



Pittsburgh Regional Healthcare Initiative

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Crowded Emergency Rooms

St. Clair tackles ED "Boarders"

The nation's crowded Emergency Departments (EDs) are again garnering national concern as observers note:

- ED visits increased from an estimated 95 million in 1997 to 108 million in 2000.¹
- The number of ED visits increased by 23% from 1992-2002, while the number of EDs decreased 15%.²
- In the United States in 2000, 1.8 million patients walked out of EDs without being seen.³
- 62% of hospitals reporting operating over capacity, with Northeast and West Coast reporting the highest percentages.⁴
- In 2003, 1 out of 10 hospitals was on diversion greater than 20% of the time. Diversion is associated with

poorer patient outcomes in cases such as myocardial infarction.⁵

- Delay in treatment is the most common type of sentinel event (46.2%) listed for hospital emergency departments.⁶

In an ED, what distinguishes "crowded" from "busy?" Common definitions include: patients in hallways, all ED beds occupied, waiting rooms full more than 6 hours per day, and acutely ill patients waiting longer than 60 minutes to see a physician.² The American College of Emergency Physicians describes ED crowding as "A situation in which the identified need for emergency services outstrips available resources in that ED... Crowding typically involves patients being monitored in non-treatment areas and awaiting ED treatment beds or inpatient beds."⁷

Consistently, above all other causes, surveys cite "lack of inpatient beds" as a primary reason for ED crowding. Patients may have been triaged, seen by a physician, stabilized and admitted...only to be stuck in the ED for hours awaiting a bed in Intensive Care or other hospital unit. Trying to care for these waiting inpatients—called "boarders"—taxes the resources of the busy ED.

National concern

Urgent Matters, a Robert Wood Johnson Foundation-funded initiative, provided \$25,000 grants to 10 hospitals in 2002 to improve ED patient flow. Program Director, Bruce Siegel, MD, notes numerous, inexpensive innovations at participating hospital EDs. "Grady Health System (Atlanta) has discharge orders written before the day of discharge. University of California San Diego Hospital put in a bonus payment for departments achieving early discharge. Some hospitals created bed

Emergency room visits rise, even as ERs close: report

From Modern Healthcare, May 31, 2005

- *Emergency department visits rose to an all-time high in 2003, 113.9 million annually, up 26% from the number recorded in 1993, the Centers for Disease Control and Prevention said in a new report.*
- *The number of emergency departments in the U.S. decreased 12.3% over the same period.*
- *Adults, especially seniors, drove the trend, with emergency rooms reporting a 26% increase in patients 65 years and older.*
- *Approximately 14% of ER visits resulted in a hospital admission in 2003.*
- *On average, patients spent 3.2 hours in the emergency department and waited 46.5 minutes to see a doctor.*

The CDC report National Hospital Ambulatory Medical Care Survey issued May 26, 2005, may be found at:

<http://www.cdc.gov/nchs/data/ad/ad358.pdf>

czars who track when beds opened up and which rooms required housecleaning to improve patient flow coordination. Inova Fairfax in Northern Virginia had an "adopt-a-boarder" demonstration where patients board on inpatient floors, not in the ER. Patients prefer it rather than being in a more chaotic ER environment."²

Local innovations

Among several local hospitals examining the ED crowding problem, St. Clair Hospital provides an example of several of these innovations. Notes Kathy Baumgarten, RN, St. Clair's Director of Med/Surg/Et/Hemo Services, the problem with the ED became apparent one unusually busy day just over a year ago. That fateful day, the ED had 24 patients awaiting beds, frustrating the nurses in the ED and leaving everyone asking whether they could find a better way. Did they really need more beds in the busiest units, including the ED, or could improved efficiency fix the problem?

They asked a simple, patient-centered question to begin the problem-solving: When the patient is ready and a bed is ready, why can't people admitted from the ED be placed in a patient unit within 30 minutes?

"We took the team approach to moving 'boarders' out of the ED," says Patient Placement Manager Sharon Escajeda, RN, who is in charge of tracking the status of every bed in the hospital. Several experiments are going on at once. Solving one aspect of the problem causes other, hidden problems to surface.

For example, in the past, a bed request could be processed by any one of a number of personnel.

This often led to confusion and waste. Sometimes, one unit secretary would be interrupted many times by people looking for beds. Sometimes more than one bed was prepared for a single patient due to multiple requests.

"Now we have one way to request a bed," says Escajeda. "When a bed is needed, or when a bed becomes available, there's only one person to call: me." Having information centralized and standardized created less confusion and improved efficiency.

