



# BEST PRACTICES

PRODUCED BY: THE EMSC NATIONAL RESOURCE CENTER

## A Guide for State Partnership Grantees on the Implementation of EMSC Performance Measures

## Cite As:

Diana Fendya, MSN, RN; Rinal Patel; Karen Belli; Gayathri Jayawardena; Therese Quinata-Morrison, NREMT; Jocelyn Hulbert; Tasmeen Singh, MPH, NREMT-P (editor/designer: Suzanne Sellman, MA). *Best Practices: A Guide for State Partnership Grantees on the Implementation of the EMSC Performance Measures*. Washington, DC: Emergency Medical Services for Children (EMSC) National Resource Center. June 2009.

The EMSC National Resource Center (NRC), located just outside Washington, DC, was established in 1991 to help improve the pediatric emergency care infrastructure throughout all 50 states, the District of Columbia, and the five U.S. territories. The NRC is housed within Children's National Medical Center, one of America's leading pediatric institutions serving sick and injured children and their families. In 2008, the NRC received its fourth (multi-year) funding award to provide support to the federal EMSC Program.

The federal EMSC Program is designed to ensure that all children and adolescents – no matter where they live, attend school, or travel – receive appropriate care in a health emergency. It is administered by the U.S. Department of Health and Human Services' Health Resources and Services Administration, Maternal and Child Health Bureau. Since its establishment, the federal EMSC Program has provided grant funding to all 50 states, five U.S. territories, and the District of Columbia.

*Best Practices: A Guide for State Partnership Grantees on the Implementation of the EMSC Performance Measures* is not copyrighted. Readers are free to duplicate and use all or part of the information contained in this publication. In accordance with accepted publishing standards, the EMSC National Resource Center requests acknowledgement, in print, of any information reproduced in another publication.

EMSC National Resource Center  
8737 Colesville Road, Suite 400  
Silver Spring, MD 20910  
Telephone: (202) 476-4927; Fax: (202) 476-6845  
Email: [emscinformation@cnmc.org](mailto:emscinformation@cnmc.org)  
Website: <http://www.childrensnational.org/emsc>



# Table of Contents

Introduction to the Guide .....	5
Chapter 1: Background Information About EMSC and the Performance Measures .....	6
Program Mission Statement .....	6
State (and Territory) Partnership Grants .....	6
Summary of Performance Measures .....	7
Chapter 2: Best Practices for PM 71 and 72 (formerly PM 66a) .....	9
Maryland EMSC – On-line Pediatric Medical Direction .....	9
Illinois EMSC – Off-line Pediatric Medical Direction .....	10
Pennsylvania EMSC – Off-line Pediatric Medical Direction .....	12
Common Strategies Found in Achieving Performance Measure 71 and 72 .....	13
Chapter 3: Best Practices for PM 73 (formerly PM 66b) .....	14
Florida EMSC – Availability of Pediatric Equipment .....	14
Missouri EMSC – Availability of Pediatric Equipment .....	15
South Dakota EMSC – Availability of Pediatric Equipment .....	16
Common Strategies Found in Achieving Performance Measure 73 .....	17
Chapter 4: Best Practices for PM 74 and 75 (formerly PM 66c) .....	18
Oklahoma EMSC – Facility Categorization .....	18
Tennessee EMSC – Facility Categorization .....	19
Common Strategies Found in Achieving Performance Measure 74 and 75 .....	20
Chapter 5: Best Practices for PM 76 and 77 (formerly PM 66d and 66e) .....	21
New Jersey EMSC – Interfacility Guidelines and Transfer Agreements .....	21
Vermont EMSC – Interfacility Guidelines and Transfer Agreements .....	22
Washington State EMSC – Interfacility Guidelines and Transfer Agreements .....	23
Common Strategies Found in Achieving Performance Measure 76 and 77 .....	25
Chapter 6: Best Practices for PM 78 (formerly PM 67) .....	26
Michigan EMSC – License/certification Renewal of ALS and BLS Providers .....	26
New Mexico EMSC – License/certification Renewal of ALS and BLS Providers .....	27
Common Strategies Found in Achieving Performance Measure 78 .....	29

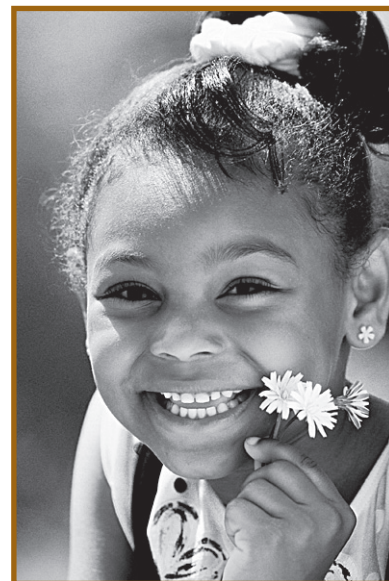


# Table of Contents, Continued

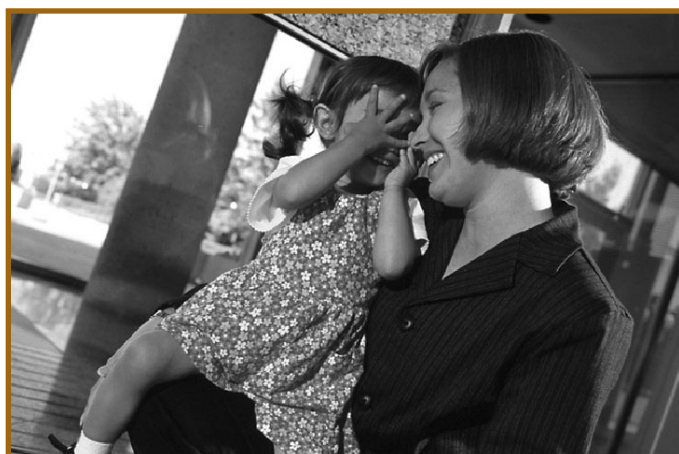
Chapter 7: Best Practices for PM 79 (formerly PM 68a) .....	30
Arizona EMSC – State EMSC Advisory Committee .....	30
California EMSC – State EMSC Advisory Committee .....	31
Utah EMSC – State EMSC Advisory Committee .....	32
Common Strategies for Establishing A Successful EMSC Committee .....	33
Chapter 8: Best Practices for PM 79 (formerly PM 68b) .....	34
Guam EMSC – Pediatric Representation on State EMS Board/Commissions .....	34
Missouri EMSC – Pediatric Representation on State EMS Board/Commissions .....	35
New Mexico EMSC – Pediatric Representation on State EMS Board/Commissions .....	36
Common Strategies for Achieving Representation in EMS .....	37
Chapter 9: Best Practices for PM 79 (formerly PM 68c) .....	38
Delaware EMSC – Full-time Equivalent EMSC Manager .....	38
Idaho EMSC – Full-time Equivalent EMSC Manager .....	39
New Hampshire EMSC – Full-time Equivalent EMSC Manager .....	40
Virginia EMSC – Full-time Equivalent EMSC Manager .....	41
Common Strategies for Securing a Full-time EMSC Manager .....	43
Chapter 10: Best Practices for PM 80 (formerly PM 68d) .....	44
Colorado EMSC – Integration of EMSC Priorities into Existing State Mandates .....	44
Florida EMSC – Integration of EMSC Priorities into Existing State Mandates .....	45
New Jersey EMSC – Integration of EMSC Priorities into Existing State Mandates .....	46
New York EMSC – Integration of EMSC Priorities into Existing State Mandates .....	47
Common Strategies Found in Achieving Performance Measure 80 .....	49
Appendix A: EMSC Terms and Acronyms .....	50
Appendix B: State EMSC Program Websites .....	57

# Introduction to the Guide

*Many Emergency Medical Services for Children (EMSC) State Partnership (SP) grantees have developed and implemented successful “best practices” to improve the emergency care of children. This document recognizes and highlights state (and territory) initiatives that have improved the pediatric emergency care infrastructure through the successful implementation of EMSC State Partnership performance measures. This document will be updated periodically to include additional “best practices” as they are identified to assist all grantees in implementing and meeting the EMSC performance measures.*



*In 2007 and 2008, the EMSC National Resource Center (NRC) asked all SP grantees to submit information on novel solutions that the state used to achieve, or make significant progress towards, a performance measure. Using a case study format, this guide highlights those “models*



*of best practice” for achieving the EMSC performance measure. The NRC thanks those states that willingly shared their tips and success stories to help others improve the emergency care of children nationwide.*

# Chapter 1

## Background Information About EMSC and the Performance Measures

### Program Mission Statement

The EMSC Program is designed to reduce child and youth mortality and morbidity resulting from severe illness or trauma. It aims to: 1) ensure state-of-the-art emergency medical care for the ill or injured child and adolescent is available when needed; 2) ensure that pediatric services are well integrated into the existing state emergency medical services (EMS) system and backed by optimal resources; and 3) ensure that the entire spectrum of emergency services, including primary prevention of illness and injury, acute care, and rehabilitation, is provided to children and adolescents at the same level as adults.



### State (and Territory) Partnership Grants

The EMSC Program was established under the Preventive Health Amendments of 1984 (PL 98-555). The Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB) administers the Program. The EMSC Program is the only federal program whose sole focus is to improve the quality of emergency care for children.

Authorized under Section 1910 of the Public Health Service Act (42 U.S.C. 300w-9), the EMSC Program began with \$2 million in funding in fiscal year (FY) 1985. In FY 2009, the Program was funded at \$20 million. The EMSC Program allocates funds through various funding mechanisms; however the Program is primarily a grant-making program to state governments and academic medical centers.

State Partnership Grants fund activities to improve and integrate pediatric emergency care within a state EMS system. The typical applicant is a state government unless the state decides to delegate the responsibility to an accredited school of medicine. In FY 2009, five new and 49 continuing SP Grants were funded, each at \$115,000 to \$130,000 per year.

In response to the Government Performance and Results Act, HRSA requires grantees to report on specific performance measures related to their grant-funded activities. The purpose of the EMSC State Partnership performance measures is to document activities and accomplishments and to demonstrate national outcomes of the Program in order to improve the delivery of emergency care services to children. Specifically, the set of measures will:

- provide an ongoing, systematic process for tracking progress towards meeting the goals of the EMSC Program;
- allow for continuous monitoring of the effectiveness of key EMSC Program activities;
- identify potential areas of performance improvement among the EMSC State Partnership grantees;
- determine the extent to which the grantees are meeting established targets and standards; and
- allow the EMSC Program to demonstrate its effectiveness and “tell its story” to HRSA, Congress, and other stakeholders.

The process for developing the performance measures was an iterative one informed by various activities, including:

- a comprehensive document review of EMSC Program materials to identify the “universe” of measures;
- the selection of a subset of measures using a set of five criteria;
- the convening of a consensus group meeting and follow-up conference calls to identify three core performance measures; and
- site visits to three beta-test grantees to further refine the three performance measures.

## Summary of Performance Measures

Below are the EMSC performance measures that all states and territories are working towards meeting.

Performance Measure 71 (Former PM 66a, part i)	<p>The percent of pre-hospital provider agencies in the state/territory that have on-line pediatric medical direction available from dispatch through patient transport to a definitive care facility. By 2011:</p> <ul style="list-style-type: none"> <li>• 90% of basic life support (BLS) pre-hospital provider agencies in the state/territory have online pediatric medical direction available from dispatch through patient transport to a definitive care facility.</li> <li>• 90% of advanced life support (ALS) pre-hospital provider agencies in the state/territory have online pediatric medical direction available from dispatch through patient transport to a definitive care facility.</li> </ul>
Performance Measure 72 (Former PM 66a, part ii)	<p>The percent of pre-hospital provider agencies in the state/territory that have pediatric off-line medical direction available from dispatch through patient transport to a definitive care facility. By 2011:</p> <ul style="list-style-type: none"> <li>• 90% of basic life support (BLS) pre-hospital provider agencies in the state/territory have offline pediatric medical direction available from dispatch through patient transport to a definitive care facility.</li> <li>• 90% of advanced life support (ALS) pre-hospital provider agencies in the state/territory have offline pediatric medical direction available from dispatch through patient transport to a definitive care facility.</li> </ul>
Performance Measure 73 (Former PM 66b)	<p>The percent of patient care units in the state/territory that have the essential pediatric equipment and supplies as outlined in national guidelines. By 2011:</p> <ul style="list-style-type: none"> <li>• 90% of basic life support (BLS) patient care units in the state/territory have the essential pediatric equipment and supplies, as outlined in national guidelines for pediatric equipment and supplies for basic life support ambulances.</li> <li>• 90% of advanced life support (ALS) patient care units in the state/territory have the essential pediatric equipment and supplies, as outlined in national guidelines for pediatric equipment and supplies for advanced life support ambulances.</li> </ul>
Performance Measure 74 (Former PM 66c medical)	<p>The percent of hospitals recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric medical emergencies. By 2017:</p> <ul style="list-style-type: none"> <li>• 25% of hospitals are recognized as part of a statewide, territorial, or regional standardized system that are able to stabilize and/or manage pediatric medical emergencies.</li> </ul>
Performance Measure 75 (Former PM 66c trauma)	<p>The percent of hospitals recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric traumatic emergencies. By 2017:</p> <ul style="list-style-type: none"> <li>• 50% of hospitals are recognized as part of a statewide, territorial, or regional standardized system that recognizes hospitals that are able to stabilize and/or manage pediatric trauma.</li> </ul>

