REPORT FROM A ROUNDTABLE DISCUSSION

Meeting the Challenge of Emergency Department Overcrowding/Boarding

American College of Emergency Physicians®
PANELISTS AT AMERICAN COLLEGE OF EMERGENCY PHYSICIANS’ ROUNDTABLE DISCUSSION: "MEETING THE CHALLENGE OF ED OVERCROWDING/BOARDING

Dr. Frederick Blum / President-Elect / American College of Emergency Physicians
Dr. Brian Keaton / Board of Directors / American College of Emergency Physicians
Dr. Arthur Kellermann / Board of Directors / American College of Emergency Physicians
Dr. Robert Schafermeyer / Past President / American College of Emergency Physicians
Dr. Sandra Schneider / Board of Directors / American College of Emergency Physicians
Dr. Robert Suter / President / American College of Emergency Physicians
Gordon Wheeler / Associate Executive Director, Public Affairs / American College of Emergency Physicians
Dean Wilkerson, JD, MBA, CAE / Executive Director / American College of Emergency Physicians
Caroline Steinberg / Vice President, Trends Analysis / American Hospital Association
Paul Speidell / Assistant Director, Federal Affairs / American Medical Association
Dr. Robert Thomas / Medical Director for Clinical Affairs / CareFirst-BlueCross Blue Shield
Dr. James Chamberlain / Medical Director/Emergency Medicine / Children's National Medical Center
Patricia Howard / President / Emergency Nurses Assoc.
Jeff Micklos / Vice President/General Counsel / Federation of American Hospitals
Trent Crable / Chief Operating Officer / George Washington University Hospital
Eric Larson / Board of Directors / Joint Commission for the Accreditation of Healthcare Organizations
Dr. Brent Asplin / Medical Director/Emergency Medicine / Regions Hospital, St. Paul, MN
Dr. Bruce Siegal / Director / RWJ Foundation
Dr. Bruce Auerbach / Chief/Emergency Services / Sturdy Memorial Hospital, MA.
OVERCROWDING AND BOARDING HISTORICAL PERSPECTIVE

The inter-related issues of emergency department overcrowding and boarding have been the subject of a great deal of discussion, culminating in this latest roundtable discussion "Meeting the Challenges of Emergency Department Overcrowding/Boarding." The roundtable is the latest in a series of high level meetings designed to help understand the causes, implications and define solutions to ED overcrowding and boarding.

For the September 2000 National Congress on the Health Care Safety Net the American College of Emergency Physicians (ACEP) invited key stakeholders such as the American Hospital Association (AHA), American Public Health Association (APHA), Health Insurance Association of America (HIAA), Families USA, Congressional and Regulatory Officials, and The Institute of Medicine (IOM). Subsequent meetings such as SAEM Consensus Conference on the Safety Net in May 2001 brought together a trio of agencies implementing the IOM safety net report; the Agency for Healthcare Research and Quality (AHRQ), Health Resources and Services Administration (HRSA) and the Assistant Secretary for Planning and Evaluation (ASPE).

The AHRQ Task Order Project defined two main goals, to develop consensus measures of system capacity and to design a system capacity monitoring tool. In 2003, Senator Baucus (D-MT) requested a study of ED crowding and ambulance diversion. The report issued by the General Accounting Office (GAO 03-460) found that emergency department crowding is most severe in areas with large populations, with nearly one in 10 hospitals diverting ambulances to other hospitals more than 20 percent of the time (5 hours a day). The report said emergency departments are clearly under strain, but that the problem is systemic and cannot be solved in the emergency department alone.

Other federal agencies that have studied overcrowding and boarding include the Center for Medicare and Medicaid Services (CMS) and the Centers for Disease Control and Prevention (CDC). Those agencies take a somewhat narrower approach, focusing on EMTALA and bioterrorism issues respectively.

Private foundations have also taken an interest in the issue. The Kaiser Family Foundation, the Commission on Medicaid and the Uninsured, and the Robert Wood Johnson Foundation have examined the causes of crowding. These groups concluded that the problem affects everyone, that essential emergency care cannot be taken for granted, overcrowding and boarding result in a lack of access for our sickest patients and concluded that policymakers, providers, and payers cannot ignore the problem.

In October 2004, the discussion moved from the theoretical when the Annals of Emergency Medicine presented scientific evidence of the adverse impact of overcrowding and boarding on the quality of patient care. The study (Emergency Department Crowding and Thrombolysis Delays in Acute Myocardial Infarction) demonstrated that heart attack patients treated in emergency department experiencing crowding were 40 percent more likely to experience a major delay before receiving a thrombolytic (clot-busting) drug.

