

Hospital emergency departments (ED) represent a critical entry point to our health care delivery system. The number of ED visits has increased by 15 percent since 1990. By 1998, 1 out of every 5 people had at least one emergency department visit. Admissions through the emergency room accounted for an estimated 40 percent of all hospital admissions. While utilization and volume have gone up, the number of emergency departments has dropped. The result is greatly increased pressure on the remaining EDs.

Emergency departments are an important resource for all communities, but EDs play a special role in providing care for traditionally underserved populations—the poor, the uninsured, certain minority groups, and rural residents—who often have trouble accessing other sources of care.

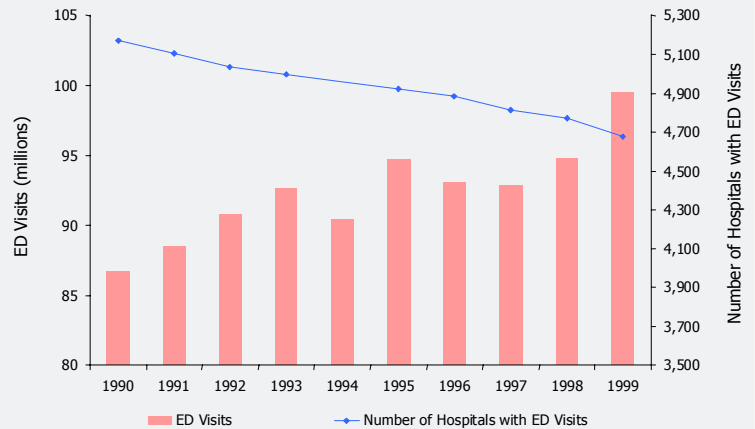
The Emergency Medical Treatment and Labor Act (EMTALA) recognizes the essential role of hospital emergency departments and requires that emergency services be available to everyone. Under EMTALA, hospitals are required to screen all patients seeking emergency services to determine whether an emergent condition exists and, if so stabilize the patient. New requirements under Medicare outpatient prospective payment extend EMTALA screening and stabilization requirements to off-campus hospital outpatient departments.

While EMTALA plays an important role in ensuring access to emergency services, this mandate is largely unfunded. There is no federal program to reimburse hospitals and physicians for emergency services provided to the uninsured with the exception of Medicaid-eligible undocumented aliens. Medicaid reimbursement for emergency services is often well below cost, and managed care plans often deny claims for emergency services.

This issue of TrendWatch examines the role of hospital emergency departments in providing essential access to care and examines some of the challenges hospitals face in providing this critical community service.

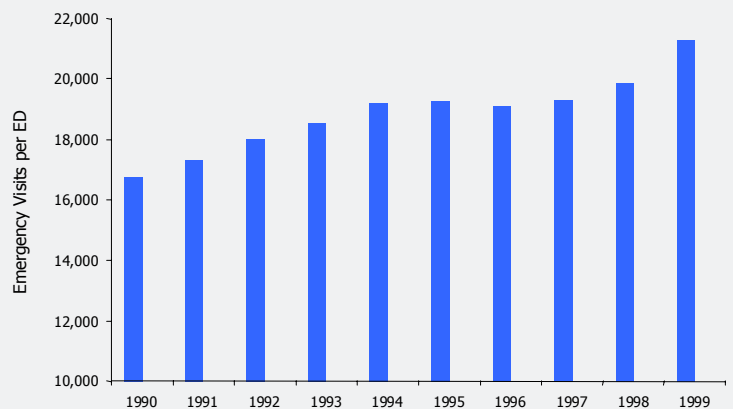
During the 1990s, growing numbers of emergency visits in fewer hospitals...

Chart 1: Emergency Visits and Hospital Emergency Departments, 1990-1999



...led to sharp volume increases in emergency departments.

Chart 2: Average Emergency Department Volume, 1990-1999



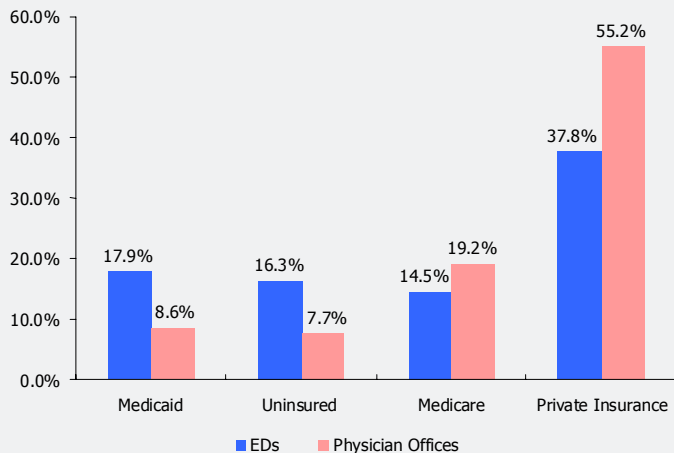
Quote from the Field

"Although the ED has been termed the 'provider of last resort' for health care, it is often the only resort. The ED is unique in its care for rape victims, rabies prophylaxis, trauma stabilization, and toxicology. The ED and emergency medical services are also the ultimate source of disaster preparation and response..." Patrick M. O'Brien in *Defending America's Safety Net*

Emergency Departments Provide an Important Access Point for Traditionally Underserved Populations

EDs serve more than twice the load of Medicaid and uninsured patients as physician offices.

