AdventHealth leaps communication barriers with FirstNet solutions

Agency/organization needs
Improved communications throughout AdventHealth's locations; enhanced safety and efficiency for a large EMS fleet

Networking solution
This busy hospital system replaced its UHF 2-way radio system with FirstNet Rapid Response to enable reliable communications; it also added FirstNet Integrated Fleet Solutions to manage compliance, control costs, and optimize its EMS vehicles from one easy-to-use platform

Agency value
Enhanced safety, increased efficiency, reduced repair costs

Industry focus
Healthcare system with hospitals in 9 states

Size
54 hospital campuses and hundreds of care sites in diverse markets

On a mission to create whole-person care and healthier communities

AdventHealth is a connected network of care that helps people feel whole—body, mind, and spirit. The organization's Central Florida Division encompasses 17 hospitals and ERs in four counties across metropolitan Orlando. The division's world-class hospitals, combined with a comprehensive outpatient care network, see more than 5.9 million patient visits annually.

AdventHealth's national footprint includes more than 100,000 team members. They provide whole-person care to nearly 9 million people annually through more than 2,000 care sites.

Rob Francisco, AdventHealth Security Operations Center and Emergency Manager, said the hospital system stretches as far west as Colorado and north to Wisconsin. "Teams oversee security and emergency management for our central Florida hospital locations in Seminole, Orange, Osceola, and South Lake Counties," he said.

AdventHealth Quality Control/Fleet Manager Tim Caporal, a critical care paramedic by trade, handles the organization's EMS operations, fleets, and quality control. He procures all the equipment used in the health system's ambulances and helicopters. "I'm also in charge of the education team, which handles all the education and training for our 322 employees, and logistics, which involves all the procurement of supplies and necessary items for our team members to do their jobs," he said.

Both Francisco and Caporal are deeply committed to delivering the quality healthcare for which AdventHealth has become known.

The need to upgrade from traditional radio systems to a cellular solution

AdventHealth's impressive growth has created some logistical difficulties. "When you consolidate processes and procedures, sometimes things get left out," Francisco said. "We need to ensure that everything is covered from the patient care perspective and the team member perspective."

Hospital workers also faced communication difficulties within some facilities. "We had varying degrees of spots inside the hospital where transmissions from our traditional radio system were just not possible. And some hospitals were not built to support traditional radio systems," he said.

Upgrading from a land mobile radio-based system (LMR) to a cellular solution proved trickier than expected. "Some people are standoffish about new technology," Francisco said. "Trying to keep updated on what's new and hot is probably the biggest challenge from a security and communication standpoint."

While Francisco and his team worked on security communications, Caporal researched telematics and camera solutions for the EMS fleet. "We have ambulances that are literally rolling ERs and ICUs, and we need connectivity to be able to do our jobs," he said. "One of the biggest challenges is growing the infrastructure and ensuring we're on the best wireless towers and satellites."

Priority access from FirstNet

AdventHealth adopted solutions from FirstNet®, Built with AT&T. The nationwide network enables first responders to break through communication barriers. It provides reliable cellular coverage and redundancy even in emergencies like hurricanes.

Francisco said AdventHealth chose FirstNet Rapid Response to replace the hospital's traditional radio system. Rapid Response Push-to-Talk gives AdventHealth priority access to voice, data, video, location, and interoperability services on the FirstNet network, making it easy for hospital employees to communicate seamlessly.

Reliable, near-real-time communication

Caporal was also pleased with the switch to Rapid Response. "Going from 400 megahertz radios via a radio tower to (Rapid Response) Push-to-Talk allows near-real-time communication between our dispatch center and our crews out on the roads."

Francisco likes the solution's built-in redundancy and cost effectiveness. "We have cellular digital systems in our hospitals that are already built in, so there's no extra infrastructure cost," he said.

"With the GPS tracking abilities of the trucks through AT&T Fleet Management, our dispatchers can see things in real time. And that enhances patient outcomes."

