

INSTITUTE OF

MEDICINE

***The Future of Emergency Care
in the
United States Health System***

***Regional Dissemination Workshop
Chicago, Illinois
Oct 27, 2006***



Sponsors

- **Josiah Macy, Jr. Foundation**
- **Agency for Healthcare Research and Quality**
- **Centers for Disease Control and Prevention**
- **Health Resources and Services Administration**
- **National Highway Traffic Safety Administration**



EMS CRISIS
Is “Under the Surface”
Emergency Medical
Services in the US are:

- **Overwhelmed**
- **Under-funded**
- **Fragmented**



Motivation

- **Crowded EDs**
- **Financial burden of uncompensated care**
- **Fragmentation**
- **Inadequate Surge Capacity (espec. with DISASTER)**
- **Personnel Shortages (nurses, physicians, technicians, EMTs, Paramedics and others...)**
- **Limited Data on Quality**
- **Inadequate Research Funding and Infrastructure**
- **Limited Preparedness for Pediatric Patients**





**New York
September 11, 2001**



**Oklahoma Federal Bldg
Bombing 1995**



Suicide Bombing Israel

***ROLE OF EMS
IN
DISASTERS***



**India Train Explosion
July 11 2006**



London July 2005



Madrid Train Bombing

Shortage of Physicians Convergence of Forces

“The Perfect Storm”

- Reimbursement DOWN
- Cost of living UP
- Reduced workforce (fewer medical school and residency “graduates”, aging surgeons, etc)
- Changing life style issues (shared practices, work hours, etc)
- Malpractice threats/outrageous premiums
- EMTALA issues



Statement of Task (In Brief)

The objectives of this study are to:

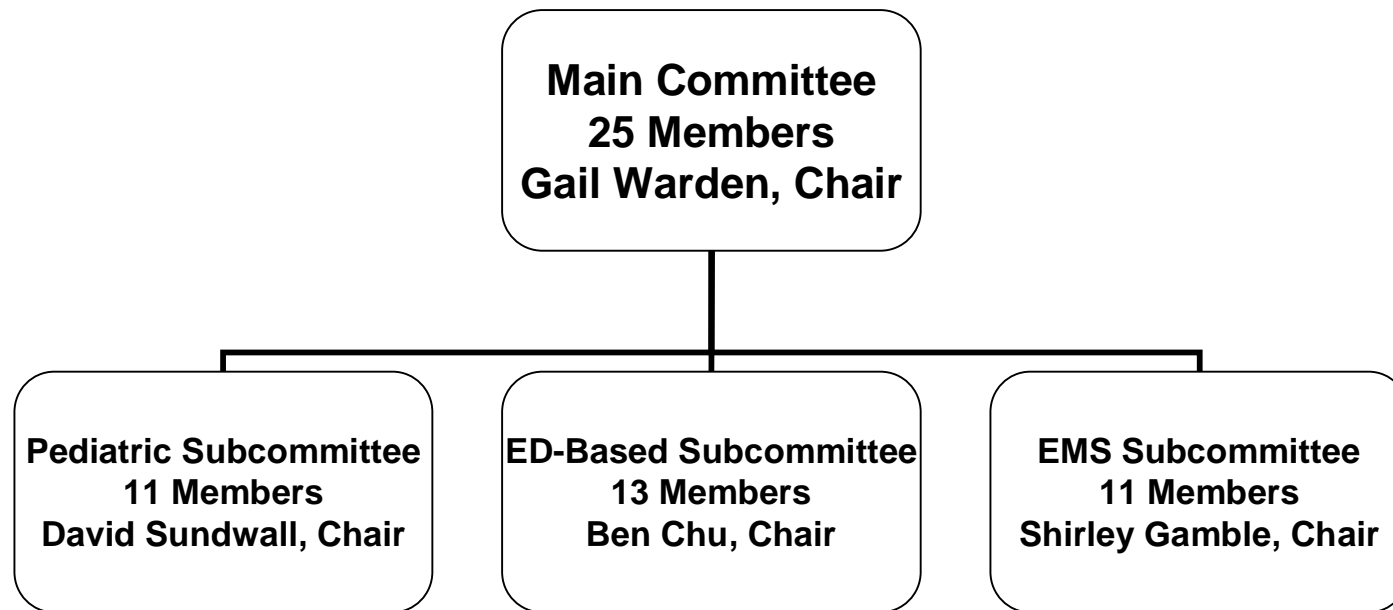
- (1) examine the emergency care system in the U.S.;
- (2) explore its strengths, limitations, and future challenges;
- (3) describe a desired vision of the emergency care system; and
- (4) recommend strategies required to achieve that vision.

