

Austin Cancer Center's on-demand network supports fast diagnosis, giving patients peace of mind



- **Business Needs** - A faster way for healthcare teams to share large digital patient files
- **Networking Solution** - Software defined networking supports rapid and secure delivery of even the biggest image files
- **Business Value** - Faster diagnosis and treatment, improved business processes, reduced network costs
- **Industry Focus** - Healthcare
- **Size** - Private practice with 12 locations

About Austin Cancer Center

Austin Cancer Center is committed to providing the highest quality cancer care, with services designed to support better physical and mental outcomes for patients, professional and financial growth for its practice, and a reputation for responsibility and excellence. The center uses state-of-the-art technology and practices to create an environment of support, compassion and respect for patients and their families.

Situation

Sharing large PET scans, MRIs and other digital medical images created problems at Austin Cancer Center. Although the healthcare leader considers technology to be an important part of its treatment regimen, its networks were unable to provide speedy transport for vital patient data. The center often had to send these large files after regular business hours, or risk slowing its network to a crawl. Austin Cancer Center needed to improve its network performance to make it faster and easier to share patient records with healthcare teams and, ultimately, to treat patients more quickly.

Solution

AT&T Switched Ethernet Service with Network on Demand lets Austin Cancer Center quickly and easily send radiology results to physicians at any of its 12 locations. Doctors can now view studies within minutes instead of days or weeks, speeding the process of diagnosis and treatment. As soon as the patient leaves the scanner, the study is on its way to the radiologist.



Easing patient anxiety

Cancer is a frightening diagnosis, even with all the progress that has been made in preventing, detecting and treating the disease. Not only does anxiety increase a patient's distress – it may also affect a patient's ability to cope with a cancer diagnosis or treatment. The National Cancer Institute reports that anxiety may increase pain, affect sleep and otherwise harm patients' quality of life.

Austin Cancer Center, which offers the highest quality cancer care, understands the importance of treating the whole patient – body, mind and spirit. The center's core values of integrity, teamwork, mutual respect and personal responsibility were chosen to assist its medical professionals in providing services that lead to better physical and mental outcomes for patients.

Center staff understand that information is a key factor in easing patients' anxiety. "Having cancer is a really stressful time. It's a life-changing event," said Jason Lindgren, Austin Cancer Center chief information officer. Patients want to know the results quickly after undergoing a PET Scan or other diagnostic test, but the center's network was unable to quickly transport the large diagnostic files to radiologists.

"The PET scanner generates extremely large data sets – upwards of a gig or more for one patient study," Lindgren said. "We had to send those studies to doctors after business hours because the data sets were so large it bogged down the network. Getting that much data from one side of town to the other over the wire, you've got to have the network performance to handle it. And we just simply couldn't do it. Our WAN topology was really a bottleneck."

Delivering critical data to doctors rapidly, reliably and securely can make a difference in cancer treatment. "We have a long-standing reputation for excellence, innovation and exceptionally personalized cancer care. Our patients look to us for a quick diagnosis," Lindgren said. "They rely on us for the best treatments we can offer. And this never leaves our

minds.” For these reasons, Austin Cancer Center was determined to deliver patient files to doctors more quickly, the better to give patients the information and treatment they needed as soon as possible.

Leveraging technology for improved cancer outcomes

“Technology is really important because the center’s providers are 100 percent electronic across the board,” Lindgren said. “It’s important to be flexible in the healthcare industry because needs change consistently, new treatments become available and new systems come online. It’s really important that we can integrate them into our system.”

A leader in cancer treatment, Austin Cancer Center chose networking leader AT&T to improve delivery of diagnostic files to medical professionals. AT&T Network on Demand provides all the bandwidth the center needs to send patient studies as soon as they’re ready. Instead of waiting for files to download, Austin Cancer Center can focus on diagnosing, treating and healing patients.

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Jason Lindgren

Chief Information Officer, Austin Cancer Center

“The agility of the AT&T Network on Demand platform gives physicians, nurses and family members fast and reliable access to medical results,” said Lindgren. “It helps our team of physicians have the information they need to quickly diagnose and begin treatment.”

The flexibility and stability of the AT&T platform allows Austin Cancer Center to increase or decrease bandwidth as needed. Thanks to an easy to use online portal, Lindgren said, “I just move a slider in one direction or the other to control the bandwidth. I select a radio button for my class of service, I apply it and it’s done.”

Thanks to Network on Demand, the center can send diagnostic files in real time. As soon as the patient leaves the scanner the study is already on its way to the radiologist. “I think it’s beneficial for doctors because they’re able to get the results that they need more quickly,” Lindgren said.

Dr. Shannon Cox, Austin Cancer Center radiation oncologist, remembers that it sometimes took weeks to get patient X-rays and other diagnostic files. He believes technology like Network on Demand has significantly improved the field of radiology. “Nowadays to be able to look at those scans instantaneously definitely speeds up the diagnosis,” he said.

Better network performance at a lower cost

AT&T enabled Austin Cancer Center’s technology team to deliver improved network performance at a lower cost. “That’s really tough to do,” Lindgren said. “Without Network on Demand I don’t think we could have accomplished it.”

Lindgren and his team researched several alternatives before selecting the AT&T solution. “I had gone back and forth with quite a few reps with other carriers and it was the same old thing: ‘What do you need, how much bandwidth, and this is what your cost is going to be for the duration of the contract,’” he said.

AT&T, on the other hand, offered the center a range of choices. “My rep said we could choose anything on the menu at any given time, and showed us the price we’d pay at each service level,” he said. “The cost was significantly lower than what we were already paying and the service level was considerably higher.”

The flexibility and stability of the AT&T platform lets Austin Cancer Center dial up or down its bandwidth when needed without a phone call, a technician or a change in contract. “With the ability to send large data sets, AT&T lets us keep services in-house,” Lindgren said. “This gives our patients the convenience and comfort of staying with the staff they’re familiar with.”

“Our team of healthcare professionals strives to leverage the best technology available for improved cancer treatment outcomes,” Lindgren said. “When a person trusts you with their life, you want the best resources available to make quick, informed decisions.”



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