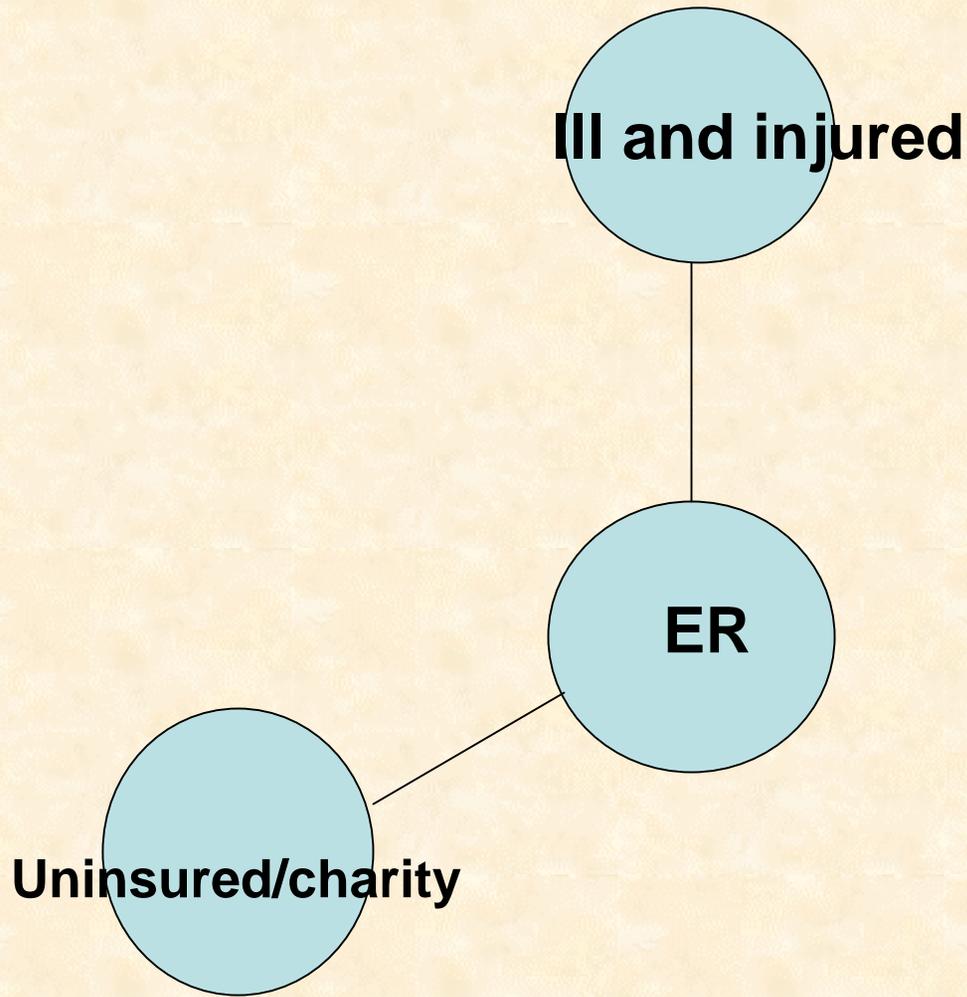


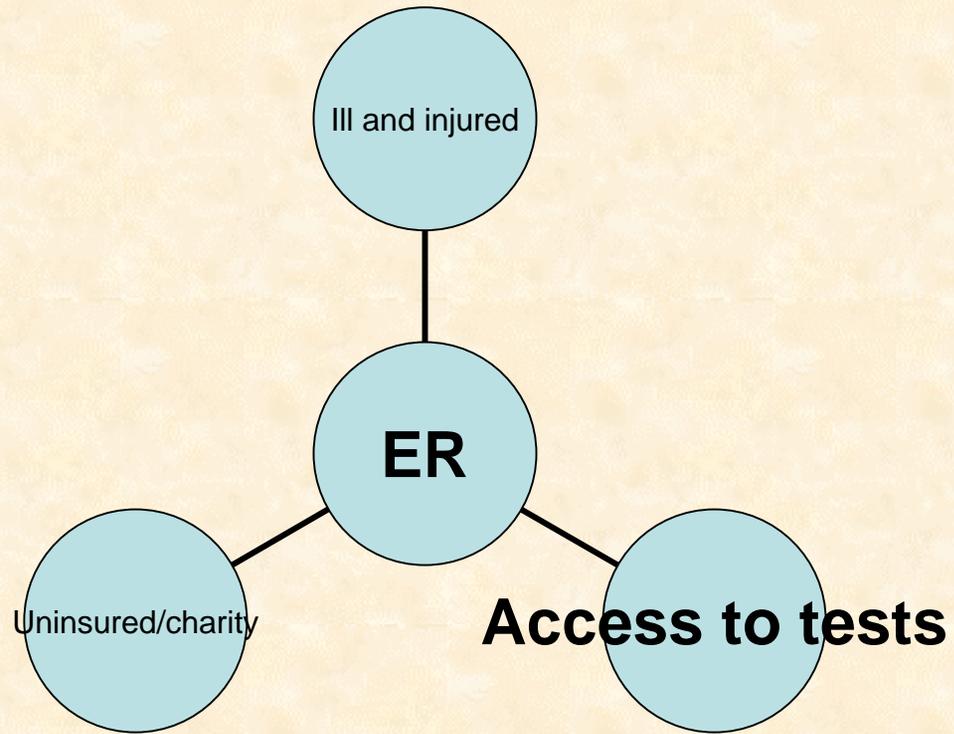
Hospital Dysfunction
ED Crowding
Patient Safety

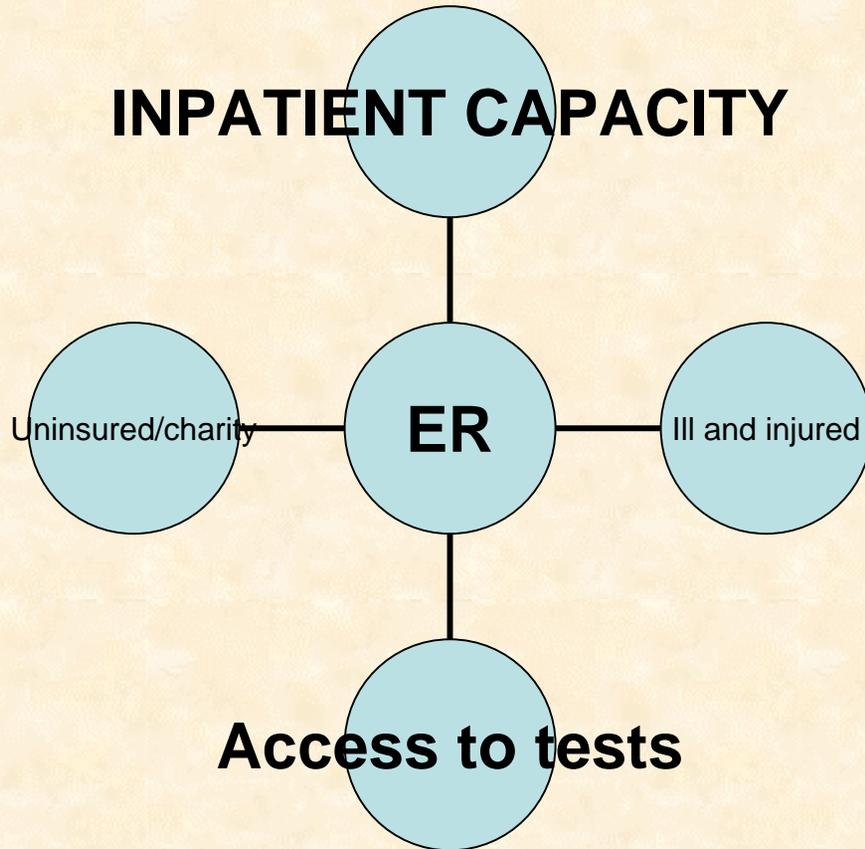
Sandra M. Schneider MD
FACEP

Ill and injured

ER

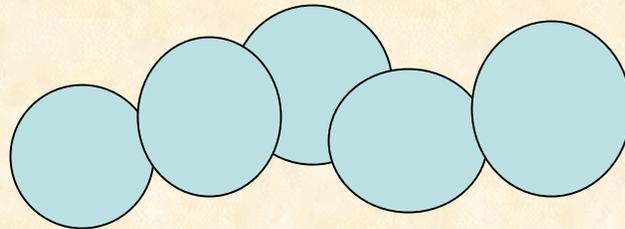
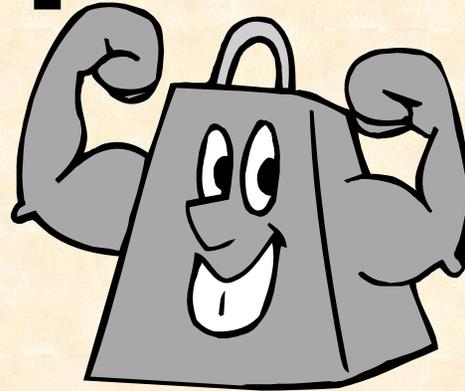






SYSTEM FAILURE

Inpatients







How To Survive Your Local ER

By Sean Flynn

WHEN TAYLOR McCormack was 13 months old, the thorns that drained excess fluid from his skull stopped working. She needed a new thorn—a simple procedure that involved less than an hour of surgery.