Chart 3: Percent of Total Visits by Expected Source of Payment, Physician Offices vs. EDs, 1998

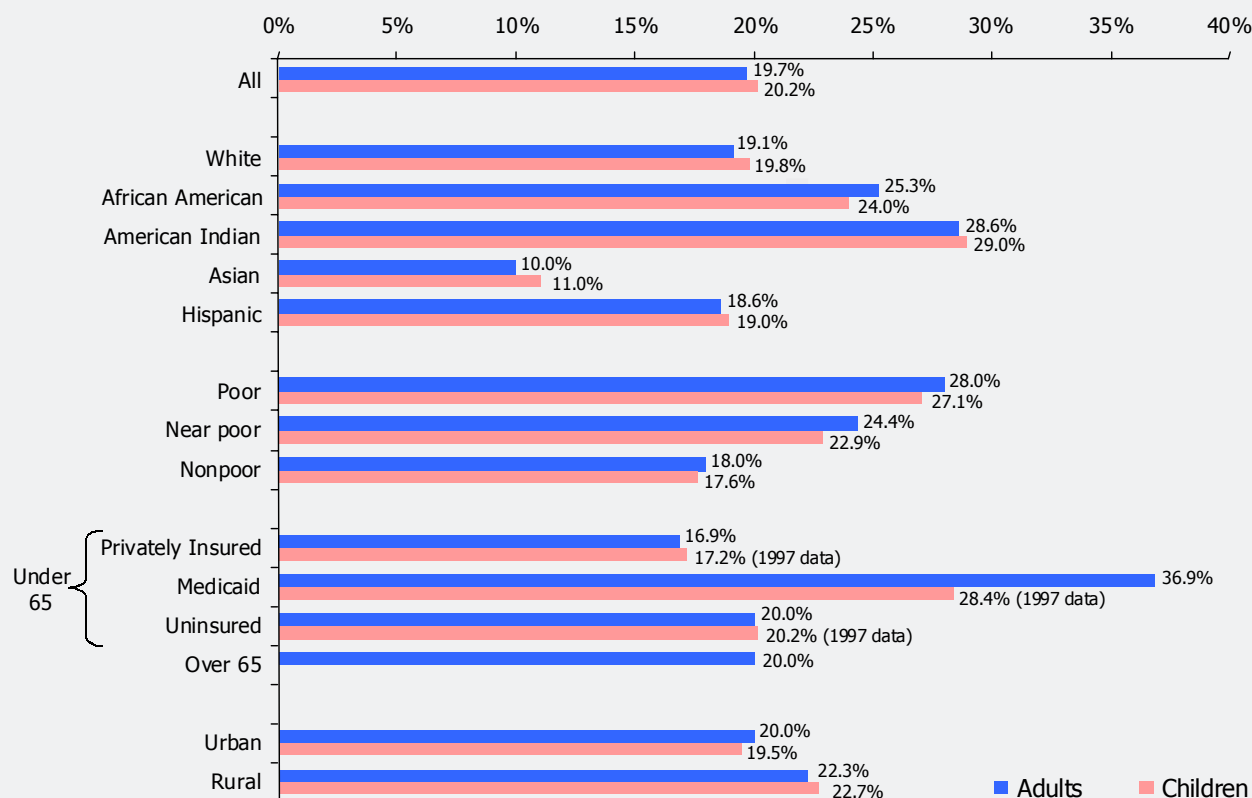


Hospital EDs provide immediate care to the critically injured and ill. Around the clock, EDs stand ready to deliver the most advanced medical care available in their communities. Because EDs are available to everyone, regardless of ability to pay, they ensure essential access to the health care system. For underserved populations, EDs are open when other doors are closed. In communities without enough doctors and clinics, an ED may be the only place to tend to acute health care needs. For the uninsured, the ED offers physician and nursing care, laboratory, radiology, support services, and pharmaceuticals that other providers cannot or will not provide.

