

EMSC: A Historical Perspective

Emergency Medical Services for Children (EMSC) is a national initiative designed to reduce childhood death and disability due to severe illness or injury. Although EMSC began 25 years ago, the larger emergency system of which it is a part dates back to the Korean and Vietnam Wars. Medical experiences in both wars demonstrated that survival rates improved dramatically when patients were stabilized in the field and transported immediately to a well-equipped emergency facility. During the 1960s, civilian medical and surgical communities began to recognize the possibilities in applying these experiences within an organized emergency medical services (EMS) system.

1966: Congress passes the Highway Safety Act of 1966, establishing the National Highway Traffic Safety Administration (NHTSA). The agency's purpose is to help states start their own coordinated EMS programs.

1973: Congress passes the Emergency Medical Services Systems Act of 1973, a program managed by the Health Resources and Services Administration (HRSA), to provide additional resources to state and local governments for implementing comprehensive EMS systems.

1975-79: State EMS systems dramatically improve the outcomes for adults. However, pediatric surgeons, pediatricians, and other concerned groups begin to recognize that children's outcomes did not keep pace.

1979: Calvin Sia, MD, president of the Hawaii Medical Association, urges members of the American Academy of Pediatrics (AAP) to develop multifaceted EMS programs designed to decrease disability and death in children.

1983-84: Senator Daniel Inouye (D-HI) joins Dr. Sias' crusade after learning about the care provided to the daughter of one of his senior staff members. Her treatment demonstrated the average emergency department's shortcomings in treating a child in crisis. Senators Orrin Hatch (R-UT) and Lowell Weicker (R-CT), backed by other staff members with similar disturbing experiences, join Sen. Inouye in sponsoring legislation to create the EMSC Program.

1984: U.S. Congress enacts legislation (Public Law 98-555), authorizing the use of federal funds for EMSC. Administered by the HRSA's Maternal and Child Health Bureau (MCHB), the EMSC Program provides states grant money to help develop and "institutionalize" emergency medical services for critically ill and injured children. The Program does not promote the development of a separate EMS system for children, but rather enhances the pediatric capability of existing EMS systems.

1985: U.S. Congress appropriates initial funds for EMSC; first program grant announcements published.

1986: EMSC awards first federal grants to Alabama, California, New York, and Oregon, specifically earmarked to improve pediatric emergency medical services.

1987: The first Pediatric Advanced Life Support (PALS) course is made available to all emergency care providers.

1989: The first National Pediatric Emergency Medicine (PEM) course is introduced in collaboration with the American College of Emergency Physicians (ACEP) and the AAP.

1990: HRSA's MCHB establishes the EMSC Resource Network, which includes the EMSC National Resource Center (NRC), located in Washington, DC, and the National EMSC Resource Alliance, located in Los Angeles, CA. Their purpose is to help grantees develop new programs, disseminate their products, promote public understanding of pediatric issues in the EMS system, and work with professional organizations to further training efforts in pediatric emergency care for all health care providers.

1991: Pediatric emergency medicine is approved as a subspecialty in Emergency Medicine and Pediatrics.

1992: New Jersey becomes the first state to enact EMSC legislation at the state-level.

1993: The Institute of Medicine (IOM) releases the most comprehensive report on children's emergency medical care, detailing the nature, extent, and outcomes of pediatric illness and trauma emergencies. The report reveals continuing deficiencies in pediatric emergency care for many areas of the country.

1995: To help address "the need for more and better data on the volume, nature, and outcomes of pediatric emergency care," a major shortcoming identified in the IOM report, MCHB funds the National EMSC Data Analysis Resource Center (NEDARC), located in Salt Lake City, UT. NEDARC's primary mission is to assist EMSC grantees in collecting and analyzing data.

1996: MCHB establishes the Partnership for Children Consortium. Members include the Ambulatory Pediatric Association, the AAP, ACEP, the National Association of EMT's, the American Trauma Society, and several other national and professional organizations that receive federal funding to help implement EMSC Program goals and objectives.