Taylor was brought to the emergency room at Boston's Children's Hospital by 7:15 p.m. that Sunday night. What followed was a series of delays and mistakes. The surgery resident couldn't locate the senior surgeon (he was napping, and his pager was on vibrate), so the operation was scheduled for the next morning. And despite the fact that Taylor's blood tests

were abnormal and her symptoms alarming, she was not admitted to the intensive-care unit. In fact, between 12:30 a.m. and 6 a.m., no doctor checked on her.

The system is stretched beyond capacity. That can lead to mistakes.

That's when Taylor turned blue. By then it was too late. Six days later, John McCormack carried his daughter's tiny body to the hospital morgue.

The McCormack tragedy is a worst-case example of an underlying truth: America's emergency rooms can be dangerous places. Despite astonishing technology and armies of skilled, dedicated physicians who routinely save people who wouldn't have stood a chance a generation ago, there simply aren't enough of either—technology or doctors—to



go around. Mistakes happen. Sometimes less-experienced doctors treat life-threatening illnesses. Diagnoses are missed or delayed. Patients are forgotten by overwhelmed staff. Even simple human foibles—a ratched-off pager, an exhausted and napping surgeon—can be tragically amplified in an emergency.

How often do things go wrong? No one knows for certain because so many mistakes are minor and so few have that cause, accurate statistics are difficult to maintain. According to one 1999 study, though, more than half of all preventable hospital-error claims result from mistakes made in the ER.

The main culprit isn't incompetence but these

The nation's emergency rooms are overburdened and underfunded, treating ever more patients with ever fewer resources. "You don't want to scare the public, but even hundreds of thousands of patients get cared for very well in emergency rooms every day," says Gail Warden, president emerita of Michigan's Henry Ford Health System, who chaired a trio of studies of emergency care released in June by the National Academies' Institute of Medicine. "But the system is stretched, and it could be at a breaking point in three to five years."

Federal law requires that ER doctors and nurses treat everyone who shows up, regardless of ability