Performance Measure 76 (Former PM 66d)	<p>The percentage of hospitals in the state/territory that have written inter-facility transfer guidelines that cover pediatric patients and that include the following components of transfer:</p> <ul style="list-style-type: none"> <li>• Defined process for initiation of transfer, including the roles and responsibilities of the referring facility and referral center (including responsibilities for requesting transfer and communication).</li> <li>• Process for selecting the appropriate care facility.</li> <li>• Process for selecting the appropriately staffed transport service to match the patient's acuity level (level of care required by patient, equipment needed in transport, etc.).</li> <li>• Process for patient transfer (including obtaining informed consent).</li> <li>• Plan for transfer of patient medical record.</li> <li>• Plan for transfer of copy of signed transport consent.</li> <li>• Plan for transfer of personal belongings of the patient.</li> <li>• Plan for provision of directions and referral institution information to family.</li> </ul> <p>By 2011:</p> <ul style="list-style-type: none"> <li>• 90% of hospitals in the state/territory have written inter-facility transfer guidelines that cover pediatric patients and that include specific components of transfer.</li> </ul>
Performance Measure 77 (Former PM 66e)	<p>The percentage of hospitals in the state/territory that have written inter-facility transfer agreements that cover pediatric patients. By 2011:</p> <ul style="list-style-type: none"> <li>• 90% of hospitals in the state/territory have written inter-facility transfer agreements that cover pediatric patients.</li> </ul>
Performance Measure 78 (Former PM 67)	<p>The adoption of requirements by the state/territory for pediatric emergency education for the license/certification renewal of basic life support (BLS) and advanced life support (ALS) providers. By 2011:</p> <ul style="list-style-type: none"> <li>• The state/territory has adopted requirements for pediatric emergency education for the recertification of BLS and ALS providers.</li> </ul>
Performance Measure 79 (Former PM 68a, b, c)	<p>The degree to which states/territories have established permanence of EMSC in the state/territorial EMS system. The goal is to increase the number of states/territories that have established permanence of EMSC in the state/territory EMS system as follows:</p> <p>Each year:</p> <ul style="list-style-type: none"> <li>• The state/territory EMSC Advisory Committee is comprised of the required members as per the Implementation Manual; and</li> <li>• The EMSC Advisory Committee met at least four times.</li> </ul> <p>By 2011:</p> <ul style="list-style-type: none"> <li>• Pediatric representation is incorporated on the state/territorial EMS Board;</li> <li>• The state/territory mandates pediatric representation on the EMS Board; and</li> <li>• One full time EMSC manager is dedicated solely to the EMSC Program.</li> </ul>
Performance Measure 80 (Former PM 68d)	<p>The degree to which the state/territory has established permanence of EMSC in the State/Territorial EMS system by integrating EMSC priorities into statutes/regulations. By 2011:</p> <ul style="list-style-type: none"> <li>• EMSC priorities will have been integrated into existing EMS or hospital/healthcare facility statutes/regulations.</li> </ul>



## Chapter 2

## Best Practices for PM 71 and 72 (formerly PM 66a)

This chapter describes best practices utilized in Maryland, Illinois, and Pennsylvania to successfully achieve performance measures 71 and 72: The percent of prehospital provider agencies in the state/territory that have on-line (PM 71) and off-line (PM 72) pediatric medical direction available from dispatch through patient transport to a definitive care facility.

### Maryland EMSC – On-line Pediatric Medical Direction (PM 71)

Maryland has both on-line and off-line pediatric medical direction available statewide through its two designated pediatric trauma and burn centers (referred to as “pediatric” base stations). The centers were selected as base stations because they met two primary criteria: each is designated as a pediatric specialty center and each provides 24/7 coverage by boarded or board-eligible pediatric emergency medicine (PEM) attending physicians. The two pediatric base stations also serve as consultation centers for the state’s community hospitals.



The 30,000+ EMS providers have radio access to the two pediatric base stations, as well as access to the 44 community hospital and trauma center (non-pediatric) base stations located in the state. Each pediatric and non-pediatric base station must comply with state regulations which include application, standardized base station course, and site visits on a five-year cycle.

All base stations and EMS providers utilize the same statewide EMS protocols (integrated ALS and BLS) for on-line medical direction. Protocol changes occur annually on July 1. All individuals using base station radios (EMS, physicians, and nurses) must take a protocol update in person, on the web, or on DVD. On-line medical direction for children can be provided simultaneously by both the pediatric base station and one of the local community base stations or the closest adult trauma center, all of which follow the same pediatric protocols.

The pediatric base stations are reached through the Maryland Institute of Emergency Medical Services Systems’ (MIEMSS) Emergency Medical Resource Center (EMRC) and System Communication Center (SYSCOM). Together they provide statewide communication linkages to all BLS and ALS transport units, ALS engines, ALS chase cars, first response EMS units, and state police med-evac. Through the use of radio and microwave or high frequency electromagnetic wave technology, the statewide communication system links ambulances, helicopters, and hospitals, thereby allowing communication between system components at all times.

The EMRC coordinates medical consultation between medic units and hospital physicians. SYSCOM’s operators work with a Maryland state police duty officer to dispatch and coordinate all Maryland state police med-evac missions and are notified of all commercial interfacility med-evac missions. A separate communications center at MIEMSS also assists with medical communications from certain high volume EMS call areas.

**Challenges in Implementation.** Base station development was a long, tedious process, evolving over a 10-year period. During the process of upgrading the communication networks, local citizens voiced concerns about tower locations and construction.

Educating BLS providers on dual consultation and providing training specific to use of pediatric base stations, as well as training hospitals to utilize the two pediatric base stations as specialty consultation centers were initially implementation challenges.

Out-of-state patient transport units and transportation teams also posed new challenges. This necessitated the identification of all out-of-state agencies transporting children into the state and providing each agency with the necessary education and training required to effectively use SYSCOM and EMRC.

**Strategies Utilized to Overcome Challenges.** The use of town hall meetings provided citizens with a better understanding of the medical communication needs in rural mountain areas. This interactive dialogue between citizens and stakeholders created a greater sense of unification and ownership.

The education and training needs of the 13,000 emergency medical technicians (EMT)-Basic were met utilizing actual base station tapes, conference workshops, and the inclusion of consultation practices in the three-year recertification cycle.

A standardized base station course was also developed and customized for the pediatric base stations. The pediatric base station course was also taught in Washington, DC, and in Delaware for hospital-based transport teams. Currently, a pediatric transportation course is being planned for 2009.

**Champions and Partnerships Help to Mobilize Best Practice.** EMS Regional Councils were key to providing communities with examples demonstrating the need for improvements in communication systems.

Challenges to education were addressed by multiple disciplines. Pediatric Emergency Medicine Fellowship programs collaborated on the development of the pediatric base station course. Base station nurse coordinators created specialized training tapes. The BLS Education Subcommittee developed a hands-on radio training workshop. Delaware and Washington, DC, EMSC offices worked closely with transport teams and MIEMSS to coordinate needed training.

**Important Lessons Learned.** The greatest key to success was and continues to be the face-to-face meetings for the purpose of promoting understanding and building consensus among all users, stakeholders, and the community. Listening to actual EMS and/or hospital calls (once names are removed) proved to be more effective than slides, a DVD, or any created scenarios. Patience and persistence (and offering free breakfast) can overcome most resistance to change.



#### For more information

- (COMAR Title 30: subtitle 03, chapter 06 for base stations; subtitle 07 for communications [www.dsd.state.md.us/comar](http://www.dsd.state.md.us/comar)).
- MIEMSS website: <http://www.miemss.org>
- Maryland EMSC website: <http://www.miemss.org/home/default.aspx?tabid=158>

## Illinois EMSC – Off-line Pediatric Medical Direction (PM 72)

Illinois first developed pediatric-specific prehospital protocols in 1997. The Illinois Pediatric Prehospital Protocols were recently revised and expanded to include 23 pediatric-specific protocols to be used by all levels of EMS providers, including emergency medical responders (EMR), EMT-Basic, EMT-Intermediate, and EMT-Paramedic.

**Challenges in Implementation.** Though these efforts began with the revision of existing protocols, the individuals on the committee participating in the process were not all involved in the original protocol development. In some instances individuals were unfamiliar with the impact of specific protocol issues facing each of the disciplines.

With multiple disciplines participating in the process, achieving consensus on proposed changes could be difficult. Disagreement discussions were anticipated.

Under Illinois EMS regulations, Illinois has EMT-Intermediates, with various abilities, skills, and access to medications. Therefore the protocols needed to address the actions for the various capabilities and defined scopes of practice for each of the levels of providers.

**Strategies Utilized to Overcome Challenges.** A multidisciplinary group of physicians, nurses, EMS and fire professionals, and laypeople were brought together to develop/revise the protocols. This group included representation from many agencies and entities, including the American Red Cross and the American Heart Association. Together they worked to revise the existing pediatric protocols and to develop new ones. It was essential that time was included in each meeting for the disciplines to share information and concerns potentially impacting individual disciplines. For example, the arrhythmia protocols were updated based on new changes in the Pediatric Advanced Life Support and Neonatal Resuscitation algorithms. In addition to a new automated external defibrillator protocol, a protocol specific to pediatric disaster preparedness was added based on input received from the Illinois Pediatric Bioterrorism Taskforce.

Multidisciplinary group meetings were held every other month to keep everyone involved and timely in completing work assignments. Discussion time was allocated at each meeting to allow committee members to discuss concerns and work towards agreement and consensus. A multidisciplinary approach proved beneficial since it brought different perspectives to the table. Additionally concerns or issues voiced were viewed positively since it was anticipated that similar concerns may be raised by the EMS community as the new protocols were rolled out. This process supported the ability to address concerns upfront. After initial development of the protocols, the group reviewed, revised, and re-reviewed all protocols. Eventually outside reviewers, such as other EMSC committee members, were also utilized in the final review/revision process.

An important key to overcoming the many challenges involved in creating and implementing a statewide document is maintaining collaborations. Vital collaborations with key individuals in a variety of agencies, associations, and other entities helped to ensure the process emerged in the most appropriate and seamless manner.

Collaborations with the state EMS Legislation and Planning Subcommittee on BLS/EMR Protocols were also essential. This collaboration ensured the inclusion of important language and information essential for acceptance and adoption of the protocols for statewide use.

The developed protocols are inclusive, and address the allowable skills and approved medications for EMT-Intermediate providers. The revised protocols are set up in an algorithm format for ease of use (many regions use narrative protocols), with consistency of actions (e.g. initial medical care comes first). Each protocol fits on one page.

**Champions and Partnerships Help to Mobilize Best Practice.** Establishing collaborations and partnerships with the American Heart Association, the American Red Cross, the American Academy of Pediatrics (AAP), ACEP, the Emergency Nurses Association (ENA), EMS representatives, fire representatives, PEM physicians, emergency department (ED) nurses,



state EMS Legislation and Planning Subcommittee members, the Illinois Pediatric Bioterrorism Taskforce, various Illinois EMSC committees, and Illinois EMSC staff were crucial for the development and implementation of these protocols.

Collaborating with such a large and diverse group ensured that the pediatric patient in Illinois was considered in every possible manner for the most appropriate emergency care.

**Important Lessons Learned.** The greatest lesson learned was to always listen to and respect the opinions of others. It is vital that project leaders listened to everyone's opinions with an open-mind. This approach facilitated the building of consensus with better and quicker acceptance of the protocols.



### For more information

- Illinois Pediatric Prehospital Protocols can be downloaded at <http://www.luhs.org/depts/emsc/stdndr-prehospital.htm>.
- Illinois EMSC program website: <http://www.luhs.org/depts/emsc/>

## Pennsylvania EMSC – Off-line Pediatric Medical Direction (PM 72)

Pennsylvania developed a complete set of pediatric-specific protocols that are mandated for statewide use by all BLS and ALS agencies in the state.

**Challenges in Implementation.** Pennsylvania has 16 EMS regions, approximately 1,000 ambulances services, and more than 50,000 EMS providers in the state. Diversity of urban and rural providers, in geographies and in distances involved in reaching and/or transporting pediatric patients, complicated the development of one standardized set of protocols to meet the needs of all providers in the state. Protocol development also required lengthy review and editing processes before a statewide mandate could be implemented. The large provider community complicated the dissemination of the new protocols.

**Strategies Utilized to Overcome Challenges.** Pennsylvania EMS regulations require protocols to be developed in consultation with the Regional Medical Advisory Committee and approved by the DOH, Bureau of EMS. To assure that regional differences were taken into consideration, regional EMS medical directors were included in the development and review of protocol drafts. Though this process was lengthy, it was essential to assure buy-in and support for a standardized state-wide set of protocols. This format was utilized to standardize the protocols at the BLS level the first year and then the ALS level in year two. Pennsylvania's statewide Medical Advisory Committee then made the final review and recommendation for adoption of the statewide protocols.

Conducting rollout continuing education sessions was imperative. Pennsylvania was successful in providing rollout education by utilizing an on-line learning management system that provided greater accessibility for all providers statewide.

**Champions and Partnerships Help to Mobilize Best Practice.** Collaborations were sought and developed with the Regional EMS Councils, the Medical Advisory Committees, and the state EMS medical director. Collaborations were essential in providing the necessary help and direction for completion and implementation of protocols statewide.