In addition to emergency care services, the ED is a gateway to all the other medical resources available in a hospital. Once seen in the ED, many patients receive further services such as inpatient care, specialty consultations, and ongoing outpatient care. For patients with urgent medical needs, hospitals provide far more extensive care than required by EMTALA. Consequently, hospital EDs are seen by many underserved patients as a source of care where their medical needs come before financial considerations.

African Americans and Native Americans, low-income persons, Medicaid enrollees, and rural residents use EDs more often.

Chart 4: Percent of Adults and Children with Emergency Visits by Race, Income, Insurance Status, and Location, 1998



Hospital EDs Are Key to Rural Health Access

Rural hospital EDs play an especially important role in their communities. They are the first response to the most critical traumas, disasters, and emergencies in remote areas. More than 80 million Americans — one third of the population — live more than 50 miles from major trauma centers, outside the so-called “golden hour” considered critical to save lives in the event of trauma. At the same time, because of the shortage of providers, rural EDs must provide routine care to those without other access. One in five Americans lives in a rural area yet only one in ten of the nation’s physicians practice in rural communities. Thus EDs are an even more important access point to care in rural areas than in urban areas.

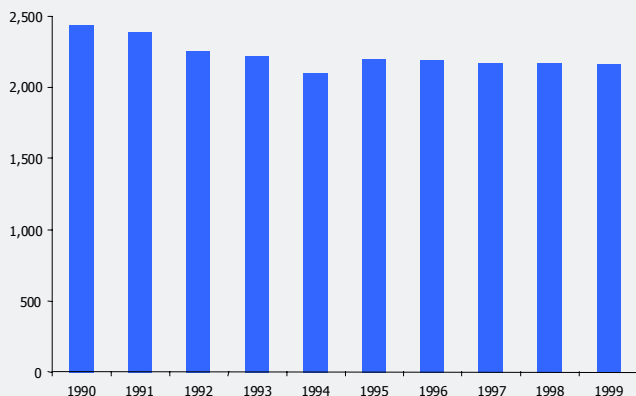
Rural communities have special demographics that create greater demand for hospital ED services. Rural areas have greater concentrations of elderly and low-income residents with difficulties traveling to reach health care. Because of higher levels of self-employment, more rural residents lack health insurance. And, the dangers of agricultural work produce farming accidents unseen in urban areas.

Financial pressures caused many rural hospitals to close during the 1990s. A decline in the number of rural hospital EDs followed. However, even though many rural residents have been forced to travel to urban centers for care, the number of ED visits in rural hospitals rose in the early nineties and then again in 1998 and 1999.



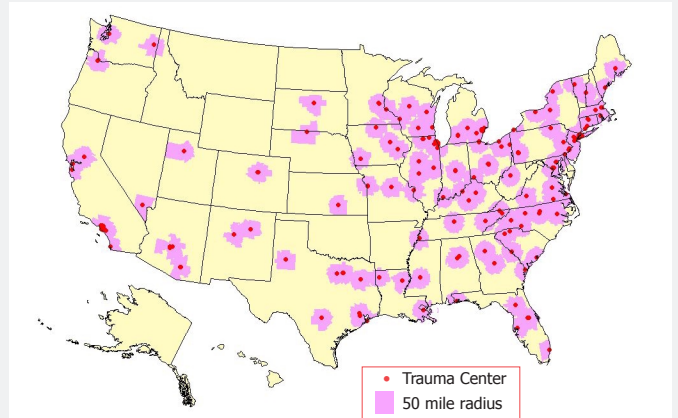
As the number of rural EDs declined 11.3%...

Chart 7: Number of Rural Hospitals Reporting Emergency Visits, 1990-1999



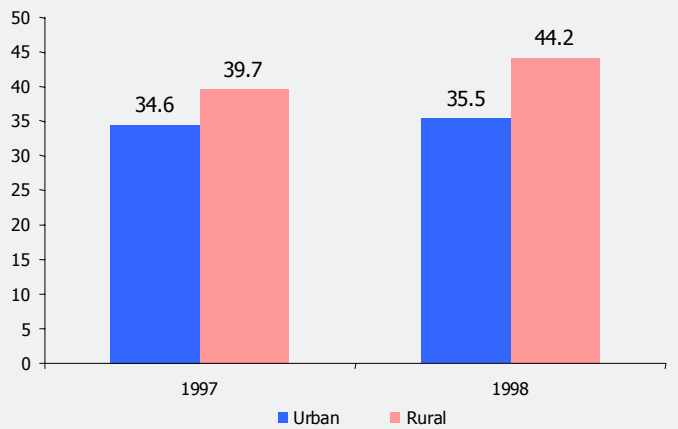
More than 80 million Americans live more than 50 miles from a Level 1 trauma center...

