

Leading U.S. Healthcare Provider Improves Network Connectivity with 11:11 Systems and AWS

SOLUTION: Managed Connectivity

Client Profile

An award-winning healthcare provider that delivers high-quality medical care to millions of patients across the northeastern United States. Well-known for being at the forefront of medicine and patient care, it boasts thousands of dedicated healthcare professionals, innovative programs, and state-of-the-art facilities. All told, it operates a number of hospitals throughout the region with hundreds of additional outpatient facilities, urgent care centers, and medical offices — making it one the largest and fastest-growing non-profit healthcare systems in the nation.

Modernizing IT to improve medical care.

The healthcare industry – more than any other – has seen a massive sea change over the last few decades. But it's not just with *how* healthcare is delivered, but *the way* it is delivered.

Healthcare providers have had to embrace IT modernization in massive ways, not only to improve and streamline medical practices and facilities, but also to deliver the best outcomes for patients. From technological advancements to the digitization of medical records to ongoing industry-wide consolidation trends, healthcare providers have a lot more to consider from an IT perspective than they used to. It's a challenge that becomes exponentially more difficult to navigate as medical practitioners remain the ever-popular target of sophisticated cyber criminals and ransomware attacks.

One large healthcare provider in the northeastern United States is seeing this firsthand. With hundreds of facilities, tens of thousands of employees, and millions of patients in need of healthcare services, this organization didn't just want to embrace digital transformation, it wanted to stay ahead of it. Well-known for being at the forefront of medicine and patient care, the provider wanted to continue its longstanding tradition of providing the best possible medical services, technologies, outcomes, and experiences for its patients.

THE RESILIENT CLOUD PLATFORM

CHALLENGES:

- Need for secure and reliable connectivity to Amazon Web Services (AWS)
- Reliance on single-source connectivity between sites and AWS
- Lack of redundant connectivity
- Ability to scale quickly and add new provider sites
- Rising threats of cybercrime and ransomware

SOLUTION:

- 11:11 Managed Connectivity Solutions
- 11:11 Managed Connectivity for AWS Direct Connect

BENEFITS:

- Fully managed solution including 24x7x365 support
- Access to networking experts for design support
- Continuous uptime and cloud access
- Secure connectivity
- Speed to deploy new facilities
- Cost savings when adding new sites
- Continuous uptime
- World-class support team

PROFILE:

- Industry: Healthcare



Dealing with massive growth, including bringing on hundreds of new locations and several new hospitals, the healthcare organization realized that it could no longer sustain its own data center and infrastructure, while also providing a positive patient experience. It needed to standardize on specific healthcare software-as-a-service applications. It also wanted the flexibility, scalability, agility, and redundancy of moving applications and data to the cloud. Because of its expansive reach and best-in-class technology, the provider chose to move workloads to AWS.

The right connections matter.

With its journey to the cloud in motion, the healthcare provider also needed to build out secure, redundant connections to AWS — both to and from all its many different facilities. However, the provider soon realized that attempting such a technically comprehensive and organizational consequential undertaking with its internal teams alone just wasn't practical. So, its IT decision makers turned to managed connectivity providers for help setting up those critical connections.

In healthcare, perhaps more than any other industry, the name of the game is uptime. But as the organization's legacy infrastructure continued to age, becoming increasingly insufficient in the face of more modern applications, it risked potentially detrimental system outages. Today's modern healthcare applications require low latency and high bandwidth, which is why many organizations are turning to last-mile connectivity to connect to cloud-based services and connect providers and patients to digital platforms for virtual care.

In an environment where wasted minutes can — quite literally — be the difference between life or death, medical providers simply cannot go without access to critical applications and clinical data. Connectivity is key to keeping information flowing, no matter what.

"In our line of work, downtime is simply not an option," said a senior executive with the healthcare organization. "As healthcare providers, our primary goal is to ensure patient safety, at all times and at all costs. From an IT perspective, that means being able to rely on uninterrupted network connectivity and continuous access to our critical data, no matter where it lives."

To ensure redundancy and maintain continuous access to its healthcare applications and data, the provider needed fiber options from several different carriers. However, working individually with these carriers to provide the necessary connections just wasn't cost effective. And no single carrier could provide the required redundancy the organization needed. This is why the healthcare provider chose 11:11 Systems Managed Connectivity Solutions.

Direct connections provide extra security.

After speaking with 11:11 teams about the organization's needs, the provider decided that 11:11 could address all its requirements. 11:11 negotiated with vendors to provide redundant fiber — from several different carriers — between hospitals and clinics. Now, the healthcare system can rest assured, knowing that if one connection failed, it had alternate connections in place to make sure data was flowing freely across its network and to the cloud.

Next, 11:11 leveraged AWS Direct Connect to provide a secure and dedicated connection to AWS for each of the hundreds of medical practices and hospitals across the provider's network. By using 11:11 Managed Connectivity for AWS Direct Connect, the organization now has a secure, dedicated connection to AWS that keeps network traffic off the public internet and reduces latency.

Ensuring connections were secure was a primary concern for the healthcare provider, to protect patient data and privacy. And for good reason. According to the FBI's 2023 IC3 Annual Report, healthcare organizations are the most attacked industry sector, with a typical provider losing up to 20% of its sensitive data. Even more concerning, is the trend that healthcare has seen its average cost per data breach increase by 53% since 2020. By comparison, the global average cost per breach across all sectors increased by just 15 percent over the same span.



Strong connections help improve growth.

Over the years, the healthcare system has grown from one hospital to having many hospitals in its network. Each time a new hospital or clinic came on board, the provider had to build different links back to its data center. Setting up this connectivity would take many weeks and months to complete.

Since moving workloads to AWS and implementing 11:11 Managed Connectivity, the customer has been better able to manage its continual growth and maintain data security and privacy. Whenever a new hospital or clinic comes on board, the organization sets up Direct Connect from the new site to AWS,

without the need to implement a large amount of connectivity infrastructure. This streamlines operations, improves onboarding, and provides significant cost savings to the healthcare provider.

"It's been much easier for us to expand our provider network," said the healthcare provider senior executive. "11:11 Systems has been there for us for every step of this journey. Their support teams have been on overnight calls with us making sure everything is running smoothly. We know they'll be there for us every step of the way."

THE RESILIENT CLOUD PLATFORM



MODERNIZE



PROTECT



MANAGE

