



The Abaris Group

The TAG Line

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GAO Ambulance Cost Study

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The United States Government Accountability Office (GAO) released a report in May looking at variation in ambulance providers' costs throughout the country, and analyzed the extent to which Medicare payments for ambulance services cover these costs. The report is titled "Ambulance Providers: Costs and Expected Medicare Margins Vary Greatly."

Since 2002, Medicare has been phasing in the ambulance national fee schedule. The ambulance national fee schedule calls for standardized payments to providers, to reduce the wide variations in payments to different providers for the same services. The Medicare Prescription Drug, Improvement and Modernization Act of 2003 put in place temporary pay relief provisions to supplement payments to ambulance service providers under the national fee schedule for several years.

The Medicare Prescription Drug, Improvement and Modernization Act also required GAO to study ambulance service costs. Specifically, GAO was to study the extent to which Medicare payments are expected to cover ambulance costs once temporary payment

provisions on ambulance payments expire and providers are reimbursed at rates defined by the ambulance national fee schedule in 2010.

The research for this study was carried out between July 2004 and April 2007, with ambulance providers completing surveys regarding their



costs, revenues, transports, and organizational characteristics in 2004. In total 321 completed surveys were returned. A subcategory of 215 providers that did not share costs with other institutions or services was identified as the focus of this study. To put this number into perspective, there are an estimated 5,200 providers nationwide that do not share costs.

The survey studied the relationships between various provider and local area characteristics and cost per transport among the providers. Overall for participants in the study, the average cost per transport was \$415. Costs for individual providers varied

greatly, however, from \$99 per transport to \$1,218. When comparing urban versus "super rural" providers, the difference in cost of providing service was statistically significant, averaging \$538 in super rural areas and \$370 in urban settings.

Several other factors were identified that help explain this great difference in cost among various providers. These include differences in volume and mix of transports, service area (urban, rural, or super rural), productivity (measured as transports per staffed hour), and percent of total revenue derived from local tax support. Other factors differentiating the various service providers were not statistically significant at predicting ambulance costs. The researchers also noted that some communities may desire for their ambulance service to operate at a higher level of readiness or provide higher quality service in terms of equipment, vehicles, and staff, and as a community may be willing to pay more for these enhanced services.

The GAO report found that Medicare payments are approximately 6 percent below

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California Mobile Field Hospital Project

California has taken a major step towards ensuring they will be prepared to provide additional medical surge capacity to communities statewide in the event of a large scale natural disaster, avian flu outbreak, or other mass casualty event. The State of California Emergency Medical Services Authority recently awarded an \$18 million contract to BLU-MED Response System to provide the state with three Mobile Field Hospitals.

Each Mobile Field Hospital will be 23,000 square feet, with an additional 6,500 square-foot



facility designated for medical staff housing. In addition to a power generation system, HVAC system, electrical distribution system, and specialized mobile medical equipment, each hospital will include the following:

- Emergency/triage facilities
- Operating room with two operating tables
- Two intensive care units with 20 total ICU beds
- 180 ward beds
- Mobile radiology, laboratory, and pharmacy supply units
- Negative pressure isolation ward for highly infectious patients

Each hospital will house a pediatric care unit, an obstetrics/gynecology unit, an orthopedic unit, and a neurology unit.



In addition to building these 200-bed facilities, BLU-MED will also be responsible to deploy and set up the mobile hospitals to any location designated by the State of California within 72 hours of notification. When the hospitals are de-

ployed, BLU-MED will also be charged with providing catering services for patients and staff, portable water services, waste water removal, trash removal, medical waste removal, showers, toilets, laundry facilities, oxygen cylinder refill, and fuel delivery for the power generation systems.

Under a separate \$4.3 million contract, BLU-MED will provide maintenance and support services for each of the mobile hospitals. Specifically, BLU-MED is responsible for annual exercise support services, medical equipment calibration, pharmaceutical supply rotation, and deployment services.

When not in use, the portable hospitals will be stored separately in warehouses; with one in Southern California, one in the Bay Area, and one in the Sacramento region.

For more information on California's Mobile Field Hospital project, please click [here](#).

GAO Ambulance Cost Study (continued from page 1)

the average cost per transport for ambulance service providers nationwide. In “super rural” areas this difference in payment is even greater, with Medicare payments 17 percent below the average cost per transport.

Researchers could not say for sure whether Medicare payments would be higher, lower, or approximately even to costs for ambulance providers without shared costs under the ambulance national fee schedule after the MMA temporary payment provisions expire. However, they estimate that between 39 and 56 percent of providers will have average Medicare payments above their average cost per transport. Specifically for super-rural areas, they estimate that only 18 to 51 percent of super-rural providers will have average costs per transport below payments, with 49 to 82 percent actually having negative or no margins. Researchers could not determine whether or not Medicare payments would be adequate to cover the costs of providing ambulance services because this study did not take into account any changes that providers might make to control or reduce their costs in response to the national fee schedule. It is unknown whether or not the national fee schedule payments will be adequate to support access to service in super-rural areas for Medicare beneficiaries.