Chart 5: Trauma Center Location with 50 Mile Radius, 1999



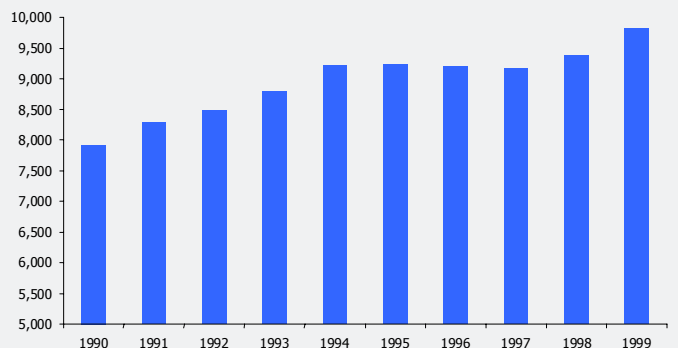
...yet rural residents rely on EDs more than urban residents.

Chart 6: ED Visits per 100 Population, 1997 and 1998



... rural emergency department volume climbed 23.8%.

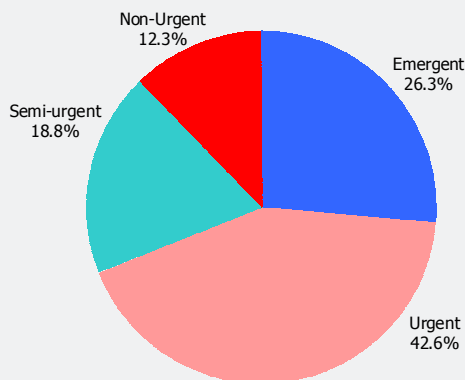
Chart 8: Average Rural ED Volume, 1990-1999



Emergency Departments Serve a Range of Patient Needs

A portion of ED care is non-emergent...

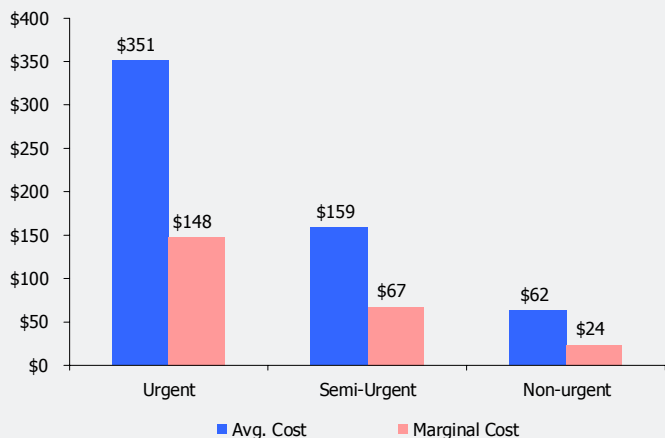
Chart 9: Emergency Visits by Immediacy of Patient Condition, 1998



Note: Excludes patients for whom condition was not recorded

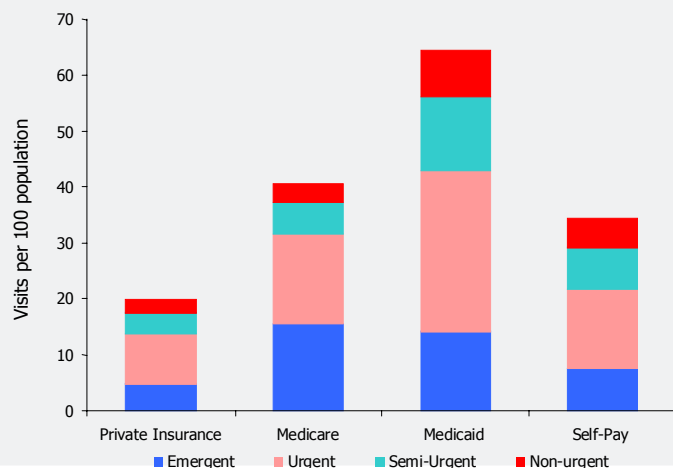
... but marginal costs of care in EDs are surprisingly low.

Chart 10: Charges and Cost for Emergency Visits by Immediacy of Patient Condition, 1998



Medicaid enrollees use the ED far more than other groups across all levels of urgency.

Chart 11: Emergency Visits per 100 Population, by Immediacy of Patient Condition, 1998



Emergency rooms are staffed with professionals and equipment to serve patients with immediate and serious medical needs. In practice, however, emergency departments serve a range of patient needs and acuity levels. The National Ambulatory Medical Care Survey found that of those patients for whom triage information was available, 26 percent presented with emergent conditions—those conditions requiring care within 15 minutes. 61 percent had urgent or semi-urgent conditions and 12 percent had non-urgent conditions.¹

Experts disagree on the significance of non-emergent care in EDs. Conventional wisdom holds that EDs are the most expensive source of ambulatory care and that every effort should be made to divert non-emergent care from hospital EDs. Some suggest building new urgent care facilities to draw non-emergent patients away from EDs. However, EDs must maintain their staffing and facilities to handle unexpected emergencies and they cannot safely reduce capacity in response to fewer non-emergent patients. A study of costs in EDs found that while average charges per visit were high, the marginal cost of serving non-urgent patients was quite low.² Thus, new alternative facilities could add to total health costs without creating offsetting savings in hospital EDs.