Discussion and dialogue continue and the Institute of Medicine is preparing a report on the future of Emergency Medicine, to be released in April 2006.

It is in this context that the roundtable discussion "Meeting the Challenges of Emergency Department Overcrowding/Boarding" is presented.

Sincerely yours,

Robert E. Suter, DO, MHA, FACEP
President
If you haven’t been to a hospital emergency room lately, here’s what you might find:

A 68-year-old man lies on a stretcher in a hospital hallway. Even though he was admitted to the hospital two days ago, there’s no bed for him. He can’t get to the bathroom and has soiled himself. The hospital staff is too busy to get him food. He slides off his stretcher. The bright lights and constant noise make it hard to rest.

At another hospital, a 5-year-old boy lies on a stretcher for 12 hours, waiting for an inpatient bed. He is crying, upset, and afraid. He wants to go to his room so he can sleep, but there’s no place for him. He’s disrupted by the loud overhead page and jangling telephones.

A man in his twenties with a bad headache comes to the E.R., but is dismayed by the long line in the waiting room. He simply leaves because he worries he’ll be there all night and won’t be able to get up in the morning for work. The next day, his co-workers see that he is very ill and bring him back to the emergency department. He later dies of meningitis.

An elderly woman with severe diarrhea and dehydration shares a room with a man on the other side of a curtain. As she improves, she spends the night in the hall. She must use a bed pan with only a curtain for privacy. The lights are on all night. Staffers are slow to answer her call bells. She tries to use the bathroom, but finds a long line of patients.
In hospitals all over the country, emergency departments are severely overcrowded – with dire consequences: delays in care, difficulty in providing quality care, and patient discomfort and dissatisfaction. "It has multiple effects, including prolonged pain and suffering for patients, long emergency department waits and increased transport time for ambulances," says Dr. Robert Suter, president of the American College of Emergency Physicians and emergency department medical director at Spring Branch Medical Center in Houston.

Overcrowding also leads to staff burnout. Veteran nurses are abandoning emergency nursing. One completely left the field of nursing; another found a more appealing job as night nurse at a prison.

The American College of Emergency Physicians, a medical specialty organization with more than 23,000 emergency physicians, recently convened a roundtable discussion called "Meeting the Challenges of Emergency Department Overcrowding" to examine the crowding crisis and possible solutions. The conference featured hospital leaders, nurses, physicians, EMS providers, and researchers — all of whom want patients to receive the best emergency care. ACEP is grateful for funding for the conference from the U.S. National Highways Traffic Safety Administration and to Emergency Medical Services Children, a national initiative designed to reduce child and youth disability and death due to severe illness and injury. ACEP is committed to improving the quality of emergency care through continuing education, research and public education. Headquartered in Dallas, Texas, ACEP has 53 chapters representing each state, as well as Puerto Rico and the District of Columbia. A Government Services Chapter represents emergency physicians employed by military branches and other government agencies. ACEP also has an office in Washington, D.C., which advocates and communicates on behalf of its members. The issue of overcrowding goes to the core of ACEP's goals: One of the organization's value statements is that "Quality emergency care is a fundamental individual right and should be available to all who seek it." Addressing overcrowding also is one of the major issues confronting hospitals, healthcare delivery systems, and emergency services, as those institutions try to better serve patients.

Crowding affects everyone – young, old, rich, poor. It is happening in cities, suburbs, and rural areas. It occurs at teaching and non-teaching hospitals. "Overcrowding affects all people regardless of insurance status, age, gender and ethnicity," says Dr. Robert Schafermeyer, a past president of the American College of Emergency Physicians and associate chair of the emergency department at Carolinas Medical Center in Charlotte, N.C. "Children and adults are affected. There is a misperception that just because you have health insurance that you will not be affected by overcrowding or have a delay in being assigned and going to your inpatient bed. This truly does affect us all."

**WHAT IS OVERCROWDING?**

The experts at the ACEP roundtable agreed on several definitions: overcrowding "exists when the institutional resources available are insufficient to meet the basic service needs of emergency patients." The experts said boarding, occurs when "a patient who could or should be receiving care in an inpatient setting remains in the emergency department." Telltale signs of crowding are:

- patients being treated in hallways
- hospitals sending away or diverting ambulances
- patients boarded in emergency departments due to lack of inpatient beds
- patient care does not meet quality standards of the community
WHY ARE AMERICA’S EDS SO STRAINED?

In a nutshell, says Caroline Steinberg, vice president of trends analysis for the American Hospital Association: “We have rising demand and reduced capacity.”