Newsweek

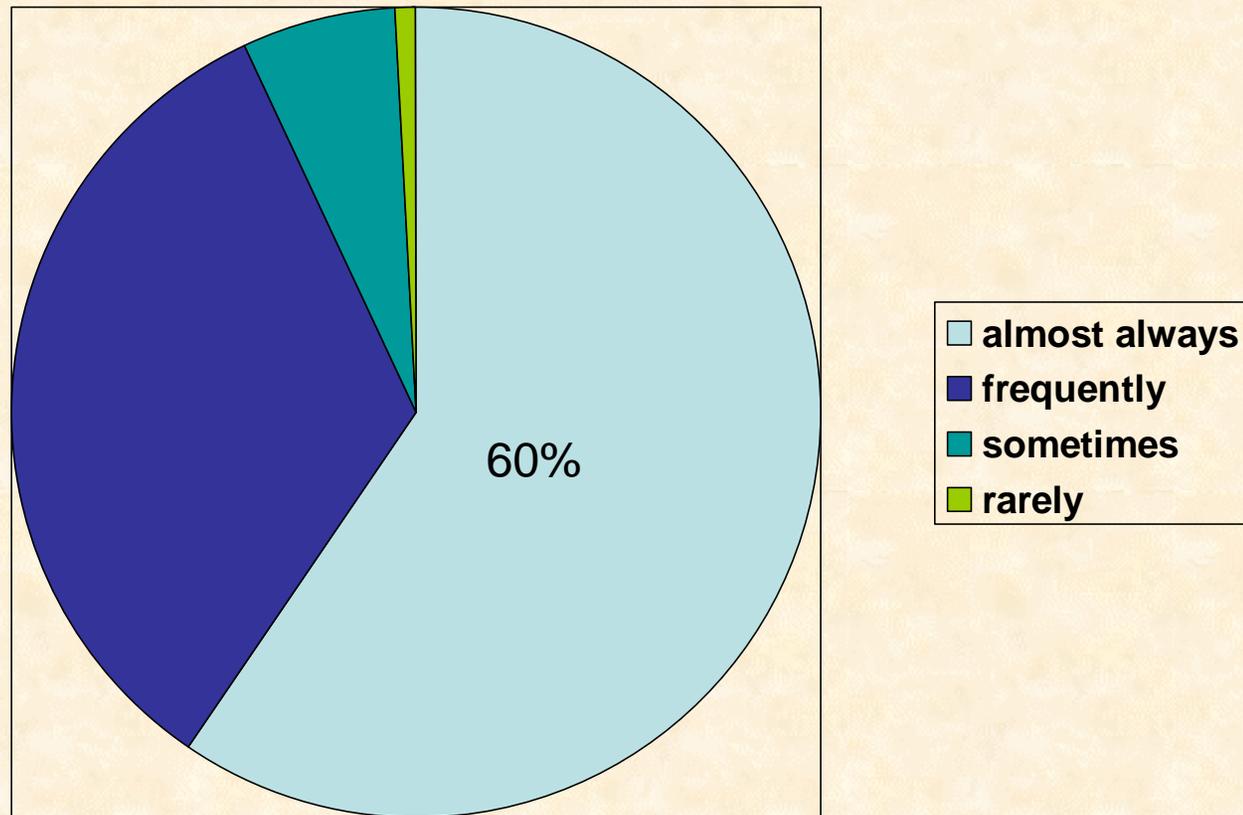
Code Blue for the ER

On Life Support: Sounding the Alarms on
the ER Crisis

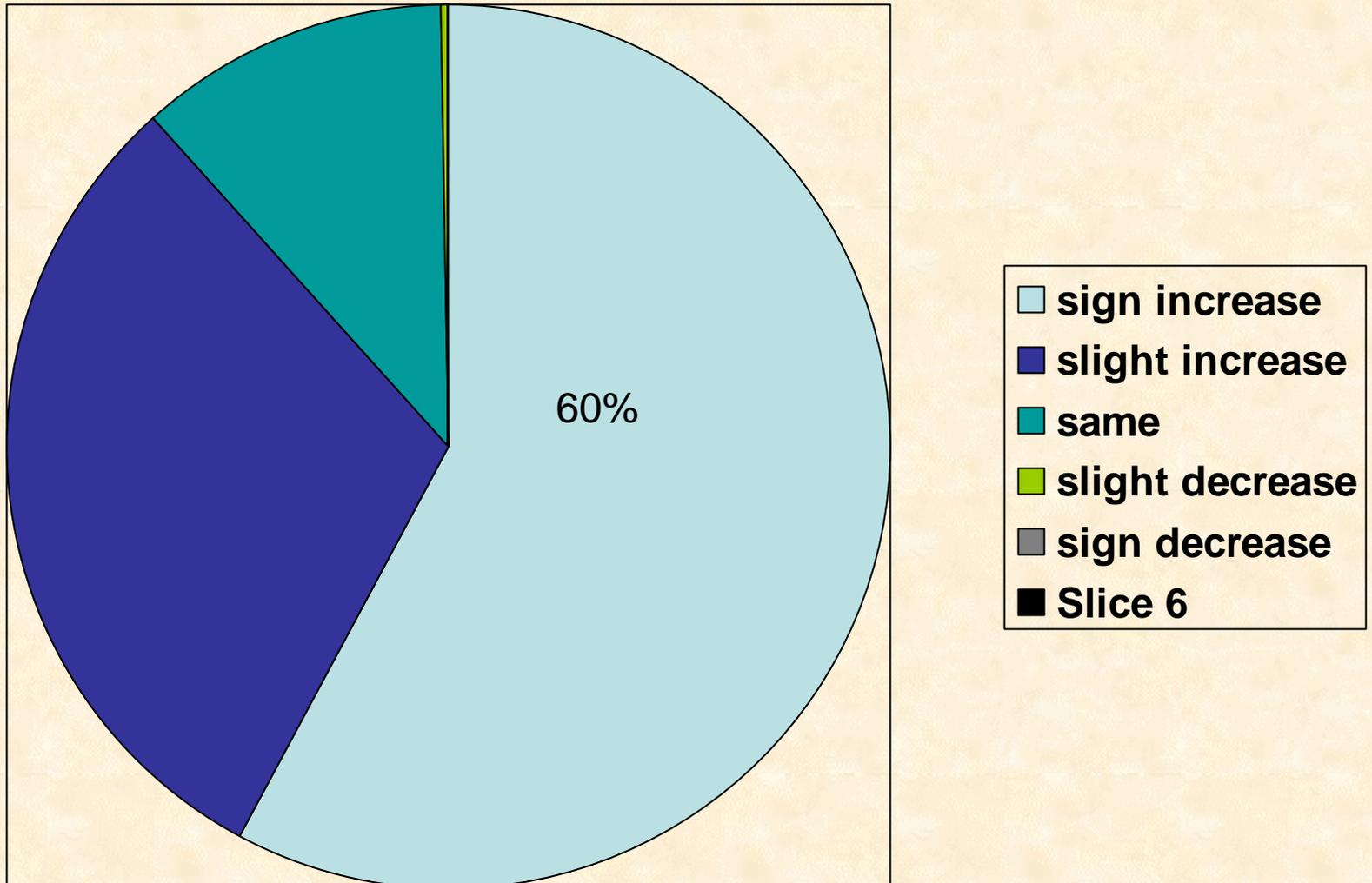
May, 2007

NY State survey 2/07
396 responses

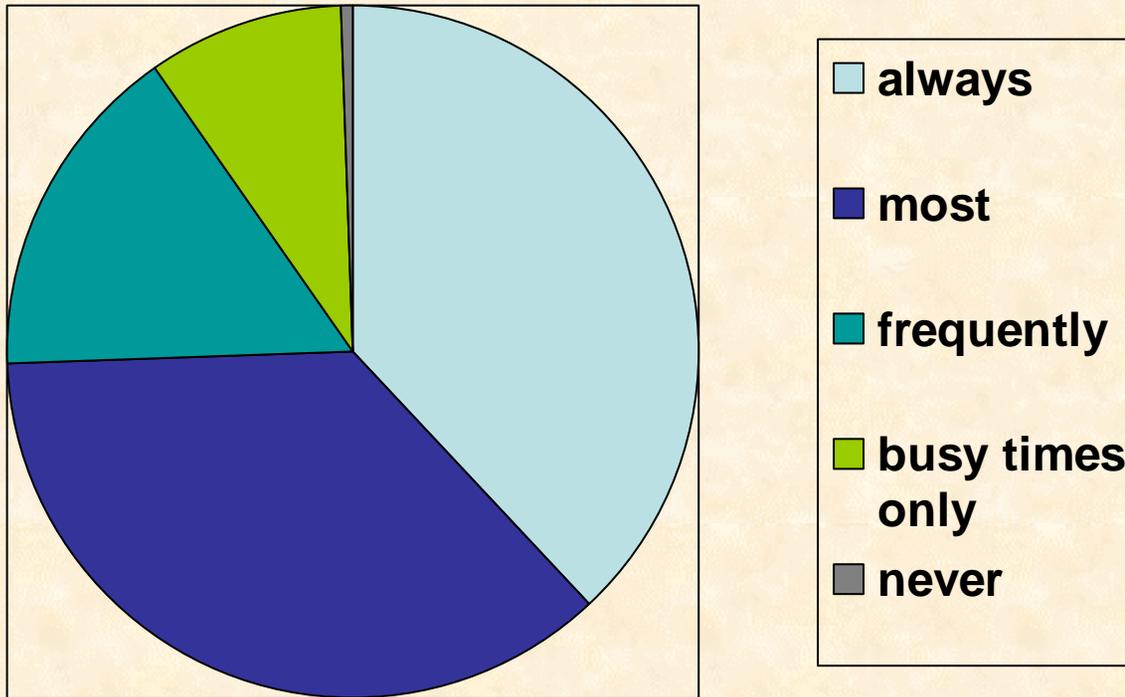
My ED is overcrowded



