



TRACKING UNIT HOURS FOR BETTER UTILIZATION

BACKGROUND

Prior to 1960, the ambulance service in Mecklenburg County was provided by funeral homes as a free public service. After 1960, emergency service was provided by a privately owned organization and several volunteer agencies. In 1974, Mecklenburg County took over legal responsibility for providing ambulance service to the community, and in 1978, after growing dissatisfaction with the service being provided by the private organization, Mecklenburg County began the operation of a county-owned and operated EMS system called Mecklenburg County Ambulance Service. This fledgling service started at the EMT level and began 24-hour operations with four ambulances providing emergency services.

In the years that followed, the service upgraded its certification through the intermediate level and saw expansion of its fleet and number of stations. In July of 1983, the county ambulance service name was changed to Mecklenburg County Emergency Medical Service, although most citizens today identify the EMS service by the name, "Medic". In July of 1986, Mecklenburg County EMS began full operation at the Paramedic level.

Medic is part of a unique partnership between Mecklenburg County, Carolinas Healthcare System and Presbyterian Healthcare/Novant Health. Since fiscal year 1997, Medic has reduced ambulance response times, implemented higher clinical standards and reduced taxpayer subsidies per call by 50%. Medic has been compliant every month since 1997.

Medic strives to use technology to improve patient care and simplify the jobs of field operations staff, and have won prestigious awards for technology deployments. In 2004, Medic received an Achievement Award from the National Association of Counties, and a Special Achievement in Geographic Information Systems Award from ESRI, a world leader in GIS software and technology, and in 2006, Medic was selected by its peers as the first-ever recipient of the Pinnacle Award as the outstanding EMS system in North America.

THE CHALLENGE

In 2005, Medic had already begun to deploy leading edge technology to track and dispatch their vehicles and crews and monitor driving habits. They were experiencing connectivity problems – connections weren't staying up, and paramedics needed to reset or reboot equipment to regain connectivity. And every time they couldn't get connected, the crew had to take the vehicle out of service for troubleshooting and repair. This was affecting Medic's unit hours – the number of hours ambulances were "available" for service. In addition, Medic had plans to roll out new applications and wanted a solution that would handle their current as well as future needs.

They defined their criteria as:

- A stable and reliable solution that wouldn't require EMT intervention
- A solution that would increase overall unit hours
- A supplier that wanted to work in partnership so that if Medic needed support, it would be available.
- A manageable solution that would provide a view of the mobile network, and allow them to troubleshoot potential problems



QUICK FACTS

Formed: 1978

Employees: 458, of which 338 are Paramedics, EMT's, or EMD's

Average Response Times for all Priority 1 calls in 2010 was 7:15

Medic's 911 dispatch center received 98,872 calls in 2010

Medic's 16,386 responses of in 2010 were Priority 1 in nature (the most serious)

Jurisdiction: 542 sq. miles

Serving: 1 million people

Medic Mecklenburg EMS Agency

CASE STUDY



THE SOLUTION

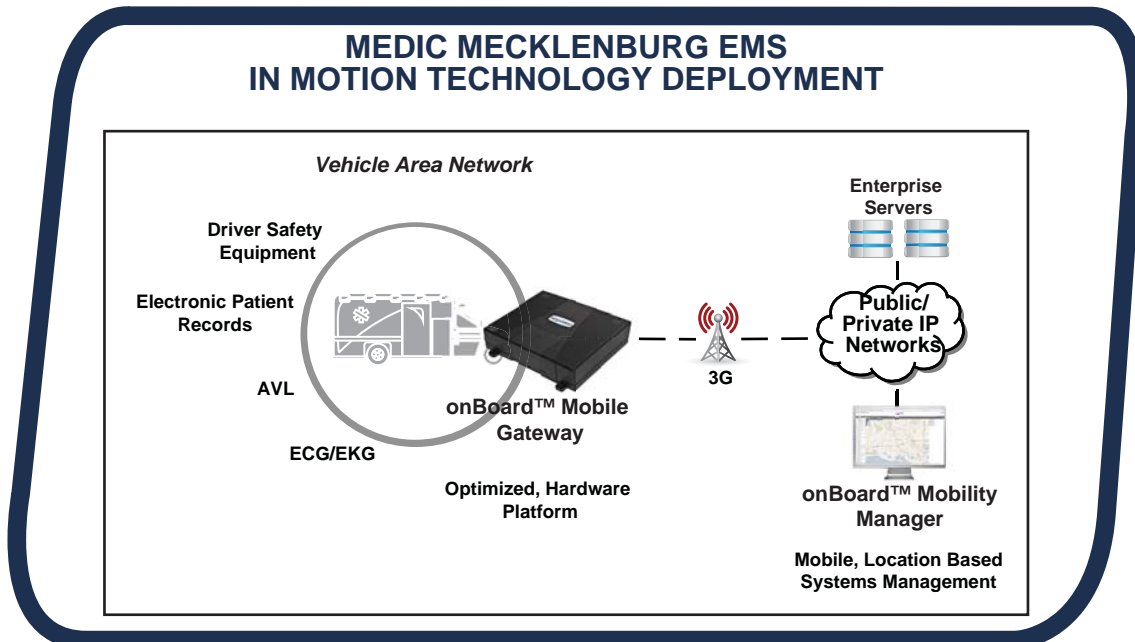
The IT department was tasked with finding a solution, so they embarked on a project of gathering information, evaluating and testing products and making recommendations.

Within weeks of testing of the onBoard™ Mobile Gateway, Medic saw an exponential improvement in operations as a result of reliability. In March of 2006, Medic deployed the Gateways for their fleet as it provided a secure, robust and flexible data communications platform for paramedics that would help telecommunicators track and communicate with the crews. It enabled them to consolidate communications and security for all their current and planned applications through a single device.

Since deployment, Medic has seen a huge improvement in “unit hours”. Before In Motion Technology, vehicles had to be taken off the road for technology to be diagnosed and fixed. Today, Medic can use the onBoard™ Mobility Manager to see the performance of their vehicles and mobile network, and can address issues “over the air”. Vehicles are on the road, ready to help patients as they should be. And In Motion Technology has been there to help Medic - “In Motion Technology’s customer support has exceeded all our expectations.”

Today, Medic has two laptops and road safety equipment running in each of their ambulances. One laptop is used for computer aided dispatch and automatic vehicle location, while the other is used for electronic patient care reporting. Deployment of the onBoard Mobile Gateways was transparent to the EMTs – the only change they saw was a remarkable increase in reliability and stability.

According to Barry Bagwell, Assistant Director of Operations at Medic, “Overall, we’re extremely pleased with a very successful implementation of the onBoard Mobile Gateways in our fleet. We’re very discriminating when it comes to technology, and In Motion fit the bill from a product and a support perspective.”



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