



The Abaris Group

The TAG Line

The Abaris Group | Innovative Solutions for the Emergency Care Field
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Case Study Shows Dramatic Reduction in Ambulance Diversion

Mike Williams, MPA/HSA
President, The Abaris Group

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

A recent paper published in *The American Journal of Emergency Medicine* reveals how a large urban region significantly reduced its incidence of ambulance diversion.

The paper, entitled "Ambulance diversion reduction: the Sacramento solution" (*Journal of Emergency Medicine*, Vol 24, Issue 2, March 2006), describes the development, implementation, and impact of a region-wide program to decrease ambulance diversion hours.

(The original analysis, action plan, and change implementation process was conducted under contract by The Abaris Group in collaboration with the hospitals and Hospital Council of Northern and Central California.)

The study's authors collected data on ambulance diversion hours from 17 hospitals in the greater Sacramento, California region from January 2001 to December 2003. In May 2002, a comprehensive program was implemented to

reduce ambulance diversion.

A 74 percent decrease in ambulance diversion hours was realized after comparing the 17-month period before implementation of the program to the 19-month period after implementation. This decrease took place in spite of overall increases in ED census, hospital admissions from the ED, EMS arrivals to the ED, inpatient hospital census, and the overall Sacramento population.

The results of this study show that healthcare systems (pre-hospital and hospital) working together, using best practices can sharply reduce ambulance diversion hours even in large urban regions. The success in the greater Sacramento County (CA) region was in spite of increasing volumes and acuity of patients. The work described in this study may serve as a model for other regions that lack an organized plan for ambulance diversion.

To view the paper's abstract, click "Article via ScienceDirect" on the following [link](#). Visitors who subscribe to [ScienceDirect](#) will have access to the article's full text.

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:

- Survival Strategies for the Air Medical Industry (4/19/06)
- High Leverage ED and Inpatient Patient Flow Strategies (5/16/06)
- Breakthrough Revenue Strategies for ED and Trauma Providers (6/14/06)
- Contemporary Product Lines for Serving the Episodic Market (9/13/06)

The Abaris Group announces its next Webinar:

"Survival Strategies for the Air Medical Industry"

April 19, 2006
10:00 - 11:30 am
(PST)

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.

State Creates Proposal to Fund Trauma Network

Georgia legislators are considering several strategies to bring more attention and funding to the state's trauma centers that care for about 10,000 seriously injured people a year. Many of these trauma centers are struggling financially.

Several trauma-related bills have passed their chambers, while both the House and Senate have proposed \$4 million in funding to begin partially reimbursing trauma centers for uncompensated care that they provide to the poor and uninsured.

Sen. Cecil Staton, a Republican from Macon, has proposed creating a commission that would be responsible for establishing and maintaining a statewide trauma network to coordinate care and direct patients to the most appropriate trauma center. For example, someone shot in the chest might go to Grady Memorial Hospital, while someone with a broken leg from a car accident could go to a less-advanced center.

Staton estimates it would cost \$25 million to \$30 million to create the statewide network.

Legislators are considering funding options such as additional fines on moving violations like running red lights or on offenses such as driving under the influence, Staton said.

In addition to Staton's proposal, another resolution to create a trust fund to help pay for trauma care passed the house with bipartisan support.

(Moriarty, *Atlanta Business Chronicle*, 3/17)

Related information:
[Society of Trauma Nurses: Legislative News](#)



Use of Telemedicine Grows to Reduce Costs and ED Visits

The Associated Press recently reported that an increasing number of healthcare providers are using telemedicine to remotely monitor patients' vital signs. This trend, according to advocates, helps "save valuable time and money" in providing care to patients who need frequent medical attention. Most physicians agree that telemedicine technology "shouldn't replace face-to-face" medical visits. Still, the president of the [American Medical Association](#), claims that the technology can "greatly enhance the patient-physician relationship" by providing patients with continuous access to medical advice.

Telemedicine encompasses a broad array of tools and equipment including basic kiosks that transmit blood pressure and readings to a port monitored by a nurse and advanced audiovisual devices that allow physicians to "listen to everything from a patient's heartbeats to lung waves."

Today, nearly 3,500 hospitals, clinics, schools, and other facilities use telemedicine equipment, an increase from 2,000 only six years ago. Experts say that this shift is helping to reduce unnecessary ED visits and hospital admissions. In fact, a study conducted by [Kaiser Permanente](#) examined two groups of 100 patients and determined that patients who used telemedicine technology decreased hospitalizations by 200 days between May 1996 and November 1997. In another study run by the [Eddy Visiting Nurses Association](#), telemedicine reduced ED visits by 29 percent and overall hospitalizations by 37 percent.