First, more and more people are going to the emergency department. According to the federal Centers for Disease Control, people made nearly 114 million visits to emergency departments in 2003 – the highest number ever. That’s 4 million more than the previous year. The greatest increase came from adults ages 65 and older, who are more likely to have chronic medical conditions that take more time to diagnose and treat. Another large group of patients in emergency departments have no health insurance, but they do have complicated medical conditions, often because they are not getting primary care.

At the same time, capacity has shrunk. There’s been a 14-percent decrease in the number of emergency departments since 1993. Cuts in reimbursement from Medicare, Medicaid and other payers, as well as payments denied by insurers, have reduced hospitals’ capacity. Hospitals are operating far fewer inpatient beds than a decade ago. During the 1990s, hospitals lost 103,000 staffed inpatient medical/surgical beds and 7,800 ICU beds. “People felt hospitals needed to reduce medical expenditures and costs,” says Dr. Bruce Auerbach, chief for emergency services at Sturdy Memorial Hospital in Attleboro, Mass., near Boston. “The move was reduce, reduce, reduce. The feeling was less was better and smaller was better.” The result was fewer beds are available for admissions from the emergency department. The healthcare system no longer is able to deal with sudden increases or surges of patients who need care.

The nursing shortage exacerbates matters. That likely will get worse as the shortage of registered nurses is expected to hit 1 million by 2020. “It’s hard to do psychosocial counseling when you are resuscitating someone behind a curtain,” says Patricia Howard, president of the Emergency Nurses Association.

Another complication stems from hospitals that have closed psychiatric units. Many of those patients wind up in the emergency department because there’s no place else for them to go. Dr. Brent Asplin, medical director of the emergency department at Regions Hospital in St. Paul, Minn., recently worked the Saturday overnight shift when two men with psychiatric problems came to the emergency department. “They were still in the ER when I left on Monday,” he says.

Another complicating trend is that increasingly, hospitals are being built without emergency departments, says Steinberg of the hospital association. Facilities, such as surgical and orthopedic centers, are growing by 30 percent a year – but without emergency departments.

The bottom-line: More patients but fewer hospital beds. The result is a practice known as “boarding,” in which patients are held or “boarded” in emergency departments waiting for inpatient beds in the hospital.

When these patients are held in emergency departments, doctors and nurses are tied up caring for them and are unable to treat additional patients.

When things get so backed up in emergency departments, hospitals alert ambulances that they can’t handle anymore patients. EMTs must take ill patients to other hospitals. This practice is known as “ambulance diversion.” Last year, nearly 70 percent of urban hospitals went on diversion, and 46 percent of all hospitals sent ambulances away, according to a 2004 survey by the American Hospital Association. Nearly 40 percent of hospitals said the biggest cause was a lack of critical care beds.

In a word, it’s gridlock.

GRIDLOCKED AIRPORTS AND HOSPITALS

Dr. Arthur Kellermann, chair of emergency medicine at the Emory University School of Medicine in Atlanta, attempted to dramatize what he describes as the “absurdity” of the current situation to the experience an air traveler might receive while flying into a busy airport:

“Imagine that you are flying into Reagan National, but all the airport’s gates are full.

“Now imagine that rather than dealing with the situation, the airport manager instructs his air traffic controllers to make inbound flights park on the runways, and inform those that are on final approach to ‘land somewhere else.’

“Now, imagine that in response to complaints about diversion, the airport manager tells pilots to go ahead and land, but be careful to dodge the planes parked on the runway.

“When you and your fellow passengers express concern about the safety of this strategy, you are informed that no one has crashed...yet.

“If an airport manager made decisions like these, you’d think he or she had lost his mind. If you knew that the same thing was happening at Dulles, LaGuardia, Kennedy, Hartsfield-Jackson, O’Hare, LAX, Seattle-Tacoma, and other major airports around the country, you’d wonder why the FAA wasn’t involved.

“Yet this is precisely what is happening around the country with ED crowding.

“By default, if not by design, we’ve allowed the
most time-critical area of the hospital – the emergency department – to be gridlocked with admitted patients who are waiting for an inpatient or ICU bed. Rather than ask other parts of the institution to double up or alter their pace of operations, we park admitted patients “on the runway” in the emergency department and expect ER physicians, nurses, patients, and family members to deal with the consequences. It’s unconscionable.

How does that fictional nightmare airport scenario play out in real-life in different hospitals around the country?

