



The Abaris Group

The TAG Line

The Abaris Group | Innovative Solutions for the Emergency Care Field
700 Ygnacio Valley Rd, Ste. 270 | Walnut Creek, CA 94596
888.EMS.0911 | www.abarisgroup.com

Inside this issue:

- The FedEx Way and Lessons for Healthcare **1**
- U.S. Emergency Care Health System in Poor Condition **2**
- Study Shows Nearly Half of all Florida ED Physician Care **3**
- American Medical Response Goes Public **3**
- Trauma Surpasses Heart Disease as Nation's Costliest Medical Problem **3**
- Mortality Significantly Lower at Level I Trauma Centers **4**
- EDs Divert an Ambulance Once Every Minute **4**
- Event Highlights **5**

For breaking news, visit www.emsnetwork.org.



Find The TAG Line and much more at www.abarisgroup.com.

To subscribe, email subscriptions@abarisgroup.com.

The FedEx Way and Lessons for Healthcare

Mike Williams, MPA/HSA

Senior Faculty, Urgent Matters, The Robert Wood Foundation

Mike is the President of The Abaris Group and has consulted with more than 800 healthcare providers.

Imagine a business that is virtually empty of staff during the day but grows to 9,000 employees for just a four-hour period beginning at 11:30 pm each night. Picture 300 miles of conveyor belts whisking 450,000 packages to sorting bags daily. This is the environment at the Federal Express "hub" in Memphis Tennessee.

It is said "systems do exactly what they are designed to do." FedEx has long embraced the concept of "zero defects" and has engineered their entire business around "no errors".

There are important parallels to the healthcare system, including EDs. Delivering quick, efficient service to a high volume of ED patients during peak periods is achievable according to Brian Janz, Ph.D. at the FedEx Institute of Technology at University of Memphis. "It is instructive to look at FedEx's production systems and practices as a potential 'best practices' model for EDs". He, along with The Regional Medical Center at Memphis have done

just that with a special grant from the Robert Woods Foundation's Urgent Matters Project. With Dr. Janz, "The Med" has studied and developed a working model for the use of radio frequency identification chips (RFID) to track location information and time intervals between patient events to determine the gaps and where resources are needed and/or being utilized. FedEx uses dedicated processes and staff for all activities that affect their entire cycle and allocate these resources based on precise prediction models. While they have a 24-hour operation, their peak activity period is only 5-6 hours per day. FedEx has demonstrated that this forecasting provides a production methodology that meets or exceeds their customer demands on a daily basis.

In contrast, many EDs operate without precise forecasting models and have difficulty meeting routine patient volume needs let alone peak loads. High unpredictable volumes you say? FedEx's solution would be to use forecasting models to predict ED volume. In the event of unique swings (e.g. a bus crash), redundant ED systems would

Announcing the 2006 Webinar Series

The Abaris Group announces the 2006 series of Webinars on improving emergency care resources throughout the country. This year's topics include:

- High Leverage ED and Inpatient Flow Strategies (3/23/06)
- Survival Strategies for the Air Medical Business (4/19/06)
- Breakthrough Revenue Strategies for ED and Trauma Providers (6/14/06)
- Contemporary Product Lines for Serving the Episodic Market—MinuteClinic/Free Standing EDs (9/13/06)

The Abaris Group announces a Free Webinar:

"Hot Topics and Strategies in Emergency Care"

February 21, 2006
10:00 am 11:30 am
(pst)

This Webinar is Free to all participants

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 Webinars.

U.S. Emergency Care Health System in Poor Condition, Reports American College of Emergency Physicians

In the first national state-by-state analysis, U.S. emergency medical care received an overall grade of C-minus by the [American College of Emergency Physicians](#) (ACEP), reports *USA Today*. The ACEP task force analyzed government data and other sources to grade all 50 states and the District of Columbia on 50 measures (Appleby, *USA Today*, 1/10). The measures were broken into four categories: access to emergency care, quality and patient safety, medical liability environment, and public health and injury prevention (Connolly, *Washington Post*, 1/10).