The distribution of use by level of urgency varies by payer. Medicare patients are the most likely to present with emergent conditions in the ED. Medicaid enrollees and the uninsured have higher rates of ED use at all levels of urgency than the privately insured. A number of factors can explain these variations including:

- differing health status (e.g., Medicare patients have a higher acuity level in general)
- differing levels of access to care (e.g., 38 percent of self-pay patients don't have a usual source of care),³ and
- differing demographics (e.g., Medicaid enrollees tend to be women of childbearing age and children).

Quote from the Field

"Non-urgent care is not the cause of the ambulance diversion crisis in our nation. Rather this growing crisis of crowding and ambulance diversion is rooted in many causes, not the least of which is the lack of in-patient hospital beds, sometimes forcing patients to be 'boarded,' possibly for days, in emergency departments until they can be admitted to the hospital." — Dr. Robert Schafermeyer, President of American College of Emergency Physicians.

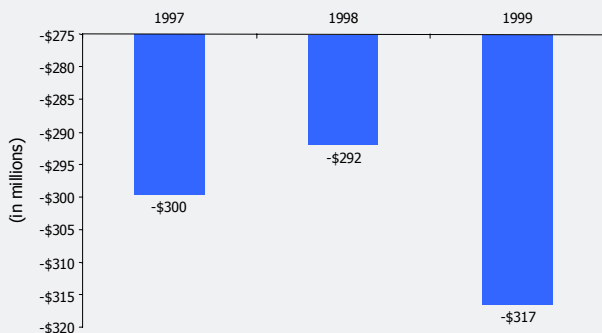
ED Diversions Reflect Strained Hospital Capacity

When a hospital cannot handle additional patients, the ED goes “on diversion”, i.e., it stops accepting patients via ambulance. In urban areas, the portion of time that one or more hospitals are “on diversion” has become an increasing concern. A recent informal AHA survey found that 69 percent of responding hospitals had been on ED diversion at some point during the prior year. Other data suggests that diversions are increasing.

A number of forces are converging to make it more difficult for hospitals to meet fluctuations in demand. The increased volume experienced by EDs is one factor. But ED physicians and administrators point to inpatient hospital capacity. The ability of EDs to accept trauma and other emergent cases depends on the availability of acute and critical care beds. Reductions in “excess” inpatient bed capacity, more tightly managed staffing levels, on-call physician availability, and a nursing shortage mean that inpatient beds are not always available for ED patients. And when patients who need to be admitted cannot leave the ED, EDs run out of beds to take in new patients, causing gridlock throughout the emergency medical system.

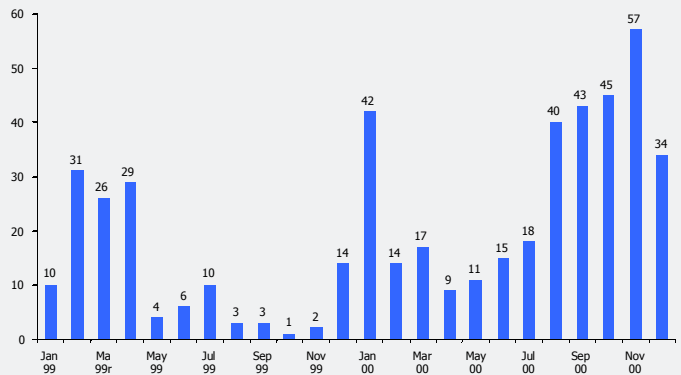
California, a Bellwether for the Nation?

A recent study by the California Medical Association found that 285 of the state’s 355 hospital emergency rooms lost money in fiscal year 1999. More than 9 million patients were treated that year in California emergency rooms at an average loss of \$46 per visit. Hospitals statewide lost \$317 million in their emergency departments. Emergency physicians provided an additional \$100 million in uncompensated care. These losses were widespread, occurring in both urban and rural areas. Los Angeles County hospital EDs lost \$94.9 million in fiscal 1999. The hospital EDs in Alameda, San Diego, and San Bernardino counties reported \$20 million in losses. Small rural communities such as Humboldt saw hospital ED losses jump from \$72,000 to over \$1.3 million between fiscal years 1997 and 1999. Since 1990, 50 emergency departments in the state closed, nine in fiscal year 2000 alone.