The study will also examine the unique challenges associated with the provision of emergency services to children and adolescents, and evaluate progress since the publication of the IOM's 1993 report, *Emergency Medical Services for Children*

In addition, the study will examine prehospital EMS and include an assessment of the current organization, delivery, and financing of EMS services and systems, and assess progress toward the *EMS Agenda for the Future*.



Committee Structure



Hallmarks of the IOM Process

- Independent (Bias and Conflict of Interest)
- Confidential
- Peer Reviewed



Information Gathering

- **Expert Presentations**
- **Commissioned Papers**
- **Literature Reviews**
- **Site Visits**
- **Information from Professional Societies and Associations and Government Agencies**



Vision for the Future of Emergency Care

***Coordinated
Regionalized
Accountable***

Emergency Care System



THE VISION of Universal Access to EMS



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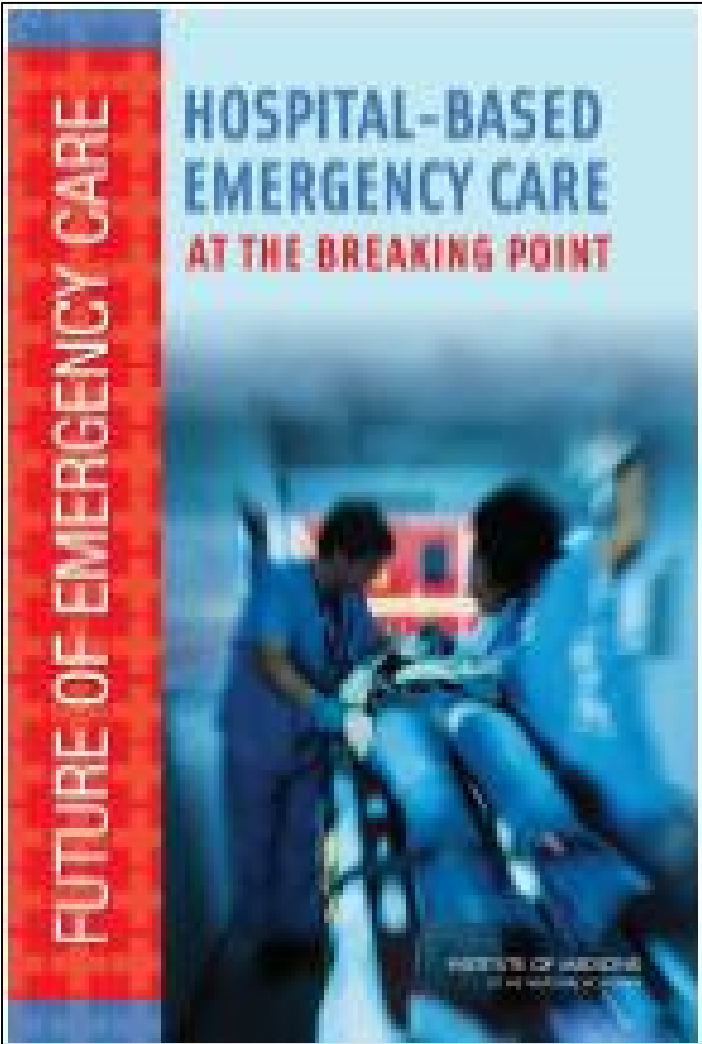


Achieving the Vision

- **Congress:** Establish a demonstration program to promote regionalized, coordinated, and accountable emergency care services.
- **Congress:** Establish a lead agency in DHHS for emergency and trauma care.
- **Federal Agencies:** Establish evidence-based categorization systems; prehospital protocols, and indicators of system performance.