**Important Lessons Learned.** Collaborations do not simply occur. They take effort, patience, and persistence to develop. EMSC program managers should strive regularly to develop and always maintain good working collaborations. It is important to also understand that it will take time to get consensus among any group to establish consistency, especially when dealing with both urban and rural settings.



Having statewide protocols provides a minimum baseline that is consistent statewide and ensures every pediatric patient will receive the standard of patient care. It is equally important to ensure all providers are educated consistently.



### For more information

- Pennsylvania website: <http://www.health.state.pa.us/ems>
- Pennsylvania Pediatric integrated BLS EMS protocols can be downloaded from [http://www.dsf.health.state.pa.us/health/lib/health/ems/bls\\_protocols\\_2004.pdf](http://www.dsf.health.state.pa.us/health/lib/health/ems/bls_protocols_2004.pdf).
- Pennsylvania Pediatric integrated ALS EMS Protocols can be downloaded from [http://www.dsf.health.state.pa.us/health/lib/health/ems/als\\_protocols-effective\\_07-01-07.pdf](http://www.dsf.health.state.pa.us/health/lib/health/ems/als_protocols-effective_07-01-07.pdf).

## Common Strategies Found in Achieving Performance Measures 71 and 72

EMSC grantees who are successful in achieving performance measures 71 and 72 have learned that utilizing the skills of others, whether experts from within their state or a subcommittee of their EMSC advisory committee, can help facilitate and expedite work. EMSC is a multidisciplinary endeavor. The skills of many ensure that the needs of the critically ill and injured child are addressed in all settings, by all types of health care providers. Multiple input is needed in the development/review of on-line and off-line processes and protocols, as well as in the development/implementation of training and dissemination strategies.

These processes take time. Be patient, but have a defined timeline that is both adhered to and monitored to assure progress is occurring. Communication and collaboration with all impacted by both on-line and off-line processes and protocols must also be a part of the strategy. Keep in mind that the families and children for whom these processes are being developed need to be educated as well. At times, town hall meetings may be needed to share information and obtain essential buy-in and support for projects to move forward.

This chapter describes best practices utilized in Florida, Missouri, and South Dakota to successfully achieve performance measure 73: The percent of patient care units in the state/territory that have essential pediatric equipment and supplies as outlined in national guidelines.

### Florida EMSC

The goal of Florida's DOH is to promote and protect the health and safety of its citizens through the delivery of quality public health services and promotion of health care standards. The Florida EMSC program partnered with the Florida EMS Advisory Council to ensure the inclusion of essential pediatric equipment and supplies in the EMS administrative rules. By working together, § 64E-2.002 and § 64E-2.003 of the Florida Administrative Code now includes recommended regulatory language that ensures availability of pediatric equipment on all ambulances. Required equipment is reviewed and updated regularly with the most recent revision being in 2006.

Inclusion of pediatric equipment and supplies into administrative rules allowed for state inspection of all licensed EMS provider agencies biannually to ensure compliance with equipment availability. The inspection process also requires corrective action plans for all deficiencies. All corrective action plans have defined time limitations for implementation that link to the severity of the infringement. As part of DOH's regulatory authority, the rules also sanction disciplinary action, if needed.

**Challenges in Implementation.** The EMS Advisory Committee consists of a multi-discipline community and each member of the committee represents a specialized constituency group. Writing administrative language that all members of the committee could agree on was both time-consuming and difficult.

**Strategies Utilized to Overcome Challenges.** Florida's EMSC program worked closely with the chairperson of the EMS Advisory Council and the EMS state medical director to facilitate the development and inclusion of recommended language into the Administrative Code.

**Champions and Partnerships Help to Mobilize Best Practice.** In addition to working with the EMS Advisory Council and the EMS state medical director, Florida EMSC partnered with the EMS Bureau and many EMS constituency groups to ensure availability of pediatric equipment.

**Important Lessons Learned.** Streamlining feedback received from constituency groups was critical to moving this initiative forward.



### For more information

- Florida EMSC website: <http://www.doh.state.fl.us/DEMO/EMS/EMSC/EMSChome.html>.

## Missouri EMSC

In Missouri, administrative rules require ambulances to carry both pediatric and adult equipment and supplies. However, individual equipment pieces and supplies are not clearly identified. Defining specific equipment pieces to be carried by ambulances is the responsibility of the ambulance medical director for each agency.

To encourage ambulance services to voluntarily carry all recommended equipment and supplies listed in the 1996 ACEP Guidelines, the EMSC Advisory Committee developed and implemented a voluntary ambulance equipment incentive program. The incentive program is designed to publicly recognize ambulance services that have gone above and beyond requirements set by the service medical director, by obtaining and carrying the recommended ACEP pediatric equipment.

A community EMS representative performs a visual inspection to ensure all recommended equipment is available on patient care units at participating ambulance services. For services with multiple ambulances, a visual inspection is done on one ambulance and then the service administrator signs an affidavit attesting to the number of ambulances equipped with the same pediatric equipment. Plans are for all affidavits to be signed by a notary republic.

All participating services meeting the ACEP equipment guidelines are then given stickers to place on each ambulance having all required equipment pieces. The sticker serves as a public symbol of being equipped to care for children. Publicity is encouraged and local reporters are invited to a formal ceremony that recognizes services participating in the equipment incentive program.

**Challenges in Implementation.** The voluntary ambulance equipment incentive program faced several challenges, including: publicizing the initiative to the EMS community and eliciting support and participation; identifying EMS community leaders to participate in the process and serve as inspectors; clearly defining the process to ensure uniformity across communities and the state; and ensuring the availability of a notary public to sign affidavits attesting to the availability of pediatric equipment from those services with more than one ambulance.

**Strategies Utilized to Overcome Challenges.** The EMSC Advisory Committee utilized regional EMS committee meetings as a venue to communicate information about the incentive program to ambulance services. Key individuals from each region were then identified to serve as inspectors. These individuals continue to work with the EMSC Advisory Committee to ensure an implementation process that is both valid and smooth. The Committee continues to evaluate the need for a notary public to validate equipment in services with multiple ambulances.

**Champions and Partnerships Help to Mobilize Best Practice.** The state's EMSC program developed partnerships with the EMSC Advisory Committee, EMS regional committees, the Bureau of EMS, and the Missouri DOH and Senior Services.

**Important Lessons Learned.** There is no such thing as a simple process – the steps are many, especially when numerous disciplines are involved in developing a process or an initiative that will impact patient care. In the EMS world not everything is always black and white. Nonetheless, many dedicated EMS individuals in Missouri have worked hard to ensure that equipment and supplies are available on ambulances when responding to the needs of ill and injured children.



### For more information

- Missouri EMSC website: <http://www.dhss.mo.gov/EMS/Emsc.html>

## South Dakota EMSC

The South Dakota EMSC program conducted a survey of all ambulance agencies in 2005 to assess the availability of pediatric equipment as outlined within the 1996 ACEP Guidelines. The survey also collected “reasons for missing items.” Data revealed that the majority of equipment was available on most ambulances, but that select sizes and more expensive items were missing. Lack of funds to purchase the equipment was often cited as the reason for the missing pieces.



Survey data was presented to the director of the state’s Bioterrorism Hospital Preparedness Program (BTHP). EMSC staff were aware of the BTHP funding application, the amount of available funds, and “borrowed” language from the grant guidance to “help” address the HPP grant objectives.

Thanks to the success of several poison control initiatives, South Dakota EMSC already had an established relationship with HPP. This relationship helped to launch a new initiative designed to ensure the availability of equipment by providing it in a Pediatric Emergency Response Bag. Every agency that received a bag would also be trained in its use. The initiative also included plans to update the state’s required ambulance equipment list.

HPP funded the purchase of Pediatric Emergency Response Bags for all ambulances, and Broselow/Hinkle systems for all ALS providers and rural hospitals. Large hospitals received Broselow/Hinkle crash carts. Ambulance agencies and hospitals that previously reported having some or most of the recommended equipment, now had duplicates. This “extra” equipment enabled ambulances and hospitals to prepare for a mass casualty incident.

For two years, Pediatric Education for Prehospital Professionals (PEPP) courses were held twice a month at a variety of locations across the state. Each PEPP course included information about the new equipment. Funding also supported an Advanced Pediatric Life Support course for physicians and hospital providers. The South Dakota EMSC staff also worked with OEMS to provide two hours of continuing education for every ambulance service (specific to the Pediatric Emergency Response Bags) through the state’s EMS education program. Finally, Broselow/Hinkle training DVDs were provided to all directors of nursing to assist in educating emergency department staff on the new equipment system.

In partnership with the EMSC Advisory Subcommittee, OEMS, and the Governor’s EMS Advisory Committee (which is the official access for change in EMS), the EMSC program was able to update the current ambulance equipment list to reflect the ACEP equipment requirements. The new equipment list is an established Administrative Rule, meaning that all equipment is mandatory in the inspection process for ambulance licensure.

**Challenges in Implementation.** South Dakota EMSC personnel encountered the following challenges while trying to implement this initiative: collecting data from all agencies; seeking a significant funding source; identifying a need to change policy/rule to ensure ongoing compliance; and making adjustments when the performance measure changed to include BLS equipment.

**Strategies Utilized to Overcome Challenges.** South Dakota’s EMSC program utilized key partners in the state and expanded the group to include additional partners as needed. Prior to meeting with key partners, EMSC personnel identified linkages between the EMSC equipment and training initiative and the partnering agency’s goals. Knowing the overall goals of a potential partner and collecting proper and relevant data to support the need for the initiative proved most useful.



**Champions and Partnerships Help to Mobilize Best Practices.** To ensure that the initiative was a success, the EMSC program established partnerships with the OHTBP deputy director, the BTHP coordinator, and the South Dakota DOH. Additional partners included: OEMS, the South Dakota Department of Public Safety, the South Dakota EMS Advisory Committee and EMSC Subcommittee, and South Dakota ambulance services.

**Important Lessons Learned.** It is very important to nurture existing partnerships and to foster new ones. One of the key elements came to fruition when South Dakota EMSC staff contacted EMS providers to request that they extend their appreciation to the funding agency by sending a “thank you” note for the equipment and training they received. EMSC staff later learned that state agencies often do not get many expressions of gratitude, and state agencies do not usually have others doing their work and then giving them credit.

In the past three years, South Dakota EMSC has received more than \$500,000 for pediatric equipment and provider education from EMSC partners. The program continues to work with these and additional partners to address new and ongoing EMSC objectives.



#### For more information

- South Dakota EMSC Program: <http://www.sdemsc.org>

### Common Strategies Found in Achieving Performance Measure 73

The three states showcased above all had common themes. Utilizing the strengths of their EMSC advisory committees, each state partnered with others – state EMS Advisory Committees and Regional EMS Committees – to establish and update state EMS pediatric equipment mandates and codes.

Champions who were identified include:

- EMS state medical directors;
- EMS Advisory Councils;
- Regional EMS Councils;
- constituency groups;
- DOH;
- Bureaus of EMS;
- Offices of Public Health Preparedness and Response and/or Bioterrorism Hospital Preparedness Programs;
- ambulance services; and
- Department of Public Safety.

All states learned the value of partnerships in facilitating successful achievement of joint ventures. Perhaps most importantly, they learned the value of extending one’s appreciation for support received from funders supporting efforts to enhance one’s ability to provide pediatric emergency care.

This chapter describes best practices utilized in Oklahoma and Tennessee to successfully achieve performance measures 74 and 75: The percent of hospitals recognized through a statewide, territorial, or regional standardized system that are able to stabilize and/or manage pediatric medical (PM 74) and pediatric traumatic (PM 75) emergencies.

### Oklahoma EMSC

Oklahoma initiated performance measures 74 and 75 utilizing the statewide Trauma Advisory Committee established by the Governor's Task Force. Oklahoma's trauma system requires all hospitals to be categorized by the level of care for which they are capable of providing. The categorization level is based on the availability of essential equipment, the capabilities of 24/7 operation, and human factors (e.g., availability of specialist and training of staff). Additional categorization requirements have been developed for pediatric trauma centers.

To establish the guidelines for pediatric categorization/recognition, Oklahoma EMSC utilized the Emergency Department Approved for Pediatrics (EDAP) standards and the American College of Surgeons (ACS) standards for Level I, II, III, and IV trauma centers. The state DOH added strength to the process by developing mandates that require all facilities with an emergency department to be categorized at one of the four ACS levels.

**Challenges in Implementation.** Though buy-in to the process of facility categorization had been achieved, additional efforts were needed to address the accompanying challenges:

- utilization of EDAP standards in defining essential pediatric equipment/training;
- concerns expressed by hospitals related to costs associated with certain equipment and supplies needed to meet established standards; and
- establishment of evaluation criteria for facilities that could be used statewide to assure uniformity.

**Strategies Utilized to Overcome Challenges.** Research findings from a study conducted in 1992 by the Oklahoma EMSC program on equipment availability and voids in both EMS and hospitals were shared with the committee exploring trauma system development. These findings helped to provide the evidence needed to encourage inclusion of pediatrics into the trauma categorization process.

Oklahoma EMSC's close relationship with the state DOH was essential in facilitating the inclusion of pediatrics into the rules and regulations on categorization when the actual drafting of such occurred.