Yet St. Clair discovered what hospitals across the country are seeing: the number of inpatient days is declining, while the number of ED visits is rising. Patients generally seek emergency care, unscheduled urgent care, or 'safety net' care in their EDs, but the rise in emergent cases has led to increased admissions. In this case, St. Clair determined that adding 10 telemetry beds would help reduce 'boarding.' They are also looking at redesigning and expanding the ED.

How to add beds

But there's another way to add more beds: make sure every bed is actually used. Doing so brings up another hospital challenge: staffing. During times of increased census, beds might remain empty for lack of nursing staff. To ensure that the new telemetry beds were always adequately staffed, St. Clair created an on-call system, which allows any nurse to pick up on-call time after meeting his or her obligation to their own unit. They are paid extra to be on call, then paid double-time if they are called.

"The telemetry unit increased its size by one-third, without chaos," notes Escajeda. "Credit

¹ GAO-03-460, a report to the Ranking Minority Member, Committee on Finance, U.S. Senate, March 2003

² *Bursting at the Seams: Improving Patient Flow to Help America's Emergency Departments*. Urgent Matters, September 2004, RWJF.

³ *Triage Time Bomb*; AHRQ Web M&M. <http://www.webmm.ahrq.gov/case.aspx?caseID=44>, January 2004

⁴ American Hospital Association (AHA) Survey of emergency department and hospital capacity (The Lewin Group, 2002)

⁵ GAO, 2003

⁶ JCAHO, 2003

⁷ Journal of American College of Emergency Physicians, *Crowding Resources*, 2002, p.10

goes to the nurse manager and the entire staff, and the planning process. It is working well. Patients who would otherwise have ‘boarded’ now have a place to go; ED nurses have more support; and staff appreciate the on-call system.”

ED expansion means listening

As plans for the ED expansion get under way, all staff are involved—aides, secretaries, physicians, nurses, lab, x-ray, pharmacy, even IT. Every team member contributes crucial information: for example, it was a mental health aide who suggested having mental health rooms located closer to the elevators leading to the mental health unit.

Examining the whole process

In tracking the many causes of ED crowding, the staff at St. Clair found themselves focusing on the opposite end of a patient’s hospital stay: discharge. Here, Escajeda has found plenty of opportunity for improvement. A process for expediting patients through the ER, done on nights and weekends, was expanded around the clock. It involves a designated nurse making rounds to all units, finding discharges scheduled throughout the day, making sure they are in the hospital computer system, and coordinating staff response. Case managers meet each day in each unit



Hospital of the future? Boarding patients in the hallways of Emergency Departments is a hallmark of overcrowding. Increasing efficiency involves improving systems throughout the whole hospital.

Photo from presentation by Brent Asplin MD, MPH, Dept. of Emergency Medicine, Regions Hospital & HealthPartners Research Foundation, Mpls/StPaul, MN

Before	After
Time for a ready patient to a ready bed varies from minutes to hours	Target stated: ready patient to ready bed in 30 minutes
Unit nurses interrupted multiple times by other units looking for free beds	Unit nurses report bed availability to Patient Placement Manager
Multiple requests lead to more than one bed being prepared	Coordinating through Patient Placement Manager eliminates duplication of effort
Many ED patients need to be admitted to telemetry unit	10 telemetry beds added; “on-call” system implemented to ensure adequate staffing
Beds unavailable because patients not discharged on time	Patient Placement Manager helps coordinate information among staff (MDs, RNs, pharmacists, unit secretaries, social services, housekeepers, etc.)
Patients not ready for discharge on time	With coordinated information, staff get information and medication to patients faster
Patients’ families late in picking up at discharge	Let families know on admission that timely pickup is crucial.

to coordinate discharge needs of patients known to be ready for discharge—from social services to insurance.

A second, unexpected reason for discharge delay were the families themselves. Often, a family member may not be available to pick up the patient until the end of the work day—sometimes hours after discharge was complete. St. Clair has used several innovations to remind community members that beds of discharged patients are needed. In times of high census, the hospital has even offered grocery certificates to families who arrive on time. However, the most effective method returns to the admission: staff members admitting patients remind them and their families that timely pickup at discharge creates less backlog for their friends and neighbors who may be waiting in the ED for a bed.

More improvements are being made as more problems are being uncovered. Standardizing report forms has aided the flow of information, and a new fax report system is being tried. These innovations seem to have “staying power” because they are based on the needs of individual patients.