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Key Problems

- **Overcrowding:** 40 percent of hospitals report ED overcrowding on a daily basis
- **Boarding:** patients waiting 48 hours or more for an inpatient bed
- **Ambulance Diversion:** Half a million ambulance diversions in 2003
- **Uncompensated Care:** results in financial losses and closures for EDs and trauma centers



Key Problems (cont...)

- **Inefficiency:** Limited use of tools to address patient flow to reduce crowding
- **On-Call Specialists:** unavailability of specialists to provide emergency and trauma consultation
- **Inadequate Emergency Preparedness:** surge capacity, training, planning, and personal protective equipment



Key Problems (cont...)

- **Fragmentation: limited coordination of the regional flow of patients**
- **Accountability: lack of system performance measurement; public reporting; financial incentives**
- **Research: Inadequate funding and infrastructure**



Recommendations

- **Congress:** Provide \$50 million for uncompensated emergency and trauma care.
- **Hospitals:** End boarding and diversion, supported by CMS working group, JCAHO.
- **Hospitals:** Adopt operations management techniques and IT improvements to enhance patient flow, supported by training and certification organizations.



Recommendations (cont...)

- **States and Regions:** Regionalize on-call specialty services.
- **Congress:** Establish a commission to evaluate the impact of medical liability on on-call services
- **Federal Agencies:** Evaluation of long-term workforce needs



Recommendations (cont...)

- **Congress:** Increase funding for hospital preparedness in key areas:
 - Trauma systems
 - Surge capacity
 - Personal protective equipment
 - Research
- **DHHS:** Study to determine optimal research strategy, including dedicated NIH center



Key Problems

- **Fragmentation:** Lack of coordination between local service providers; between EMS and public safety; and between EMS and air medical services.
- **Uncertain Quality:** Little or no performance data; lack of national standards for training and credentialing.
- **Disaster Preparedness:** Inadequate training, equipment, funding.
- **Evidence Base:** limited understanding of effectiveness.



Communications

- **Improve data and communications systems interoperability between EMS agencies, hospitals, and public health departments.**
- **State regulation of air medical providers with respect to communications, dispatch, and transport protocols.**



Workforce Standards

- **Improve the quality and consistency of EMS by encouraging states to:**
 - **Require national accreditation of paramedic education programs.**
 - **Accept national certification as a prerequisite for state licensure.**
 - **Establish a common scope of practice for EMS personnel across states, with state licensing reciprocity.**



Research

- **Study to examine the gaps in emergency and trauma care research.**
- **Development of a research strategy.**
- **Increased funding for prehospital EMS research, emphasizing systems and outcomes research.**



Disaster Preparedness

- **Elevation of emergency care to a position of parity with other public safety entities in disaster planning and operations.**
- **Increase in funding for EMS-related disaster preparedness through dedicated funding streams.**
- **Incorporate disaster preparedness training into EMS professional training and continuing education.**



State of Pediatric Emergency Care

- Only 6 percent of EDs have all essential pediatric supplies and equipment needed managing pediatric emergencies.
- Many emergency providers receive little training in pediatric emergency care.
- Many medications prescribed to children are “off label.”
- Disaster preparedness plans largely overlook the needs of children.



Inclusion of Pediatric Concerns

- **Categorization systems based on pediatric capabilities**
- **Treatment, triage and transport protocols for children**
- **Performance measurement of pediatric emergency care**
- **Lead agency with oversight of pediatric emergency care**



Pediatric Disaster Preparedness

- **Minimize parent–child separation.**
- **Improve the level of pediatric expertise on disaster response teams.**
- **Address pediatric surge capacity.**
- **Develop specific medical and mental health therapies, as well as social services, for children.**
- **Conduct disaster drills for a pediatric mass casualty incident.**



Provider Training and Resources

- **Define pediatric competencies; require practitioners to receive the level of training necessary to achieve and maintain those competencies.**
- **Appoint pediatric coordinators to provide pediatric leadership in EMS agencies and hospitals.**



Research

- **Research the efficacy, safety, and health outcomes of medications for children.**
- **Research the effect of technologies and equipment in the emergency care environment on children.**



Federal Leadership for Pediatric Emergency Care

- Appropriate \$37.5 million each year for the next 5 years to the federal Emergency Medical Services for Children program.