**Champions and Partnerships Help to Mobilize Best Practice.** The following committees and individuals helped to move the facility categorization process forward:

- the state DOH;
- the Trauma Advisory Committee;
- Trauma Committee chair;
- EMS director; and
- the Department of Pediatrics and the Department of Pediatric Surgery at the Oklahoma Medical School.

**Important Lessons Learned.** To achieve buy-in from all parties involved, it is critical to work through the potential barriers faced by those participating in the process, i.e. facilities, staff, and physicians. These barriers include: a lack of funding for supplies, equipment, and training; a lack of educational resources for providers; and a lack of reimbursement for care and services provided through a designated funding program for the trauma system.



### For more information

- Oklahoma EMSC website: [www.health.state.ok.us](http://www.health.state.ok.us). Click on the E in the index to locate the EMS Division.

## Tennessee EMSC

Tennessee invited all stakeholders, EMSC Advisory Committee members, and others with a vested interest in the emergency care of children to a three-day meeting to complete a “future search,” titled “What Will Tennessee EMSC Look Like in 10 Years?”. The meeting was designed to:

1. provide an opportunity for dialogue amongst the entire continuum of emergency care in one local;
2. identify common ground and future focus, not problems and conflicts; and
3. assure that the content was global in context, while the goal was to address the impact on Tennessee as a state. (The end result though was to be one of local action or from within the communities.)

The three-day meeting utilized the skills of a facilitator who was not a stakeholder nor in any way affiliated with the program. The meeting ended with plans to develop a White Paper. Steps to institutionalize EMSC into state statute were also initiated.

In 1996, EMSC legislation was passed unanimously. The resulting statute established a Committee on Pediatric Emergency Care. The committee's purpose is to provide advice to the state Board for Licensing Health Care Facilities and to the EMS Board on: appropriate triage, stabilization, and referral of patients; ambulance and facility equipment; qualifications of personnel; and continuing professional education of facility personnel.

The following resources were utilized as a guide in the development of Tennessee’s rules and regulations:

- Guidelines for Pediatric Emergency Care Facilities. *Pediatrics* 1995; 96: 526- 537
- Guidelines and Levels of Care for Pediatric Intensive Care Units. *Pediatrics*, 1993;92:166-175.

**Challenges in Implementation.** The Tennessee Hospital Association (THA) originally opposed the legislation, citing it as being too expensive for every hospital to be equipped for handling the emergency needs of children. Once grant funding was established for the needed additional equipment, THA then helped lobby for the bill. THA continues to be an active partner in disseminating EMSC information.

**Strategies Utilized to Overcome Challenges.** Tennessee was successful in achieving a program for facility categorization/ recognition by:

- utilizing parents to advocate for the needs of children. Turf or special interest issues often experienced with organizations or groups were eliminated when parents asked the question, “What is best for children?”
- hosting a press conference where stakeholders (excluding federal- and state-funded organizations) addressed pediatric facility categorization. Held on Tennessee's legislative plaza, the press event resulted in a great deal of media support.
- including and encouraging those considered as obstructionists, but influential, to be part of all conversations to develop a “win-win” situation.
- securing a \$300,000 grant to provide pediatric emergency education and a stocked Browserslow cart for all non-profit rural facilities.

**Champions and Partnerships Help to Mobilize Best Practice.** Champions and partnerships that helped in mobilizing facility categorization in Tennessee included: the Tennessee Parent Teacher Association; Family Voices; state chapters of ACEP, the AAP, ENA, the Academy of Family Physicians, and the Association of School Nurses; THA; the Tennessee College of Surgeons; the Tennessee Ambulance Service Association; the Rural Health Association of Tennessee; Vanderbilt Children’s Hospital; East Tennessee Children’s Hospital; T.C. Thompson Children’s Hospital; and DOH's Division of EMS, Division of Health Licensure, Traumatic Brain Injury Program, and Office of Rural Health.

**Important Lessons Learned.** Tennessee EMSC learned two major lessons during the implementation of the facility categorization process. First, the process is one of continued ongoing evaluation and refinement. The rules and regulations have been updated twice since the original approval. Second, the need for follow up is crucial. Making systemic changes are a result of positive relationships that need to be continually nurtured.



#### For more information

- Tennessee EMSC website: <http://www.tnemsc.org/>. Pediatric Facility Rules and Regulations can be found at: <http://www.state.tn.us/sos/rules/1200/1200-08/1200-08-30.pdf>.

### Common Strategies Found in Achieving Performance Measures 74 and 75

Tennessee achieved performance measures 74 and 75 by utilizing the strength of advocacy and a focus on what’s best for children. Key stakeholders were engaged early in the process and used as the driving force. For Oklahoma, the added benefit of timing and partnering helped efforts for pediatric trauma system development and categorization.



This chapter highlights those “models of best practice” for achieving or leading to achievement of EMSC performance measures 76 and 77: The percentage of hospitals in the state/territory that have written interfacility transfer guidelines (PM 76) (and agreements, PM 77) that cover pediatric patients and that include pre-defined components of transfer. The NRC thanks New Jersey, Vermont, and the state of Washington for willingly sharing their tips and success stories to help others improve the emergency care of children nationwide.

## New Jersey EMSC

The New Jersey EMSC program lies within the state DOH and Senior Services, Office of Emergency Medical Services. EMSC legislation has been in place since 1992.

As outlined in the legislation, the New Jersey EMSC program is responsible for the following:

- providing continuing education programs for EMS personnel inclusive of training in the emergency care of infants and children;
- maintaining pediatric equipment guidelines for prehospital care;
- ensuring that the following guidelines are adhered to and utilized:
  - guidelines that define appropriate assessment, stabilization, and treatment of critically ill infants and children either to resolve a problem or to initiate preparations for transfer of the child to a pediatric intensive care unit or pediatric trauma center,
  - guidelines that ensure children are referred to an appropriate emergency treatment facility, and
  - guidelines to ensure pediatric intensive care units, trauma centers, and intermediate care units are fully equipped and staffed by trained critical care pediatric physicians, surgeons, nurses, and therapists;
- overseeing an inter-hospital transfer system for critically ill or injured children; and
- ensuring that pediatric rehabilitation units are appropriately staffed and capable of providing services to assure maximum recovery from severe trauma.

New Jersey EMSC legislation provided the impetus for the state’s EMSC program to develop “Use of Patient Human Simulators to Evaluate Hospital Preparedness for Critical Pediatric Patients, Including Transfer.” The New Jersey EMSC Advisory Committee helped to develop pediatric scenarios for this project to ensure accuracy of clinical aspects of each scenario. They also videotaped the simulation exercises, and developed a numerical scoring tool to assess patient care rendered for each scenario. The numerical scoring tool was designed to assure consistency in the evaluation process. Individual facilities worked with the EMSC manager to develop an evaluation implementation plan.

**Challenges in Implementation.** As described below, New Jersey EMSC faced several challenges in getting this project completed:

- Time commitment and expertise required for pediatric scenario development.
- Time commitment for implementation of the scenario simulation-based evaluations at facilities.
- Hospital administrator concerns that as scenarios identified care deficiencies, these potentially could result in the generation of fines.

- Administrator concerns over confidentiality of all institutional data collected during the process.
- Statewide groups, such as the New Jersey Emergency Nurses Association, expressed concerns about potential adverse treatment of employees as a result of the evaluation of care provided.

**Strategies Utilized to Overcome Challenges.** The most important strategy to achieving this initiative was to develop and promote strong working relationships between the EMSC program and critical stakeholders. The skills and expertise of the New Jersey EMSC Advisory Committee was crucial in the development of the evaluation process and the pediatric patient care scenarios. ENA of New Jersey assisted in the development of an evaluation plan that included education and avoided a potential negative impact on emergency department nursing practice or employment.

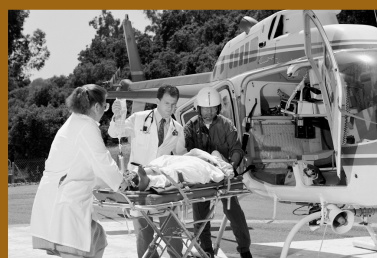
Committee members were important in making recommendations to officials not accessible to government employees. They played an important role in gaining trust and obtaining buy-in of hospital officials initially resistant to the pediatric simulation project.

The New Jersey Hospital Association was also used as a conduit in the establishment of trust between the state EMSC program staff and hospital administrators.

Preplanning with participating facilities – i.e. timing for enactment of scenario-based simulations – helped to assure that sufficient staff were available to participate in the exercises while assuring the ability to continue normal patient care.

**Champions and Partnerships Help to Mobilize Best Practice.** The New Jersey EMSC Advisory Committee was the primary champion of this innovative process of evaluating individual hospital pediatric emergency preparedness. The Burlington County College Simulation Center continues to serve as an essential partner in the actual implementation of the pediatric scenario simulator evaluations. Finally, the New Jersey Hospital Association assisted in reducing participating hospital administrator fears and anxieties.

**Important Lessons Learned.** Advisory committee members have immense knowledge and skills that EMSC managers should tap into. They can be engaged to be change agents for the state. Evaluation processes can be excellent learning opportunities, but trust between those being evaluated and the evaluators is essential. Strong partnerships between those implementing the initiative and those receiving the initiative greatly facilitate the process.



### For more information

- New Jersey website: [www.state.nj.us/health/ems/index.shtml](http://www.state.nj.us/health/ems/index.shtml)

## Vermont EMSC

Vermont has had a statewide, master patient interfacility transfer guideline and agreement in place for almost 10 years. This master agreement, “Vermont Association of Hospitals and Health Systems Standard Procedures for Inter-hospital Patient Transfers” was developed in 1999 and signed by all hospitals (17) at that time. The Vermont Hospital Association provided the initial leadership into the development and buy-in of the master agreement. Though dated and in need of updating, this document meets the intent of EMSC performance measures 76 and 77.

**Challenges in Implementation.** As described below, Vermont EMSC faces several challenges in getting the guidelines updated:

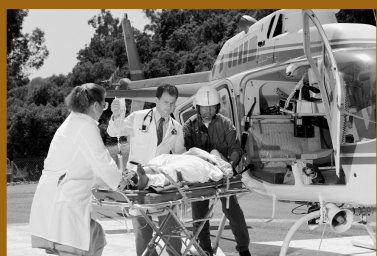
- The master agreement was developed almost 10 years ago. Present hospital administrators and staff members are unaware of its existence.
- The existing document has 17 hospital signatures and presently there are only 14 hospitals in the state. The original commitment to the outlined statewide master guideline, as witnessed by hospital leadership signatures, may therefore be void and no longer in effect.
- Other priorities within the state may make development of a new model template difficult to pursue. Others may question the need when it appears that patient transfer incidents are negligible.
- Resources to invest in updating the document may not be available at this time.

**Strategies Utilized to Overcome Challenges.** The federal EMSC Program's focus on assuring timely and appropriate interfacility transfer of the pediatric patient may be a sufficient motivator to update the current state master agreement. Hospital administrations may also support the update since the present document is dated and other needed language changes may be identified.

The Vermont EMSC Program has partnered with the Vermont Office of Rural Health (ORH) to update the statewide guideline. ORH recognizes the value of the document in facilitating the timely transfer of patients from critical access hospitals to resource facilities.

**Champions and Partnerships Help to Mobilize Best Practice.** The EMSC Advisory Committee worked with the following partners to update the interfacility transfer document: ORH, the Vermont DOH, Center for Disease Control and Prevention's Emergency Preparedness Grant Program, the Vermont Flex Committee, and the Vermont Hospital Association.

**Important Lessons Learned.** Consensus building, even in a small state with few hospitals, is an important part to having a statewide master interfacility transfer guideline and agreement. Hospital administrators, physicians, nurses, EMS organizations, and others must agree that a statewide agreement is in the best interest of patients and the provider community. Numerous organizations can serve as partners in building this consensus. Having a consistent statewide approach to interfacility transfers may reduce exposure under EMTALA or other allegations of inappropriately managed transfers.



#### For more information

- Vermont website: [http://www.healthvermont.gov/hc/ems/ems\\_index.aspx](http://www.healthvermont.gov/hc/ems/ems_index.aspx)

## Washington State EMSC

A 2006 Washington state survey of hospitals focused on gathering data on the presence of pediatric transfer guidelines and agreements. Survey data reflected a statewide need for both. The realization that interfacility transfer agreements and guidelines could improve movement of patients to appropriate resources more quickly and safely provided the impetus for hospitals to request assistance from the Washington state EMSC program. The EMSC Advisory Committee agreed to spearhead the task. A template was developed to assist hospitals in making informed and appropriate transfer decisions for pediatric patients.

The EMSC Advisory Committee formed a subcommittee to research and develop a draft document. Subcommittee members reviewed the state's 1990 trauma transfer guidelines; documents from the National Highway Traffic Safety Administration, the American Burn Association, and academic resources; and work accomplished by the EMSC programs within California, Illinois, and Maryland. Members integrated specific components outlined in the EMSC Performance Measures: Implementation Manual for State Partnership Grantees into the document. The entire Advisory Committee provided input prior to consensus on a final product.

As draft documents were completed, other groups were also encouraged to review the documents and provide input – i.e. the State Hospital Advisory Committee and state trauma nurse coordinators. Suggestions were sought and encouraged from all potential users of the guidelines.

