Advancing the Dispatch Experience

Intuitive Ambulance CAD makes debut at AMR's Connecticut dispatch center

by Mary Estes

When you're the nation's leading medical transportation company, you have to stay focused on all of your customers to keep a competitive edge. Caring for a patient in transport is a given, but there is also the business customer to consider.

American Medical Response (AMR) understands this. Besides the four million people it transports annually, AMR has to meet the needs of the vast numbers of hospitals, nursing homes, and emergency dispatch centers it serves from its more than 250 locations across the country.

One of AMR's busiest areas is Connecticut. Its New Haven operation serves the most active dispatch and healthcare facilities in the state, including 9-1-1 dispatchers, 26 public hospitals, and numerous nursing facilities, dialysis centers, and physician offices. Call volume keeps 30 computer workstations hopping during peak hours, and managing 100 employees and up to 75 ambulance units keeps supervisors on their toes 24/7.

To stay ahead of the curve and cover Connecticut's 4,845 square miles of land area, AMR Connecticut went to the source – its business customer. "As a national company, our strength is rooted in maintaining the personal touch," said Phil Coco, Eastern Region IS Director for AMR. "We know that staying competitive means meeting customer needs."

GEAC

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Call volume at AMR's New Haven (CT) dispatch center keeps 30 computer workstations busy during peak hours. The center was the test site for Geac's new EnRoute Ambulance CAD software. Shown front to back are dispatchers are Kenney Teague, Gretchen Wieler, and Pete Filippone. (Left) AMR dispatcher Stephanie Milano takes a call at the company's New Haven (CT) Dispatch Center.

It's all about the call

So AMR Connecticut surveyed its top clients, asking penetrating questions. "The number one issue with our business customers is the call intake process and the time it takes to exchange information," said Coco. Digging deeper, Coco learned the subtlety behind this customer hot button. Staff cutbacks over the last few years have left health care facilities with fewer resources and little time for dialogue when requesting patient transports.

In the medical transport field, being brief is one thing; the need to be thorough is another. AMR needed an intake system that keeps questions to a minimum, yet is comprehensive enough to satisfy reporting requirements, summon the appropriate unit, and leave nothing to chance.

Opportunity knocks

At the same time Coco was evaluating AMR's customer needs, the company that provided and supports New Haven's AMR computer-aided dispatch (CAD) approached him about participating in the design of its new CAD system.

An industry player since 1987, Tampa-based Geac Public Safety is very familiar with AMR's business environment. "We already had a highly functional text-based CAD system, and we were eager to take it to the next level," said Molly Crews, General Manager of Geac Public Safety, a division of Geac Enterprise Solutions, Inc. Collaborating with an industry leader like AMR on a system enhancement was a win-win.

Coco saw the benefits, too. So he jumped at the chance to team with the software company. He agreed to commit AMR time and resources to help Geac refine its CAD capabilities to be more operationally efficient and improve AMR's customer experience.

AMR Connecticut then became the beta test site for what is now Geac's new Ambulance CAD software, called EnRoute CAD. The new version, driven by market demand, took Geac's standard ambulance CAD to another level of functionality and made AMR Connecticut a believer.

"We had always been satisfied with the stability and reliability of our existing Geac CAD," said Coco. "Together, we knew we had the chance to vastly improve our ability to provide each customer with a completely customized experience, and at the same time enhance our on-time performance and improve our resource productivity."

Simply stated, AMR's goals for the collaboration were these:

1. To provide dispatch with a CAD computer display screen unique to each customer to remove the need for extraneous questions, and
2. To provide operational efficiencies to reduce time on task and build business proficiency.

Asking the Keyboard Users

With more than 17,000 medical professionals and support staff nationwide, AMR had a ready source of field knowledge to share with Geac. As a team, they held two-day town hall meetings attended by AMR supervisors and dispatch personnel from around the country to "hammer out the features we needed," said Coco.

"Although we are familiar with the market, we knew there was valuable information to be gained in the field," said Crews. "We wanted to hear directly from users what they were and were not using in our current software, what business demands they are facing, and what their vision is for an ideal CAD system." As Coco puts it, Geac asked "the people at the keyboard."

Among AMR's core needs were reducing time on task, using resources more efficiently, making better scheduling and 9-1-1 response decisions and meeting contract obligations on a timely basis.

"We put everything they gave us on a list," said Crews. After sorting and prioritizing, "we worked through the priorities to add their key requirements." Meanwhile, AMR Connecticut created the first wave of customers' call entry screens. Each was designed to mimic the customer's forms used to provide call details to AMR dispatch. And to speed up the intake call, customer information was pre-loaded into the screen, eliminating the need for certain questions.

Launching with Promise

The new CAD system took a year to develop. By spring 2005, the New Haven dispatch center was live with EnRoute CAD with several individualized customer display screens in place. Following the cutover, Geac and AMR worked to refine the new features, which, among other functions help AMR manage contract agreements, billing and insurance, unit staffing and utilization, and execution of dispatch recommendations. "The dispatchers' and supervisors' commitment to the process was extremely valuable during the weeks that followed," said Crews.

Because customer contract information is now part of the database, the system can track and flag events and dates unique to each customer and to AMR's internal business operations. Supervisors can keep internal records current, calibrated to flag and announce trigger dates, such as when a paramedic approaches a license renewal date, or a piece of equipment is set to expire. The feature list goes on.

- Customers' priority response times are stored in the CAD, based on the contractual agreement, for immediate access.
- Computer screens display countdown timers that automatically activate when the call comes, notated by flashing warnings signifying time on task, and terminating when units arrive on scene.
- Time-on-task records are archived to benchmark efficiencies.
- Data on callers needing special equipment are stored and automatically displayed when the call comes in, so appropriate resources are deployed.
- Billing and insurance information can be stored and interfaced with the billing system to minimize call intake questions, verification time and billing errors.
- Time-of-day and day-of-week call averages can be calculated and stored so personnel and units can be efficiently managed.
- Vehicle and equipment maintenance schedules can be established and flagged in advance of expiration.

Today, months after the launch, Coco said the outlook for the new system is so promising that five other sites in AMR's Eastern Region will be receiving the new software. "If all goes as planned, we will have the new sites installed and running by the end of the year," he said.

AMR Connecticut started with an adequate system for ambulance dispatch, he said. "What we have now is an intuitive model that is interactive and customer specific, something our customers have needed for a long time."

AMR also has a platform for building its own business proficiency directly from the CAD, aided by the CAD's ability to interface directly with records like billing and insurance, personnel staffing schedules, and key events – the type of files AMR relies on daily to operate at maximum efficiency. 911

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