1997: MCHB reports that every state, the District of Columbia, and four U.S. territories have received grant support at some time since the Program's establishment. Many elements of a model EMSC system have been developed since the Program's implementation, including prehospital protocols for triage and treatment of children, curricula for prehospital and emergency department staff, and standards for hospital facilities accepting pediatric patients. In addition, State Partnership grants are first introduced.

1998: MCHB sponsors the first National Congress on Childhood Emergencies. This historic event marks the first nation-wide gathering of all medical and non-medical individuals interested in improving health care for children.

During a special luncheon at the Congress, HRSA honors the recipients of its first National Heroes Awards. The purpose of the awards program is to identify, honor, and recommend as models the efforts of a select handful of men and women who excelled in improving children's emergency health care.

1998: The Interagency Committee on Emergency Medical Research (ICER) is created. Its purpose is to improve the quality and quantity of EMSC research, to foster collaboration between federal agencies in highlighting EMSC research topics during development of research agendas, and to reduce barriers to the production of high quality EMSC research.

Participating agencies include: HRSA, the Agency for Health Care Research and Quality, the Centers for Disease Control and Prevention, the Food and Drug Administration, and the National Institutes of Health, among others.

1999: Recognizing that families are a valuable resource in the planning, development, and evaluation of prehospital healthcare services for children, the NRC creates the Family Advisory Network (FAN).

2000: The Department of Health and Human Services (DHHS) releases Healthy People 2010, a national health promotion and disease prevention initiative that identifies 28 focus areas and 467 objectives to improve the health of all Americans. After countless hours of hard work, EMSC succeeds in ensuring that the plan's final version includes two EMSC-related objectives.

2000: ACEP includes information about the first-ever National EMSC Day in its National EMS Week promotional materials. Working in partnership with the NRC, EMSC Day is now celebrated annually on the third Wednesday of May.

2001: The EMSC Program awards four competitive cooperative agreements to academic medical centers through a competitive funding mechanism known as the Network Development Demonstration Project. These cooperative agreements form the Pediatric Emergency Care Applied Research Network (PECARN), the first federally-funded, multi-institutional network for research in pediatric emergency medicine.

2002: HRSA awards the University of Utah a three-year cooperative agreement to serve as the Central Data Management Coordinating Center for PECARN.

2002: DHHS adopts the EMSC theme, The Right Care When It Counts, as the focus of its annual observance of Child Health Month (October 2002). The centerpiece of this year's celebration is the EMSC National Public Information and Education (PIE) campaign, a three-year initiative designed to: (a) help prepare caregivers for addressing

the distinctive needs of children in medical emergencies; and (b) raise awareness among parents about the critical need to work closely with their healthcare providers better prepare for a pediatric medical emergency.

2005: The NRC commences a two-year endeavor to develop the first set of EMSC performance measures to demonstrate the results of Program funding given to states/territories. The final measures included three primary measures and nine sub-measures. These measures become the basis for all State Partnership grants.

2006: The IOM releases the Future of Emergency Care, a series of reports that included “Emergency Medical Services at the Crossroads,” “Hospital-Based Emergency Care: At the Breaking Point,” and “Emergency Care for Children: Growing Pains.” The reports comprehensively described the “fragmented” system of emergency care with emphasis in the pediatric report on the “uneven” nature of emergency care for children.

2007: PECARN completes its first major trial looking at the use of dexamethasone for the treatment of infant bronchiolitis. The study is published in the July 26, 2007, edition of the *New England Journal of Medicine*.

2008: NIH releases special program announcement (PAR-08-26) inviting applications for EMSC research. This multi-agency program Funding Opportunity Announcement is designed to improve the quality and quantity of research related to EMSC.

2009: EMSC turns 25! The EMSC Program funds more than 85 grants, contracts, and cooperative agreements in 50 states, the District of Columbia, and five U.S. territories, including the Pediatric Emergency Care Applied Resource Network (PECARN) and the Family Advisory Network. In addition, EMSC State Partnership grant funding increased; thereby, improving the federal Program’s ability to improve pediatric healthcare through the implementation of EMSC performance measures.