**Challenges in Implementation.** An early draft of the guidelines was shared with state trauma nurses for input. Numerous concerns and obvious misunderstandings from the group were noted. Hospitals were feeling threatened. Common practices and methods of caring for children were perceived as needing to be changed. Authors had not anticipated that the new guidelines would be perceived as mandating community hospitals to “not” keep pediatric patients if they fell into the defined transfer criteria.

A second major challenge occurred with the release of the 2007 EMSC Program Performance Measure Implementation Manual. The EMSC Advisory Committee had already completed their work on the new pediatric interfacility transfer guidelines and agreements. The workgroup was therefore reluctant to return to their product and make further changes.

**Strategies Utilized to Overcome Challenges.** Initial education is necessary and even helpful when deploying tools or guidelines perceived as potential threats. Educational programs were held at the statewide trauma nurse and trauma program medical directors' meetings. A PowerPoint slide presentation to assist hospitals in implementing the new guidelines is also being developed.

It is critical that rumors and incorrect interpretations be addressed promptly. Guideline language was edited to provide clarity and facilitate flexibility in facility interpretation pending local resources.

EMSC advisory committee participation in the EMSC webcast “Introduction to Interfacility Transfer Agreements and Guidelines,” helped to reduce resistance to further modification of the guidelines. The webcast helped to facilitate a buy-in to the process and a willingness to advocate for further changes in the nearly completed documents.

### **Champions and Partnerships Help to Mobilize Best Practice.**

Following is a list of partners and a brief description about how each helped the Washington EMSC program achieve performance measures 76 and 77:

- Washington state's EMSC Advisory Committee made the guidelines become a reality.
- State trauma medical directors, the state Trauma Nurse Network, ENA, and the medical program directors provide expert input.





- The Governor's EMS and Trauma Steering Committee approved the guidelines for distribution on May 14, 2008.
- The state DOH, OEMS and Trauma Systems posted the new guidelines on their website.
- The Washington Hospital Association agreed to print an article in their monthly newsletter.

**Important Lessons Learned.** Respond to rumors as quickly as possible. They are all serious, no matter how odd or strange they may sound. Keep people talking and listening to ideas from outside the chosen circle. Keep in mind that these are guidelines and not standards or mandates. As a result, they can be revised by local hospitals to fit their circumstances and resources.



#### For more information

- Washington state website: [www.doh.wa.gov/hsqa/emstrauma](http://www.doh.wa.gov/hsqa/emstrauma)

### Common Strategies Found in Achieving Performance Measures 76 and 77

The three states highlighted in this section illustrate the value of engaging the state EMSC Advisory Committee. Advisory committee members worked to develop patient care scenarios. They helped to develop interfacility guidelines and provided leadership in gathering consensus and support for effecting change in each state. The expertise of committee members and commitment to improving the emergency care of children in their states should not be under-estimated.

This chapter describes best practices utilized in Michigan and New Mexico to successfully achieve performance measure 78: The adoption of requirements by the state/territory for pediatric emergency education for license/certification renewal of BLS/ALS providers.

### Michigan EMSC – License/Certification Renewal of ALS and BLS Providers

In 1997, the Michigan OEMS and the state's EMSC program embarked on a project to identify the types and frequencies of pediatric EMS runs and the outcomes for care rendered. Utilizing funds from the Michigan EMSC State Partnership Grant, OEMS contracted with the University of Michigan to conduct the Pediatric Surveillance Data Project. Based on study results, two primary recommendations were made:

- Continuing medical education should consistently offer components for treatment and evaluation of the injured child with an emphasis placed on efficient and appropriate patient packaging.
- Treatment of pediatric seizures and respiratory difficulties, including basic airway management, were essential educational topics to be covered in any pediatric continuing education initiative.

OEMS then decided to evaluate the impact of existing educational programs provided to all emergency providers (including EMS providers, nurses, and physicians). Two initiatives were employed for this evaluation:

1. A structured one-day pediatric educational offering that included pre- and post-performance evaluations using patient simulations as the main component of determining clinical competency. Details include:
  - Background: The Michigan EMSC Committee developed a pre- and post-Objective Structured Clinical Exam (OSCE), which integrated essential pediatric components of the educational program. Clinical competence was evaluated based on the outcomes of the simulations and demonstrated integration of essential skills.
  - Methods: The educational initiative consisted of a modified Advanced Pediatric Life Support course. Prior to taking the course, participants completed the pre-OSCE. The post-OSCE was given six weeks following the pre-test.
  - Conclusions: Performance evaluation, as measured by the pre- and post-OSCEs, demonstrated a significant improvement of pediatric emergency skills. Data collected from the OSCEs indicated that pediatric emergency education could be an important adjunct to improving the care of children.
2. A survey of all course participants to determine self-perception of changes in skill levels. Details include:
  - Methods: Nine months following training, surveys were sent to all course participants. The survey addressed students' perceived value of educational components in improving patient outcome and improvement of specific skills.
  - Conclusion: The majority of participants believed that the educational course significantly improved both skill and comfort levels in the provision of pediatric care. Participants also felt that training had positively impacted their ability to save the lives of children. As a result, study investigators and participants both believed that pediatric emergency training improved patient care and outcomes of seriously ill and injured children.

After learning about the results of the training and survey initiatives, the EMSC Advisory Committee pledged its full support for pediatric continuing education as a requirement for all EMS personnel (medical first responder to paramedic). Though there was significant discussion regarding the number of hours to be required, the EMSC Advisory Committee agreed on the recommendation that each level should obtain at least one continuing education credit in pediatrics. This recommendation was presented to the EMS Coordination Committee (advisory to the Department and the legislature on all EMS issues) and received unanimous support. The recommendation was made in 1998 and was placed into EMS Administrative Rules in 2004.

**Challenges in Implementation.** A lack of available pediatric educational opportunities for all EMS providers in the state was a major deterrent to requiring pediatric continuing education for recertification and needed to be addressed. In addition, nurses and physicians initially resisted participating in OSCE developed by the EMSC Advisory Committee.

**Strategies Utilized to Overcome Challenges.** OEMS took an active role in assuring that providers could meet the new license requirement by working with the Michigan Society of EMS Instructor Coordinators. The Society agreed to assist in making pediatric educational offerings available to all EMS personnel.

Physicians on the EMSC Advisory Committee and physician friends of EMSC assisted in the recruitment of medical professionals to participate in the OSCEs. This in turn helped to alleviate any concerns physicians and nurses had with the tests.

**Champions and Partnerships Help to Mobilize Best Practice.** The EMSC Advisory Committee partnered with the University of Michigan, the Michigan Society of EMS Instructor Coordinators, and the EMS Coordination Committee.

**Important Lessons Learned.** Data gleaned from the OSCEs provided the support needed to push performance measure 78 forward. Without the data, the Department would not have been able to gather unanimous support for this rule.



### For more information

- Michigan website: [www.michigan.gov/mdch/0,1607,7-132-2946\\_5093\\_28508---,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2946_5093_28508---,00.html)

## New Mexico– License/Certification Renewal of ALS and BLS Providers

Prior to applying for new EMSC funding, the New Mexico EMSC program determined the need to add specific pediatric continuing education requirements for recertification in conjunction with the EMSC performance measures. As a first step in addressing this need, program staff introduced state policymakers to the EMSC performance measures, explaining their importance and rationale. They attended numerous meetings involving the state EMS Board, the state Medical Direction Committee, and the state Joint Organization on Education Committee. All committees and groups were apprised of the goals of the EMSC performance measures. Performance measures 78 and 79 were the two primary performance measures of interest. State EMSC program staff asked the state EMS Board to consider placing a voting pediatric representative on their committee and to endorse pediatric training requirements for renewal of EMS licensure. Although the state's EMSC program was only seeking rules regarding "paramedic" continuing education for recertification at the time, it seemed important to require all levels of EMS providers to have pediatric education.

Coincidentally, the state EMS Bureau was also in the process of revising the recertification licensing regulations and was hosting meetings throughout the state for stakeholders to make recommendations. The project coordinator for New Mex-

ico's EMSC program attended several of these meetings and put forth the recommendation for written requirements for pediatric education to be included in the renewal regulations. All stakeholders unanimously agreed that pediatric education should be required of all EMS providers in the state, providing the impetus for the state EMS Bureau to include this requirement as an addition to the current regulations.

The amount of hours required for pediatric education for recertification licensure varies by licensure level. During the negotiation process with the state EMS Bureau, it was determined that since approximately 10% of EMS interactions are pediatric, at least 10% of continuing education should be focused on pediatrics. Wording in the rules does not limit providers in the amount of pediatric education, but lists the number of hours as a minimum.

To assist EMS providers in meeting the requirements for pediatric education, the state EMSC program developed on-line pediatric education courses. The courses were available two years prior to the change in rules, and free to New Mexico EMS providers. The training is in a research format, with data gathered being used to determine efficacy of online education for EMS.

**Challenges in Implementation.** Timing can be a challenge when attempting to make changes to state law. Many states do not review or revise their rules on a regular basis. Convincing state officials that the review process is necessary takes both effort and time from many. Fortunately for New Mexico, revising the regulations took less than one year because the rules were already scheduled for revision. It is also interesting to note that had the state waited until the federal EMSC Program required it to comply with performance measure 78 for "all" levels of providers, an additional five years may have been required to achieve the measure. Timing was and can be critical when trying to work through political processes.

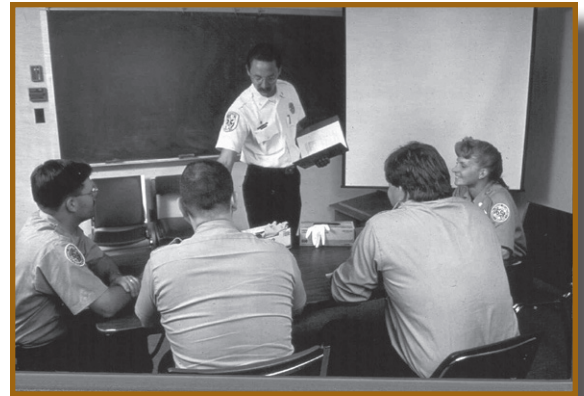
Not all went smooth for New Mexico. During the editing process, the pediatric education requirements were arbitrarily deleted. Recognizing the changes in the proposed regulations, state EMSC program staff contacted the Bureau. The Bureau corrected the language prior to the rules being sent through the hearing and ratification process.

**Strategies Utilized to Overcome Challenges.** It is critical to build good working relationships with EMS leaders before attempting to pursue change. Much time should be spent attending policymaking meetings and communicating face-to-face with policymakers prior to and during the change process.

It is equally important to find a way to include EMSC as an agenda item on the state EMS Board and other appropriate committee meetings. A time slot dedicated to ESMC issues is critical. EMSC issues should be addressed in two to three minutes, and the messenger should be prepared to answer questions and have resource documents in hand for committee members who may want more information.

Remember to tie all argument points to money (i.e., funding requirements), if possible. Make leaders aware that the state's EMSC program must comply with the performance measures or risk jeopardizing future grant funds. This compelling argument almost always leads to a positive result.

For frontier and rural states, such as New Mexico, a training program that can be accessed from a distance (such as the New Mexico EMSC Online Pediatric Education for EMS) can also be an adjunct in getting rules in place for continuing





education. The state EMS Board was very supportive of the EMSC request put before them, especially since a solution had been offered to the education program before the rule was changed.

**Champions and Partnerships Help to Mobilize Best Practice.** In New Mexico, the state EMS Board can be one of the most important committees in implementing change. It is in charge of EMS-related regulation review and revisions. Other partners in the state include the state Medical Direction Committee, which assumes responsibility for setting scope of practice and medical oversight, and The Joint Organization on Education, which is responsible for all EMS educational programs in the state.

**Important Lessons Learned.** Never assume work on rule development or change is done until the actual rule is approved. Maintain direct involvement in the revision process so inadvertent changes won't go unnoticed.



#### For more information

- New Mexico state website: <http://hsc.unm.edu/emersed/PED/emsc/emsc.shtml>
- The New Mexico EMSC education website: [www.pediatricemergencytraining.com](http://www.pediatricemergencytraining.com)

### Common Strategies Found in Achieving Performance Measure 78

The two practices highlighted in this section both illustrate the importance of having a methodology in place to facilitate meeting the requirements for continuing education prior to instituting a regulation change and engaging key stakeholders in the process to obtain early buy-in. Further, timing can be key to achieving this measure.

# Chapter 7

## Best Practices for PM 79 (formerly PM 68a)

This chapter describes best practices utilized in Arizona, California, and Utah to successfully achieve performance measure 79: The degree to which state/territories have established permanence of EMSC in the state/territory EMS system by establishing an EMSC Advisory Committee, incorporating pediatric representation on the EMS Board, and hiring a full-time EMSC manager. Chapter 7 focuses on establishing an EMSC Advisory Committee.

### Arizona EMSC

Arizona's state EMSC Advisory Committee was resurrected in August 2006. To ensure adequate representation across the entire healthcare spectrum, state project staff contacted several professional organizations – working primarily through their state chapter affiliates – to identify representatives to participate on the committee. This process resulted in an additional seven committee members.

This newly expanded committee chose to meet five to six times per year, a higher frequency than the performance measure requires. It also renamed itself the Pediatric Advisory Committee for Emergency Services (PACES), thus creating its own identity.

