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The Abaris Group

# The TAG Line

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## Inside this issue:



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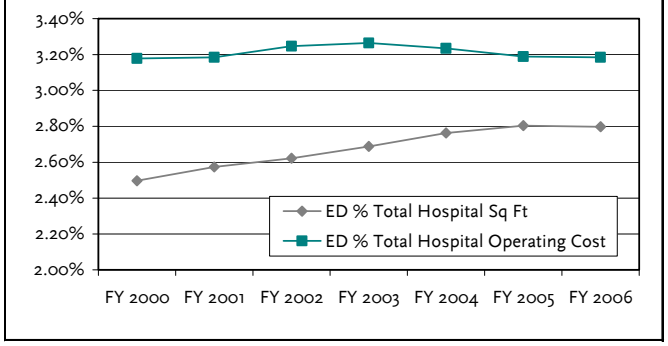
## ED Capacity Increases, Despite Decrease in Number of EDs Nationwide from 2000 to 2006

In March 2008, *Healthcare Financial Management* published a report that showed that from 2000 to 2006, emergency department services throughout the country have increased, despite the fact that there were substantial decreases in the number of hospitals and hospital beds during this same time period.

The report focused on capacity issues at short-term acute care hospitals, because the majority of EDs are located in this type of facility.

**Trends in ED Capacity and Costs, 2000-2006**




From 2000 to 2006, beds at short-term acute care hospitals decreased from 689,037 to 608,954. However, the report explains that some of this decrease does not actually represent a loss of capacity, as it can be explained by the fact that a number of smaller short-term acute care hospitals have been reclassified as critical access hospitals.

At the same time as this decrease, however, the size of EDs at short-term acute care hospitals increased by a total of about 15 percent in terms of square footage. Considering square footage per hospital, the average ED increased approximately 55.5 percent.

However, while EDs increased in size, operating costs of these EDs did not increase relative to total hospital operating costs; ED operating costs remained fairly constant at 3.2 percent of total operating costs. The report explains that this constant relative cost along with

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## Coming up: The next two The Abaris Group Webinars for the 2008 Series:

**Product Lines for Improved Patient Throughput—Part I—Making a Business Case**
Tuesday, April 29, 2008
10:00-11:30 am PST (1:00 EST)

**Product Lines for Improved Patient Throughput—Part II—Design and Successful Implementation**
Monday, May 19, 2008
1:00-2:30 pm PST (3:00 EST)

Patient throughput is the number one challenge facing hospitals in the U.S. The challenges of patient flow do not simply rest with the ED. It is the entire hospital that tends to be bottlenecked. There are a developing list of product lines that enhance a hospital's ability to ease these bottlenecks. During Part I, learn the causes of disruptions in patient flow, what product lines exist to reduce these bottlenecks, and how to make a business case for these product lines. In Part II, learn the components of each of these product lines, and how to successfully implement the product lines.

For more details and to register, visit: www.abarisgroup.com. Educate your entire staff for one low cost. Pay only **$295** per site for one Webinar or learn about our special discounts when you purchase two or more Webinars.

## Paramedics Use Swipe Cards to Measure Delays in Ambulance Off-load Times

In June of 2007, the Hamilton Emergency Service Network, in Ontario, Canada, began a program in which paramedics use swipe cards to document throughput time intervals for patients arriving in the ED. Specifically, the paramedics swipe their cards through a card reader located at the triage desk four times to automatically record the following data:

- Time of arrival
- Time patient is triaged
- Time they are informed that a bed is available
- Time of the formal transfer of care

The data collected from the swipe cards is stored on a password-protected website. The hospitals and EMS providers can log on to the website to determine where ambulances are located throughout the city and how long they are at each location.

Prior to this program, EMS providers were only able to collect data on total time from when an ambulance arrives at a hospital to when it leaves. The general belief was the there were long delays in transferring patients into hospital beds; however no data was available to support this belief or to determine just how long these delays were.

As an incentive to participate in the program, paramedics were told that if they could better track times and identify where these delays are happening, it will eventually lead to more paramedic units and less work for each individual paramedic as the need for more units would be documented. Compliance with swiping cards is currently about 70 percent. Officials are not too concerned with the missing 30 percent, however, because the data that they are collecting is still very valuable for planning purposes. They have been able to document that there really is a problem, and a real need for more vehicles and personnel.

