



The Abaris Group

The TAG Line

The Abaris Group | Innovative Solutions for the Emergency Care Field
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Stimulus Funds for Rural EMS

A provision of the American Recovery and Reinvestment Act (ARRA) has set aside \$19 million that will be divided between 280 communities in 39 states. These funds are part of the United States Department of Agriculture (USDAs) Community Facilities Direct Loan and Grant Programs and will be used for “acquisition, construction, renovation, or the purchase of equipment and furnishings” for community facilities. Included in this program are healthcare, public safety, and education services.

In addition, other sources will be utilized to generate \$6.9 million for the purchase of emergency services and systems, and fire and rescue equipment. The additional funds will help local communities purchase more than 120 fire, medical, and police vehicles. This portion of the stimulus effort is expected to help rural communities maintain essential functions and create or save more than 1,350 jobs. In addition,

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Surge Capacity in Mass Incidents

In light of the current swine flu concerns and the previous concerns regarding 9/11, anthrax scare incidents, SARS, and natural disasters of the past decade, emergency preparedness has dramatically increased in importance among healthcare and public health officials. Emergency incidents such as these are almost certain to recur in the future and require careful planning and coordination to mitigate losses.

A number of organizations have written reports regarding the issues of emergency preparedness and surge capacity. In 2004, the American College of Emergency Physicians (ACEP)

published “Health Care Surge Capacity Recognition, Preparedness, and Response,” and in 2006, the Institute of Medicine (IOM) discussed surge capacity in its “Emergency Medical Services at the Crossroads” report. In addition, a number of states have been proactive in instituting comprehensive emergency preparedness plans.

Despite the great deal of progress nationwide, a new report from the Center for Biosecurity at the University of Pittsburgh Medical Center (PUMC) states that we can do better. The PUMC study was funded by the DHHS

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Upcoming Webinars:

Stay tuned for the 2009 Webinar schedule.



View the [Products](#) section of our website for CDs of previous Webinars.

Ask Abaris Column:

This new section of our newsletter will publish one question from a TAG Line reader, to be answered by one of our senior healthcare consultants. Send an email with your question to:

askabaris@abarisgroup.com

TAG Website Launch Soon:

Look out for the new and improved TAG website which will be launched later this year. Some new features to be included are a blog, videos, and a secure retail site.



GAO Study Cites Lack Of Inpatient Beds As Main Cause of ED Crowding

A Government Accountability Office (GAO) study released April 2009, stated that a lack of inpatient beds is the main cause of ED crowding. The report also cited additional causes such as: lack of access to primary care, shortage of on-call specialists, and difficulties transferring, admitting, or discharging psychiatric patients in the ED. Each of these causes produces a bottleneck in the outflow of patients from the ED and can potentially result in poor quality of care and increased costs.

The GAO study is an update of a 2003 survey and report on ED crowding. The current report evaluated data from the National Center for Health Statistics (NCHS) from 2001 to 2006 and also conducted a literature review of 197 articles. During the analysis the researchers looked at three indicators of crowding: diversion, patient's leaving without being seen, and patient boarding.

The GAO also summarized the NCHS results from 2001 to 2006, showing that the number of EDs have fluctuated between 4,600 and 4,900. During the same period ED visits have increased from 107.5 million to 119.2 million. The majority of ED visits are for urgent care (37 percent), followed by semi-urgent (22 percent). Emergent cases counted for 11 percent of ED visits.

The report commented that the national diversion data appeared to be somewhat clouded, since from 2003 to 2006 the percent of hospitals on diversion decreased by almost 50 percent; however, the average number of hours on diversion increased by approximately 50 percent. The GAO reported that the NCHS could not account for the variation.

The national data on boarding was also reported to be limited and can therefore be difficult to draw many meaningful conclusions for that indicator. However, the NCHS included an ED boarding

question in their 2007 survey, so this data may improve.

To determine the major causes of crowding, the GAO reviewed 77 articles discussing factors that contribute to ED crowding, of which 45 (58.4 percent) concluded that a lack of inpatient beds was a factor. The researchers indicated that the lack of inpatient beds could be linked to competition between scheduled and ED admissions. This competition could result from the belief that ED admissions are less profitable, especially compared with surgical procedures.

The report concluded with proposed measures to assist in mitigating the root causes of ED crowding.

The study can be found [here](#).

Urgent Care Centers More Cost-Effective Than EDs

A recent survey of 436 urgent care centers concluded that urgent care centers are more cost-effective for some medical problems, than emergency departments (EDs). Urgent care centers are typically staffed by family physicians and provide common services for non-urgent and urgent conditions. The survey found that the average reimbursement for physicians in urgent care centers was \$103 per visit, compared with \$560 for ED visits. In addition, 22 percent of the surveyed centers have a basic electronic health record, which is double that of physician practices.