To facilitate member engagement, each meeting begins with a presentation from a committee member on their area of expertise as it relates to children. This process allows members to learn about each other's strengths as well as to educate one another.

Meetings are structured to be both informative and productive. It is important that membership feel time away from home and jobs is important and making a difference. Members are provided with meaningful tasks that are suited to both their interests and expertise. For example, the committee worked on the annual review of state pediatric protocols. Their recommendations, which included the need for new protocols and regular updates to the School Nurse Guidelines, were submitted to the state EMS Council.

**Challenges to Implementation.** Arizona is fortunate to have a very active and committed committee, all of whom believe in the program. No real challenges have surfaced. Members are working hard to improve pediatric EMS care in the state.

**Champions and Partnerships Help to Mobilize Best Practice.** The real champion for the Arizona EMSC program is the chair of PACES. This individual is a practicing emergency physician with the University Medical Center in Tucson and is the AAP's representative. The state's family representative is a representative from Raising Special Kids. This person has no EMS background and therefore is able to ask questions that often escape those who are too close to EMS.

**Important Lessons Learned.** Building an advisory committee takes time and requires relationship building. Allowing members to assist in identifying issues that need to be addressed is as important as the work being done on the performance measures. Members are then able to see that their contributions are not only helpful, but necessary.



### For more information

- Arizona website: <http://www.azdhs.gov/phs/owch/emsc.htm>

## California EMSC

In 1991, the state's EMS Authority received a Targeted Issues grant to develop state guidelines for EMSC. This initiative was done in partnership with the University of California at San Francisco. As a result of this grant, the Project Steering Committee was formed bringing together stakeholders from pediatric emergency medicine, emergency medicine, pediatrics, pediatric critical care, nursing, rehabilitation, EMSC, EMS, and EMS administration. The Steering Committee, by defacto, became the EMSC Advisory Committee.

After the grant ended, many of these stakeholders remained active promoting EMSC objectives. With the help of the California EMS Authority, they lobbied the EMS Commission – the governing body for EMS within the state of California – to include EMSC as a standing advisory committee.

Today, this 26-member committee, known as the Technical Advisory Committee or EMSC TAC, works collaboratively with the statewide EMSC coordinators (nurses/paramedics within each of the local EMS agencies). Together, they plan the state's Annual EMSC Conference. During the conference planning phase each January, committee members and EMSC coordinators meet in either Napa or Sonoma. This meeting serves as both a planning session and a “thank you” to the EMSC TAC members.

The Annual EMSC Conference begins with an EMSC coordinators meeting on the first day. The coordinators utilize this time to network and discuss the successes/failures of day-to-day local program activities. They also tackle several special projects related to the EMSC performance measures.

On the second day, EMSC TAC members meet with the coordinators. The coordinators use this opportunity to present various EMSC issues to EMSC TAC for their expertise and technical assistance.

The third day is reserved for the EMSC TAC meeting, at which time members discuss the barriers and strategies to meeting EMSC performance measures in California. Members also work on existing projects, as well as plan and discuss new performance measure(s) for the next year (i.e. family-centered care guidelines).

**Challenges in Implementation.** Funding and staff turnover are two challenges for EMSC TAC.

**Strategies Utilized to Overcome Challenges.** Establishment of an EMSC advisory group can best be accomplished by identifying current statewide EMSC advocates and organizing them in a group. In California, the state agency has great power to coordinate EMSC activities by facilitating communication amongst important stakeholders. Having an inclusive versus an exclusive approach is best to encourage both initial participation and keep members engaged. An annual meeting in a resort location within the state can also serve as a “thank-you” to these hard-working EMSC advocates.

EMSC TAC has utilized email and conference calls to continue work efforts in order to save money. Its membership is broad, most of whom are active nationally in professional societies. States should consider reaching out to the national figures within their state and utilize their expertise on an advisory committee.



Quarterly meetings are alternated between the northern and southern area of the state to decrease meeting costs and to equalize the time burden for members.

Many EMSC advocates have limited time to give to this process; therefore adhoc or smaller working committees have also been necessary to get various program objectives accomplished and to keep members involved. Outside experts have also been brought into these smaller working groups to add additional expertise as needed. This is an effective strategy to keeping initiatives moving forward when single committee members seem to block processes.



The Annual EMSC Conference nets enough money to support the EMSC TAC planning conference for the next year.

**Champions and Partnerships Help to Mobilize Best Practice.** California EMSC has reached across multiply disciplines to recruit experts in pediatric emergency care. EMSC champions in California include academic emergency medicine physicians, pediatric emergency physicians, pediatric critical care experts, surgeons, emergency and pediatric nurses, child advocates from injury prevention groups (parents), practicing prehospital providers, statewide EMS agencies and their established committees, the EMS Commission, EMS medical directors and administrators, the state Office of Traffic Safety, the state hospital association, and state medical professional societies.

**Important Lessons Learned.** Identify key leaders for EMSC within the state and recruit these individuals to participate on an EMSC advisory committee. These leaders should represent multiple disciplines in pediatric health care. Establish smaller working groups to accomplish committee goals and broaden the expertise of the group by including other experts as needed to achieve committee objectives. Give back to members who serve by offering some benefit of participation, such as a meeting in a resort location within the state – make planning and participation fun and worthwhile.



### For more information

- California website: <http://www.emsa.ca.gov/systems/EMSC/default.asp>

## Utah EMSC

Since the early 1990's, Utah's EMSC program has been fortunate to maintain an active EMSC advisory committee. This has been accomplished by keeping members involved in projects and ensuring that they feel valued. When possible, it has also been important to give special recognition for individual and committee efforts and support.

**Challenges in Implementation.** Many members of the EMSC Advisory Committee have demanding schedules; therefore, it is imperative that state EMSC programs meet the individual members' needs to ensure they will continue to remain active in committee meetings.

**Strategies Utilized to Overcome Challenges.** To assist in meeting each committee member's needs, the EMSC manager met with members individually. During this informal meeting, members were encouraged to identify what they



would like to gain from serving on the committee. Knowing each committee member's goals in advance helped the manager plan and assign tasks to the appropriate person.

**Champions and Partnerships Help to Mobilize Best Practices.** Utah EMSC is a public/private partnership between the Utah DOH and Primary Children's Medical Center. The administrative support afforded to the Advisory Committee from Primary Children's has encouraged committee members who are also staff at the medical center to participate in the meetings.

**Important Lessons Learned.** Advisory committee members are very talented individuals and they need to feel that their input for program activities is valued. As members provide feedback and input, it is important to incorporate those contributions into the state's EMSC program. As programs and initiatives evolve due to their contributions, members need to have their contributions recognized.



#### For more information

- Utah website: <http://health.utah.gov/ems/emsc/>

## Common Strategies Found in Achieving Performance Measures 79

EMSC advisory committees flourish if their members are linked to professional organizations. This membership provides both professional expertise and broadens the reach of the individual member. Inclusivity vs. exclusionary membership is critical to building a strong committee.

EMSC managers should remember that building a strong advisory committee takes time and requires essential relationship building. It is important to determine an individual member's goals for participating on the committee. Matching individual goals with tasks at hand keep members engaged while helping them feel valued for specific expertise.

Members will also feel a sense of value if they are encouraged to assist in identifying EMSC issues needing to be addressed. This encourages individual investment of time and energy to improve the emergency care of children in states.

When possible, it is also important to give special recognition for individual and committee efforts and support. This may be given in the form of awards or special opportunities, such as California's planning workshop.

This chapter describes best practices utilized in Guam, Missouri, and New Mexico to successfully achieve performance measure 79: The degree to which state/territories have established permanence of EMSC in the state/territory EMS system by establishing an EMSC Advisory Committee, incorporating pediatric representation on the EMS Board, and hiring a full-time EMSC manager. Chapter 8 focuses on incorporating pediatric representation on the EMS Board.

### Guam EMSC

At the time Guam began working on this measure, the EMS Commission – comprised of 12 members – had only 10 of the positions filled. In Guam, the OEMS Office makes recommendations to the governor for all members of the EMS Commission. The governor then officially makes appointments to the Commission. OEMS recommended that the pediatric medical director for the territory's EMSC grant be appointed to the Commission.

**Challenges to Implementation.** As described below, Guam EMSC faced several challenges in getting the pediatric director appointed to the Commission:

- Chapter 84 Title 10 of the Guam Code Annotated §84108-Composition did not specifically indicate that the physician member of the Commission be a pediatrician. However, the section of Code does specify that the physician must have an unlimited license, or without restrictions, to practice medicine in Guam and to be considered for appointment to the Commission.
- Prior to 2005, OEMS had been without a permanent EMS administrator to facilitate changes within the EMSC program, the EMS System, or the Code.
- It should also be noted that the EMS Commission had not met for at least four years prior to 2006 making it difficult for EMS protocols, rules, and regulations to be reviewed and revised.

**Strategies Utilized to Overcome Challenges.** With the identification of a new EMS administrator in 2005, the Commission once again became active. One of its top priorities was to review Chapter 84 Title 10 of the Guam Code Annotated. In 2007, the Commission submitted its suggested Code revisions, which included adding a pediatrician – to meet the EMSC performance measure requirement – and two additional physicians to the Commission. To assure compliance with prior requirements for physician membership, the physicians would have an unlimited medical license to practice emergency care.

**Champions and Partnerships Help to Mobilize Best Practice.** The following individuals and groups helped with the territory's EMSC endeavors:

- Guam Fire Department;
- Guam Memorial Hospital Authority Hospital (GMHA) Administrator or his/her designee;
- GMHA Emergency Medicine/Pediatric Departments;
- legislative chairperson on the Committee of Health;
- Guam Homeland Security;
- acting EMS medical director;
- Department of Public Health and Social Services;
- Department of Public Works – Office of Highway Safety; and
- Guam Community College.



**Important Lessons Learned.** A key factor when advocating for pediatric representation on the EMS Commission is to make sure that a pediatrician with emergency medicine experience is available to fill the position. The Guam EMSC program manager utilized creative incentives, such as access to administrative assistance, to recruit and maintain the current EMSC pediatric medical director. The search process for an appropriate candidate had been lengthy, as there were not very many pediatricians on staff at the Guam Memorial Hospital who had experience in emergency medicine and who were willing to volunteer time to EMS.



### For more information

- Guam has no website at this time.

## Missouri EMSC

The State Advisory Council (SAC) for Missouri's EMS is comprised of 12 volunteer, emergency care, multidisciplinary providers and leaders appointed by the governor. All SAC meetings take place as an open public forum and are announced well in advance. Representatives from the three children's hospitals in the state, as well as leaders in pediatric EMS from various adult/pediatric hospitals, began to attend the SAC meetings approximately 20 years ago. During the "open comment" period of each meeting, the pediatric representatives were very vocal in regards to the pediatric population needs within the state.

Consistent attendance by the pediatric representatives at the meetings served as a catalyst to the pursuit of the first EMSC grant for the state. With grant funding secured, the governor appointed the first pediatric representative to SAC. The representative began with a very active presence, but was forced to resign due to health issues. Coincidentally, at that time, additional EMSC funding was coming into the state via the children's hospitals. The EMSC grant leaders were consistently present at the SAC meetings, but, without being official members of the Council, they did not have voting power on important issues. In the meantime, the Bureau of EMS recommended that the governor appoint a new pediatric representative to its Board to help establish a pediatric subcommittee of the Board's EMS Committee. This subcommittee has since evolved into the EMSC Advisory Committee with one of its committee members now having an appointment on SAC.

The pediatric subcommittee consists of representatives from pediatric hospitals, general hospitals, and ground and air ambulances, and includes physicians, nurses, paramedics, and EMS administrators from throughout the state. This group continues to help the pediatric population by asking questions such as, "What about the kids?" and "How does this impact the pediatric patient?". This committee has evolved so that it now impacts each region in the state through the EMS Regional Subcommittees, which in turn report back to SAC.

**Challenges to Implementation.** Missouri's initial challenge was to identify individuals with the willingness, time, and commitment for monthly attendance at SAC. Without their attendance, there would be no consistent voice for children.

**Strategies Utilized to Overcome Challenges.** The pediatric voices in the audience led to an increased awareness, by both SAC members and EMS staff, to the needs of children. The early EMSC grants also provided stimulus for pursuing a consistent pediatric representative to SAC. Without a Council representative to lead the way and ask challenging questions, the needs of the children could easily be forgotten.

It is important to utilize every opportunity to include the pediatric perspective when working with non-pediatric committee representatives. In addition, it is helpful to have other individuals in the audience to serve as voices on children's issue.

**Champions and Partnerships Help to Mobilize Best Practice.** The changes in Missouri were made possible due to the hard work of the following individuals and groups:

- DOH and Senior Services;
- State Advisory Council of EMS;
- Bureau of EMS;
- state trauma nurse coordinators;
- Pediatric Subcommittee to the SAC ;
- children’s hospitals within the state;
- additional hospitals in state with interest in children;
- Missouri Ambulance Association;
- Missouri Hospital Association;
- Missouri Emergency Medical Association; and
- ENA.

**Important Lessons Learned.** Each member of SAC has a different background, which lends itself to a different and specific agenda. It is important to constantly “push the envelope” and include pediatric considerations when SAC initiatives are presented. Make sure that pediatric considerations are expressed in other subcommittees as well (i.e. Trauma, Education, Air Ambulance, and Legislative). Remember that all pediatric care is affected by decisions made at this high level (all issues, medical and trauma, school nursing, disaster management, etc).