According to the [American Telemedicine Association](#), the [U.S. Department of Veterans Affairs](#) seeks to double the number of patients using telemedicine at home to 20,000 by next year.

(Choi, AP/Long Island *Newsday*, 3/12)

Abaris Group Conducts Healthcare Safety Net Study for San Diego County

Efforts are underway to perform 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. Also included in the study is 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. The study will be conducted employing in-depth data analysis and obtaining input from stakeholders via Town Hall meetings, one-on-one interviews, and focus groups. Upon conclusion of this work, a comprehensive report will be prepared and forwarded to the County and key stakeholders. For more information on the study, please go to www.abarisgroup.com and click on the [Project Sites](#) webpage.



University Receives \$4.7 Million for Trauma Center

Bill Richardson, the governor of New Mexico, recently announced a funding package worth \$37 million for the [University of New Mexico Health Sciences Center](#) (UNMHSC). The package is the result of a summit that the Governor held in December to determine ways to improve access to health care.

Included in Governor Richardson's budget is \$4.7 million in recurring trauma funding for New Mexico's only Level I trauma center. This represents UNMHSC's portion of a larger trauma package the Governor is recommending.

"We heard from hundreds of people at the Health Sciences Center Summit and many had excellent ideas," remarked Governor Richardson. "We are committed to maintaining the highest quality instruction at the School of Medicine while also supporting New Mexico's premier public hospital. The Health Sciences Center plays a vital role in the healthcare of all New Mexicans and deserves this level of commitment."

(New Mexico Office of the Governor Press Release, 1/25)

Related Information:
[The International Trauma Studies Program at New York University](#)

MinuteClinics Reduce Load at Emergency Rooms

Reflecting a national trend toward more convenient and expedient treatment of minor medical problems, six "MinuteClinics" have opened at CVS pharmacies around Nashville, Tennessee within the past year.

MinuteClinics are typically located within retail pharmacies and are staffed by nurse practitioners who are licensed to treat common illnesses and write some prescriptions.

Because MinuteClinics are not staffed by doctors, there are limits on the treatment people can get. However, conveniences such as extended hours and shorter wait times as well as cheaper prices are making them an appealing alternative to walk-in urgent-care centers and doctors offices.

"We can treat probably 20 percent of what people go to their doctor for. It's all the things that tie up a physician's office—a lot of strep throat, cuts, pink eye," said Cindy Culpepper, manager of MinuteClinic operations in Nashville.

Hospital officials say they are hoping MinuteClinics will help save ERs for real emergencies, possibly reducing costs for everyone.

Critics point out that there are drawbacks to "McMedicine."

Some health officials argue that major health problems sometimes display only minor symptoms. A headache, for instance, could be a sign of a stroke. Health officials say doctors, nurse practitioners, are best trained to recognize these more challenging symptoms.

In addition, there is a treatment hierarchy among health-care facilities. MinuteClinics can treat many common conditions, such as bladder infections and bronchitis. Ur-

gent-care centers can care for those types of ailments, as well as more serious problems, such as simple broken bones, but not life-threatening emergencies. Emergency rooms are set up to treat a full range of conditions.

A visit to a MinuteClinic is often a fraction of what it would cost to visit an urgent-care center or an emergency room with most MinuteClinic visits costing \$50, compared to \$100 at some urgent-care centers and hundreds of dollars at emergency rooms.

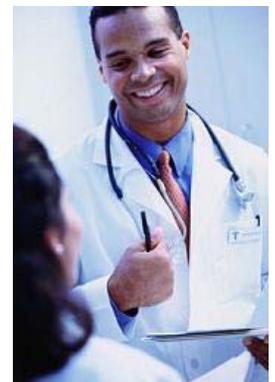
Savings are achieved through staffing, space, and equipment. On average, nurse practitioners earned \$69,000 in 2003, while doctors typically earned much more. In addition, MinuteClinics do not take up much physical space which is rented from the store.

Because MinuteClinic costs are lower, health insurers have embraced the concept. Some, in fact, are encouraging patients to use the clinics by lowering the co-pay.

"The biggest benefits are that it's cheaper and it fits into most people's busy lifestyle of today," said Culpepper.

(Pinto, *The Tennessean*, 3/14)

For more information, please visit: www.minuteclinic.com





Emergency Departments Show Poor Performance in Pediatric Emergencies

According to a team of researchers at the [Johns Hopkins Children's Center](#) and [Duke University Medical Center](#), a third of North Carolina's hospital emergency departments failed to properly stabilize seriously injured children during mock trauma simulations. 35 of North Carolina's 106 EDs participated in the study. Among the 35 EDs, five were designated trauma centers (out of 11 in North Carolina), and 30 were located in community hospitals. A report in the March issue of *Pediatrics* states that the results probably also apply to hospitals across the country.

