OF THE NATIONAL ACADEMIES

The Future of Emergency Care: Key Findings and Recommendations

KEY FINDINGS

Many EDs and trauma centers are overcrowded. [Drawn from Hospital-Based Emergency Care: At the Breaking Point]

- Demand for emergency care has been growing fast emergency department (ED) visits grew by 26 percent between 1993 and 2003.
- But over the same period, the number of EDs declined by 425, and the number of hospital beds declined by 198,000.
- ED crowding is a hospital-wide problem—patients back up in the ED because they can not get admitted to inpatient beds.
- As a result, patients are often "boarded"—held in the ED until an inpatient bed becomes available—for 48 hours or more.
- Also, ambulances are frequently diverted from overcrowded EDs to other hospitals that may be farther away and may not have the optimal services. In 2003, ambulances were diverted 501,000 times—an average of once every minute.

Emergency care is highly fragmented. [Drawn from *Emergency Medical Services At the Crossroads*]

- Cities and regions are often served by multiple 9-1-1 call centers.
- Emergency Medical Services (EMS) agencies do not effectively coordinate EMS services with EDs and trauma centers. As a result, the regional flow of patients is poorly managed, leaving some EDs empty and others overcrowded.
- EMS does not communicate effectively with public safety agencies and public health departments—they often operate on different radio frequencies and lack common procedures for emergencies.
- There are no nationwide standards for the training and certification of EMS personnel.
- Federal responsibility for oversight of the emergency and trauma care system is scattered across multiple agencies.

Critical specialists are often unavailable to provide emergency and trauma care. [Drawn from Hospital-Based Emergency Care: At the Breaking Point]

- Three quarters of hospitals report difficulty finding specialists to take emergency and trauma calls.
- Key specialties are in short supply. For example, the number of neurosurgeons declined between 1990 and 2002, while the number of trauma visits increased.
- On-call specialists often treat emergency patients without compensation due to high levels of uninsurance.
- These specialists also face higher medical liability exposure than those who do not provide on-call coverage.

The emergency care system is ill-prepared to handle a major disaster. [Drawn from all three reports]

- With many EDs at or over capacity, there is little surge capacity for a major event, whether it takes the form of a natural disaster, disease outbreak, or terrorist attack.
- EMS received only 4 percent of Department of Homeland Security first responder funding in 2002 and 2003.
- Emergency Medical Technicians in non-fire based services have received an average of less than one hour of training in disaster response.
- Both hospital and EMS personnel lack personal protective equipment needed to effectively respond to chemical, biological, or nuclear threats.

EMS and EDs are not well equipped to handle pediatric care. [Drawn from Emergency Care for Children: Growing Pains.]

- Most children receive emergency care in general (not children's) hospitals, which are less likely to have pediatric expertise, equipment, and policies in place for the care of children.
- Children make up 27 percent of all ED visits, but only 6 percent of EDs in the U.S. have all of the necessary supplies for pediatric emergencies.
- Many drugs and medical devices have not been adequately tested on, or dosed properly for, children.
- While children have increased vulnerability to disasters—for example, children have less fluid reserve, which leads to rapid dehydration—disaster planning has largely overlooked their needs.

RECOMMENDATIONS

Create a coordinated, regionalized, accountable system. [Drawn from all three reports]

- The emergency care system of the future should be one in which all participants (from 9-1-1 to ambulances to EDs) fully coordinate their activities and integrate communications to ensure seamless emergency and trauma services for the patient.
- Congress should enact a demonstration program (\$88 million over 5 years) to encourage states to identify and test alternative strategies for achieving the vision.
- The federal government should support the development of national standards for: emergency care performance measurement; categorization of all emergency care facilities; and protocols for the treatment, triage, and transport of prehospital patients.

Create a lead agency. [Drawn from all three reports]

 The federal government should consolidate functions related to emergency care that are currently scattered among multiple agencies into a single agency in the Department of Health and Human Services (DHHS).

End ED boarding and diversion. [Drawn from *Hospital-Based Emergency Care: At the Breaking Point*]

- Hospitals should reduce crowding by improving hospital efficiency and patient flow, and using operational management methods and information technologies.
- The Joint Commission on the Accreditation of Healthcare Organizations should reinstate strong standards for ED boarding and diversion.
- The Centers for Medicare and Medicaid Services should develop payment and other incentives to discourage boarding and diversion.

Increase funding for emergency care. [Drawn from Hospital-Based Emergency Care: At the Breaking Point and Emergency Medical Services At the Crossroads]

- Congress should appropriate \$50 million for hospitals that provide large amounts of uncompensated emergency and trauma care.
- Funding should be increased for the emergency medical component of preparedness—both EMS and hospital-based—especially for personal protective equipment, training, and planning.

Enhance emergency care research.

[Drawn from all three reports]

- Federal agencies should target additional research funding to prehospital emergency care services and pediatric emergency care.
- DHHS should conduct a study of the research needs and gaps in emergency care, and determine the best strategy for closing the gaps, which may include a center or institute for emergency care research.

Promote EMS workforce standards.

[Drawn from Emergency Medical Services At the Crossroads]

 States should strengthen the EMS workforce by: requiring national accreditation of paramedic education programs, accepting national certification for state licensure, and adopting common EMS certification levels.

Enhance pediatric presence throughout emergency care. [Drawn from *Emergency Care for Children:* Growing Pains.]

- EDs and EMS agencies should have pediatric coordinators to ensure appropriate equipment, training, and services for children.
- Pediatric concerns should be explicit in disaster planning.
- More research is needed to determine the appropriateness of many medical treatments, medications, and medical technologies for the care of children.
- Congress should increase funding for the federal Emergency Medical Services for Children Program to \$37.5 million per year for 5 years.