



Access to Optimal Emergency Care for Children

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Every year, millions of pediatric patients seek emergency care. Significant barriers limit access to optimal emergency services for large numbers of children. The American Academy of Pediatrics, American College of Emergency Physicians, and Emergency Nurses Association have a strong commitment to identifying these barriers, working to overcome them, and encouraging, through education and system changes, improved access to emergency care for all children.

All children deserve access to optimal (safe and high-quality) emergency care. Given the inherent vulnerabilities of children and potential lifelong consequences of poorly treated health conditions, access to optimal emergency health care is particularly important. In the United States, emergency departments (EDs) serve as the national safety net for individuals unable to find care elsewhere as well as a resource during public health emergencies and disasters through the provision of comprehensive acute care 24 hours a day and 7 days a week. Vulnerable populations who rely more heavily on the ED for services are disproportionately affected when this safety net is weakened or fails, and this needs to be addressed to ensure optimal care for all Americans. A significant portion of annual ED visits are by children younger than 18 years. Recent national data reveal that children account for approximately 20% of all ED visits, which represents more than 27 million total ED visits in the United States.¹ The vast majority of these visits take place outside of pediatric medical centers and children's hospitals.²

The American Academy of Pediatrics (AAP), American College of Emergency Physicians (ACEP), and Emergency Nurses Association (ENA) have previously endorsed policy statements advocating for improved access to emergency care.^{3–5} Despite these statements and calls for action by other groups,⁶ access to optimal emergency care remains limited for many children in the United States. The 2014 ACEP "Report Card on Emergency Medicine" examined access to emergency care for patients of

abstract

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all ages on a state-by-state basis, and it found that few states have adequate policies and resources to deliver an acceptable level of emergency care access. The overall nationwide grade of D– was unchanged since the last report card was issued in 2009, reflecting a lack of improvement in emergency care access, despite recent efforts at health care reform.⁷

PROBLEMS THAT RESTRICT ACCESS TO CARE

Children and their families face barriers to optimal emergency care at many key points of access. These include the following.

1. Public and Professional Awareness of Available Resources and Systems of Care

Deficits remain in the awareness and perceptions of the public and health care professionals regarding the emergency care system and how best to access emergency care when needed. These include:

- lack of a consensus on what should drive entry into the emergency care system and appropriate points of access for patients;
- underuse of emergency medical services (EMS) in emergencies because of a misconception by some caregivers that they can reach EDs faster on their own;
- limited access to a medical home for patients and poor coordination of 2-way communication between emergency physicians, nurse practitioners or physician assistants, and the primary care provider;⁸
- misconception that urgent care centers provide comprehensive emergency services;
- lack of knowledge of the inconsistent readiness of EDs to care for children of all ages;²
- language and health literacy barriers to understanding the appropriate use of less emergent sources of care, such as urgent

clinic appointments or urgent care centers; and

- poor access to timely primary care appointments among vulnerable patients, especially children who have public insurance, have language barriers, are members of racial and ethnic minorities, and/or live in underserved areas.^{9,10}

2. Entry Into the Emergency Care System

Many factors may limit a family's ability to access the emergency care system for their child. These include:

- lack of universal access to enhanced or basic 911 services and wireless 911 service for cellular phones, with continued reliance in some areas on local 10-digit emergency telephone numbers;¹¹
- language barriers that can impede the use of 911 services in many locales;
- limited transportation resources to access emergency care outside of the 911 system;
- long transportation times, especially in rural environments;¹²
- concern for financial consequences of activating the 911 system and incurring bills that may not be adequately covered by all insurance types;
- concerns on the part of families of ill or injured children regarding immigration issues, social service agency intervention, and other legal or financial concerns that might arise once care has been accessed; and
- excessive demand on the emergency care system because of inappropriate use of 911 systems by patients who do require them. This limits the availability of such services and can potentially delay a more urgent transport.

3. Availability of Optimal Pediatric Prehospital Care

The Institute of Medicine (now the National Academy of Medicine)⁶ and

others have outlined some of the deficiencies in pediatric prehospital care, including:

- variability in pediatric readiness between urban, suburban, and rural prehospital care systems as well as discrepancies in readiness between high-volume pediatric facilities and their low-volume (fewer than 10 pediatric patients per day) counterparts;
- lack of comprehensive pediatric training, experience, competency assessment, and ongoing quality improvement for prehospital EMS and interfacility transport professionals;
- limited scientific evidence on which to base protocols or procedures for prehospital care of children;
- limited high-quality and specific evidence-based guidelines for care efficacy and safety within all levels of EMS for children; and
- lack of validated quality metrics and paucity of quality improvement efforts in pediatric prehospital care.

