

Telemedicine in the ICU gets a lifeline from AT&T

- **Business needs** - Infrastructure to support a first-of-its-kind telemedicine solution for Intensive Care Unit (ICU) patients
- **Networking solution** - A fast, highly secure network to connect patients with medical care providers
- **Business value** - Enabling technology for an innovative healthcare model
- **Industry focus** - Remote patient monitoring
- **Size** - Hicuity partners with 150 different medical facilities in 35 states

About Hicuity Health

Hicuity Health revolutionized patient care by launching the first external tele-ICU solution for hospitals and health systems' most critical patients. The company, which now provides acute care in and out of the ICU, is the largest independent operator of provider-to-provider telemedicine services in the nation.

The situation

Technology enables Hicuity to deliver telemedicine care to ICU and cardiac patients. The company needed secure, dependable connectivity and phone service to support its outstanding remote patient care.

Solution

AT&T Switched Ethernet with Network on Demand enables vital communication with patients with a private lane across the nationwide AT&T broadband network. The service supports video conferencing sessions with patients and makes it easy for providers to share large medical imaging files. Hicuity also relies on AT&T Office@Hand, a cloud-based voice, e-fax, text, and conferencing system and robust, secure internet service.

A new way to care for ICU patients

Hicuity Health (formerly known as “Advanced ICU Care”) is transforming telemedicine. It introduced an independent tele-ICU model at its founding. Now its expertise extends to remote cardiac telemetry, virtual nursing, and remote device and wearables monitoring.

The organization’s name reflects the superior degree of care it provides to patients who need special supervision while recovering from a serious illness. Tom Bobich, Hicuity Vice President, marketing, explained the name change. “We wanted a name that helped us enter multiple categories as we expanded our service lines. Hicuity does draw from ‘high’ and ‘acuity,’ but the name also includes ‘ICU’ and ‘IT,’ which are two of our key components.”

The company offers its team, tech, and protocols to hospitals nationwide.



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Tom Bobich
Vice President, Marketing
Hicuity Health

Changing the venue

Hicuity Health has integrated with more electronic medical records systems and aligned with more diverse hospital and system practices than any other partner. It supports hospitals’ critical care mission, responding to each ICU’s unique needs and helping to provide the highest standard of care to patients.

The company’s clients are hospitals and healthcare facilities. “We specialize in high acuity or provider-to-provider telemedicine, meaning we work in partnership with another provider at the bedside and collectively care for a patient,” Bobich said. “In other industries it might be looked at as a B2B2C structure. Hicuity’s structure works very well because it helps satisfy the needs of hospitals looking to improve care without bringing on additional resources within their structure.”

Today Hicuity partners with about 150 different facilities in 35 states, ranging from independent hospitals to healthcare systems with multiple locations to post-acute facilities. Most recently, it added high acuity or acute care in the home. “It’s a relatively new service authorized by Medicare through the pandemic,” Bobich said. “It allows patients whose conditions are under control and expected to improve to be cared for at home. It’s really about changing the venue rather than changing the care.”

Technology-enabled clinical care

Technology is at the heart of Hicuity’s value proposition. “It’s very important to understand that we are a technology-enabled clinical care service,” Bobich said. “Technology is our direct linkage into the hospitals’ monitoring and Electronic Health Records

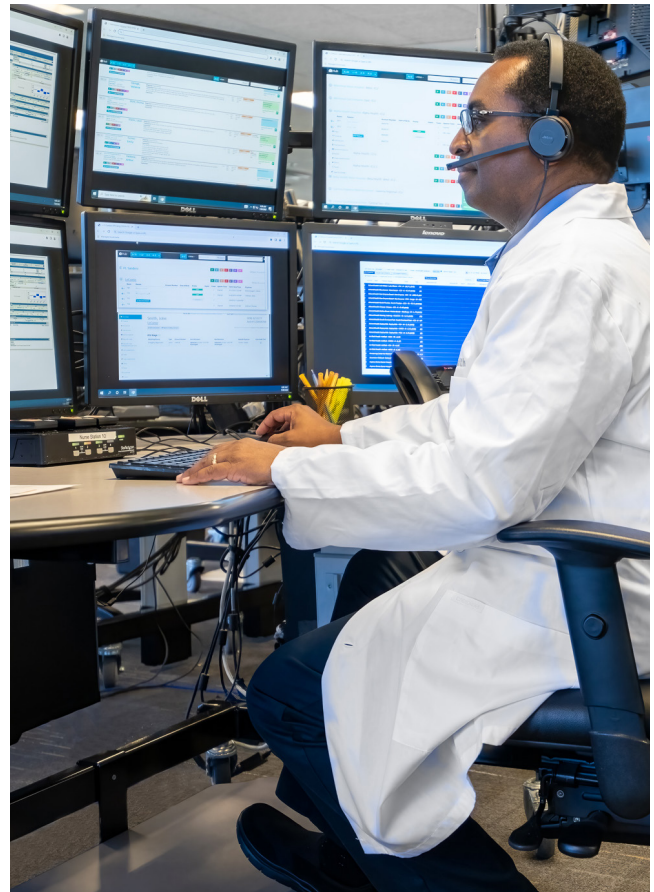
(EHR) systems so that we can see from afar exactly what our doctors and nurses would see if they were in the room with the patient, except for being able to put hands on the patient. That allows them to provide care remotely.”