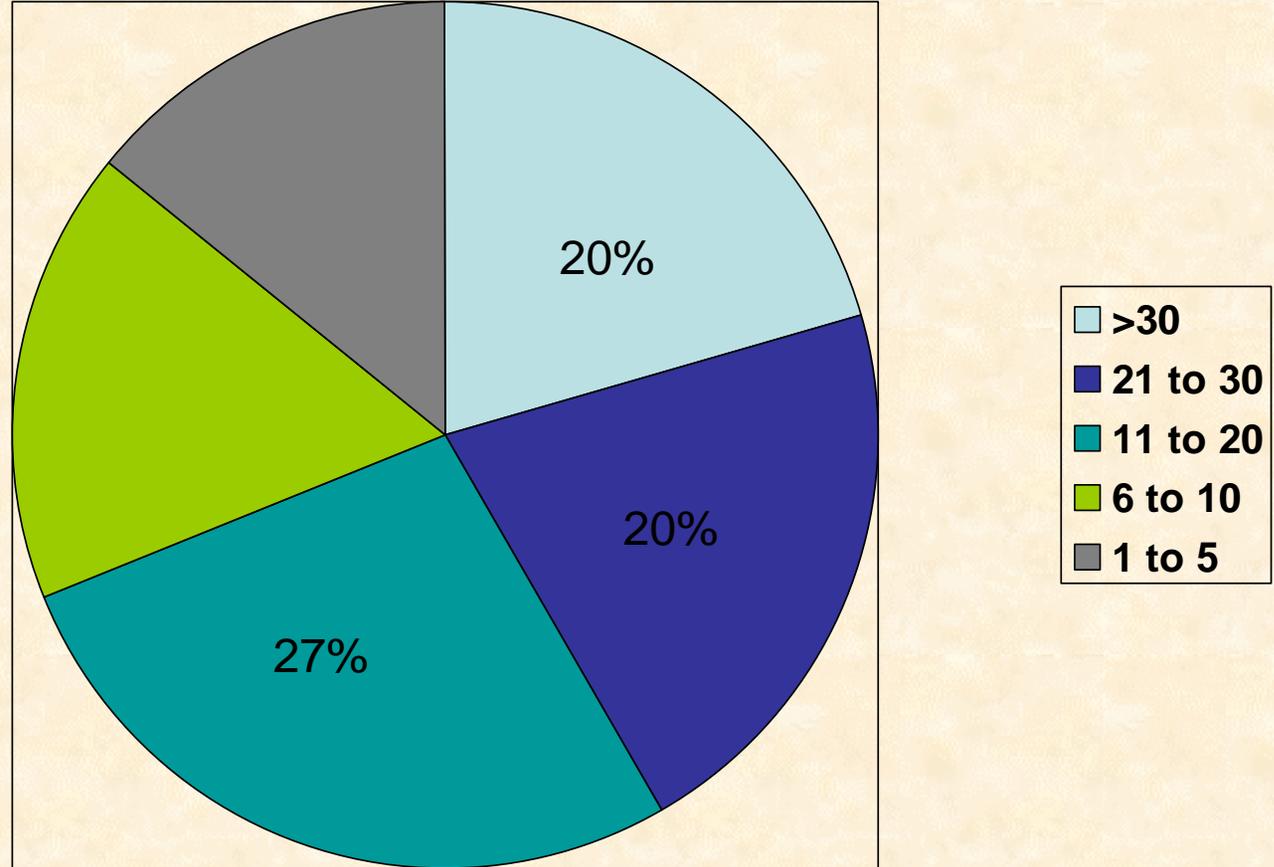
In the past year crowding has



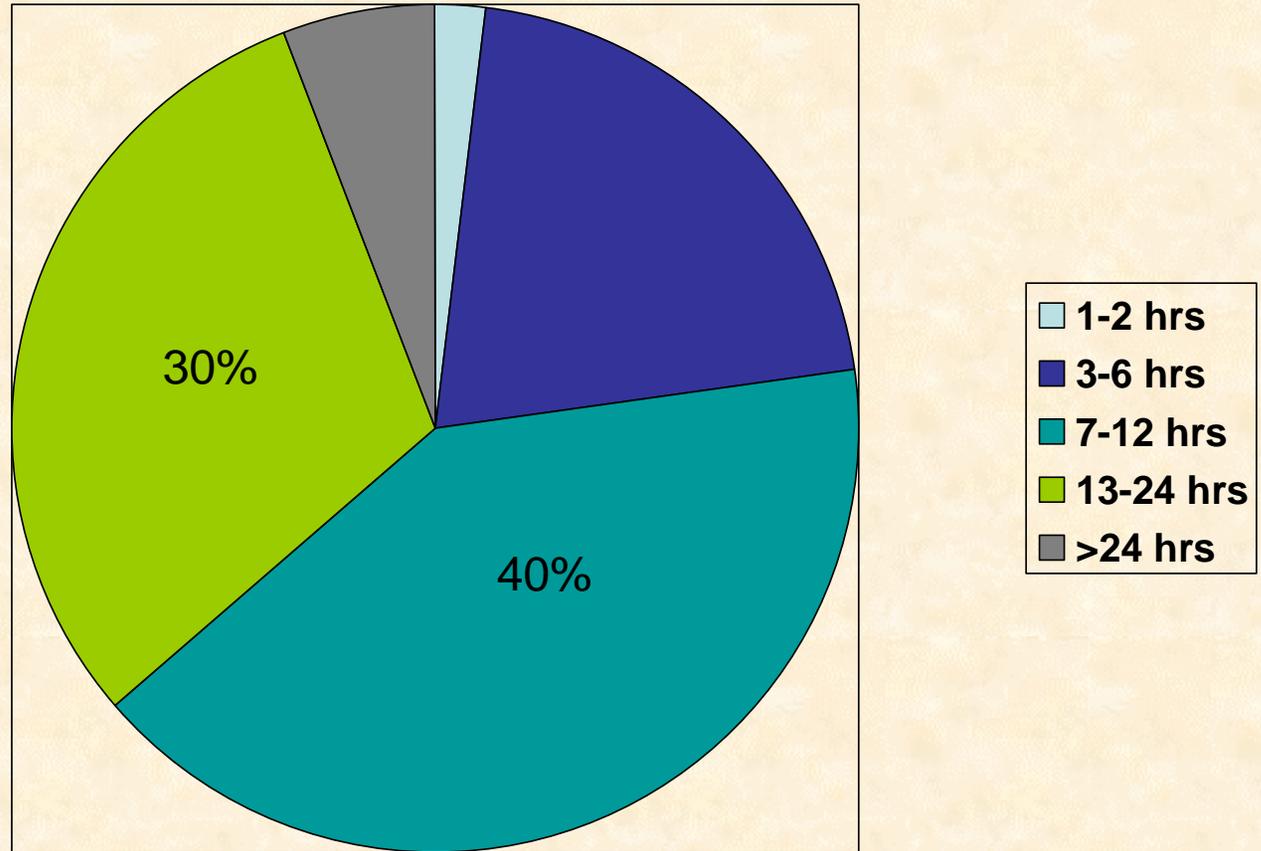
Boarding happens



Board as many as

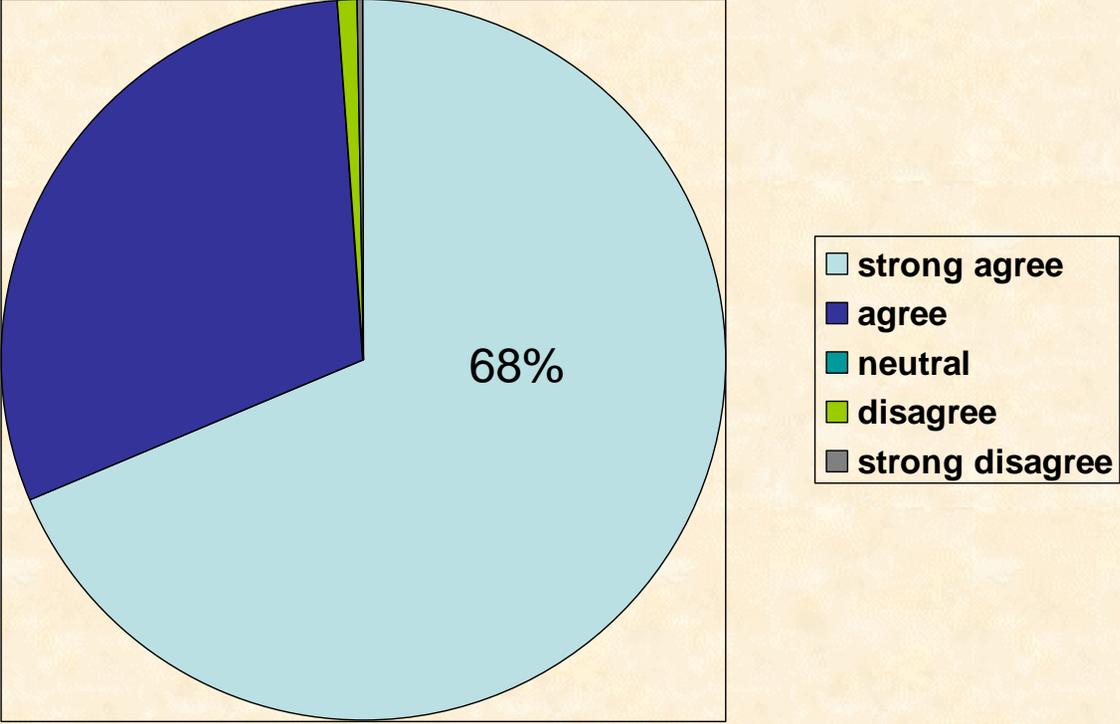


Board on average

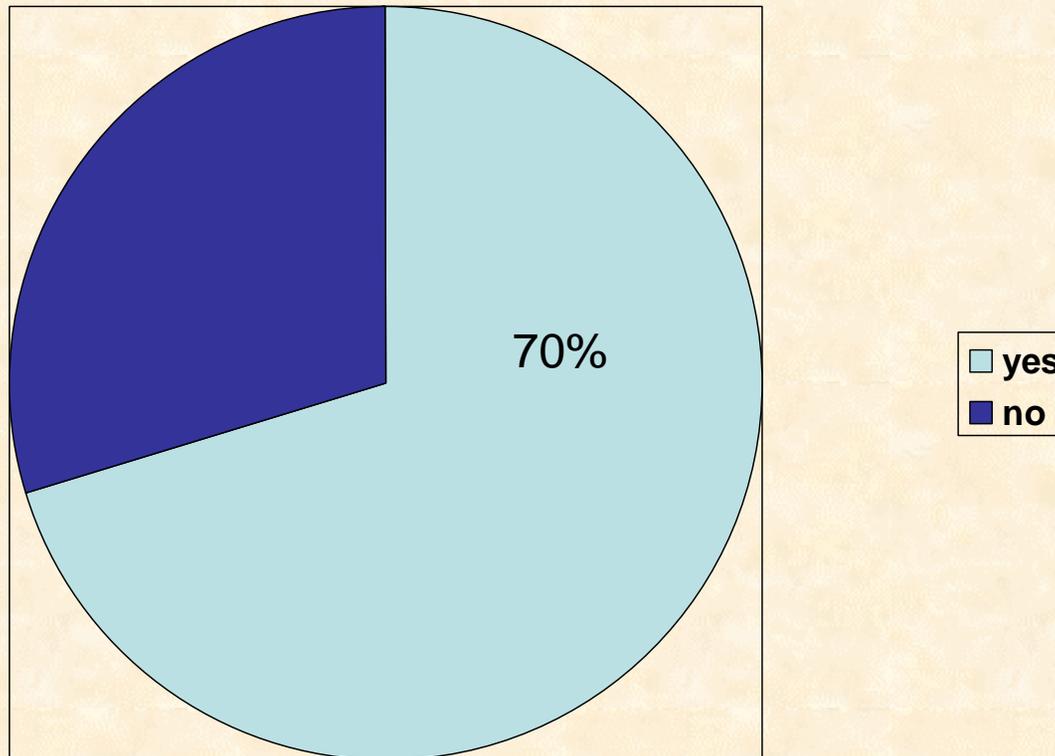


So what?