Take Rochester, New York, a bustling metro area of nearly 220,000 people. In 2000, the region had six hospitals. Today, there are four. Meanwhile, emergency department visits have skyrocketed. All hospitals are brimming at full capacity. All hospitals board inpatients in their emergency departments. Dr. Sandra Schneider chairs the department of emergency medicine at the University of Rochester Medical Center, also known as Strong Memorial Hospital. In 2001, her department treated 55,000 patients. Today, that number has nearly doubled to 93,000. The hospital treats mostly insured, white-collar patients. Each night, about 140 patients are squeezed into an emergency department built with 59 beds. Every room has two patients – with 27 more beds in the hall. On average, the hospital holds about 25 inpatients overnight in the emergency department – and more than 40 during the day. Doctors see patients in waiting rooms. Many days, her department has the largest number of inpatients. Most patients who are admitted to the hospital don’t get a bed for the first day they are in the hospital. “I’m not proud to take care of patients in the hallway,” says Dr. Schneider. “Unfortunately our story is not unusual. Crowding is not a problem in urban, poor county hospitals. It is in every hospital.”

It’s also a problem in Morgantown, West Virginia, a small town of nearly 27,000 people, where Dr. Frederick Blum practices and is associate professor of emergency medicine at the West Virginia University School of Medicine. There is no other hospital to divert ambulances to. “The nearest hospital is some 80 miles away in Pittsburg,” says Blum, who is president-elect of the American College of Emergency Physicians. “There is a misconception that this is an urban, inner-city problem. This problem has extended to every part of the country.”

Even at brand new hospitals. Blum recalls visiting a new hospital in the Northeast where “the paint wasn’t even dry,” and the hallways already were equipped with outlets for oxygen, as if the planners already knew that emergency department crowding was a given.

At Blum’s hospital, the problem has taken a toll on staff, especially a core group of nurses with the experience and calm to handle disasters. “In my practice, those nurses are gone,” says Blum. “They went to work worn out and just left emergency medicine.”

In Akron, Ohio, Dr. Brian Keaton works as attending physician in the emergency department at Summa Health System and, like other emergency doctors, he faces wrenching decisions about finding space for seriously ill people. One recent night, all of his hospital’s intensive care beds were filled. Yet, Keaton received a call about an incoming helicopter carrying a patient with a serious head injury. Dr. Keaton faced an anguishing practical and moral dilemma that other emergency doctors increasingly face. Do you turn away a seriously injured patient? If not, where do you treat him? Dr. Keaton had no place for the critically injured patient, yet he felt compelled to take him. For Dr. Keaton, the overcrowding has gotten worse every year, and he worries about the future. “We will see a disaster greater than what any terrorist can do,” he said.

EVERYONE IS FED UP

Not surprisingly, the public is displeased with the overcrowding. Seven out of 10 Americans believe emergency departments were approaching a crisis due to overcrowding, according to a recent poll commissioned by the American College of Emergency Physicians. Two-thirds said boarding should be used only as a last resort in extreme cases, such as natural disasters or epidemics.

If the public is unhappy about emergency department crowding, doctors themselves are even more frustrated that so little has been done to ease the problem. “Four years after September 11 and two years after the SARS outbreak in Toronto, we continue to talk but not do anything about this problem,” fumes Dr. Kellermann. “It persists because it is easier and cheaper to tolerate it than to fix it. At a time when we are supposed to be concerned about ‘homeland security’ and the risk of bioterrorism and emerging epidemic diseases, the federal government has completely ignored the issue.” Dr. Eric Larson is a board member of the Joint Commission for the Accreditation of Healthcare Organizations, an independent, not-for-profit organization that evaluates and accredits more than 15,000 health care organizations and programs in the United States. He agrees that inertia has allowed overcrowding to persist: “This is an intolerable situation we are tolerating in this country.”

SOLUTIONS GO BEYOND THE EMERGENCY DEPARTMENT

But there are solutions to the problem, and at the recent ACEP conference, many steps were discussed. “Crowding is not the disease. Crowding is a symptom,” says Dr. Blum of West Virginia. “It is a complex problem, but it has solutions that extend outside the emergency department.”
As Dr. Asplin notes, “It is a hospital-wide problem.”

At the heart of the problem, says Dr. Suter, is “a pervasive financing system that favors elected medicine. We have a public financing system that encourages hospitals not to offer emergency departments.” Dr. Kellermann put it even more bluntly: “Elective admissions pay better than emergency admissions. Emergency admissions are disproportionately uninsured and Medicaid. The incentive as an administrator is to keep elective admissions moving and limit emergency admissions... The economics of this issue are driving the problem.”