According to ACEP's report, California earned the highest grade, with a B-plus, while Arkansas took home the lowest overall grade, with a D (O'Brien, *Baltimore Sun*, 1/10). No state received an overall grade of an A, and more than half of the states received below-average grades on measures for availability of hospital beds and emergency specialists, immunization rates, injury-prevention programs, medical malpractice laws, and 911 telephone systems (Connolly, *Washington Post*, 1/10).

Since 1993, the number of emergency departments in the U.S. has decreased by 14 percent while the number of emergency patients has increased, according to the analysis



(AP/St. Paul *Pioneer Press*, 1/10). In addition, an increasing number of uninsured patients is turning to the ED to seek primary care. ACEP also finds that hospitals have decreased ability to transfer emergency patients to hospital beds. According to the American Hospital Association, U.S. hospitals closed 103,000 medical-surgical beds and 7,800 intensive-care beds during the 1990s. The *Atlanta Journal-Constitution* reports that the analysis also "sounds an alarm on nurse shortages, ambulance diversions, low levels of state financial support and severe emergency room overcrowding" (McKenna, *Atlanta Journal-Constitution*, 1/10). The ACEP report concludes "The results are sobering. The national emergency health care system is in serious condition, with many states in a critical situation" (Levine, *Washington Post*, 1/10).

For related news, visit www.acep.org

The FedEx Way and Lessons for Healthcare

(Continued from page 1)

be in place. These systems include on-call teams, cross trained hospital staff, or ambulance "smoothing" techniques, designed to reallocate patients during these temporary peak times.

FedEx also uses a tracking system that carefully monitors each task over the work flow process. Variations (e.g. unexpected higher demand, equipment failures or staff performance) are monitored and reacted to immediately to avoid missed shift targets. Most EDs do not have patient tracking systems and those that do often don't conduct real-time resource reallocation.

"There is huge potential for EDs and other health care providers to learn from the FedEx experience," says Bruce Siegel, the director of the Robert Wood Johnson Foundation's Urgent Matters Project (www.urgentmatters.org). "Rigorous demand forecasting as well as dedicated processes and staff for peak periods are the keys to success. These concepts could be adopted by EDs across the country."

Abaris Group Selected to Conduct Healthcare Safety Net Study for San Diego County

After a competitive process, The Abaris Group was recently selected to conduct an extensive healthcare safety net study for San Diego County.

This study, the largest of its kind ever conducted, will include a long-range needs assessment of the healthcare safety net serving San Diego county residents including hospital inpatient, hospital outpatient, emergency, trauma, primary and specialty care and physician needs as well as an assessment of funding needs for those services for the San Diego region over the next 20 years. The focus for this assessment will be on estimating the service and funding needs (demand) and on identifying strengths, weaknesses, opportunities and challenges to meet those needs. Upon conclusion of this work, a comprehensive report will be prepared and forwarded to the County and key stakeholders. Go to the [project website](#) for more information on the study.

American Medical Response (AMR) Goes Public

Emergency Medical Services Corp., the parent company of American Medical Response and EmCare, began trading on the New York Stock Exchange (NYSE) on Dec. 16, 2005. Under the symbol, "EMS", Emergency Medical Services Corp. offered 8.1 million shares of common stock at \$14 per share. In its NYSE filings, EMSC wrote "AMR has an 8 percent share of the total [U.S.] ambulance services market and a 21 percent share of the private provider ambulance market, with net revenue approximately twice that of our only national competitor," reported the Denver Post on Dec. 11, 2005. AMR employs 17,000 people across 250 locations in 33 states. [EMS](#) opened at \$14.00 and closed at \$13.43 a share as of Feb. 8.