Although this program does not actually solve any problems related to ED crowding or long offload times, it has led to a number of improvements to address these and other problems. For example, the skill set for paramedics has been expanded, as it was identified that paramedics are treating patients for longer before the hospital takes over providing care. Also, participating hospitals have looked for improvements to help facilitate patient throughput, so that space is available in the ED to accommodate incoming ambulance patients. Finally, the Hamilton Emergency Services Network is looking to develop long-term solutions to address ED crowding, which include both building new facilities to increase physical capacity and funding nurse practitioner programs to increase available staff.

In total, the swipe card program cost about Canadian $43,000 for the purchase of swipe cards and card readers. There are virtually no ongoing costs to operate this program.

More information is available in the March 2008 edition of *EMS Insider*.

## American Heart Association Calls For Expanded CPR Training

A statement released by the American Heart Association (AHA) on January 14, 2008 calls for increased efforts from healthcare providers, policy makers, and community leaders to better train and educate the public in order to improve bystander CPR.

Currently bystander CPR occurs very infrequently, as little as 15 to 30 percent of the time, and often incorrectly, despite the fact that it has great potential to help save lives. AHA's statement, titled "Reducing Barriers for Implementation of Bystander-Initiated Cardiopulmonary Resuscitation," discusses options for reducing mortality rates for victims of sudden cardiac arrest.

> "CPR is an inexpensive and readily available technique that can save lives. Therefore, the number of people trained in CPR must increase, and the quality of CPR provided by every rescuer must improve."
> – AHA Scientific Statement

Survival rates, measured as the percent of patients who survive through hospital discharge, vary significantly between different communities; survival rates are as low as less than one or two percent in places such as Los Angeles, Chicago, and Detroit, but as high as 9 to 15 percent in Chicago and Seattle. According to AHA's statement, some communities have implemented widespread CPR training and have reported survival rates as high as 49 to 74 percent. However, the average survival rate of out-of-hospital cardiac arrest victims is only about six percent in the U.S.

AHA makes the point that it is important to provide CPR on a cardiac arrest victim as soon as possible, as the chance of survival decreases by between 7 and 10 percent for each minute that treatment is delayed, and it typically takes EMS providers 7 or 8 minutes to arrive. Therefore, witnesses of cardiac arrest have the opportunity to drastically increase the victim's chance of survival by performing CPR right away.

The AHA has found that when bystander CPR is performed, it is often done incorrectly. Chest compressions are typically too shallow to be effective, are interrupted too often, and rescue breathing is performed at an excessive rate.

AHA's statement includes a series of recommendations that aim to improve both the quality and quantity of bystander CPR. These recommendations include the following:

1. Local, state, and federal government agencies should offer CPR training



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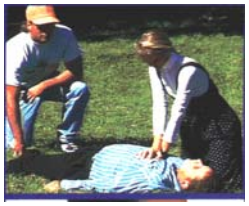
## AHA Recommendations, *continued*

*(Continued from page 2)*

and education in schools and government-funded health facilities

2. EMS and 9-1-1 providers should create and support dispatch-assisted CPR programs
3. CPR instructors, EMS leaders, and government agencies should work to educate the general public about Good Samaritan laws, as well as the fact that bystander CPR has a dramatic potential to save lives



4. EMS system providers and CPR instructors should focus efforts on rigorous CPR performance and efforts to improve the quality of resuscitative care provided, and CPR training programs should include objective quality assessments for CPR certification
5. Improving methods of CPR education, improving skill retention, and developing creative methods to widen the scope of current CPR training should be the focus of research funds

Additionally, on March 31, 2008, AHA issued a statement supporting the use of chest compression only CPR for bystanders who witness sudden cardiac arrest, rather than the traditional CPR involving both chest compressions and mouth-to-mouth breathing. Eliminating the mouth-to-mouth requirement may help improve the rate of bystander CPR, as it removes a common barrier to intervening.

AHA's statement regarding bystander CPR can be found here. The statement regarding compression-only CPR can be found here.

## ED Capacity Increase, *continued*

*(Continued from page 1)*

increases in capacity might result in part from increasing visits to the ED for non-emergent primary care purposes.