Tim Caporal
AdventHealth Quality Control/Fleet Manager

Hurricanes Helene, Milton create need for extraordinary emergency response

Outperforming other services

The hospital benefits from both FirstNet support and services. AdventHealth operates more than a dozen facilities in western North Carolina. When Hurricane Helene ravaged Asheville and other North Carolina cities, AdventHealth leaned heavily on FirstNet technology. "That area was devastated, and as a FirstNet customer, I was able to request a satellite truck, take our devices to North Carolina, and assist our team. You can never have too much redundancy," Francisco said.

"By the time I got there with my partner, FirstNet had already partially reinstated much of the service."

FirstNet also helped when Hurricane Milton cut a path of destruction across Florida just two weeks later. AdventHealth's FirstNet representative was able to arrange for power antennas, backup generators, and satellite connectivity. "The primary FirstNet systems never went down here in Florida, and we never had to touch the satellite phones," Francisco said.

The ability for FirstNet to connect AdventHealth with police, fire, and EMS teams has been helpful. "It's beneficial to our accreditation to have that ability. All the hospitals in our area do mass casualty exercises once a year, and law enforcement officials participate," he said. "It's been very valuable to showcase the technology we're growing with."

Francisco also appreciates the FirstNet team's expertise and willingness to respond quickly.

The forefront of community care

AdventHealth also operates standalone emergency care departments, facilities that are equipped to handle emergencies but may not have the full facilities offered at its hospitals, Caporal said. If necessary, the hospital's EMS department transports patients from the standalone emergency departments to a hospital. "The landscape in which healthcare is delivered is changing, and AdventHealth is at the forefront of expanding that care to communities so folks don't have to drive so far. They have healthcare services right there in their backyard."

"Anything that I can do to enhance the safety of our department and our team members is definitely rewarding."

Tim Caporal
AdventHealth Quality Control/Fleet Manager

FIRSTNET®
Built with AT&T

FirstNet Fleet Management boosts safety through management of drivers, vehicles

Expanding care locations helps patients but creates challenges for AdventHealth's hospital-based EMS service. "We have to make sure that we have enough team members and units or ambulances to respond to those calls as we spread out farther and farther," Caporal said.

The hospital system relies on FirstNet Fleet Management, which integrates Geotab's fleet tracking with AT&T Internet of Things (IoT) platforms to simplify operations. The integrated solution provides a single analytics-based platform that delivers improved efficiency, proactive issue detection, reduced repair costs, and data security.

The sophisticated cloud-based platform is a GPS location and telematics solution. It helps the healthcare system manage its drivers and vehicles by extracting actionable intelligence from trip data, including many critical variables.

Enhanced safety

The hospital system also uses AT&T Fleet Management for the KP2 dash camera to capture video and audio from inside and outside a vehicle to monitor driver behavior and improve safety.

Geotab's AT&T Fleet Management vehicle diagnostic sensors alert AdventHealth to potential issues before they occur. "We get near-real-time alerts if a 'check engine' light comes on, we get idle times, the amount of fuel we're using, and hours of service. AT&T Fleet Management gives us a ton of information, and it's phenomenal," Caporal said.

AT&T Fleet solutions are designed to help customers improve productivity and safety. "Anything that I can do to enhance the safety of our department and our team members is definitely rewarding," he said.

He also relies on the expertise and availability of his FirstNet account representatives.

Better patient outcomes

FirstNet solutions enable constant, reliable communication with AdventHealth's ambulances and with team members in the field, Caporal said. "That improves our response times, which at the end of the day gets our people to the patient quicker, which then gets the patient to where they need to be quicker, improving our patient outcomes."

FirstNet Fleet solutions have significantly improved communications. Years ago, knowing which ambulance was closest when an incident occurred was hard. "Now, with the GPS tracking abilities of the trucks through AT&T Fleet Management, our dispatchers can see things in real time. And that enhances patient outcomes because if we have a closer unit, we're going to be able to get those patients where they need to go much quicker," he said.