4. Availability of Optimal Emergency Care for Children

- Underserved areas and populations.
 - Impact of closing hospital EDs: The closure of EDs and hospitals that disproportionately serve disadvantaged populations has impacted both rural areas and underserved urban areas, with differential impacts in each type of region.¹³
 - Critical access hospitals: The federal government has historically supported rural hospitals. In 1997, the Centers for Medicare and Medicaid Services created the Critical Access Hospital Program, through which Congress, through the Balanced Budget Act of 1997, designated several small rural hospitals as critical access facilities, recognizing that

their small size limited their scope of service.¹⁴ Such hospitals received extra federal funding to focus on critical medical services. Often, these facilities have low volumes in general and in particular have low pediatric volumes, which limits experience in pediatric care and creates a challenge for skill retention. Moreover, changes in health care reimbursement models have led to struggles for rural hospitals, leading to many closures and decreased services in some instances. From 2010 to 2016, 75 rural hospitals in the United States closed or ceased operations, prompting new concerns about access to essential services in rural communities.^{15,16}

- o Development of expanded medical services: Accelerated trends toward retail medical clinics, urgent care clinics, and freestanding EDs, in addition to expansion of existing facilities, disproportionately benefit areas with a higher socioeconomic status, which has the potential to create further disparities in access to care in underserved areas.¹⁷
- ED crowding: Long ED wait times for pediatric patients can discourage families from seeking timely care for emergency situations. In addition, crowded EDs create a challenging and rushed environment that is less child friendly and fails to address the specific needs of each pediatric patient.¹⁸ Long wait times and crowding in EDs is particularly difficult for children with special health care needs, including those with physical and intellectual disabilities or mental and behavioral health concerns. Crowding has been associated with decreased safety, timeliness,

and effectiveness of emergency care in children.^{19–24}

- Readiness of EDs for pediatric patients: Data from the 2013 National Pediatric Readiness Project (NPRP) noted that pediatric preparedness had improved since 2003, with the national median assessment score increasing from 55 to 69 of 100 points.² Despite this improvement, many gaps in pediatric readiness remain, particularly in EDs with a low volume of pediatric patients. In the 2013 assessment, at least 15% of EDs lacked at least 1 specific piece of recommended equipment, 81% reported barriers to implementing guidelines for pediatric emergency care, only 47% included pediatric-specific components to their disaster plans, and fewer than one-half included children in disaster drills.² Further study of 1 state (California) determined that the presence of a pediatric emergency care coordinator and the inclusion of pediatric-specific elements in the ED quality improvement plan were associated with improved scores on the NPRP. However, in the same state, only about one-half of the hospitals had a person designated as a pediatric emergency care coordinator, and fewer than one-half had a quality improvement plan that included at least 1 pediatric-specific metric.²⁵
- Quality of care (evidence-based practice and quality improvement): Despite significant growth in high-quality pediatric emergency care research, a relative paucity of data to support evidence-based care for childhood emergencies remains. In addition, a significant delay between the creation of evidence and its translation into practice in the ED further challenges knowledge translation and dissemination.^{26,27}

- Access to pediatric medical subspecialists, pediatric surgical specialists, and mental health professionals: Significant geographic variation exists in access to pediatric subspecialty care, with children in rural areas disproportionately affected by poor access to subspecialists and longer transport times to centers that provide specialty care, including care for behavioral and mental health emergencies.^{28,29} This lack of access limits the ability to provide emergency and ongoing care for children closer to their homes and places a larger burden on families requiring specialty care in addressing complications from ongoing disease processes and treatments.^{30–32} Moreover, regardless of their insurance, patients may experience challenges with accessing specialty care and navigating networks of care.³³ Telemedicine has been proposed as a potential solution to this problem and has received significant attention because of coronavirus disease 2019, with improvement in access and a reduction in previously described implementation barriers.³⁴

5. Financial Considerations

Limited and often inadequate payment for primary care for many children decreases both the availability of primary care and the ability to provide unscheduled visits in the primary care office setting. Children covered by Medicaid or the Children's Health Insurance Program visit the ED more frequently than both those with private insurance and those who are uninsured. However, reasons for the visit differed among population groups. When asked about their child's last visit to the ED, respondents for children who had Medicaid or Children's Health Insurance Program were more likely

than those with private coverage to report that their usual medical home was not open or they did not have another place to obtain care. In contrast, respondents for certain categories of privately insured children were more likely to report they last visited the ED because the family's primary care provider told them to go or they perceived that the condition was too serious to be treated by primary care.³⁵ In a recent study, researchers demonstrated that office-based primary care pediatricians increased their Medicaid participation after the payment increases, in large part by increasing their Medicaid panel percentage.³⁶

Other financial concerns include:

- A failure by payers to use the “prudent-layperson” standard for definition of emergency care, which creates financial hardships after a care episode and can discourage future timely emergency visits.
- An increased number of insurance plans with high deductibles may discourage families from seeking emergency care when needed. Increasing regulatory and managed care initiatives related to emergency access for children that often require complex and time-consuming telephone calls and documentation to ensure appropriate payment for care.
- Managed care protocols designed to reduce the use of emergency facilities provide variable levels of appropriate alternatives for care.
- Increasing numbers of “narrow networks” (in which, in exchange for paying lower insurance premiums, the plan restricts the number and type of physicians, nurse practitioners, or physician assistants whose services are covered) can limit access to EDs in children's hospitals and to subspecialty services, which delays access to timely care and can result in poor health outcomes.

Improving Access to Emergency Care for Children

The emergency care environment remains challenging for pediatric patients, as outlined in this report, but efforts have been ongoing in recent years to improve access to optimal pediatric emergency care. Professional organizations such as the ACEP, the AAP, and the ENA, along with government agencies such as the Emergency Medical Services for Children (EMSC) program of the Health Resources and Services Administration, have worked to increase the information available to lay people as well as medical professionals. Enhanced and next-generation 911 systems are steadily improving the ease and reliability of calls for help and enable prehospital professionals to respond appropriately and efficiently. An increased focus on prehospital care and pediatric readiness in the ED setting through EMSC programs, the NPRP, and state-based pediatric readiness recognition programs in hospitals has increased both awareness and the ability to address pediatric emergencies at all stages of care.

Although inherent challenges remain, an increased focus on pediatric emergency research through networks, such as the Pediatric Emergency Care Applied Research Network, has helped to advance the evidence base, increase awareness, and promote efforts to address the need for more information.³⁷⁻³⁹ In addition, pediatric emergency medical education continues to expand through increasing numbers of fellowships, residency training that includes dedicated pediatric emergency education, and ongoing targeted continuing medical education training. Pediatric nursing residency training programs and certification in pediatric emergency nursing contribute positively to patient satisfaction and nurse retention.⁴⁰

Despite these recent efforts to improve access to emergency care, access to optimal emergency care for children can and should be improved. The ACEP, the AAP, and the ENA believe that every child in need should have access to quality pediatric emergency health care in the appropriate setting. Efforts must be made at local, state, and federal levels to improve prompt and appropriate access to pediatric emergency health care, including dental, behavioral, and mental health emergencies for all children, regardless of socioeconomic status, ethnic origin, language, immigration status, type of insurance, geographic location, or health status.

RECOMMENDATIONS

I. Improving Entry Into the Emergency Care System

The ACEP, the AAP, and the ENA recommend the following.

- A. Pediatricians, emergency physicians, emergency nurses, health care systems and their professional organizations should work with stakeholders within their communities to improve public and health care professional's awareness of available resources and systems of care by:
1. improving transparency of pediatric systems of care within communities, including educating families and caregivers about the urgent and emergency care resources in their community;
 2. developing and disseminating knowledge and resources to increase public, health professional, and government awareness about the magnitude of the problem of access to emergency medical care for children;
 3. improving awareness, use, and dissemination of

comprehensive resources available through the EMSC program;

4. encouraging collaborative efforts by emergency physicians, nurse practitioners and physician assistants, and primary care providers to identify an appropriate medical home for every child;
 5. increasing access to a medical home by expansion of after-hours and/or improved coordination with after-hours or urgent care clinics with the medical home for ambulatory sensitive conditions to improve timely and appropriate care;⁸
 6. encouraging the use of the emergency information form published by the AAP and ACEP⁴¹ (this form is particularly helpful for children with medical complexity),⁴² and
 7. developing electronic versions of the emergency information form with health information exchange for easy access.
- B. Federal governmental agencies should provide ongoing funding support for future resource development, education, research, and quality outcomes measurement by the EMSC program, as recommended in the 2006 Institute of Medicine report.
- C. State and federal governmental agencies should work with EMS systems and health care organizations to improve entry into the emergency care system by:
1. improving all 911 systems to facilitate communication with non-English speaking families;
 2. continuing to broaden enhanced and next-generation 911 systems to more locations in the United States to allow wireless services via cellular phones as well as voice-over

Internet protocols, text messaging, and video transfer; and

3. improving collaboration and connectivity between schools, child care facilities, mental health professionals, medical homes, and local EMS systems to facilitate easy access into the EMS system.