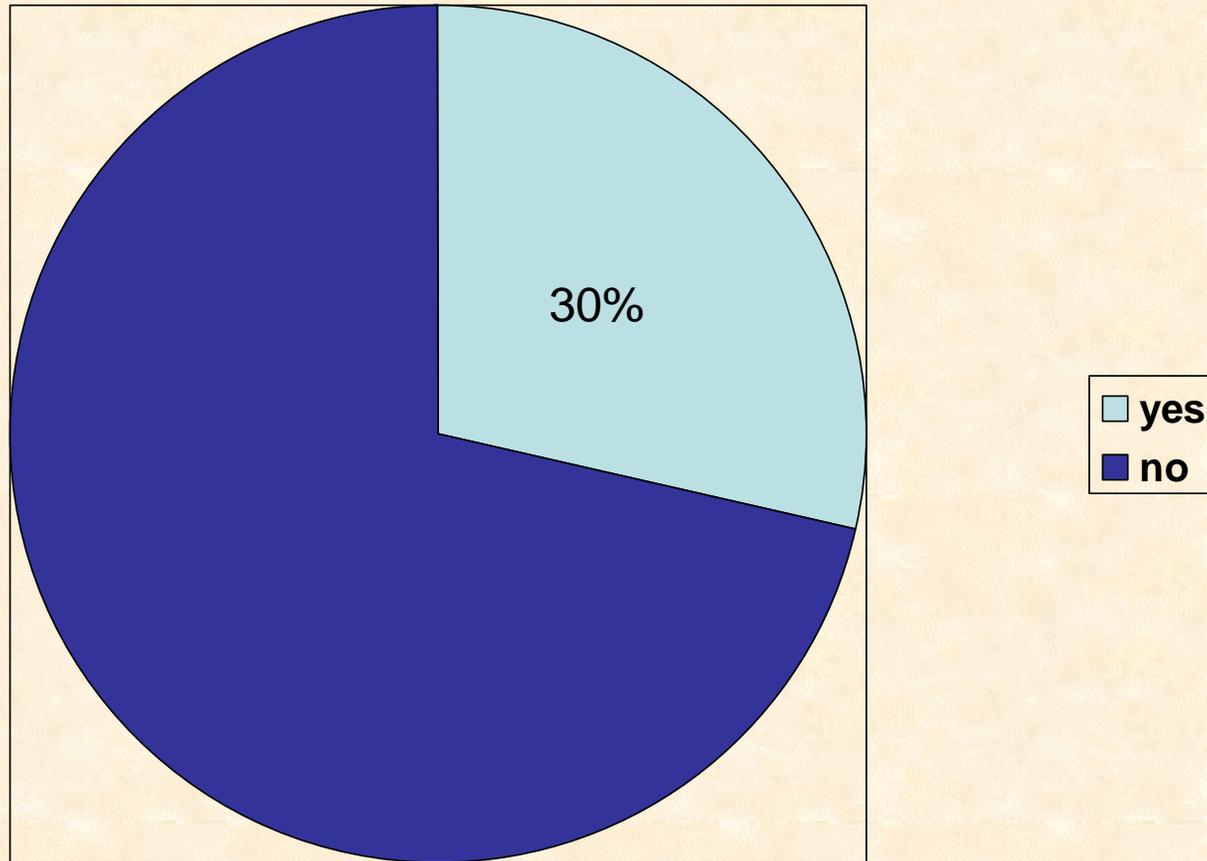
Crowded conditions are harmful to patient care



Have you personally experienced a patient suffer harm as a result of crowding?



Have you personally experienced a patient dying as a direct result of crowding?



1000 EM physicians

- Important to patient safety ranked 1-5
- Timeout procedures 2.13
- MD order entry
- Ambulance diversion
- Medication errors 2.88
- Antibiotics for pneumonia

1000 EM physicians

- Important to patient safety ranked 1-5
- Handwashing 3.11
- Interpreters
- low acuity patients
- Shift handoffs
- Aspirin for MI's
- IT data sharing
- Lab/Xray times
- Nursing shortage 3.89

1000 EM physicians

- Important to patient safety ranked 4-5
- Availability of consultants 4.1
- Inpatient crowding 4.3

Most important factor

- Large and medium hospitals
 - High and medium volumes (20K+)
 - Those with higher LWBS
 - Urban and suburban
-
- >4.5 in urban, high volume, large hospitals

Evidence

- Hospital dysfunction leads to ED crowding

Evidence Crowding leads to patient safety issues

- JCAHO
- 50% sentinel events occur in the ED
- 1/3 are related directly to crowding

- MMWR True emergencies wait >1 hour in ED

Frequency of Adverse Events and Errors among Patients Boarding in the Emergency Department

Shan Woo Liu, Stephen H. Thomas, James A. Gordon and Joel Weissman

Massachusetts General Hospital: Boston, MA

ABSTRACT

Background: As hospital **overcrowding** increases, the number of patients who "board" in the emergency department (ED) as they wait for their hospital beds to become available has skyrocketed. However, little has been published regarding the quality of care and outcomes of these patients.

Objectives: To assess the frequency of adverse events and errors among boarder patients. **Methods:** With institutional board review approval, we performed a descriptive study at a busy, tertiary urban hospital through a retrospective chart review of all admitted patients during 3 randomly selected dates between February 2003 and July 2003. Boarding time was defined as time between moment of bed request and departure from the ED. Errors or adverse events were defined as upgrade in ED care, unexpected death, hypoxia, significant hypertension/hypotension, arrhythmia, missed laboratory tests, missed medications, or other unexplained adverse events. **Results:** 162 patients were admitted during these three dates. Ultimately, 152 medical charts were reviewed. 10 were unable to be located. We found that average boarding time was 4.5 hours and frequency of errors or adverse events was among 43.0%

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Confirmation of Association between **Overcrowding** and Adverse Events in Patients Who Do Not Wait to Be Seen

Drew B. Richardson and Michael Bryant

The Canberra Hospital: Canberra, ACT, Australia, Western General Hospital: Melbourne, VIC, Australia

ABSTRACT

OBJECTIVES: Daily total patient care time (PCT = time from treatment start to left ED) has been identified as a measure of ED workload and **overcrowding**. Recent study identified an association between this measure and the rare adverse event of a patient who does not wait for treatment ((DNW or left without being seen (LWBS)) but requires early subsequent admission to hospital. This study aimed to investigate this association over a long period in two different hospitals. **METHODS:** Retrospective descriptive study of 1,092 days of data from 2000 to 2002 (New Year's Day excluded) in two different tertiary EDs. Existing workload databases were queried to generate the data elements. An "adverse event" was defined as a patient who DNW but was admitted to hospital through the ED arriving within 72 hours of the first presentation. PCT was calculated for each presentation and then proportions were ascribed to the day (midnight-midnight) during which the care was provided. Workload was described as "high" if daily total PCT exceeded the previously established **overcrowding** threshold of 18 patient-days per day, or "low" otherwise. **RESULTS:** In Hospital A, one or more adverse events occurred on 111 (11.9%) of 932 low-workload days and 30 (18.6%) of 161 high-workload days ($P < 0.02$). In Hospital B the figures were 84 (9.6%) of 872 and 38 (17.2%) of 221, respectively ($P < 0.002$). Both hospitals also had an increase in the number of adverse events per patient between low and high workload: from 0.14% to 0.20% ($P = 0.06$, Hospital A) and from 0.07% to 0.13% ($P < 0.002$, Hospital B). Subgroup analysis revealed an essentially linear relationship between daily PCT and adverse events per presentation in both hospitals. **CONCLUSIONS:** ED **overcrowding** as defined by daily total patient

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Delays in Care

Emergency department overcrowding and ambulance transport delays for patients with chest pain

Michael J. Schull, Laurie J. Morrison, Marian Vermeulen, Donald A. Redelmeier

Abstract

Objective: Emergency department overcrowding sometimes results in diversion of ambulances to other locations. We sought to determine the resulting prehospital delays for cardiac patients.

Methods: Data on consecutive patients with chest pain who were transported to Toronto hospitals by ambulance were obtained for a 4-month period in 1997 and a 4-month period in 1999, which represented periods of low and high emergency department overcrowding respectively. Multivariate analyses were used to model 90th percentile system response (initiation of 9-1-1 call to arrival on scene), on-scene (arrival on scene to departure from scene) and transport (departure from scene to arrival at hospital) intervals. Predictor variables were study period (1997 or 1999), day of the week, time of day, geographic location of the patient, dispatch priority, case severity, return priority and number of other patients with chest pain transported within 2 hours of the index transport.

Results: A total of 3609 patients (mean age 66.3 years, 50.3% female) who met the study criteria were transported by ambulance during the 2 study periods. There were no significant differences in patient characteristics between the 2 periods, despite the fact that more patients were transported during the second period ($p < 0.001$). The 90th percentile system response interval increased by 11.3% from the first to the second period (9.7 v. 10.8 min, $p < 0.001$), whereas the on-scene interval decreased by 8.2% (28.0 v. 25.7 min, $p < 0.001$). The longest delay was in the transport interval, which increased by 28.4% from 1997 to 1999 (13.4 v. 17.2 min, $p < 0.001$). In multivariate analyses, the study period (1997 v. 1999) remained a significant predictor of longer transport interval ($p < 0.001$) and total prehospital interval ($p = 0.004$).