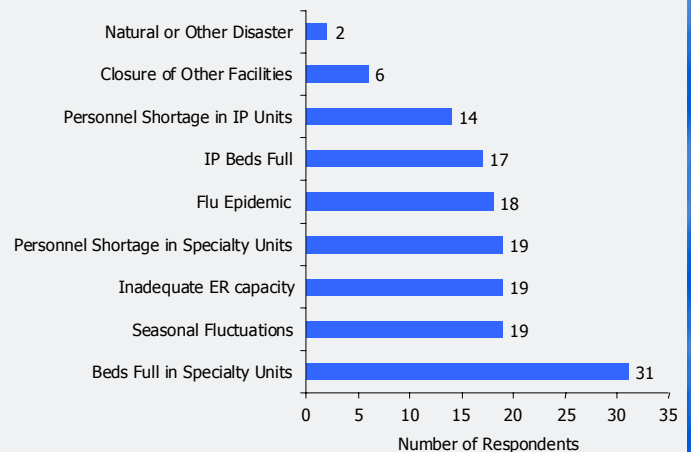
Ambulance diversions are becoming almost a daily occurrence in some metro areas...

Chart 12: Number of Hospital Shifts on Diversion Per Month, Selected Cincinnati Hospitals, 1999-2000



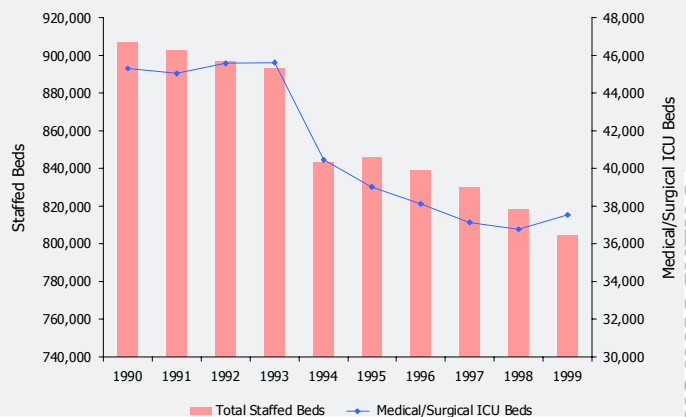
...but ER capacity is not the driving cause for diversions...

Chart 13: Reasons Cited for Diversions, August 2000



...rather, patients have no place to go - 103,000 staffed beds and 7,800 medical/surgical ICU beds were lost in the 1990s.

Chart 14: Total Staffed Beds and Med/Surgical ICU Beds, 1990-1999



Trends in Hospital EDs Raise Important Questions for America's Healthcare System

Originally conceived to treat the most urgent medical crises, hospital EDs are now the front door to the entire health care system. Not only do hospital EDs treat victims of heart attacks, strokes, and traumas, they provide access to all who seek care, as required by Federal and state laws. In inner cities and rural communities, EDs are not the providers of last resort, they are the first and only providers willing to care for the patients who arrive off-hours or have no insurance. Uninsured emergency patients not only generate uncompensated costs in the ED, but are responsible for even greater levels of uncompensated inpatient care. Given the financial pressures facing hospitals, the ability of hospital EDs to meet the mission of providing both critical emergency care and universal access to services may be threatened.

- What does the increase in ambulance diversions indicate about the state of the nation's hospitals?
- What is the appropriate level of support that private employers and insurance plans should give to sustain essential access to emergency care?
- Have Medicare and Medicaid provider payment cuts threatened the financial stability of hospital ED services?
- Has too much inpatient capacity been eliminated, especially in critical care units, to handle the peaks in emergency demand?
- Should EMTALA's mandate to provide universal access to emergency services be accompanied by funding?
- What additional support do rural hospital EDs need to maintain their essential role in caring for communities outside of major metropolitan areas?
- How will the extension of EMTALA requirements to off campus hospital outpatient departments impact delivery of care?
- Why do Medicaid enrollees continue to seek care in America's EDs despite managed care?

Quotes from the Field

"We are basically the canary that's telling the story that the whole system is in trouble, its capacity is inadequate to meet the peak demands." — Dr. Alan

Woodward, Chief of Emergency Services at Emerson Hospital in Concord, MA, *New York Times*.

"Virtually every major metropolitan area, and many rural areas, are struggling with [diversions]. They're seeing 8 or 10 or 12 hospitals in a major urban market simultaneously on E.M.S. diversion because, say, they have no inpatient beds or critical care beds." — Dr. Arthur Kellerman, Professor and Chair of Emergency Medicine at Emory University School of Medicine, *New York Times*.

"There are plenty of emergency rooms most of the time. But for the first time, as places close and consolidate, we're not sure if we have enough for the peak periods. We need a way to accurately assess whether we feel we're getting into hot water." — Dr. Joseph Barger, Emergency Room Medical Director at Contra Costa County Regional Medical Center, Martinez, CA, *Contra Costa Times*.