To compete with increasing numbers of urgent care clinics in supermarkets and pharmacies, (such as Wal-Mart and CVS), many hospitals have developed their own. The hospitals

argue that the clinics have helped them to reduce overcrowding in their EDs, while also connecting with patients who may potentially use the hospital's inpatient services in the future.

The study found approximately 8,100 urgent care centers in the country, but commented that this may be an underestimate. The clinics staff on average 4.8 physicians, and 2.4 nurse practitioners and physician assistants. The facilities see an average of 314 patients per week, with approximately 21.7 percent of them seeing over 450 patients per week. The study also found that 50.8 percent of the patients visiting the urgent care centers had private insurance.

The numbers of both urgent care centers and freestanding EDs (FEDs) are continuing to grow across the country and find their role in the healthcare spectrum. Many provide quicker access to health services and in the case of urgent care centers, provide a notable reduction in costs. Due in part to these factors, we may find that in the proceeding years both of these types of facilities will supplant functions more traditionally provided by primary care offices and hospitals.

The study authored by Robin M Weinick, Steffanie J Bristol and Catherine M DesRoches, is available [here](#).



EMS/Hospital Collaboration Helps Cut STEMI Door-to-Balloon Times

A series of 10 networks created between hospitals and emergency medical services (EMS) have managed to significantly reduce ST-elevation Myocardial Infarction (STEMI) Door-to-Balloon (D2B) times. The networks equipped EMS personnel with 12-Lead ECGs and directed the paramedics to transport patients with presumed STEMI to the nearest STEMI resource center (SRC). SRCs are hospitals that have cardiac capabilities that specifically treat STEMI cases.

A study of the 10 networks included 72 hospitals and 2,712 patients. The study concluded that almost 90 percent of the qualified patients (those with STEMI) had a D2B time of 90 minutes or less. The networks averaged 86 percent of patients with D2B less than 90 minutes, which consistently surpassed the American College of Cardiology target of 75 percent. During the study period, less than 50 percent of patients in the US were treated in under 90 minutes.

This study provides additional proof that substantial improvements in the quality of patient care can be achieved through the proper collaboration between hospitals and emergency services. The researchers hope that the success of this study will encourage other communities to look into their STEMI protocols and seek improvement through collaboration.

The source article can be found in [ACEP News](#)

Stimulus, continued

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tion to the rural-specific funds, EMS has been specifically listed as an eligible entity to receive funding from other sources, including the National Institute of Health (NIH), Department of Health and Human Services (DHHS), and other grant programs.

Congress also recently finished the fiscal 2009 appropriations that provide increased funds to some pre-hospital grants and programs. Small increases were made with both the Traumatic Brain Injury program which will receive \$1.1 million and the EMS for Children program which will receive \$600,000. Larger increases in funds were established for the Center for Disease Control and Preventions (CDCs) Preventive Health and Health Services block grant (\$102 million), which assists 16 states who currently utilize the grant to fund EMS programs and services.

For further detail on the USDA portion of the Recovery Act, click [here](#) . For the Federal government website on the Recovery Act, click [here](#) .

New Therapeutic Hypothermia Study Sets Out To Determine Best Practices for Traumatic Brain Injuries

A new pilot project will begin towards the end of this year that will focus on best practices for implementing therapeutic hypothermia for traumatic brain injuries and ischemic stroke. While there have been a number of positive animal studies as well as feasibility studies regarding the hypothermia treatment, there are currently no randomized, controlled trials confirming the positive results. In addition, there is still speculation regarding when to utilize the therapeutic hypothermia treatment, specifically which time period, post the traumatic event, is most effective.

Dr. Kees Polderman of the Utrecht University Medical Center in the Netherlands stated in an ACEP article that, "If we start cooling late, more than 8 or 10 hours after the event, we may have lost an important therapeutic window. Brain edema usually peaks around 24-48 hours, persisting up to 72 hours." In addition, "If we begin rewarming after only 24 hours, as the edema is peaking, it's very likely not to be effective."

The Eurotherm study, beginning in the fall of 2009, will provide the therapeutic hypothermia treatment to a sample of 1,800 patients with closed traumatic brain injury. At six months post injury, each patient will be assessed with the Glasgow Outcome Scale. In addition the researchers will evaluate control of intracranial pressure, length of ICU stay, 21-day Head Injury Related Early Outcome Scale, and mortality.

The source article can be found [here](#).

Survey Shows Need For ED Design and Staff Improvements

An Annals of Emergency Medicine survey of 3,562 physicians, nurses, nurse practitioners, and physician assistants, revealed that significant improvements must be made in ED design and personnel requirements. Survey participants were asked a vast array of questions ranging from environment to operations to communication. The results were that 62 percent believed that there was insufficient space either consistently or sometimes and 82 percent stated that ED volume consistently or sometimes exceeded capacity to provide safe care.