The report, titled "Trends in Emergency Department Capacities and Costs," can be found here.

## Survival Rates Significantly Higher at Level I Trauma Centers Than Level II Trauma Centers

A recent study found that survival rates for severely injured patients are significantly higher at Level I versus Level II trauma centers. Because both Level I and Level II trauma centers must adhere to strict requirements regarding staffing and equipment in order to be prepared to treat those patients with the most severe injuries, many people believe that there is little or no difference in the quality of care received at hospitals with these designations.

The study compared patient records at Swedish Medical Center from the four-and-a-half years after upgrading to a Level I trauma center with the five years prior to receiving this designation, when it held a Level II trauma center designation. Specifically, researchers compared mortality data for 9,511 patients who were admitted to the hospital from January 1, 1998 to December 31, 2002 with 7,902 patients who were admitted from January 1, 2003 to March 31, 2007.

The study found the following differences between the two time periods:

- 2.50 percent of all patients died after the facility was upgraded to a Level I facility compared with 3.48 percent prior to the upgrade
- 8.99 percent of severely injured patients died after upgrading compared with 14.11 percent before upgrading
- For patients with severe head injury, mortality decreased from 14.51 percent to 9.96 percent after upgrading
- The mortality rate for patients with severe chest pain decreased from 11.27 percent to 7.14 percent after the facility became a Level I center
- Mortality for patients with severe abdominal or pelvic injury decreased from 17.05 percent prior to Level I designation to 6.76 percent after
- For patients who developed acute respiratory distress syndrome during their hospital stay, mortality decreased from 26.87 percent to 9.51 percent after the facility upgraded to a higher level trauma designation

The study found that even for patients who did not seem to be very sick in the field, but who had head, chest, abdominal, pelvic, or other serious injuries, chances of survival could be improved by triaging them to a Level I rather than a Level II facility. This is particularly true for patients with multiple injuries.


The study's authors believe that a severely injured patient should be taken to a Level I facility even if that facility is further away than a Level II facility; however, they have not been able to determine how great the distance can be in order for the patient to receive care soon enough to still benefit from the higher-level trauma center's services.

Both Level I and Level II trauma centers are capable of treating patients with severe injuries. The greatest difference between Level I and Level II trauma centers is that Level I trauma centers have an academic focus, as they are required to be affiliated with a teaching or residency program, and must be actively involved in research. Aside from that, there are few differences in staffing and equipment requirements.

An abstract of this study can be found in the *Archives of Surgery*.

## SERVE Act Proposes $1,000 Tax Credit for Volunteers

If enacted, the Supporting Emergency Responders Volunteer Efforts (SERVE) Act would provide a refundable federal tax credit of $1,000 to volunteer firefighters and EMS workers.

Specifically, the SERVE Act would provide a $1,000 tax credit to members of volunteer fire departments of EMS providers who are active for the full year. Those volunteers who are not active for the full year will receive a pro-rated tax credit for the portion of the year which they were working.

The purpose of this bill is to reward volunteer firefighters and EMS providers for the service they provide, as well as to attempt to boost recruitment and retention of volunteer first responders. Volunteer first responders incur a number of expenses relating to calls and training which go uncompensated. This tax credit attempts to offset some of these costs.

Congressman John Hall (D-NY), a cosponsor of this legislation, feels that the proposed tax credit is a worthwhile investment to preserve health and safety in America, because volunteer first responders save an estimated $37.2 billion annually in taxpayer money.

The SERVE Act was introduced in the House of Representatives (HR 5700) on April 3, 2008, and currently has bipartisan support. Previous attempts have been made to pass this legislation since it was first proposed in 2005.

For more information on this legislation, click here. To view the full text of the SERVE Act or check its status, visit the Library of Congress website and search for "HR 5700."

## Study Looks at Trends in On-Call Specialist Compensation

The *Annals of Emergency Medicine* recently published a report of a two-year longitudinal study of the on-call physician coverage crisis in Oregon.

For the study, researchers sent an email-based survey to the CEO at each hospital in the state. The survey asked questions relating to on-call stipends and guaranteed pay, difficulties with maintaining call for specific specialties, loss of trauma designation and specialty care capabilities, and opinions regarding potential policies for addressing problems with providing on-call coverage. The survey was originally sent out in 2005, and again in 2006, in order to obtain two years of data. Altogether 77 percent of the state's hospitals responded to both surveys.

