

September 2006

## The Emergency Room Safety Net – At the Breaking Point

The great majority of the nation's 4,000 hospital emergency departments already operate at or over critical capacity and are ill-prepared for a major disaster, said a June 2006 Institute of Medicine (IOM) study. Central Florida, while more prepared than many other communities, faces many of the same challenges.

This *Brief* outlines hospital-related concerns noted in the report, entitled *Hospital-Based Emergency Care: At the Breaking Point*.<sup>i</sup> It also references a local report by Orange County EMS comparing Orange County to the IOM report.

### **Overcrowding**

Nationally, 91% of EDs surveyed by the IOM reported overcrowding, 40% of them daily. Between 2000 and 2005, Central Florida saw ED visits rise 23% -- while one ED closed.

While the system's capacity is an issue, the other is ED use for non-emergencies. The IOM study said just over 50% of all ED patients were categorized as emergent or urgent, meaning they needed care within 15 to 60 minutes. The others could have been treated in a physician office. The consequence: average wait times of four hours for non-emergent patients and longer-than-necessary wait times for urgent and emergent patients.

The overuse of the ED reflects several realities:

- EDs have become adjuncts to busy physician offices that send patients to the ED during and after office hours. In fact, 84% of people who go to the ED four or more times a year have insurance and access to a physician.
- EDs are the primary providers for the one in five uninsured Americans. Large medical centers and public hospitals bear the greatest burden. Some hospitals receive federal Disproportionate Share (DSH) payments but the payments are inadequate, said the IOM report. Most physicians do not take Medicaid because of low reimbursement rates. As a result, Medicaid clients use the

### **An August Day in a Florida Hospital ED**

#### **3:30 p.m.**

Forty-four patients sit in the ED waiting room; some have waited for hours. Those who could have been seen in a physician office will wait the longest. Some are in pain. Two have been given IVs -- with the accompanying poles.

All 40 ED treatment rooms are full. Some patients wait for specialists who are tied up elsewhere. Fourteen patients need to be admitted but the hospital's inpatient beds are full. Some lie in treatment rooms and some lie on gurneys in the hall, where they will spend hours waiting. Outside, six ambulances wait to unload. Their patients' conditions are not life-threatening -- but EMS is required to take all 911 callers to the ED.

#### **3:35 p.m.**

Police arrive with the day's fifth Baker Act patient. Again, the law requires that these patients, deemed a threat to themselves or others, be taken to a hospital receiving center. They will be seen by a psychiatrist and moved to an appropriate psychiatric facility if any beds are available.

#### **3:40 p.m.**

The nursing supervisor cannot find additional staff to come in. Three patients leave without being seen. Two more ambulances pull up.

#### **3:50 p.m.**

EMS calls. There is a serious car accident and more ambulances will be arriving.

#### **3:55 p.m.**

At least one more patient needs to be admitted. The hospital calls a "Code Purple" for the third time that month, meaning that 15 or more patients are waiting for inpatient beds. A full mass casualty effort is deployed.

- ED twice as often as the uninsured and four times that of insured patients.
- ED patients tend to be older and sicker, requiring lengthy and complex work-ups and treatments.

<b>Overcrowding: IOM Recommendations</b>	<b>Orange County Situation</b>
<ul style="list-style-type: none"> <li>An immediate additional \$50 million in federal funding for hospitals providing high levels of uncompensated emergency and trauma care.</li> </ul>	<ul style="list-style-type: none"> <li>EMS works to distribute patients evenly when possible.</li> <li>Florida law now provides additional trauma funding.</li> </ul>

### Boarders & Ambulance Diversions

ED and inpatient crowding can also generate "boarders." When the hospital's inpatient beds are full, ED patients who need to be admitted must be held in the ED. Ironically, these boarders are the ED's sickest patients -- yet they can wait hours or in some cases, days, in treatment rooms or hallways. Over 73% of hospitals reported patient boarding, said the IOM.

Boarders back up the EMS system as well. When the ED is full, ambulances with non-emergent patients must wait to unload -- and the paramedics wait with them.

In many areas, overcrowded EDs can go on diversion, meaning that ambulances must pass by one hospital and go to another. This lengthens the patient's time-to-treatment and ties up the EMS system. Nationally, 70% of US hospitals went on diversion at some point in 2004. Orange County does not allow ambulance diversions; Lake, Seminole and Osceola Counties do.

### CDUs Improve Efficiency

The IOM recommends expanding the use of CDUs, or "clinical decision units." These protocol-driven units have proven success in quickly diagnosing/ruling out conditions like heart attacks -- with fewer resources.

Florida Hospital has two CDUs. The Chest Pain Center is a 23-hour observation unit that reduces time-to-treatment during the critical early stages of a heart attack. The Stroke Center works with EMS to begin treatment even before the ambulance arrives at the hospital.