Based on the findings of this survey, researchers recommended that the Administrator of CMS should monitor utilization of ambulance transports to ensure that Medicare payments are adequate to provide ambulance services for Medicare beneficiaries, especially in super-rural areas where average costs were higher.

To read the complete report, please click [here](#).

Alabama Bill Proposes Statewide Trauma System

Alabama state lawmakers are considering a bill that would create a statewide trauma system. Specifically SB 278 calls for a comprehensive system with multiple components to offer coordinated trauma care throughout the state.

Currently only the Birmingham area has any sort of coordinated trauma system. Since Birmingham's system was put in place, trauma deaths have decreased by 12 percent. Lawmakers feel that a statewide effort could significantly reduce trauma deaths statewide. With no coordinated system for managing trauma patients, care is often delayed unnecessarily as patients are initially taken to facilities that cannot accommodate their injuries.

The bill calls for the establishment of a Statewide Trauma Advisory Council. This ten-member council will be responsible for assisting in the development of regulations and standards necessary for the implementation of a coordinated trauma system. The council will essentially act as consultants to the Board of Health on all matters relating to trauma care and the statewide trauma system. Additionally, the council will be charged with creating guidelines for trauma system designation, so that patients will only be transported to facilities capable of handling their injuries.

Additionally, the bill calls for the creation of a statewide trauma registry, which will collect and analyze data on the incidence, severity, and causes of trauma. This registry will then be used to improve the availability and delivery of pre-hospital care as well as hospital trauma care services. All trauma centers will be required to report data to the trauma registry.

Other elements of the statewide trauma system that will be created under this bill include regional trauma advisory councils, centralized dispatch for participating trauma centers and emergency medical services, and a State Trauma System Fund.

Click [here](#) to read SB 278 and search by bill number. For more information on Alabama's proposed trauma system, click [here](#).

Nevada Project Heartbeat

On April 20, 2007, Nevada began a statewide public-access defibrillation project. The project, titled Nevada Project Heartbeat, is the first such statewide project in the United States. The project aims to make automated external defibrillators (AED) available and accessible throughout Nevada communities, with the goal of improving an individual's chances of survival following sudden cardiac arrest.

Nevada Project Heartbeat is primarily sponsored by the University of Nevada



School of Medicine's Center for Education and Health Services Outreach and Office

of Rural Health, the Regional EMS Authority, and Humboldt County General Hospital. Specifically, the Regional EMS Authority will provide CPR and AED training and medical oversight for urban communities statewide, while Humboldt County General Hospital will train and oversee participating rural communities.



The project identified Cardiac Science Corporation as the "preferred" AED provider, although communities are free to purchase from any

provider they wish. Cardiac Science Corporation is offering special pricing for participating communities who purchase their Powerheart AEDs. Additionally, program leaders will use Cardiac MasterTrak software to manage the deployed Powerheart AEDs. Nevada Project Heartbeat will not actually provide AEDs or funds to purchase AEDs, however they will assist communities with identifying available funding sources.

Already there are several documented saves as a result of Nevada Project Heartbeat. The project is encouraging communities to place AEDs in busy, public places, and to train workers in those locations to recognize signs and symptoms of a heart attack, perform CPR, and use an AED.

For more information about Nevada Project Heartbeat, please visit the project website, at www.padprograms.com/nevada.

AMR Purchases MedicWest Ambulance

On June 11, 2007 Emergency Medical Services Corporation (AMR) announced that it has entered into a deal to purchase MedicWest Ambulance, which provides ambulance transport in the Las Vegas area. The transaction is expected to be completed in 30-60 days, after which MedicWest will be owned by a subsidiary of American Medical Response, Emergency Medical Services Corporation's healthcare transportation business.

The purchase by Emergency Medical Services Corporation is part of the company's strategy to expand its market and increase economies of scale.

More information about this purchase can be found [here](#).

Adverse Events Linked to Hospital Occupancy: Study

Hospitals throughout the country are facing financial pressure to increase efficiency, which in turn will increase occupancy and patient throughput; however a recent study published in *Medical Care* suggests that hospitals consistently operating at or above capacity may be increasing the risk of adverse events to patients.

For this study, researchers looked at two rural and two urban teaching hospitals in the United States. A random sample of records from 24,676 adult patients discharged from the medical/surgical services in these hospitals from October 2000 to September 2001 was collected. From these records, 6,841 that likely had experienced adverse events were identified; and from there 1,530 records were found to have involved a preventable adverse event.

Researchers then compared the adverse event data with daily workload at each of the hospitals, particularly looking at volume, throughput, intensity, and staffing, measured by patient-to-nurse ratios. At three of the four hospitals in the study, the occurrence of adverse events did not appear to be linked with workload. At the fourth hospital, however, which was consistently operating at or above capacity, the likelihood of an adverse event was significantly linked to the volume of admissions and patients-to-nurse ratios. Specifically, a 0.1 percent increase in the patient-to-nurse ratio led to a 28 percent increase in the rate of adverse events.