This might involve a Hicuity nurse talking with a patient, or a Hicuity physician evaluating a patient and then recommending a change to the care plan or ordering a prescription. Hicuity was the first company to offer this service independent of a hospital or hospital system. “We envisioned that there were lots of hospitals that would benefit from telemedicine and in that case, tele-ICU, but would not have the resources to put that in place on their own.”

Hicuity has become the nation’s largest provider of cardiac telemetry monitoring. “We have technicians constantly watching the heart rhythms of patients and advising the bedside of any abnormalities they notice in the same way that a hospital might do internally,” Bobich said. “And increasingly we’re focused on delivering virtual nursing, which is a relatively new phenomenon, but is anchored in the tele-ICU experience of the last 20 years.”

Virtual nursing involves Hicuity taking over administrative tasks such as admission or discharge that don’t require hands-on patient care. This lets nurses continue to care directly for patients on an urgent basis and manage other nursing functions on a timely basis.

Helping reduce the length of ICU stays by a full day for the average patient in one recent year saved Hicuity’s partner hospitals more than \$60 million in ICU costs. A study of 40 partner hospitals found



decreased costs associated with staff turnover, compliance, re-admissions, ICU capacity issues, and other challenges—money better spent on staffing, expansion, or reinvestment.

Upgrading the network to support expansion

Corey Danko, Hicuity Vice President, telehealth infrastructure, said AT&T Business has been a key part of the company’s network strategy for years. “The relationship has blossomed since I arrived,” he said. “We’re using more AT&T technology now, and that’s partly due to the growth of our organization and the relationship that we’ve had with AT&T.”



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Vice President, Telehealth Infrastructure
Hicuity Health

For years, the company used legacy AT&T Business services to connect its 12 operations centers, five data centers, and about 145 healthcare facilities. As Hicuity expanded, officials saw the need to upgrade some services. Staff required secure access to increasingly larger medical files.

Danko and his team evaluated AT&T Switched Ethernet Service with Network on Demand to replace existing services. “We identified it as a tool that’s cost effective and gives us the flexibility to turn up or turn down bandwidth,” he said.

Critical needs: reliability and security

AT&T Switched Ethernet with Network on Demand helped Hicuity streamline operations with a dedicated connection with speeds up to 100Gbps to accommodate patient tele-health visits. The service works well for Hicuity’s geographically diverse clients. “We have clients in rural and metropolitan areas. The AT&T product has been extremely reliable, available, and secure,” Danko said.

Reliability is a must for most operations, but Hicuity’s need for it is especially crucial since patient lives are at stake. “If we lose connectivity, we’re unable to take care of patients, so it’s extremely valuable for that connectivity to be in place,” he said.

For that reason, Hicuity builds redundancy into all its systems and has devised a method to hand patient control back to facilities for the care of the patients if connectivity is ever compromised. “Of course, that is not ideal for either party,” he said. “This reiterates the value of AT&T reliability.”

Security is equally important to Hicuity, Danko said. “Security is one of the most important things that we need to consider as we are taking care of patients. We highly depend on AT&T technology to securely transmit data, whether it’s phone calls, data, or raw format back and forth between the clients internally,” he said. “We do have other security controls in place, but we depend on AT&T to secure that communication externally as well as internally to Hicuity.”

Easy access to bedside teams

Hicuity also chose AT&T Office@Hand, a cloud-based communications solution, to replace an on-premise solution. “Our phone system was difficult to maintain and was becoming obsolete,” Danko remembers. “We worked with AT&T to evaluate the options that Office@Hand provides, and it worked really well. We use this service company-wide.”

Clinicians benefit from the features of AT&T Office@Hand. “We integrate Office@Hand with our internal application that provides our clinicians a very easy way to call our bedside teams by just clicking on information regarding a specific patient,” he said.



“So, if we’re monitoring a specific patient within our application, there’s a link that uses an API with Office@Hand that allows that clinician to click that link and connect directly with the nurse who is taking care of that patient at the bedside.”

Making things easier for staff means better patient care. “A lot of times we’re dealing with emergent situations with patient care, so this allows the clinician who’s working for Hicuity in our operation centers to quickly and accurately get that nurse or other clinician at the bedside and attend to that patient if needed,” he said.

Relationships make a difference

Hicuity staff have discovered many advantages to working with AT&T Business, including the breadth of services and the relationship with AT&T Business staff. “Our account rep is very responsive, and the team at AT&T is always available to address any issues,” Danko said.

“AT&T has been great to connect us with the right people, whether we’re trying to resolve an issue or explore new technology. We don’t look at AT&T as just a vendor. It’s great to have a relationship with our service provider.”

Danko said he would recommend AT&T Business to peers. “I would definitely tell them to consider it and evaluate it, and I’d share my positive experiences with AT&T at Hicuity and also in ‘past lives.’ It’s a solid, stable platform in terms of technologies that AT&T offers.”