Trauma Surpasses Heart Disease as Nation's Costliest Medical Problem

The [Agency for Healthcare Research and Quality \(AHRQ\)](#) released its annual [Medical Expenditure Panel Survey](#), revealing that total spending on trauma injuries now exceeds medical spending on heart disease. Between 1996 and 2003, total spending on trauma injuries, resulting from automobile accidents, violence, and other emergencies, doubled approaching a level near that of heart disease. In 1996, heart disease led the nation as the highest-cost medical problem with insurance companies, patients, and government programs spending about \$58 billion for hospital care, doctor visits, home-health services, and drugs. During that same year, trauma care cost an estimated \$37.1 billion. By 2003, however, trauma medical spending had grown to \$71.6 billion, surpassing the \$67.8 billion spent on heart conditions, according to AHRQ.

For related articles, visit: www.ahrq.gov

Study Shows Nearly Half of all ER Physician Care Goes Uncompensated

A new [University of South Florida](#) study shows that overcrowding will worsen as the number of uninsured patients coming into Florida's emergency rooms increases.

USF researchers took a survey of 188 Florida hospital emergency physician groups about the amount of uncompensated care they provided in 1998. 83 physician groups that responded provided substantial uncompensated care which ranged from 26 to 79 percent with an average of 47 percent.

Uncompensated services are those for which the group is not paid, such as charity care for patients who cannot afford to pay, bad debt from patients who choose not to pay their bills, and denial of payments issued by health plans.

The study also found that the majority of the physician groups providing free care tended to have their practices located in urban areas which serve high populations of Medicare and the uninsured.

The law states that all patients who come through the emergency room must be examined whether they can offer compensation or their level of needed emergent care. The problem lies in the fact that while the number of the uninsured increases, the limitations of what Medicare will reimburse a physician group decreases, the study shows.

The research seems to suggest that an emergency physician group's ability to shift costs from uninsured to insured patients is quite limited. Another problem is that emergency physician's groups do not have access to non-emergency services which usually help to subsidize unfunded care.

In essence the groups are being told that they are mandated to provide care, and are first responders,

but they are not given the provisions to pay for that care.

The USF study does not specifically address why the cost of uncompensated care has been rising at a higher rate than unfunded emergency department visits, but does offer some insight:

- Emergency physician groups that provide a higher percentage of uncompensated care work in tertiary care hospitals with higher intensity of sick patients such as trauma, cardiac or stroke centers.
- Emergency physician groups may try to raise prices to offset the portion of their services that are uncompensated, but the attempt to shift cost does not necessarily result in higher reimbursement rates from third-party payers.

The Orlando based [Florida College of Emergency Physicians](#) represents more than 1,100 emergency physicians in Florida and worked with USF on this study. The study has been published in the October-December 2005 issue of "[Health Care Management Review](#)."

For related news, visit www.fcep.org



Mortality Significantly Lower at Level I Trauma Centers

A recent study published in the [New England Journal of Medicine](#) (NEJM) shows that patients treated at Level I trauma centers are more likely to survive than patients with comparable injuries who are treated at non-trauma centers, the Associated Press reports.

Funded by the [Centers for Disease Control](#), researchers at [Johns Hopkins Bloomberg School of Public Health](#) compared mortality data from patients who were treated at 18 hospitals with a Level 1 trauma center and 51 hospitals without a trauma unit. Patients were between the ages of 18 through 84 and had moderate to severe injuries.

After researchers adjusted for "differences in the case mix," they found that the in-hospital mortality rate was 7.6 percent for patients treated in trauma centers, compared with 9.5 percent for patients treated at non-trauma centers. Furthermore, the one-year mortality

rate for patients treated in trauma centers was 10.4 percent compared with 13.8 percent for patients treated at non-trauma centers.

The researchers note that the benefits of trauma center treatment "varied according to severity of injury" and that differences in mortality rates were "primarily confined to patients with more severe injuries." The study, according to the researchers, confirms that mortality risk is "significantly lower" at trauma centers than at non-trauma centers and support "continued efforts at regionalization." The researchers caution, however, that because the study focused on centers in cities and suburbs, the results may not apply to rural hospitals.

(MacKenzie et al., *NEJM*, 1/26; *AP/Orlando Sentinel*, 1/25).