Interpretation: An increase in overcrowding in emergency departments was associated with a substantial increase in the system response interval and the ambulance transport interval for patients with chest pain.

Ambulance diversion systems help in the management of ambulance traffic during periods of ED overcrowding. Their purpose is to temporarily slow the influx of new patients to a participating hospital and hence to ease overcrowding. The result is that ambulances do not take patients to the closest hospital but travel instead to an alternate one further away, which inevitably results in some prehospital delay.⁵ However, many ambulance systems allow paramedics to override the diversion status of an ED when transporting critically ill patients. The extent of prehospital delay caused by these diversion systems is unknown, nor is it known whether override provisions diminish delays for critically ill patients.

Our objective was to determine whether greater ambulance diversion was associated with longer prehospital delays for patients with chest pain. We also sought to determine whether the delay varied with the severity of illness. We chose to study patients with chest pain since this condition is common, serious and urgent.⁶⁻¹¹ Our hypothesis was that a period of greater ambulance diversion would be associated with ambulance delays for patients with chest pain, with the longest delay occurring during the transport interval (departure from the scene to arrival at the hospital). We further hypothesized that this association would not vary with severity of illness.

Methods

The study setting was the city of Toronto, which has a population of 2.5 million people¹² and a single prehospital care provider, Toronto Emergency Medical Services (EMS). Approximately 120 000 patients are transported annually to Toronto hospitals (Brian Schwartz, Medical Director, Toronto EMS, personal communication, August 2001). For ambulance dispatch purposes, the city is divided into 4 geographic quadrants, each quadrant containing 3 to 6 EDs. Ambulance patients are preferentially taken to an emergency department within their quadrant of origin. ED

gency Medicine, Mount Sinai School of Medicine, New York

Out-of-hospital cardiac arrest (OOH-CA) is a leading cause of mortality and the focus of significant research. Recent studies provide new evidence that may change our management of OOH-CA and improve outcomes. The findings of two recently published studies of OOH-CA are reviewed in this article. The first, the Public Access Defibrillation Trial, was a randomized, controlled trial of public access defibrillation in 993 community facilities in the U.S. and Canada. It demonstrated that a community strategy to train laypersons to respond to cardiac arrests significantly increased survival to hospital discharge following OOH-CA in nonresidential community units with community members trained and equipped to provide public access defibrillation, compared to community units with community members trained to provide cardiopulmonary resuscitation (CPR) without any capacity for defibrillation. The second, the European Resuscitation Council Vasopressin during Cardiopulmonary Resuscitation Study, was a randomized, controlled, double-blinded trial that compared vasopressin to epinephrine as the initial pharmacological therapy for 1,219 patients who sustained OOH-CA. The study demonstrated that vasopressin is similar to epinephrine for OOH-CA due to ventricular fibrillation or pulseless electrical activity, and superior to epinephrine for the initial treatment of asystolic arrest; it also demonstrated that the combination of vasopressin and epinephrine is superior to epinephrine alone in the treatment of refractory, out-of-hospital cardiac arrest. Studies on alternative CPR techniques and adjunctive devices for CPR were also reviewed. We conclude that pre-hospital access to defibrillators and the use of vasopressin in the management of asystolic hold promise for improving survival for patients with out-of-hospital cardiac arrest.

Office pediatrics: current perspectives on the outpatient evaluation and management of lower respiratory infections in children

Klig JE. *Curr Opin Pediatr*. 2006 Feb;18(2):21-6. Long Island Jewish Medical Center, Schneider Children's Hospital, Department of Emergency Medicine, Albert Einstein College of Medicine, New Hyde Park

PURPOSE OF REVIEW: The outpatient evaluation and management of a child with lower respiratory infection (LRI) remain a challenge to clinicians worldwide. This update will discuss current problems and new developments in the outpatient evaluation and treatment of pediatric LRIs. **RECENT FINDINGS:** The cause of pediatric LRIs remains partially defined. Mixed infections and 'unknown' organisms may be important sources of clinical illness. A wider incidence of atypical bacteria LRIs (notably *Mycoplasma pneumoniae*) in children is now recognized. Viral LRIs from rhinoviruses and human metapneumovirus are increasingly detected in children. Human metapneumovirus may compound the clinical severity of pediatric LRIs, specifically in combination with respiratory syncytial virus. Innovations in testing for viral LRIs offer a promising tool for the outpatient evaluation and management of pediatric LRIs. **SUMMARY:** Neither clinical symptoms nor findings on chest radiographs can reliably distinguish children with bacterial LRIs from those with viral or atypical pathogens. The efficacy of outpatient antibiotic treatment of atypical bacteria LRIs remains unproven. Multiplex rapid viral testing may ultimately help to refine strategies for outpatient management. The outpatient treatment of viral LRIs remains limited to supportive care; the 'value' of bronchodilators, epinephrine, or corticosteroids for treatment of bronchiolitis is unconfirmed.

The effect of emergency department crowding on the management of pain in older adults with hip fracture

Hwang U, Richardson LD, Sunmji TO, Morrison RS. *J Am Geriatr Soc*. 2006 Feb;54(2):217-25. Department of Emergency Medicine, Mount Sinai School of Medicine, New York

OBJECTIVES: To evaluate the effect of emergency department (ED) crowding on assessment and treatment of pain in older adults. **DESIGN:** Retrospective review of ED records from a prospective cohort study. **SETTING:** Urban, academically affiliated, tertiary medical center. **PARTICIPANTS:** One hundred fifty-eight patients, aged 50 and older, evaluated and hospitalized from the ED with hip fracture. **MEASUREMENTS:** Patient-related risk factors: age, sex, nursing home residence, ED triage status, dementia, Acute Physiology in Age and Chronic Health Evaluation II physiological score, and RAND comorbidity score. ED crowding risk factors: ED census and mean length of stay. Outcomes: documentation of pain assessment, time to pain assessment, time to pain treatment, patients reporting pain receiving analgesia, and meperidine use. **RESULTS:** Mean age was 83 (range 52-101), 81.0% of patients complained of pain, mean time to pain assessment was 40 minutes (range 0-600), time to treatment was 141 minutes (range 10-525), and mean delay to treatment was 122 minutes (range 0-526). Of those with pain, 35.9% received no analgesia, 7.0% received nonopioids, and 57.0% received opioids. Of those receiving opioids, 32.8% received meperidine. ED crowding at census levels greater than 120% bed capacity was significantly associated with a lower likelihood of documentation of pain assessment ($P < .05$) and longer times to pain assessment ($P = .01$). **CONCLUSION:** Older adults with hip fracture are at risk for underassessment

Pines J et al

Acad Emerg Med 2007 14: 52

- Occupancy by quartiles
- Pain Treatment delay >1hr (odds ratio)
 - 2nd 1.9
 - 3rd 2.8
 - 4th 3.4

Ambulance diversion

- Bad for patients
- Costly for companies (\$1M)

Hospital length of stay/cost

The access-block effect: relationship between delay to reaching an inpatient bed and inpatient length of stay

Drew B Richardson

MJA 2002 177 (9): 492-495

[Abstract](#) — [Introduction](#) — [Methods](#) — [Data sources](#) — [Data extraction and analysis](#) — [Results](#) — [Discussion](#) — [Competing interests](#) — [References](#) — [Author details](#)

Abstract

Objectives:

To investigate the relationship between access block in the emergency department (ED) (defined as total time from arrival to transfer from the ED over eight hours) and inpatient length of stay (LOS).

Design and setting:

Retrospective cohort study of all admissions through the ED to a tertiary hospital in Canberra, Australian Capital Territory, during 1999.

Main outcome measures:

Total time in the ED and LOS, calculated in days from ED departure to hospital discharge (non-overnight admissions were assigned LOS of one day, and all LOS were truncated at 10 days).

Results:

11 906 admissions were included, and 919 experienced access block (7.7%). Mean LOS was 4.9 days in those who experienced access block (95% CI, 4.7–5.1), compared with 4.1 days in the no-block group (95% CI, 4.0–4.2; $P < 0.0001$). Subgroup analysis showed that this "access block effect" occurred across different severities of illness and diagnoses. A strong relationship was found between longer LOS and arrival of access-block patients on the inpatient ward outside office hours (0800–1600 weekdays).