II. Improving Pediatric Prehospital Care

The ACEP, the AAP, and the ENA recommend the following:

- A. State and federal governmental agencies should work with EMS systems to ensure optimal prehospital care for children by:
1. funding, supporting, and promoting the further development and improvement of EMS for children at the federal, state, and local levels;
 2. insuring the inclusion of children's needs in all funded efforts to improve prehospital care (eg, EMS education, EMS quality metrics [National EMS Quality Alliance (NEMSQA)], prehospital evidence-based guideline consortium); and
 3. encouraging state EMS systems, local EMS agencies, and hospitals to incorporate children in disaster planning and response.⁴³
- B. EMS physicians and agency leaders should work with pediatricians, emergency physicians, emergency nurses, their professional organizations, and other stakeholders within their communities to ensure availability of optimal prehospital care for children by promoting improved readiness for pediatric patients, as outlined in the joint policy statement "Pediatric Readiness in Emergency Medical Services Systems."⁴⁴

III. Improving Emergency Department Care for Children and Adolescents

The ACEP, the AAP, and the ENA recommend the following:

- A. Pediatricians, emergency physicians, emergency nurses, health care systems, and professional organizations should work with stakeholders within their communities to ensure availability of optimal emergency care for children by
1. promoting improved readiness and a minimal standard for readiness in all EDs, as outlined in the joint policy statement "Pediatric Readiness in the Emergency Department,"⁴⁵
 2. developing quality metrics and quality improvement efforts for ED care of pediatric patients;
 3. encouraging the availability of and access to existing pediatric medical subspecialists, pediatric surgical specialists, and mental health professionals who have special skills and expertise that are required for optimal care of critically ill and injured children;
 4. encouraging the expansion of training programs to ensure future availability of adequate numbers of pediatric surgical and medical subspecialists necessary to provide specialized pediatric emergency care;
 5. supporting the development of nurse practitioners and physician assistants with particular training and expertise in pediatric emergency care, with the goal to expand access to emergency care, with appropriate levels of supervision based on jurisdictional regulations;
 6. promoting the development, dissemination, and

- implementation of evidence-based guidelines and other strategies to improve diagnostic accuracy, therapeutic effectiveness, and minimization of unwanted variation in care;
7. continuing to explore new and innovative methods of pediatric medical subspecialist care, such as telemedicine, to aid medical professionals in settings of limited resources; and
 8. promoting the development of guidelines and education to the approach of children with behavioral and emotional difficulties (intellectual disabilities, autism spectrum disorder, and mental health disorders) for both prehospital and emergency care.⁴⁶
- B. State and federal governmental agencies, health care systems, and professional organizations should work with stakeholders within their communities to ensure the availability of optimal emergency care for children by
1. promoting maintenance of ED facilities and work to prevent the closing of hospitals that provide critical services in underserved communities;
 2. encouraging all EDs and facilities that provide urgent care for children to establish transfer agreements and protocols with facilities with higher levels of pediatric care resources to promote timely access to specialty pediatric emergency care and subspecialty tertiary care for critically ill and injured children;⁴⁷
 3. developing state or regional programs to recognize facilities that have demonstrated pediatric readiness;^{48,49}
 4. developing funding sources, multidisciplinary support, and enhanced research efforts directed at all aspects of pediatric emergency care, including health equity, to provide the evidence for standards for effective and safe patient care; and
 5. promoting the inclusion of pediatric expertise into comprehensive psychiatric emergency programs, when these are available in a community.
- C. State and federal governmental agencies, health care systems, and professional organizations should work with payers to overcome financial barriers to the provision of optimal emergency care for children by:
1. encouraging managed care organizations to accept the prudent-layperson definition of an emergency and provide payment for services mandated by the Emergency Medical Treatment and Active Labor Act (42 USC §1395dd);
 2. improving payment for pediatric care, by using a value-based model that encourages the achievement of a pediatric-relevant cost to benefit ratio, especially valuing efforts that lead to prevention or better control of long-standing problems, recognizing that the most effective intervention may not be the one with the lowest cost but still represents the optimal choice;
 3. providing appropriate payment levels at all episodes of care to facilitate unscheduled primary care visits and reduce the burden on the emergency care system;
 4. providing payment for telemedicine to optimize the delivery of care for services that can be delivered via telemedicine;
 5. expanding coverage for the expanse of language-translation services required to provide emergency care;
 6. expanding networks of care to allow patient access to specialty care and children's hospitals when indicated for patients and reducing barriers to care for patients within networks of care; and
 7. improving transparency of coverage for emergency care and eliminate the retrospective denial of payments for any reasons, including for chronic conditions or out-of-network emergency care.

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ABBREVIATIONS

AAP: American Academy of Pediatrics
ACEP: American College of Emergency Physicians
ED: emergency department
EMS: emergency medical services
EMSC: Emergency Medical Services for Children
ENA: Emergency Nurses Association
NPRP: National Pediatric Readiness Project

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