### For more information

- Missouri website: <http://www.dhss.mo.gov/EMS/Emsc.html>

## New Mexico EMSC

Robert Sapien, MD, has been an enthusiastic leader for New Mexico’s EMSC program for many years. He and the New Mexico EMSC staff have successfully achieved performance measure 79 by saying “yes” to all requests, including those to serve on committees, to review protocols, to participate in meetings, to serve as guest lecturers, and to provide expert testimony before the state legislature. This approach served to boost their reputation as pediatric experts, which in turn made EMSC a common entity within the DOH. Their burgeoning relationship with DOH brought more invitations for project participation and sharing of his expertise. Which ever meeting, committee, or function they attended, Dr. Sapien and the New Mexico EMSC staff always asked “What about the children?” and “Have you considered children?”. Soon, DOH came to the realization that children did need special representation. They approached the Secretary of Health for appointment of a pediatric representative to the EMS Medical Direction Committee. This committee oversees and approves EMS protocols and scope of practice.

**Challenges to Implementation.** The willingness to say “yes” to all good causes designed to help heighten awareness of children’s issues can create complications for other career activities and for the family.

**Strategies Utilized to Overcome Challenges.** A simple strategy used by New Mexico was to keep saying “yes” and to keep asking “Are the needs of children being met?”. Increasing the awareness of the unique needs of children and families is hard work. Educating and advocating for the needs of children in the hopes they are not left out never seems to go away. Finding committed, passionate voices can be difficult, but they are out there in every state and community.



**Champions and Partnerships Helping to Mobilize the Best Practice.** The changes in New Mexico were made possible due to the hard work of the following individuals and groups:

- DOH, EMS Bureau;
- State Trauma Stakeholders Advisory Committee;
- New Mexico School Nurse Association; and
- New Mexico Hospital Association.

**Important Lessons Learned.** In most cases, members of committees usually have their own agendas for which they are advocating. Therefore, it is very important to be creative when modifying these agendas to include the needs of children. An example of this effort can be seen with the new state trauma system development effort taking place in New Mexico. Working with the trauma system planners it has become possible to include a report on the need for regionalization of pediatric emergency care as part of the proposal for the Trauma Fund Authority. Trauma development is being used as the conduit to further improve the general approach to the ill and injured child.



#### For more information

- New Mexico website: <http://hsc.unm.edu/EMERMED/PED/emsc/emsc.shtml>

### Common Strategies Found in Achieving Performance Measure 79

Practices highlighted in this section illustrate the importance of having the availability of committed voices for children and their families. These voices are essential to helping others best understand the unique needs of children. It is also important to understand that it is equally important to identify opportunities to support the initiatives and agendas of others while finding a fit for the needs of children. Collaborating with others can and does provide a synergism for the improvement of emergency care for all, inclusive of children.

This chapter describes best practices utilized in Delaware, Idaho, New Hampshire, and Virginia to successfully achieve performance measure 79: The degree to which state/territories have established permanence of EMSC in the state/territory EMS system by establishing an EMSC Advisory Committee, incorporating pediatric representation on the EMS Board, and hiring a full-time EMSC manager. Chapter 9 focuses on securing a full-time EMSC manager.

### Delaware EMSC

Delaware has a triangular partnership supporting the EMSC program. This includes the state's only children's hospital, DuPont Hospital for Children, the state Division of Public Health, and the state OEMS. The goal of the partnership is to provide a full-time EMSC program manager within the state OEMS. The EMSC grant was to fund 60-70% of the position and the Division of Public Health would fund 30-40% of the position with contractual funds allocated to OEMS and the EMSC manager's office. The hospital would provide support assistance.

**Challenges in Implementation.** One of the most important and biggest challenges encountered by the Delaware EMSC program was and continues to be the yearly contract negotiations that must occur between the partners. The hospital attorneys and the Division of Public Health's contract specialists negotiate the details of the agreement, which includes identifying specific activities that the manager will perform to meet the needs of the partners while benefiting the children and families of Delaware. At times, the details of the agreement are tenuous. A potential risk exists every year that EMSC may not always be considered a priority by the hospital.

A second challenge was that initially partners did not understand the roles and responsibilities of the EMSC manager nor the relationship he/she had with each partner.

**Strategies Utilized to Overcome Challenges.** To meet contract deadlines, it was and continues to be very important to begin contract negotiations early. The EMSC program manager coordinates all communication between the state's contracts office and the hospital's legal department to assure that agreements are reached in a timely manner.

To help others understand the role of the EMSC program manager, and the triangular partnership, education of staff both within the hospital and state government occur yearly and includes a discussion of how the partnership functions to best serve children in Delaware.

### Champions and Partnerships Help to Mobilize Best Practice.

The planning and support of the triangular partnership is coordinated among the departments, groups, and individuals identified on page 39:



- OEMS in the Division of Public Health
  - EMS director
  - medical director
  - state trauma coordinator
- DuPont Hospital for Children, Administration,
  - administrator, COO, and CEO
  - ED physicians
  - ED nurse manager
  - trauma coordinator
  - emergency clinical nurse specialist
- The Safe Kids Coalition and community injury prevention partners.

**Important Lessons Learned.** To ensure a full-time EMSC manager position in the state, a solid partnership amongst the hospital, the Division of Public Health, and OEMS must exist. It is equally important for the partners to have consistent, clear communication. A high level of trust among all partners is also important and is achieved when contractual deliverables are consistently met.



### For more information

- Delaware website: <http://dhss.delaware.gov/dhss/dph/ems/emsc.html>

## Idaho EMSC

Idaho's EMSC program manager is funded through OEMS. To ensure funding, it was important that committed individuals (i.e. EMS leaders and EMSC advisory committee members) be available to help educate and advocate for the position, if needed. The EMS director ensured that these individuals were knowledgeable regarding the EMSC program, its mission, and the many responsibilities of a program manager. It was also critical that advocates and other state leaders supportive of change have a full understanding of state government processes and the steps to be followed to ensure successful change.

In Idaho a "decision unit" process is utilized when newly funded positions/programs are being requested. The EMS director initiated the decision unit request for a state-funded EMSC manager position.

Once initiated, the request then moves through the chain of command. A decision unit is treated as an official request and forces others to defend publicly any reason for denial of the requested position.

**Challenges in Implementation.** The decision unit process and the legislative process moves quickly in Idaho. Only a brief, one-year window is available to get proposed changes posted for public comment then integrated and approved within the administrative rules.

**Strategies to Overcome Challenges.** OEMS identified a mentor familiar with state political processes to educate advisory committee members on how best to educate and advocate for a full-time EMSC manager position. This was extremely important since the state agency is not allowed to advocate. Communications regarding the proposed changes were kept simple to avoid misunderstandings often associated with requests having long explanations. This helped to expedite movement of the proposal.

**Champions and Partnerships Help to Mobilize Best Practice.** When pursuing a new position or an increase in time allocation for a manager potentially funded by state money, it is critical to have the active involvement of leaders knowledgeable in operational processes. Idaho's champions included: the EMS bureau chief, representatives from the Division of Financial Management and Human Resources, EMS Advisory Committee members, and EMS staff (i.e. those performing certification, licensure, inspections, etc.).

**Important Lessons Learned.** Because state political processes can be complex, it is important for those seeking change to be fully familiar with state political change processes. Idaho's decision unit process facilitated a well-defined planning process in Idaho to successfully secure a full-time EMSC manager.



### For more information

- Idaho website: <http://www.idahoems.org>

## New Hampshire EMSC

A partnership between the medical school and the state Bureau of EMS made the availability of a full-time EMSC manager possible in New Hampshire. Since 1992, EMSC Implementation and State Partnership Grants have been awarded to Dartmouth College/Medical School with the permission and support of the New Hampshire Bureau of EMS. Even though the full-time program manager was a university employee and fully funded by the EMSC grant, there have been no competing interests for the manager's time.

**Challenges in Implementation.** Every three years, the Bureau of EMS has an opportunity to apply for the EMSC grant instead of Dartmouth College. At this time, the work of the academic-based program is assessed to determine the effectiveness of the arrangement and program continuation through the university. The arrangement must be recognized as a "win-win" situation for both the state and the college.

As the program is not an integral part of the EMS Bureau, it has also been a challenge to maintain close contact with Bureau staff and to be an integral part of policy development and implementation.

**Strategies Utilized to Overcome Challenges.** To overcome challenges, it is important to develop and maintain close working relationships with multiple players. Important strategies include involvement on state committees and boards as well as becoming a valuable pediatric resource and bringing this expertise to the table at the right time. Multiple departments and organizations must see the value of EMSC as it functions in the state. Lastly, it has been important to act as a bridge between the medical school and the EMS Bureau.

**Champions and Partnerships Help to Mobilize Best Practice.** Community groups with an interest in children continue to work with the EMS Bureau and the hospital to ensure that the EMSC manager position remains full time. These champions include:

- Department of Safety's Commissioner;
- EMS Bureau chief and staff;
- state legislators;
- Kiwanis;
- DOH and Human Welfare;



- New Hampshire Pediatric Society;
- EMS medical director;
- State Protocol Committee chair; and
- pediatric specialists at medical school.

**Important Lessons Learned.** It is essential to maintain good working relationships. The program manager should be a valuable resource to which people can turn to for information, research, and contacts. By helping others in need, they will in turn support and help the EMSC program.



### For more information

- New Hampshire website: <http://www.dms.dartmouth.edu/cfm/faculty/development/emsc.php>

## Virginia EMSC

To successfully complete performance measure 79, the Virginia EMSC program focused on four areas: commitment of leadership to EMSC program concept, collaboration, officially embracing and incorporating the EMSC mission into OEMS, and proactively planning for an EMSC manager position that would be independent of grant funding.

When Virginia's EMSC program was first established more than ten years ago, state EMS office leadership wanted to house the program, but due to political realities, the initial program became housed within an academic institution. Over the years and despite political constraints, OEMS began including the EMSC manager in state office planning and provided office space and limited funding to support EMSC activities.

Subsequently, state EMSC stakeholders held discussions that led to a consensus decision that timing was appropriate for the EMSC program to be fully supported and effectively implemented as part of OEMS. Based on these discussions, a plan to move the "home" of EMSC was developed with the 2007 grant application. The academic center originally housing the EMSC program supported the move and ensured an orderly transition. Concurrently, friends of the EMSC program successfully introduced state legislation, which established an EMSC program within OEMS.

Proponents of EMSC wanted permanence for the program. Program longevity was not to be dependent upon the availability of grant funding. Therefore, plans were made to make the EMSC manager state-funded.

**Challenges in Implementation.** Identifying and maintaining a stable source of revenue for the full-time position within the state OEMS was a critical challenge for Virginia.

State EMS offices often tend to be understaffed and under funded. With so many responsibilities existing at the state EMS level, it is often difficult to justify a manager "dedicated solely to the EMSC Program." Furthermore, the state government did not fully understand pediatric emergency care issues, had competing agendas to deal with, and often showed a lack of trust amongst state leadership. With limited resources available, additional funds or support needed by the EMSC program, made others feel EMSC might be consuming resources at their expense.

**Strategies Utilized to Overcome Challenges.** It was important to convince DOH leadership that EMSC permanence was more important than short-term grant funding. As luck would have it, Virginia's OEMS was able to successfully become

fiscally independent of the general fund. The office is funded by driver's license fees referred to as "4 for life" (the revenue collected being \$4.25 per license). This has made it easier to survive periods of budget deficits or shortfalls.

Use of the IOM report, *Growing Pains*, was very helpful in educating decision makers and stakeholders of the importance of pediatric emergency care issues. The EMSC manager developed a PowerPoint presentation to help with education. (This tool may be obtained from the Virginia EMSC manager.)

People skills, open dialogue, education, and collaboration helped to minimize the challenges of competing agendas. Being a team member and offering assistance to others served as a major adjunct when resources were limited. It also helped others come to know the state EMSC program better and better understand requests and needs.

**Champions and Partnerships Help to Mobilize Best Practice.** Partnerships were and continue to be critical to Virginia EMSC. OEMS, its staff, and members of the EMS Board realized the value of EMSC in bringing the needs of children to the forefront and ensuring their integration into the emergency care system of the state. They worked closely with the medical school to ensure the transition of the program to the state proceeded smoothly. A partial list of the important partners for Virginia EMSC includes:

- DOH
  - Division of Injury and Violence Prevention
  - State EMS Advisory Board
  - Trauma Critical Care
  - Medical Director's Committee
  - Trauma System Oversight and Management
  - Regulation and Compliance (TSO and M) Committee
  - Professional Development Committee
  - Regional Council directors
  - Child Protective Services
  - attorney general
- VA Injury Control Planning Group
- VA AAP, VA ACEP, VA ENA
- Virginia Commonwealth University
  - Department of Pediatrics
  - Survey Evaluation & Research Lab
- Office of Chief Medical Examiner
  - Child Fatality Review Team
- Virginia SIDS Alliance
- Prevent Child Abuse Virginia
- Department of Motor Vehicles
- OEMS
  - director; assistant director;
  - finance director
  - trauma/critical care
  - trauma coordinator
  - regulation and compliance
  - technical assistance to localities
  - educational development
  - consolidated grants
  - biostatistician

**Important Lessons Learned.** Change does not happen overnight, therefore patience is very important. Education of others, while doing your own homework, and collaboration are core for program acceptance and support. "Long-term" gains over "short-term" benefits in government was an important concept in making a full-time, state supported EMSC manager a reality in Virginia. Lastly, the commitment to EMSC by organization leadership was a huge "difference maker" during the implementation process.