Dr. Bruce Siegel directs the Robert Wood Johnson Foundation’s Urgent Matters program (www.urgentmatters.org), which began in 2002 to help hospitals eliminate emergency department crowding. The project seeks more efficient ways to move patients through hospitals. Working with 10 hospitals around the country, the project found that hospitals can move patients more efficiently without significant costs, thus relieving crowding in emergency departments.

Physicians agree that a critical ingredient to efficiency is a commitment from a hospital’s top leadership. “There needs to be recognition from the top-down leadership that this is a problem,” says Dr. Auerbach at Sturdy Memorial Hospital. He says that after he complained to his hospital CEO about crowding and boarding, an agreement was made that both the vice president of nursing and the director of emergency medicine would be called if there was no bed for a patient within an hour and a half of admission. In other words, there would be more accountability. Another step was to hold bed meetings at the beginning of every shift to review the lay of the land. A case manager was assigned to specific physicians to ask, “What is the plan for this patient?” His hospital also tried to educate patients early about discharge procedures, which sometimes can slow down the movement of patients.

ACEP experts oppose the blanket elimination of diverting ambulances to other hospitals, but they agreed that communities should minimize the use of this practice by setting high standards for when it is employed. The community also should be informed about when its hospitals are resorting to diverting ambulances. One doctor suggested that a public notification system, much like a tornado warning, should alert the public about hospitals on diversion.

---

**STRATEGIES THAT WORK**

Across the country and even the world, hospitals are implementing strategies that work. Among them:

- Hospitals are developing protocols to operate at full capacity
- Hospitals are expanding their capacity to handle a sudden increase or surge in inpatients
- In Israel, hospitals put beds in all inpatient hallways during national emergencies
- Some hospitals, such as Sturdy Memorial, are improving accountability for a lack of beds with direct reports to senior hospital staff
- Hospitals are setting up discharge holding units for patients who are to be discharged. That way, they don’t tie up beds that could be used by others.
- Set up internal staff rescue teams
- On busy days, some hospitals in nearby communities help each other
- Some medical centers are trying to do a better job of scheduling elective surgeries
- Seek physician leadership and cooperation
- Set up one to one case management
- Hospitals are trying to minimize delays in transferring patients
- Some hospitals support new pay-for-performance measures, such as reimbursing hospitals for admitting patients and seeing them more quickly and for disclosing measurements and data
- Some EMS community disaster departments are monitoring hospital conditions daily
- Institute definitions of crowding, saturation, boarding by region with staged response by EMS, public health, hospitals
- Hospitals are seeking best practices from other countries that have eased emergency department crowding
- Hospitals are trying to improve their technology to share information internally
NEW IDEAS ON THE HORIZON

In addition to these strategies, experts at the American College of Emergency Physicians' conference agree innovative ideas should be explored to solve the crowding crisis. Among them:

- Create and expand the use of clinical decision units
- Use case managers to facilitate care and discharge
- Expand areas of care for admitted patients. In-hospital hallways would be preferable to ED hallways. If 20 patients are waiting for admission and if there are 20 hallways, putting one patient per hallway would be preferable to putting all 20 in the ED, preventing others from accessing care.
- Observation units can provide flexibility in the healthcare system and should be used for patients who stay less than 23 hours.
- Hold “huddle” meetings with managers from all units to discuss bed management.
- Collect data to measure how patients move through the hospital
- Assess artificial vs. natural variables in the system to look for the predictable rates of admits and plan for them
- Define stages of saturation and plan staged response
- Address access to primary care and issues to facilitate patient care
- Offer staggered start times and creative shifts that would offer incentives to those that couldn’t work full time or for those who would benefit from having a unique work schedule
- Doctors should work to improve physician leadership
- Certificate of need applications for new hospital programs should be denied until emergency department crowding is addressed
- Hospitals should learn from other industries and adopt their effective practices that are applicable to healthcare and in particular to the emergency department.
- Study industries that deal with queuing and how people move through systems
- Policymakers need to improve the legal climate so that doctors aren’t forced to order defensive tests in hopes of fending off lawsuits
- Communities that are growing rapidly should make sure they build hospitals to handle the growth
- Doctors need to work with their patients to educate policymakers about the access and crowding problem
- Policymakers need to pass universal health insurance that includes benefits for primary care services
- Communities need to increase the number of facilities and improve access to quality care for the mentally ill
- Emergency medical care available to all regardless of ability to pay or insurance coverage should be treated as an essential community service that is adequately funded.
- Congress needs to increase spending for hospital-based medical first responders in federal homeland security legislation

Experts agree there’s too much at stake if the crowding crisis goes unsolved. “This problem endangers and jeopardizes lives,” says Dr. Kellermann. “And we simply cannot allow that to happen.”