Conclusions:

This is the first study to show an association between access block and a measure of outcome outside the ED. If the effect of access block on LOS is reproduced in other settings, there are major

Emergency department length of stay independently predicts excess inpatient length of stay

Don Liew, Danny Liew and Marcus P Kennedy

MJA 2003; 179 (10): 524-526

[Introduction](#) — [Methods](#) — [Data sources](#) — [Data analysis](#) — [Results](#) — [Discussion](#) — [Limitations of the study](#) — [Conclusion](#) — [Acknowledgements](#) — [Competing interests](#) — [References](#) — [Author details](#)

Abstract

Objective:

To examine the association between emergency department length of stay (EDLOS) and inpatient length of stay (IPLOS).

Design:

Retrospective review of presentations and admissions data.

Setting:

Three metropolitan hospitals in Melbourne, 1 July 2000 to 30 June 2001.

Main outcome measures:

Mean IPLOS for four categories of EDLOS (≤ 4 hours, 4–8 hours, 8–12 hours, >12 hours); excess IPLOS, defined as IPLOS exceeding state average length of stay; odds ratios for excess IPLOS adjusted for age, sex and time of presentation.

Results:

17 954 admissions were included. Mean IPLOS for the four categories of EDLOS were ≤ 4 hours,

Dolcourt B, Bilkovski R

Acad Emerg Med 2007; 14:84

- CHF
 - ED LOS <8h
 - Hosp LOS 5.3 D charges \$23,572
 - ED LOS >8h
 - Hosp LOS 8.5 d charges \$39,345
- AMS
 - ED LOS <8h
 - Hosp LOS 4.8 D charges \$20,215
 - ED LOS >8h
 - Hosp LOS 6.8 D Charges \$40,725

Increased mortality

Review

Clinical review: Emergency department overcrowding and the potential impact on the critically ill

Robert M Cowan¹ and Stephen Trzeciak²

¹Chief Resident, Department of Emergency Medicine, UMDNJ-Robert Wood Johnson Medical School at Camden, Cooper University Hospital, Camden, New Jersey, USA

²Assistant Professor, Department of Emergency Medicine and the Section of Critical Care Medicine, UMDNJ-Robert Wood Johnson Medical School at Camden, Cooper University Hospital, Camden, New Jersey, USA

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Published online: 14 October 2004

This article is online at <http://ccforum.com/content/9/3/291>

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Critical Care 2005, 9:291-295 (DOI 10.1186/cc2981)

Abstract

Critical care constitutes a significant and growing proportion of the practice of emergency medicine. Emergency department (ED) overcrowding in the USA represents an emerging threat to patient safety and could have a significant impact on the critically ill. This review describes the causes and effects of ED overcrowding; explores the potential impact that ED overcrowding has on care of the critically ill ED patient; and identifies possible solutions, focusing on ED based critical care.

Introduction

Critical care begins immediately upon recognition of the critically ill (or potentially critically ill) patient, who has been defined as 'any patient who is physiologically unstable, requiring constant and minute-to-minute titration of therapy according to the evolution of the disease process' [1]. Therefore, the spectrum of critical care is not limited to the

(AMIs). Although EDs are designed to provide emergent stabilization and initial therapy for critically ill patients, most EDs do not have ICU-level resources for optimal longitudinal critical care delivery (such as uninterrupted 1 : 1 nursing care, focused subspecialty expertise, and invasive hemodynamic monitoring). Currently, the provision of critical care in the ED is increasing (in terms of both frequency and duration), largely because of ED overcrowding [5,7].

This review describes the causes and effects of ED overcrowding in the USA; explores the potential impact this has on the care of the critically ill ED patient; and identifies possible solutions, focusing on innovations in ED based critical care.

Emergency department overcrowding

In order to meet the increasing need for emergency services,

Increase in patient mortality at 10 days associated with emergency department overcrowding

Drew B Richardson

MJA 2006; 184 (5): 213-216

[Introduction](#) — [Methods](#) — [Results](#) — [Discussion](#) — [Conclusions](#) —
[Acknowledgements](#) — [Competing interests](#) — [References](#) — [Author details](#)

Abstract

Objective:

To quantify any relationship between emergency department (ED) overcrowding and 10-day patient mortality.

Design and setting:

Retrospective stratified cohort analysis of three 48-week periods in a tertiary mixed ED in 2002–2004. Mean “occupancy” (a measure of overcrowding based on number of patients receiving treatment) was calculated for 8-hour shifts and for 12-week periods. The shifts of each type in the highest quartile of occupancy were classified as overcrowded.

Participants:

All presentations of patients (except those arriving by interstate ambulance) during “overcrowded” (OC) shifts and during an equivalent number of “not overcrowded” (NOC) shifts (same shift, weekday and period).

Main outcome measure:

In-hospital death of a patient recorded within 10 days of the most recent ED presentation.

Results:

There were 34 377 OC and 32 231 NOC presentations (736 shifts each); the presenting patients were well matched for age and sex. Mean occupancy was 21.6 on OC shifts and 16.4 on NOC shifts. There were 144 deaths in the OC cohort and 101 in the NOC cohort (0.42% and 0.31%, respectively; $P = 0.025$). The relative risk of death at 10 days was 1.34 (95% CI, 1.04–1.72). Subgroup analysis showed that, in the OC cohort, there were more presentations in more urgent triage categories, decreased treatment performance by standard measures, and a higher mortality rate by triage category.

Conclusions:

In this hospital, presentation during high ED occupancy was associated with increased in-hospital mortality at 10 days, after controlling for seasonal, shift, and day of the week effects. The magnitude of the effect is about 13 deaths per year. Further studies are warranted.

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Phenomenology?

- Innes G, et al Acad Emerg Med 2007: 14:85
- Full capacity protocol 2006
- Pre/post analysis
- ED volume increase
- ED LOS fell by 9 hours for admitted medical patients, 5 hours for all

Phenomenology?

- Innes G, et al Acad Emerg Med 2007: 14:85
- Hospital LOS fell by 1.0 day for all admissions ($p < 0.001$)
- No adverse events in ED WR or inpatient care spaces during 6 months

Patient safety initiatives

- Negative impact on patients needing to be seen
- Negative impact on EMS functionality, e.g., diversion, “circling the field”
- 10% of TRUE emergencies wait >one hour to be seen (MMWR)
- Increased adverse events in overcrowded ED

Patient safety initiatives (cont)

- Increased LOS for hospitalized after ED hold.
- Patients who LWBS or AMA as a result of crowding and boarding may suffer adverse outcomes
- Demonstrated increase in Mortality and Morbidity

Patient safety initiatives (cont)

- A/T JCAHO, 50% of sentinel events involve ED with 1/3 of these related to overcrowding.
- More patients suffer adverse outcomes from overcrowding and boarding than from failure to meet 4-hour rule for pneumonia or 3-hour rule for sepsis!!

- [Emerg Med J. 2003 Sep;20\(5\):399.](#)
- **Emergency department overcrowding in the United States: an emerging threat to patient safety and public health.**
- [Trzeciak S,](#)
- [Rivers EP.](#)
- Department of Emergency Medicine, Section of Critical Care Medicine, Robert Wood Johnson Medical School at Camden, University of Medicine and Dentistry of New Jersey, Cooper Health System, Camden, USA. trzeciak-stephen@cooperhealth.edu
- Numerous reports have questioned the ability of United States emergency departments to handle the increasing demand for emergency services. Emergency department (ED) overcrowding is widespread in US cities and has reportedly reached crisis proportions. The purpose of this review is to describe how ED overcrowding threatens patient safety and public health, and to explore the complex causes and potential solutions for the overcrowding crisis. A review of the literature from 1990 to 2002 identified by a search of the Medline database was performed. Additional sources were selected from the references of the articles identified. There were four key findings. (1) The ED is a vital component of America's health care "safety net". (2) Overcrowding in ED treatment areas threatens public health by compromising patient safety and jeopardising the reliability of the entire US emergency care system. (3) Although the causes of ED overcrowding are complex, the main cause is inadequate inpatient capacity for a patient population with an increasing severity of illness. (4) Potential solutions for