"More people seem to be told [by their managed care plan], 'We can't see you until next week.' When nobody will see them, they come here." — Dr. Kathryn Perkins, Thunderbird Samaritan Medical Center, Phoenix, AZ, *Time Magazine*.

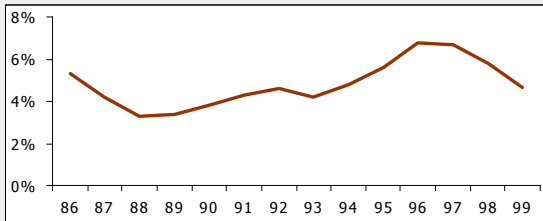
"This is a symptom of an entire health care system under extreme stress." — Dr. Howard Koh, Massachusetts Commissioner of Public Health, *USA Today*.

"We're dying. I got called nine times yesterday to divert my ambulances, and that was not an unusual day." — Dr. Donald Gordon, Professor and Chairman, Emergency Medical Technology, University of Texas Health Science Center and San Antonio's E.M.S. Medical Director, *New York Times*.

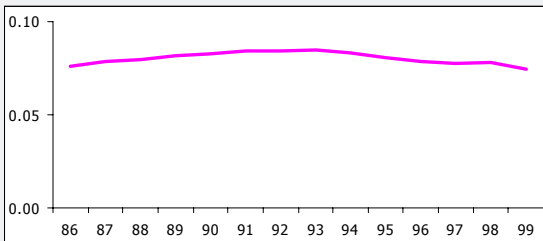
Stats to know

Hospital Sector

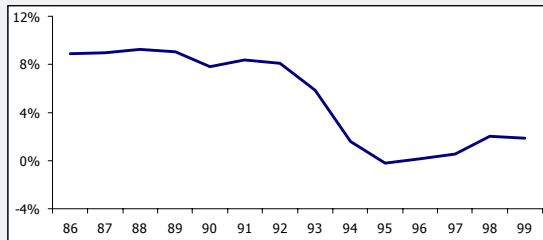
Total Margin:	1997	1998	1999
86 to 99 Trend	6.7%	5.8%	4.7%



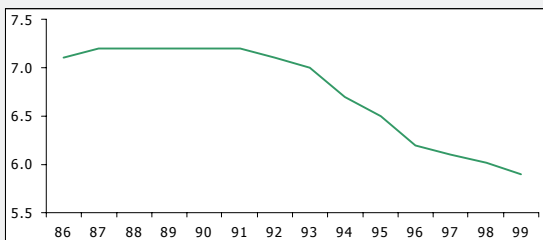
FTEs per Adjusted Admission:	1997	1998	1999
86 to 99 Trend	0.08	0.08	0.07



Percent Change in Expense per Adj. Admission: 86 to 99 Trend	1997	1998	1999
	0.6%	2.0%	1.9%

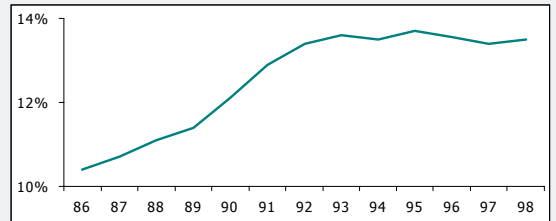


Average Length of Stay (in Days): 86 to 99 Trend	1997	1998	1999
	6.1	6.0	5.9

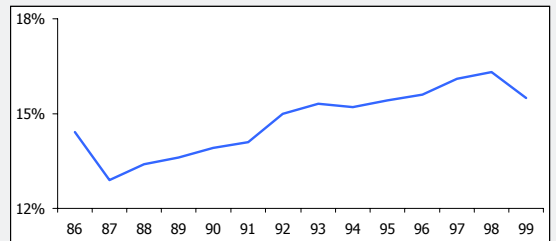


Healthcare Industry

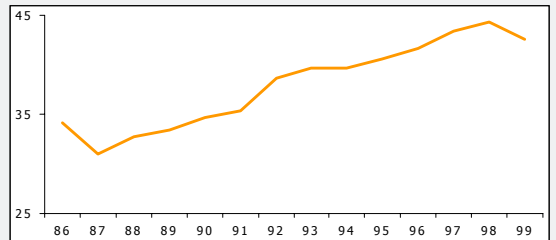
National Health Expenditures as a % of GDP: 86 to 98 Trend	1996	1997	1998
	13.6%	13.4%	13.5%



