Acadian Ambulance Service

Acadian Ambulance Service: Improving Emergency Response for a Leader in Emergency Medicine



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Acadian Ambulance Service transports more than 1,000 patients every day across its vast and diverse service footprint that includes urban andsuburban areas, the remote swamps of Louisiana’s bayou, and offshore oil rigs in the open Gulf of Mexico. Acadian has dispatch centers in Lafayette, Louisiana and Austin, Texas.

To serve one of the most disaster-prone areas of the U.S., Acadian crews must have the training and technology to deal with a variety of emergencies –ranging from routine illnesses and accidents to mass casualty incidents – and has been recognized as a leader in emergency medicine nationwide.

BUSINESS CHALLENGE

Acadian’s sprawling footprint poses many communications and management challenges for fi rst responders. For years, Acadian relied on a private analogradio network to communicate with units in the fi eld. But as the company grew and deployed increasingly sophisticated and bandwidth-intensivedispatch systems and on-board medical devices, Acadian needed a mobile communications solution with greater capabilities and reliability.

Dispatches and emergency communications often took two minutes to be received. This delay slowed responses, hindered operations and limited Acadian’s ability to deploy the latest technologies in its fleet.

To augment its private network, the company used commercial cellular services. However, cellular coverage is unreliable in rural stretches ofsouthern Louisiana, and cellular air cards and modems were frequently damaged from use in demanding emergency environments.

Acadian needed a single mobile network solution that would enable:

- Use of the best available wireless network in any given area – and seamless roaming across networks as units transported patients across the Gulf Coast.
- Deployment of the latest dispatch, communications, management and patient care technologies.
- Confi dence that communications gear would withstand the rigors of emergency services and disaster responses.
- Easy upgrades of on-board technology. Acadian is committed to remaining at the forefront of emergency medical technology, and a mobile communications solution that would enable deployment of the latest patient care equipment was required.

SIERRA WIRELESS INMOTION SOLUTION

In January 2008, Acadian piloted three oMGs. Crews saw immediate anddramatic results. Dispatches, emergency communications and patientinformation were transmitted and received instantaneously and reliably. Networkcongestion, dead zones and bandwidth limitations no longer hindered emergency communications.

The oMG provided secure, worry-free connectivity for data and communicationsgear deployed in Acadian units, including dispatch systems by Tritech, driver andvehicle monitoring technology by Road Safety, LIFEPAK 12 monitors by PhysioControl, and Panasonic Toughbooks. Soon after the trial, Acadian ordered and installed 250 oMGs in ambulances throughout its fleet.

IMPROVED MANAGEMENT OF COMMUNICATIONS, VEHICLES AND DEVICES

To enable headquarters staff to monitor and manage operations in real time,Acadian deployed the oMM, which collects and analyzes information from eachoMG-equipped vehicle in the fi eld to provide headquarters staff with a virtualdashboard of detailed information about networks, vehicles and devices.

LIFESAVING RESULTS

Since deploying the InMotion Solution, Acadian has seen signifi cant improvement in emergency communications and operations.

“Everyone at Acadian is excited about how this technology has improved theservice we provide to the community,” says Kenny Logan, Director of ElectronicTechnology for Acadian. “The InMotion Solution enables our medics to focuson their mission – saving lives – and not whether our communications are going through.”

When an oMG-equipped Acadian Ambulance receives a call, it receivesinstantaneous computer aided dispatch information through the oMG; it takesthe fastest, satellite-guided route to and from the scene; critical driver andvehicle information is monitored in real time by operations command, and patientinformation is wirelessly transmitted to the ER in advance of arrival. The InMotionSolution provides critical data to emergency personnel at the speed necessary to save lives.

“Although this technology has already improved our communications andoperations dramatically, we are exploring a variety of other applications that it willenable us to deploy in the future,” said Kenny Logan. “Acadian is exploring mobilevideo, VoIP, vehicle tracking and telemetry, asset and inventory tracking and other features.”

QUICK FACTS:

- Founded: 1971
- Largest private ambulance company in USA
- Employees: >2,650
- Ambulances: 270

CUSTOMER CRITICAL CHALLENGE

- Private analog radio network with limited capacity
- Slow dispatch communications caused slow response
- Unreliable cellular coverage in rural areas
- Cellular equipment frequently damaged in demanding environments

SOLUTION

- oMG provided secure, instant and reliable communications
- oMM enabled HQ staff to monitor and manage operations in real time using a virtual dashboard

BENEFITS

- Dispatches, emergency communications and patient information are transmitted and received instantaneously and reliably, even in dead zones, speeding response times
- Network congestion and bandwidth limitations no longer hinder emergency communications
- Secure, worry-free connectivity for all the data and communications gear employed in Acadian units