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BMJ

Lack of hospital beds causes emergency departments to miss targets

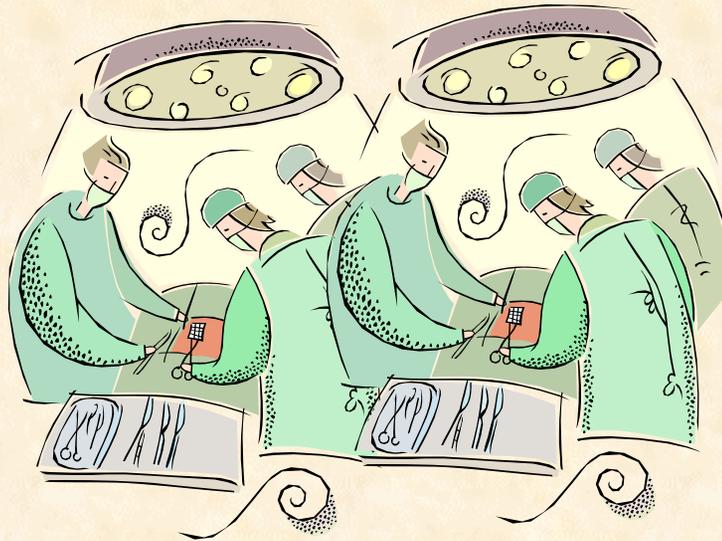
Susan Mayor

BMJ 2007;334;111-
doi:10.1136/bmj.39098.461968.DB

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<http://bmj.com/cgi/content/full/334/7585/111>

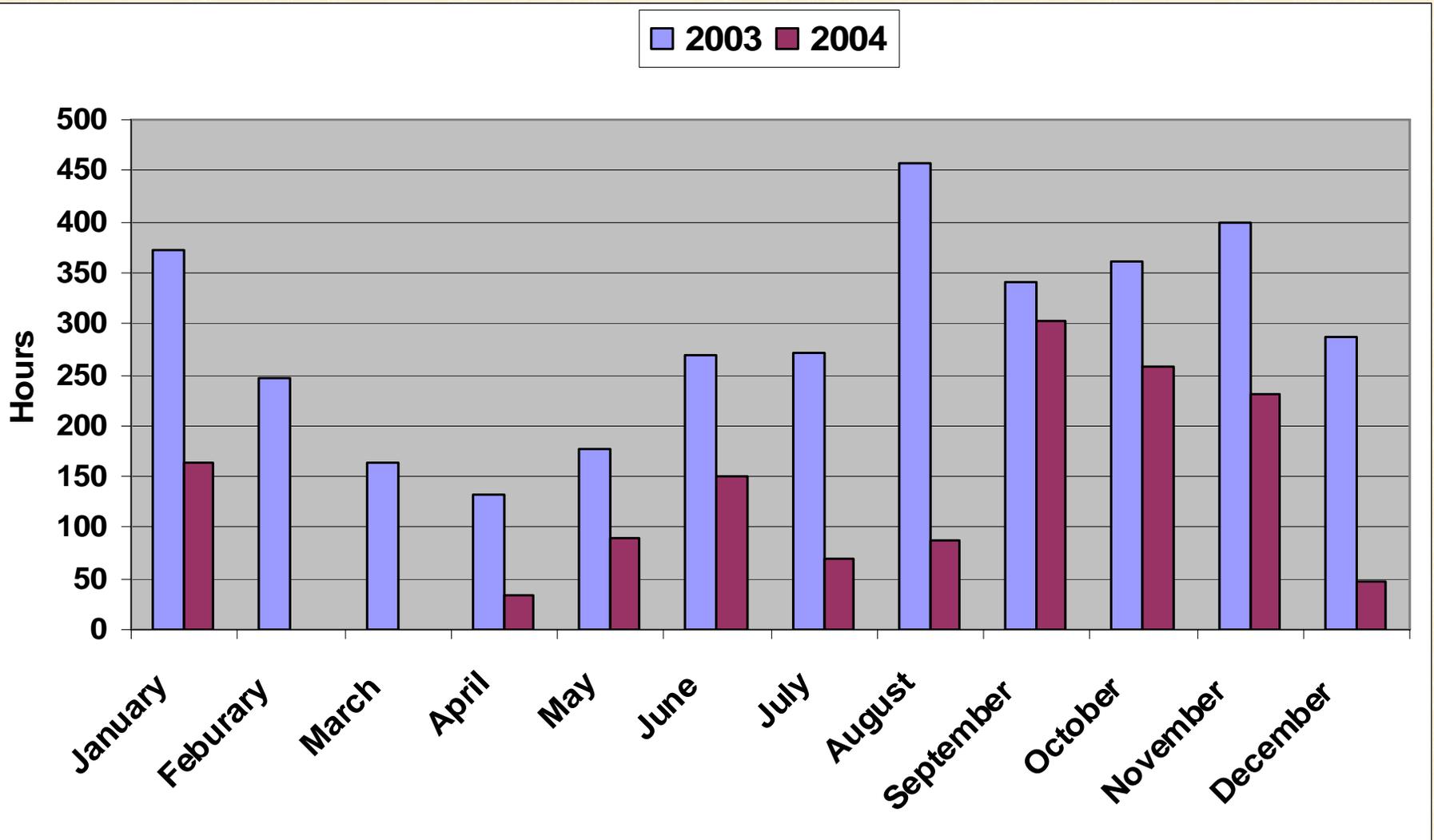
Best Practices

- Don't start

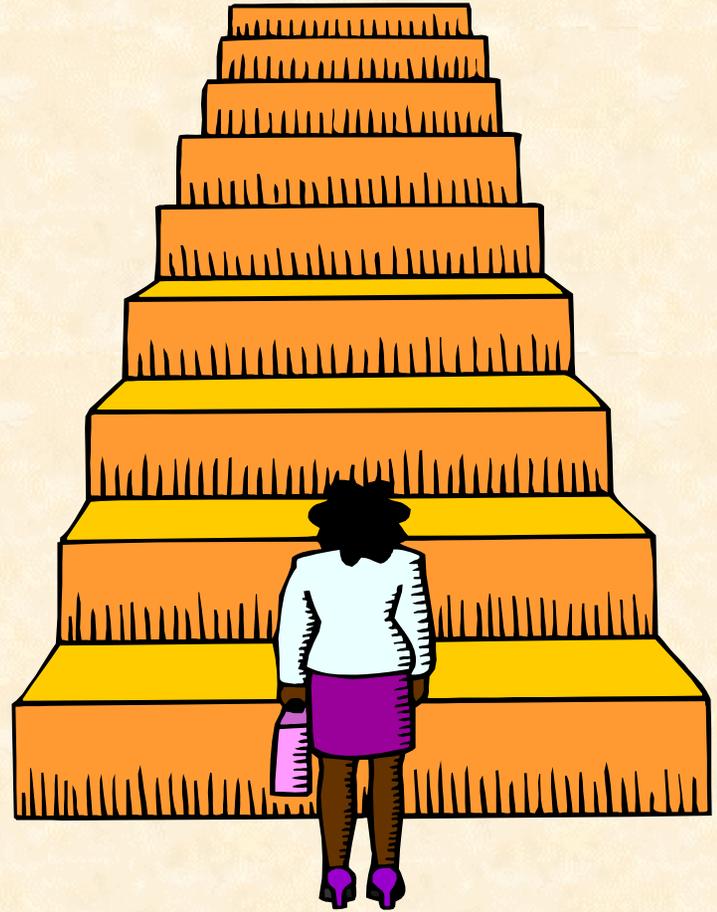


Add Capacity

Impact of the Observation Unit on Diversionary Hours



- Move the patient upstairs.



Hospital overcrowding: a threat to patient safety?

Peter A Cameron

MJA 2006; 184 (5): 203-204

[Introduction](#) — [What should be done?](#) — [Reduce hospital demand](#) —

[Optimise hospital bed capacity](#) — [Author details](#)

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→ See also [Sprivulis et al, Richardson](#)

→ More articles on [Administration and health services](#)

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Managing access block involves reducing hospital demand and optimising bed capacity

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Hospital overcrowding causing “access block” — a lack of available inpatient beds for emergency department patients — remains a major impediment to the delivery of good health care both in Australia and overseas. It is obvious that making elderly or disabled patients wait on uncomfortable emergency trolleys in corridors, with sleep deprivation and minimal privacy, is inhumane. Previous research has shown that hospital overcrowding is actually inefficient: it is associated with increased length of hospital stay,^{1,2} thus potentially reducing throughput. The number of adverse events has also been shown to increase with worsening access block.^{3,4}

An overcrowded hospital should now be regarded as an unsafe hospital

Two articles in this issue of the Journal have put pressure on efforts to solve this problem. [Sprivulis and colleagues](#)⁵ and [Richardson](#),⁶ using different methods and different populations, have shown a strong association between access block and mortality rate. Their findings now make access block a patient safety issue for which all health care workers and the community must be responsible. It is incumbent on