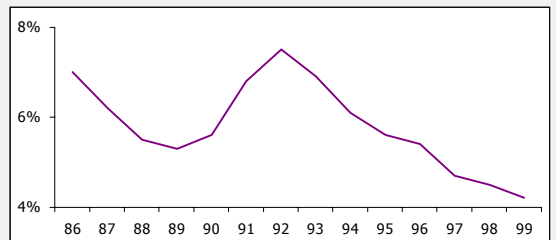
Percent Uninsured: 86 to 99 Trend	1997	1998	1999
	16.1%	16.3%	15.5%



Number Uninsured (in Millions): 86 to 99 Trend	1997	1998	1999
	43.4	44.3	42.6



Percent Unemployed: 86 to 99 Trend	1997	1998	1999
	4.9%	4.5%	4.2%



Endnotes:

- 1: Urgent, semi-urgent, and non-urgent conditions are defined as those that need to be seen within 15-60 minutes, 1-2 hours, and 2-24 hours, respectively.
- 2: Robert M. Williams, "The Costs of Visits to Emergency Departments" in *New England Journal of Medicine*, 334:642-6, 1996
- 3: *Uninsured in America*, The Henry J. Kaiser Family Foundation, May 2000.

Sources:

- Chart 1: Source: The Lewin Group analysis of AHA Annual Survey data, 1990-1999 for community hospitals. Number includes all hospitals that reported ED visits regardless of whether they reported having an ED
- Chart 2: The Lewin Group analysis of American Hospital Association Annual Survey data 1990 - 1999 for community hospitals
- Chart 3: McCaig L.F., *National Hospital Ambulatory Medical Care Survey: 1998 Emergency Department Summary*. Advance data from vital and health statistics; no. 313. Hyattsville, Maryland: National Center for Health Statistics, 2000. Woodwell D.A., *National Ambulatory Medical Care Survey: 1998 Summary*. Advance data from vital and health statistics; no. 315. Hyattsville, Maryland: National Center for Health Statistics, 2000
- Chart 4: National Center for Health Statistics. *Health, United States, 2000 With Adolescent Health Chartbook*. Hyattsville, Maryland, 2000
- Chart 5: The Lewin Group analysis of American Hospital Association Annual Survey data 1990 - 1999 for community hospitals
- Chart 6: McCaig L.F., *National Hospital Ambulatory Medical Care Survey: 1998 Emergency Department Summary*. Advance data from vital and health statistics; no. 313. Hyattsville, Maryland: National Center for Health Statistics, 2000. Norjah, P. *National Hospital Ambulatory Medical Care Survey: 1997 Emergency Department Summary*. Advance data from vital and health statistics; no. 304. Hyattsville, Maryland: National Center for Health Statistics, 1999
- Chart 7: The Lewin Group analysis of American Hospital Association Annual Survey data 1990 - 1999 for community hospitals
- Chart 8: The Lewin Group analysis of American Hospital Association Annual Survey data 1990 - 1999 for community hospitals
- Chart 9: The Lewin Group analysis of the National Hospital Ambulatory Medical Care Survey, 1998
- Chart 10: Robert M. Williams, "The Costs of Visits to Emergency Departments" in *New England Journal of Medicine*, 334:642-6, 1996
- Chart 11: The Lewin Group analysis of the National Hospital Ambulatory Medical Care Survey, 1998
- Chart 12: Greater Cincinnati Health Council. Data are for selected member hospitals
- Chart 13: AHA, *Redefining Hospital Capacity*, Survey of selected hospitals (41 respondents), August 2000
- Chart 14: The Lewin Group analysis of American Hospital Association Annual Survey data 1990 - 1999 for community hospitals
- Quote 1: Patrick M. O'Brien, "The Emergency Department as a Public Safety Net" in *American College of Emergency Physicians, Defending America's Safety Net*, 1999

Sources for "Stats to Know":

- Total Margin*: AHA Annual Hospital Survey, 1986-1999
- FTE/Adjusted Admission*: American Hospital Association Annual Survey, 1986-1999
- Percent Change in Total Expense per Adjusted Admission*: American Hospital Association Annual Survey, 1986-1999
- Average Length of Stay*: Hospital Statistics, 1999 Edition, Healthcare Infosource, Inc.
- National Health Expenditures as a Percent of GDP*: Compiled by HCFA on www.hcfa.gov/stats/nhe-oact/tables/t1.htm
- Percent Uninsured*: Compiled by Bureau of the Census on www.census.gov/hhes/www/hlthins.html
- Number Uninsured*: Compiled by Bureau of the Census on www.census.gov/hhes/hlthins/hlthins.html
- Percent Unemployed*: Compiled by Bureau of Labor Statistics on <http://stats.bls.gov/cpsaatab.htm#empstat>

TrendWatch is a series of reports produced by the American Hospital Association and The Lewin Group highlighting important and emerging trends in the hospital and health care field.



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