The authors of the study recommend that hospitals which regularly operate above capacity should try to redesign the way they provide care during times of high patient volume, as patient safety issues are likely to arise in these facilities during high-census times.

An abstract of this study can be found at the *Medical Care* website, by clicking [here](#).

Statewide Trauma Registry Study

The Journal of Trauma, Injury, Infection and Critical Care recently published a study that looked at the current capacity of statewide trauma registries throughout the country. The purpose of this study was to determine the feasibility of a National Trauma Registry for Children.

For the study, which was conducted in 2004, researchers carried out a telephone survey of state EMS and trauma registry managers, and collected data regarding the existence and scope of a statewide trauma registry. The findings include the following:

- 32 states have an active statewide trauma registry
- 13 additional states and the District of Columbia were planning or considering a statewide trauma registry at the time of the survey
- One state had a registry in place, but was not yet collecting data from hospitals
- Four states had no plans for a trauma registry

Of those states with active trauma registries, 27 require hospitals to

participate in data collection. Of those 27, 11 require data submission from all acute care hospitals, while 13 collect data only from trauma centers.

States collect trauma data for a variety of reasons, the most common of which include advocacy, injury surveillance, education and training, and research. Few use the data for reimbursement analysis.

The existence of statewide trauma registries means that there is a potential for this data to be compiled into a national registry; however there is concern regarding the comparability of data collected in different states. State trauma registries differ from one another with respect to participating facilities, inclusion and exclusion criteria, and extent to which trauma registries were linked with other statewide data.

This study was a follow-up of a similar study conducted in 1992. An abstract of the more recent study can be found at *The Journal of Trauma, Injury, Infection and Critical Care* [website](#).

National First Responder Day

On June 21, the Senate unanimously voted to pass S.R. 215, which establishes September 25 as National First Responder Day. The resolution was sponsored by Wayne Allard (R-Colo.), and was co-sponsored by 30 additional members of the Senate. Allard sought to establish a National First Responder Day as a way to honor those individuals who regularly put their lives on the line in order to protect their communities.

S.R. 215 has been praised by a number of organizations, including the Colorado State Fire Fighters' Association, the National Law Enforcement Officers Memorial Fund, and the National Association of Emergency Medical Technicians, as well as other individuals and organizations that recognize the great service and sacrifice that first responders offer to communities throughout the country.

To view S.R. 215, please click [here](#).



Evidence in Support of the Trauma Care Systems Planning and Development Act

On May 24, Representative Gene Green spoke to the House of Representatives about the importance of trauma systems, citing the role that coordinated, efficient, and high-quality trauma care played in the survival of New Jersey Governor Jon Corzine following a recent car crash. Mr. Green used Governor Corzine's story to stress the importance of the Trauma Care Systems Planning and Development Act, signed into law by the President only a few short weeks after Governor Corzine's crash.

Immediately following the crash on April 12, Governor Corzine was sent by helicopter to Cooper University Hospital, a level I trauma center in Camden, New Jersey. Upon arrival, Governor Corzine was met by a trauma team, includ-

ing the trauma center director, a trauma nurse, a nurse anesthetist, a respiratory therapist, and an EMT.

Although in critical condition after the crash, Governor Corzine survived as a result of eleven days of treatment in the ICU, including blood transfusions, CAT scans, and surgeries; however the most significant factor in his survival was a fast arrival to the trauma center, thanks to an organized and well-coordinated trauma system.

More information about Governor Corzine's experience with New Jersey's trauma system, including a recent *New York Times* article, can be found in Representative Green's statements in the *Congressional Record*, [here](#).

Upcoming Webinars from The Abaris Group

The Abaris Group will soon be announcing dates and times for its 2007 series of Webinars. These new Webinars will include topics important to the current healthcare environment, including the following:

- "Hot Topics in Emergency Care" (free Webinar)
- "New Medicare ED and Trauma Center Revenue Opportunities"
- "Best Practice Approaches to ED and Inpatient Throughput"
- "So You Want to be a Consultant"
- "Retail healthcare—Freestanding EDs and Retail Centers"

More information on these and other new Webinars will soon be available at www.abarisgroup.com.

To purchase a recorded version of any of The Abaris Group's previous Webinars on CD, please visit www.abarisgroup.com.



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The Abaris Group is a consulting firm that specializes in emergency and outpatient services. We provide clients with help on a wide range of topics, including strategic planning, operational improvement, and financial enhancement, to help them achieve their goals.

We pride ourselves on delivering value to our clients in the form of quality recommendations and strategies that work. To achieve this, we conduct detailed analyses, blending insight and experience from all spectrums of the healthcare and emergency care fields to meet our client's unique needs.

Whether it is evaluation of new programs, studies of existing ones or assistance with implementation, we will extend this superior level of service to you and your organization.

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