<b>Boarders &amp; Diversions: IOM Recommendations</b>	<b>Orange County Situation</b>
<ul style="list-style-type: none"> <li>Establish joint EMS-hospital efficiency committees.</li> <li>Eliminate ambulance diversions.</li> <li>Eliminate boarding.</li> <li>Medicare currently reimburses for chest pain, congestive heart failure and asthma CDUs only. Medicare should remove these restrictions.</li> </ul>	<ul style="list-style-type: none"> <li>Both the EMS Advisory Board and its Access Committee include hospitals and meet monthly.</li> <li>Florida Hospital has a 45-minute offload mandate.</li> <li>Local hospitals are using/testing overcrowding programs including CDUs (see box above).</li> </ul>

### Physician Shortages

Physician shortages can aggravate ED crowding and wait times, and impede timely patient care. Procedures performed on emergency patients are inherently risky, and physicians are trying to avoid this risk limiting their hospital practices and privileges, thereby getting around ED call. Many are opting for the low-risk environment of ambulatory surgery centers and purely office-based practices. Others are leaving the state. In addition, Florida's exceptionally high medical liability insurance rates make it very difficult to recruit new doctors to the state.

For example, the IOM study said, 36% of neurosurgeons had been sued by an ED patient. In Orlando, some skilled neurosurgeons no longer perform brain surgery and focus instead on less risky spinal surgeries. (In some cases, neuro patients have been flown out of state for treatment.) Other specialists, including general and orthopedic surgeons, have also limited their practices.

Besides the risk, physicians cite a lack of reimbursement. The IOM study agreed, saying nearly 80% of specialists surveyed reported difficulty in getting paid for emergency and trauma patients.

Finally, Florida is not producing enough new physicians. Medical residents typically stay and practice in the area of their residency programs – Florida ranks 43rd in the nation for federally funded residency slots.

<b><i>Physician Shortages: IOM Recommendations</i></b>	<b><i>Orange County Situation</i></b>
<ul style="list-style-type: none"> <li>▪ <i>Form a Congressional commission to look at the impact of medical malpractice suits in emergency situations.</i></li> <li>▪ <i>Establish regional collaborations regarding critical specialty on-call services.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Florida Hospital is adding surgery and emergency medicine residency programs.</i></li> <li>▪ <i>All hospitals are exploring alternative methods for recruiting specialists.</i></li> <li>▪ <i>Tertiary medical centers like Florida Hospital provide a regional safety net.</i></li> </ul>

### **Disaster Preparedness & Surge Capacity**

The IOM report expressed grave concerns about disaster preparedness and the ability of hospitals to absorb "surges" of ill or injured patients. They noted that, while millions of dollars are going into disaster preparedness, just a fraction has gone to medical preparedness.

Federal grants to hospitals for bioterrorism preparedness ranged from \$5,000 to \$10,000 -- not enough to fund a single critical care room. Supplies of critical equipment such as decontamination showers, negative pressure rooms that prevent the spread of airborne disease, ventilators and intensive care beds are "wholly inadequate," said the report. A recent series of national and state summits on pandemic flu preparedness identified many of the same ED-preparedness deficiencies, noted the authors.

Surge capacity remains an issue in the nation and locally. With Central Florida hospitals already at or over capacity, there is little space or capacity to absorb a large influx of patients from a mass casualty. Physical space is part of the issue, but personnel and equipment may also prove inadequate.

<b><i>Surge Capacity: IOM Recommendations</i></b>	<b><i>Orange County Situation</i></b>
<ul style="list-style-type: none"> <li>▪ <i>Significantly increase federal disaster preparedness funding in 2007 for ED and trauma surge capacity, hospital and EMS training, decontamination and negative pressure rooms, and adequate personal equipment.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>EMS is developing plans for Alternate Medical Treatment Sites.</i></li> <li>▪ <i>EMS provides regular mass casualty training using federal grants.</i></li> <li>▪ <i>Hospitals provide internal mass casualty training.</i></li> <li>▪ <i>Hospital construction will add much-needed beds.</i></li> <li>▪ <i>Some specialized equipment is provided by federal funds.</i></li> </ul>

"Our area hospitals and EMS systems have state-of-the-art disaster preparedness systems," said Lars Houmann, president of Florida Hospital. "But the reality is this: we just do not have adequate surge capacity for a full-scale disaster.

"The Institute of Medicine report is one of several that point this out," he continued. "Their recommendations, as well as similar ones from the Florida Hospital Association Emergency Department Task Force, are viable ones. We just have to do everything we can to make sure they are implemented – quickly.

<sup>i</sup> *Hospital-Based Emergency Care: At the Breaking Point, Institute of Medicine, June 2006.*