover that their current networking, from cloud to cloud, lacks the performance, resilience, automation and security that support and sustain the newest healthcare digital services.**

And they're surprised to learn that their network providers may not have the answers.

## ZAYO CAN HELP.



To learn more about these problems and our solutions, examine our latest thought leadership white paper: **Rethinking the Network for Transformative Healthcare**. In it, you'll gain a deeper understanding of the opportunities you face, the technical challenges you need to overcome, and some latest technologies that can help you shift from strategies to solutions.

### Obstacle #4

#### You need to radically rethink your network.

If you're expected to drive network innovation, you're forced to come up with a plan, evaluate technologies, and build business cases to move forward with new technologies that will support your vision. But getting there is simply hard because you'll encounter:

**TOO MANY NEW TECHNOLOGIES:** It's hard to pick the best mix of performance, future relevance, and value

**TOO MANY OPINIONS:** Conducting research will make your head swim

**INTERNAL SKILLS SHORTAGES:** You might lack the staff or competencies for DIY improvements

#### The Surprise:

#### You don't have to do it yourself.

**The solution:** Partner with an organization that has expertise working with the largest healthcare systems. They see the big picture, know the technology, have a mature vision, a track record of innovation, and the ability to support your success.

### Obstacle #3

#### You need better analytics.

Many healthcare improvements rely on cross-correlated analytics that spans structured and unstructured data from sensors and health records alike. But problems in the network impede the value of data analytics for better, faster decision-making.

**SLOW DATA COLLECTION AND TRANSPORT:** Data can't be collected and used in time

**DATA VOLUMES ARE TOO LARGE:** Data sets interfere with other traffic

**SOME SOURCES OF DATA AREN'T AVAILABLE:** Connectivity problems limit access to data

#### The Surprise:

#### You might need more than the cloud.

**The solution:** Explore edge connectivity for distributed analytics. With better, faster, more resilient connectivity from clinics and radiology centers to metro-level edge nodes, organizations can do real-time, first-pass analytics locally, and then send subsets of data back to the core. Optimized campus and metro-level network connectivity is a key to making that approach a success.

### Obstacle #2

#### You need predictable performance and resilience.

New digital services require more bandwidth, lower latency, and superior resilience from the network at all levels. If you're adding demanding digital services, you're likely to experience problems with:

**THROUGHPUT:** Not enough capacity for all the added traffic

**LATENCY:** Response times are too slow for video or augmented reality

**UPTIME:** Services freeze or time out when the network drops

#### The Surprise:

#### Bigger pipes aren't the solution.

**The solution:** Explore the advantages of AI-powered SD-WAN. Regardless of network provider or network technology, with SD-WAN, you have superior visibility and control over your network, powered by automation -- giving you more intelligence to take a nuanced approach. You might add bandwidth in a few locations, redundant connections in others, new providers here, new connectivity there -- enabling cost-effective problem solving.

### Obstacle #1

#### On-premise connectivity isn't good enough.

Many in-clinic or hospital digital services require anytime anywhere wireless connectivity that's up 24x7 to support widespread Internet of Medical Things (IoMT) data collection. But WiFi comes with intrinsic weaknesses that can stand in the way of success.

**DEAD ZONES:** Your devices can't connect

**SLOWDOWNS:** Your data backs up

**DROPPED CONNECTIONS:** You're always troubleshooting intermittent issues

#### The Surprise:

#### That's probably due to problems with WiFi.

**The solution:** Evaluate private wireless. Private 5G is emerging as a solution for wireless connectivity problems in clinics and hospitals, according to CIO.com<sup>1</sup>

<sup>1</sup> <https://www.cio.com/article/306930/private-5g-will-transform-healthcare.html>

Let's explore four problems that can stand in the way of supporting the highest levels of satisfaction for healthcare digital services.

Connect what's next for your business.

Learn more at [zayo.com](https://zayo.com)

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