EDs Divert an Ambulance Once Every Minute

A study conducted by the [National Center for Health Statistics](#) (NCHS) reveals that on average throughout the country, an ambulance is diverted to a different hospital once every minute. The study attributes the diversion to overcrowding in the ED and bed shortages. Researchers who conducted the study defined a hospital diversion as any time that an ED closes its doors to an incoming ambulance and instead redirects it to other hospitals.

According to the [AP/Washington Post](#), the researchers carried out the study in 2003 by collecting data from 405 hospital EDs in the U.S. (or about 10 percent of all U.S. EDs). They drew their conclusions by analyzing the amount of time that hospitals reported being on diversion and the number of ambulance arrivals during that time. The study reports that about 500,000 ambulances were diverted from their original destinations because hospital EDs were too crowded or lacked enough critical-care beds.

Researchers also found that air and ground ambulances delivered 14 percent of all ED patients of whom 16.2 million arrived by ambulance. About 70 percent of ED patients had urgent conditions that required care within one hour. In addition, more than 60 percent of patients brought to EDs by ambulances were at least 45 years old and about 40 percent were 65 or older.

Although the study did not examine the effects of diversion on patients' survival, researchers believe that diversions most likely have a negative impact because of the chain reactions they produce. Benjamin Sun, lead author of the study remarks, "...when a hospital decides to go on diversion, nearby hospitals subsequently go on

(Continued on page 5)

The Abaris Group continues with its:

2006 Webinar Series on Improving Emergency Services

The Abaris Group announces its 2006 Webinar series designed to assist emergency, trauma and other healthcare providers with effective strategies to use in the hospital and out-of-hospital environments. Led by experts in the field, the Webinars will provide participants with tools and tactics to use in the everyday healthcare setting.

The Abaris Group announces a *Free* webinar:

"Hot Topics and Strategies in Emergency Care"

February 21, 2006
10:00 am—11:30 am (pst)

For more details and to register, visit [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 register for two Webinars.

If you've missed our previous Webinars, visit [www.abarisgroup.com](#) to purchase a recorded version on CD.



EDs Divert an Ambulance

(Continued from page 4)

diversion as they become overwhelmed by the increase in incoming ambulance transports."

Catharine Burt, a researcher with NCHS, adds, "Most of the people that arrive by ambulance are older, and they have more serious medical conditions, so the fact that they're being delayed,...whether it's two minutes or five minutes or fifteen,...I can only assume that's going to have some impact" (Stobbe, AP/Washington Post, 2/7).

For related news, visit www.cdc.gov/nchs

Event Highlights

Workshop for Practitioners and Researchers Involved in Risky Industries

The Coalition for High Reliability Organizations is hosting a conference to address problems faced by organizations that work in environments characterized by uncertainty, threat, and time pressure.

The conference seeks to create an opportunity for managers, researchers, regulators, and operators to share practice-based approaches.

Conference participants will discuss and design bottom-up management models that can identify risk and provide solutions that involve power sharing, authority migration, and continuous problem solving.

The conference will take place **April 2-4, 2006** at the Ontario Hilton in

Ontario, California. The registration fee is \$450 per person.

Included among the conference sponsors are:

- American Medical Response, Inland Fire Division, CA
- San Bernardino City (CA) Fire Department
- Haas School of Business, University of California, Berkeley
- Division of General Pediatrics, Loma Linda University
- California Association of Healthcare Facilities

For more information and registration details, visit:

www.highreliability.org



A B A R I S G R O U P

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.

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

Subscriptions:

Would you or someone you know like to subscribe to updates when new newsletters are released? To subscribe, simply email subscriptions@abarisgroup.com with your email address and the word *subscribe*.

Contact Us

The Abaris Group
700 Ygnacio Valley Rd, Ste 270
Walnut Creek, CA 94596
Phone: (888) EMS-0911
Fax: (925) 946-0911
Email: subscriptions@abarisgroup.com

www.abarisgroup.com