While researchers warn that the observations during mock codes do not necessarily represent performance in a real health emergency, the study's results suggest that hospital EDs are not fully prepared to deal with pediatric emergencies, says lead author Elizabeth A. Hunt, MD, MPH, Assistant Professor of Anesthesiology and Critical Care Medicine at Johns Hopkins.

Hunt and her colleagues staged "mock codes" by using life-size child mannequins. They presented each ED team with a brief description of the patient's symptoms, appearance, and vital signs. Researchers then observed and critiqued the team's performance on 44 stabilization tasks such as evaluating an airway, administering fluids, and ordering appropriate tests.

None of the departments scored perfectly, says Hunt. While some mistakes were common, certain failures were more worrisome than others. Of the 35 EDs studied, for example, 34 failed to properly administer dextrose to a child in hypoglycemic shock (a life-threatening sharp drop in blood sugar). In addition, 34 of 35 failed to correctly warm a hypothermic

child. 31 out of the 35 also failed to order proper administration of IV fluids and personnel in 24 out of 35 either neglected or failed to access a child's bloodstream through a bone, a critical alternate method of rapidly delivering fluids and medicines to sick children whose veins may be constricted due to hypothermia or blood loss.

The researchers were surprised to find that emergency medicine staff failed to carry out safe patient transport procedures. Only 12 of the 35 hospitals prepared appropriate medications, monitoring equipment, and personnel needed to transport a child safely within the hospital. According to Hunt, the observation sheds new light onto why transportation within the hospital is high-risk for patients.

In spite of the failures, says Hunt, the departments successfully executed many of the 44 mock code tasks including: calling for appro-

priate members for assistance, performing initial airway assessment, initiating bag-mask ventilation, ordering appropriate imaging tests, and carrying out an initial vital signs assessment.

Commenting on the "mock codes", Hunt admits "There is no definitive evidence to say whether performance during simulation reflects performance during actual events." She adds however that "This study gives us very specific targets for attempting to improve stabilization procedures for children." For example, Hunt suggests periodic drills to identify recurrent patterns that reveal areas most prone to error.

(Medical News Today, 3/9)

For more information, please visit: <http://www.hopkinschildrens.org/>

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 its upcoming Webinar:

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If you've missed our previous Webinars, visit www.abarigroup.com to purchase a recorded version on CD.



NIH Tests Waist-Packs to Monitor ED Patients

The [National Institutes of Health](#) has sponsored a \$3.1 million trial at Boston-based [Brigham and Women's Hospital](#) where nurses and physicians are using waist packs to continuously monitor ED patients' vital signs and immediately locate them in the waiting room if their conditions change, reports the *Boston Globe*. For the project—which is a joint effort of Brigham and Women's Hospital, [Harvard Medical School](#), and the [Massachusetts Institute of Technology's Computer Science and Artificial Intelligence Laboratory](#)—hospital staff will issue 10 waist packs containing “sensors, transmitters, and tracking gear” to patients waiting in the hospital's ED, allowing unit workers to continuously monitor patients' blood-oxygen level, heart rate, and

movement. The waist packs contain three-lead electrocardiograms and finger sensors that detect patients' readings and send them to a personal digital assistant, which sends them to a server that “displays the information for nurses to monitor.” Ultrasound transmitters built into the waist packs also send information to receivers placed in ED walls, hallways, and restrooms. The receivers then pass on the signals to computers for storage. One ED physician at Brigham and Women's Hospital who is facilitating the pilot project says the waist packs will help medical staff “respond better to codes”. If successful, the monitors may be produced commercially for hospitals with large ED volumes or for use during major disasters.

(Rowland, *Boston Globe*, 3/20)

Event Highlights

May 3-4, 2006

[Managing Evacuation: Ripple Effects of Terrorism and Natural Disasters](#), a summit organized by the [International Association of Emergency Managers](#), will be take place in Shepherdstown, W. Virginia—about 70mi NW of Washington, DC. The summit will address the logistics, politics, and consequences of large-scale evacuations and will bring together disaster management, homeland security, and emergency management professionals.

May 14-20, 2006

[National EMS Week](#) is sponsored by the [American College of Emergency Physicians](#). Emergency Medical Service Week aims to bring together local communities and medical personnel to promote safe practices and to recognize those who serve on medicine's “front lines” by providing day-to-day lifesaving services.



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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