Survey respondents reported paying stipends to 54 different specialties in 2006. The average stipend paid to these specialties was $18,324 in 2006. Total per hospital stipend payments increased by 84 percent between 2005 and 2006, from $227,000 to $487,000 per hospital. This increase in annual stipends was greatest for larger hospitals, with 90 beds or more, where annual stipends increased by 174 percent from 2005 to 2006.

In addition to stipends, there are several other ways in which hospitals compensate specialists for providing on-call coverage. One example is offering a guaranteed rate of pay, which ensures that the specialist will be paid even if

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## The Wakefield Act to Reauthorize EMSC Program

On March 13, 2008, the House Committee on Energy and Commerce, Subcommittee on Health accepted by voice vote H.R. 2464, which will extend the Emergency Medical Services for Children (EMSC) program. The bill, also called the Wakefield Act, was originally introduced May 23, 2007. It will now be brought to the House of Representatives for debate and consideration. The Senate version of the bill, S. 60, is still being considered by the Committee on Health, Education, Labor, and Pensions.

This bill aims to amend the Public Health Service Act to reauthorize the EMSC program, in order to ensure continued efforts to reduce morbidity and mortality in children through the EMSC program. The program supports improvement efforts for the quality of emergency care provided to children. EMSC is currently the only federal program that focuses specifically on improving the pediatric components of emergency medical care, and works to promote the nationwide exchange of pediatric emergency medical care knowledge and collaboration.

The EMSC program was created in 1984, as a result of evidence showing that major gaps exist between the quality of emergency care received by children and adults. EMSC has worked to address these gaps, and has funded a number of improvement initiatives throughout the country. There has been a lot of improvement in pediatric emergency care because of the EMSC program; however there are still gaps that need to be addressed thus the need for the EMSC program remains.

The Wakefield Act would reauthorize the EMSC program for five years and calls for additional funding during this time period.

For more information on the EMSC program, please click here. To check on the status of the bills, visit the Library of Congress website and search for "the Wakefield Act."

## Study Looks at Trends in On-Call Specialist Compensation, *continued*

*(Continued from page 4)*

they care for an uninsured patient. This and other non-stipend payments accounted for about 33 percent of the total annual payments for on-call coverage according to the 2006 survey.

Seventy-seven percent of reporting hospitals said that they experienced "some problem" with maintaining on-call coverage in 2006. In fact, 67 percent said that they lost continuous coverage for at least one specialty between 2004 and 2006.

Those respondents that experienced some difficulty with on-call coverage were then asked their opinion regarding policy options to address these problems. Most felt that having a state supported reimbursement program for the uninsured and reducing the liability threat associated with emergency patients would be somewhat or very effective, while fewer believed that improved regional cooperative coverage or a state-based transfer call center would be effective policies.

Although the study's authors caution that these results might not be representative of the on-call problem nationwide, as Oregon has a relatively small number of hospitals, the majority of which are located in rural areas, and the on-call coverage crisis might not be as severe in Oregon as in other parts of the county, they can provide some insight to the growing national problem of maintaining on-call coverage. Additionally, they noted that the prevalence of stipends reported in this study is consistent with several recent national estimates, including estimates from the American Hospital Association and American College of Emergency Physicians.

The report can be found on the *Annals of Emergency Medicine* website.

Issues of on-call physician coverage are very important to hospitals, as more and more physicians are unwilling to take call. A number of factors contribute to this decreased willingness to take call, including inadequate reimbursement, lifestyle issues, and malpractice liability concerns.

In March, The Abaris Group held a Webinar titled "ED Physician On-Call Crisis – Solutions for Today and the Future" which discussed possible solutions to the shortage of specialists willing to provide on-call coverage. Specifically, Webinar attendees learned how to determine the appropriate amount of financial compensation for on-call specialists, as well as best-of-breed non-financial strategies to ease the burden for on-call physicians. A recording of this Webinar is available for purchase on The Abaris Group's website.

ABARIS GROUP *Innovative Solutions for the Emergency Care Field*


## 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.

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