The survey report appeared in the [June 2009 Annals of Emergency Medicine](#).

Boston Initiates City-Wide AED Alert System

Starting April 22, Boston initiated the “AED Alert” program, which allows 9-1-1 call-takers to locate hundreds of Automatic External Defibrillator (AED) units across the city. Therefore, for example, if someone calls 9-1-1 for a cardiac arrest in a mall, the call-taker can alert the caller that there is a nearby AED and then instruct the caller how to use it on the cardiac arrest patient. The database will automatically notify the call-taker if the call is in close proximity to an AED and it is reportedly very specific in describing the location of the AED. For instance, the notification might say the AED is in the “1st floor lobby” or “next to men’s room”, etc.



The city hopes that this program will further lift their cardiac arrest survival rates by getting the required treatment as quickly as possible.

The source article can be found [here](#)

The Abaris Group Awarded Colorado Trauma Assessment Project

The Abaris Group recently won a bid on an extensive project for the State of Colorado’s Department of Public Health and Environment. The contract involves the development of a standardized needs assessment tool and conducting assessments of the emergency medical and trauma services (EMTS) systems of the 11 regional emergency medical and trauma advisory councils (RETACs). The project tool will also provide a basis for future development of biennial plans to address future needs and identify policies and resources for the future. The Abaris Group will work in collaboration with the Standardized (Regional) Needs Assessment Task Force (SNAP) to accomplish these goals. The project began six months ago and is slated to last for 18 months total.

Some AEDs Not Maintained Adequately

Health officials and AED owners in Illinois have become worried that the increase in distribution of AEDs in public and private facilities have not been followed by frequent maintenance checks. In McLean County, from 2001 to 2004, approximately 200 AEDs were placed throughout the County as part of their Operation Heartbeat project. Today, officials are concerned as to how many of those AEDs have been maintained.

Lack of regular maintenance of the AEDs can have obvious detrimental effects in the event that the devices are needed for an emergency. It is recommended that the AEDs are checked at least annually and includes examining the batteries, electrode pads, and looking for any appearance of damage to the device.

Lisa Weber, an RN at Epiphany Catholic Church, commented that, “In the past several years, AEDs have become almost as common as fire extinguishers.” In most cases, private companies are contracted to perform regular maintenance checks on fire extinguishers. These findings then present the question of whether public and private facilities containing AEDs should perform maintenance in a similar manner.

The source article can be found [here](#).

New Indiana Law Includes Parkinson’s As Line-Of-Duty Disability For EMS and Public Safety Personnel

Beginning July 1, 2009, the state will add benefits coverage for firefighters, EMS, and law enforcement to include Parkinson’s Disease. The law was presented to the state after Gary Coons, a firefighter diagnosed with Parkinson’s at age 33, lobbied state legislators. In 2005, he was lead investigator in a paint warehouse fire, which exposed him to a number of toxins over a 3-day period. After the Coons was diagnosed he began researching the disease and found that, “toxic exposure to burning chemicals can bring about early onset of the disease that usually strikes people in their 50s.” Coons also founded the [FirefightersWithParkinsons.com](#) website to expand the cause. Firefighters in other states have contacted Coons and are interested in passing similar legislation in their own state.

This article can be found at [EMSResponder.com](#)



Surge Capacity, *continued*

(Continued from page 1)

as part of the Hospital Preparedness Program (HPP), which has a primary goal of advancing the ability of “hospitals and healthcare systems to prepare for and respond to bioterror attacks on civilians and other public health emergencies .”

The study found that since 2002, significant gains have been made in emergency preparedness, due to several key factors, including: senior hospital leader involvement, more comprehensive operations plans, and better collaboration across hospitals, EMS, and government agencies.

However, the report concluded that the country is still largely unprepared for a large-scale emergency and that many communities continue to struggle to develop guidelines and procedural and legal frameworks for an adequate emergency response. The report also provides recommendations as to what the HPP should pursue in the future to further expand emergency preparedness programs.

The report may be viewed at www.upmc-biosecurity.org

Recent Webinars:

Audio CDs Now Available For:

Optimizing ED & Trauma Center Payments

Are EDs and Trauma centers doomed to be classic hospital money losers or are they simply *designed* to lose money?

Medicare’s 2009 Changes for EDs and Trauma Centers

In November, the CMS released the final changes for the 2009 outpatient fee schedule for Emergency Departments and Trauma Centers. This Webinar evaluates the impact and strategies for adapting to the changes.

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About Us

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.

For more information, visit www.abarisgroup.com or email subscriptions@abarisgroup.com.

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