### For more information

- Virginia website: <http://www.vdh.state.va.us/OEMS/EMSC/index.htm>

## Common Strategies Employed by EMSC Grantees to Achieve PM 79

Ensuring that a full-time funded EMSC manager exists in states is difficult to accomplish with numerous models existing. All models presented in this section have developed some unique partnerships. Managers who have achieved this status have also had to be patient, creative in gathering support for their roles, and have earned the trust of funding partners.

Emphasizing long-term gain over short-term funding can be a helpful concept to emphasize when seeking state funds for the position. But those seeking such should be aware that during budget short falls and difficult economic times, which frequently occur in states, this struggle may be heightened.

A well-defined plan and having proactive advocates identified, such as advisory committee members, can be most helpful in educating legislators and others regarding the need for an EMSC program and a full-time manager. It is essential that others understand the unique emergency care needs of children and the many roles of the EMSC manager in order to gather the needed essential support.

It is critical for both the EMSC manager and the program to be visible and valued by the state and financial partners. It is helpful for managers to illustrate their value through involvement in numerous committees and boards that potentially and even remotely touch children. Helping others with their goals can also be an effective strategy in gathering support and assistance for EMSC goals.

Lastly, when numerous partners come together to financially support a state's EMSC program, managers must consistently demonstrate accountability in meeting contractual commitments and program responsibilities that accompany funding.

This chapter describes best practices utilized in Colorado, Florida, New Jersey, and New York to successfully achieve performance measure 80: The degree to which state/territories have established permanence of EMSC in the state/territory EMS system by integrating EMSC priorities into statutes/regulations. Though the four best practices described here have been successful in working towards permanence of EMSC, note that only one state (New York) has mandated all of the EMSC priorities.

### Colorado EMSC

To institutionalize emergency care for children, Colorado focused on developing stakeholder groups, engaging in the political process, and enhancing organizational relationships.

**Mandates.** Colorado has mandated several EMSC priorities in statute and regulation. These mandates include:

#### PM 70

- 6 Colo. Code Regs. §1015-3 (2009). This regulation requires that basic life support and advanced life support ambulances have various pieces of pediatric equipment. (Note: required equipment may not be congruous with the 2009 equipment for ambulances list.)

#### PM 75 (Pediatric Trauma Center Designation Only)

- Colo. Rev. Stat. § 25-3.5-703 (2008). This statute requires that the Department of Public Health and Environment designate regional pediatric trauma centers.
- 6 Colo. Code Regs. §1015-4 (2009). This regulation establishes criteria for designated Regional Pediatric Trauma Centers.

#### PM 76 and 77

- 6 Colo. Code Regs. §1015-4 (2009). This regulation establishes standards for pediatric interfacility transfer and consultation.

**Challenges to Implementation.** A high stakes political environment exists in Colorado, which can make getting new initiatives through legislation difficult. Ensuring that a consistent and clear message was delivered from multiple messengers was challenging. New initiatives being considered must also be perceived as working within funding processes.

**Strategies Utilized to Overcome Challenges.** A high value was put on communication, so much so that key talking points were developed and provided to EMSC advocates to be emphasized in all discussions with legislators. The development of an inclusive stakeholder process and the identification of effective champions as the voices of children were also helpful.





**Champions and Partnerships Help to Mobilize Best Practice.** Partnerships with statewide organizations, support from the state EMS Council and the Trauma Advisory Council, and administrative support from the state executive branch were critical to the successful integration of EMSC priorities into state mandate.

**Important Lessons Learned.** Key factors to achieving legislative success were to (1) maintain an open, transparent process, (2) remain inclusive in all aspects of the implementation process, and (3) preserve the original scope and purpose of the legislative authority.



#### For more information

- Colorado website: <http://www.cdphe.state.co.us/em/emsc/about.html>

## Florida EMSC

Florida's EMS Advisory Council consists of 15 voting members, all of who are appointed by the state surgeon general. One of the most important duties of the Council is to assist in the development of EMS statutes and administrative rules.

The Florida EMSC Advisory Committee formally requested pediatric representation on the statewide EMS Advisory Council. Through Committee consensus, the chairperson of the EMSC Advisory Committee was identified as the EMSC representative/liaison. The Committee then solicited support from state officials and conducted a formal presentation to the Council outlining the benefits and positive outcomes associated with the EMSC/EMS partnership and collaboration. The EMSC liaison has become the voice in Florida's efforts to ensure pediatric issues are well integrated into the EMS system as a whole.

Establishing an EMSC position to serve as a liaison to the statewide council has proven to be critical for the successful integration of EMSC priorities into existing state mandates and administrative rules.

**Mandates.** Florida has also mandated several EMSC priorities in statute and regulation. These mandates are:

#### PM 70

- Fla. Admin. Code Ann. rr. 64J-1.002 and 64J-1.003 (2009). These regulations require that basic and advance life support vehicles are equipped with various pieces of pediatric equipment (Note: required equipment may not be congruous with the 2009 equipment for ambulances list.)

#### PM 75 (Pediatric Trauma Center Designation Only)

- Fla. Stat. § 395.4001 (2009). This statute defines pediatric trauma center as a hospital that is verified by the DOH to be in substantial compliance with pediatric trauma center standards as established by rule of the department and has been approved by the department to operate as a pediatric trauma center.

#### PM 78

- Fla. Stat. § 401.2715 (2009). This statute requires that DOH establish criteria for emergency medical technician and paramedic recertification training and that such criteria include the performance parameters for pediatric emergency medical clinical care.

**Challenges to Implementation.** The EMS Advisory Council consists of members representing various constituency groups within the EMS community. In that the pediatric population is one of many groups needing representation, convincing the Council to appoint an official EMSC liaison to this statewide group was a major challenge.

**Strategies Utilized to Overcome Challenges.** Education is often the key to successfully overcoming challenges. The EMSC Advisory Committee's strategy was to develop a marketing and advocacy campaign. Part of this plan was to develop a resource clearinghouse to be used in educating the EMS community on the benefits of a comprehensive and integrated statewide EMS system for the improvement of pediatric emergency care outcomes.

**Champions and Partnerships Help to Mobilize Best Practice.** To meet the needs of all citizens of Florida, it was crucial to educate others regarding the benefits of integrating EMSC into all emergency care initiatives. The voices of partners helped to take this education forward to ensure both buy in and support of a pediatric representative on the EMS Advisory Council.

The state EMSC program benefited from the support of the following groups and departments: DOH, the Division of Emergency Medical Operations, the Bureau of EMS, the EMSC Advisory Committee, the EMS state medical director, the EMS Advisory Council, EMS constituency groups, and EMS provider agencies.

**Important Lessons Learned.** Aligning with state and local officials and advocates, who can effect change, provides enhanced momentum, more voices of support, and a greater opportunity for success.



#### For more information

- Florida website: <http://www.doh.state.fl.us/demo/EMS/EMSC/EMSCHome.html>

## New Jersey EMSC

The New Jersey EMSC program engaged many partners to promote, educate, and advocate for EMSC legislation.

**Mandates.** New Jersey has mandated several EMSC priorities in statute and regulation. These mandates are:

### PM 73

- N.J. Rev. Stat. § 26:2K-51 (2009). This statute requires that the EMSC program establish pediatric equipment guidelines for prehospital care.
- N.J. Admin. Code §§ 8:40-6.5, 8:40-6.6, 8:40-6.7, and § 8:40-6.9 (2009). These regulations require that basic life support ambulances have various pediatric equipment and supplies. (Note: required equipment may not be congruous with the 2009 equipment for ambulances list.)

### PM 76 and 77

- N.J. Rev. Stat. § 26:2K-51 (2009). This statute requires that the EMSC program establish guidelines for referring children to the appropriate emergency treatment facility and for an interhospital transfer system for critically ill or injured children.
- N.J. Admin. Code §§ 8:43G-12.2 and 8:43G-22.2 (2009). These regulations require that an emergency department have transfer protocols that govern interhospital transfers of pediatric patients and a hospital pediatric service have an emergency transfer policy that specifies mechanisms for transport of pediatric patients requiring specialized or intensive care services.

### PM 78

- N.J. Rev. Stat. § 26:2K-51 (2009). This statute requires that the EMSC program establish continuing education programs for emergency medical services personnel that include training in the emergency care of infants and children.

- N.J. Admin. Code §§ 8:40A-7.5 and 8:41A-4.3. These regulations require that an EMT-Basic complete continuing education based on the U.S. Department of Transportation's EMT-Basic National Standards Refresher Curriculum and that an EMT-Paramedic possess either Pediatric Advanced Life Support or Pediatric Education for Prehospital Providers-Advanced certification and complete a minimum of eight hours of instruction in Pediatric Advanced Life Support for recertification.

**Challenges to Implementation.** New Jersey government employees are not permitted to discuss legislative initiatives with elected officials. Therefore, it was important to identify non-government partners. Equally important, was to acknowledge that non-governmental partners may have more focused views of the issue in need of resolution, and as such, petition for a resolution which cannot always be implemented.

Securing additional funding for program activities became another challenge. Lastly, the composition of the advisory committee did not meet our needs and changing membership became a top priority.

**Strategies Utilized to Overcome Challenges.** It became imperative for the program to identify non-government partnerships that would support EMSC legislation. It was suggested to err on the side of inclusion versus exclusion when it comes to establishing committee membership composition. It was also important to develop a common vision and message for membership to use during advocacy activities. To help defray program costs, EMSC staff began searching for a more stable funding source. In the meantime, expenses were kept to a minimum and more realistic cost estimates were created for each program activity.

**Champions and Partnerships Help to Mobilize Best Practice.** New Jersey worked with the state chapter of ACEP and the AAP, the Junior League, and the New Jersey Women's Club to successfully get EMSC priorities into mandate and institutionalize the program in the state.

**Important Lessons Learned.** Three important lessons New Jersey learned were: (1) be as comprehensive as possible when crafting legislation; (2) committee membership should be open to a wide cross section of pediatric constituency groups, including parent representatives; and (3) the cost of all efforts (conference calls, face-to-face meetings, travel compensation for members) should be considered in advance.



#### For more information

- New Jersey website: <http://www.state.nj.us/health/ems/emsc.shtml>

## New York EMSC

While early efforts to establish separate EMSC legislation in the state had been unsuccessful, the continued contributions of the program to the children in the state were well recognized. The successes of the EMSC program led to the appointment of a pediatric representative on the State Emergency Medical Advisory Committee (SEMAC).

Timing, of both trauma system planning and the newly released EMSC performance measures, also helped the state meet 80. Trauma system planning was well underway in the state when the EMSC performance measures were released. As state trauma regulations were being drafted, a trauma advocate and expert, who happened to be a pediatric surgeon, was appointed to SEMAC to assist with development of the trauma regulations. This individual was able to address trauma system develop-

ment and to advocate for the unique needs of children. Change though takes time. Most recently, legislation to address funding deficits of trauma centers provided an opportunity for the integration of EMSC priorities into the proposed legislation.

**Mandates.** New York has mandated all of the EMSC priorities in statute and regulation. These mandates include:

PM 71 and 72

- N.Y. Pub. Health Law §3075 (2009). This statute requires that DOH develop and maintain a system for the provision of prehospital medical oversight, including direct and indirect medical control, for pediatric emergencies.

PM 73

- N.Y. Pub. Health Law §3075 (2009). This statute requires that DOH establish statewide equipment guidelines for basic and advanced life support of pediatric emergencies, consistent with those of national professional organizations concerned with child health and emergency care.
- N.Y. Comp. Codes R. & Regs. tit. 10, §800.24 (2009). This regulation requires that all ambulances in a certified ambulance service have various pieces of pediatric equipment. (Note: required equipment may not be congruous with the 2009 equipment for ambulances list.)

PM 74 and 75

- N.Y. Pub. Health Law §3075 (2009). This statute requires that DOH develop and maintain a statewide system for recognition of facilities able to provide pediatric emergency medical and trauma care.

PM 76 and 77

- N.Y. Pub. Health Law §3075 (2009). This statute requires that DOH promote the use of facilities able to provide pediatric emergency medical and trauma care with written protocols or transfer agreements.
- N.Y. Comp. Codes R. & Regs. tit. 10, §708.5 (2009). This regulation requires that emergency departments and emergency services have written protocols and agreements for the transfer of pediatric patients who cannot receive definitive care at the receiving hospital.

PM 78

- N.Y. Pub. Health Law §3075 (2009). This statute requires that DOH develop, maintain, and offer statewide educational programs for continuing education in pediatric prehospital basic and advanced life support.

**Challenges to Implementation.** Initially, committee members were both skeptical and concerned that EMSC initiatives were striving to create a different emergency care system for children as opposed to integration of pediatric needs into the present system. It is also important to remember that each committee member has his/her own agenda, which can at times complicate efforts to achieve EMSC goals. Change takes time.

**Strategies Utilized to Overcome Challenges.** It became critical to partner with those trying to enhance the existing emergency and trauma systems in the state. It was important to realize that the care of children would never be better than the system in which care was being provided. Understanding this meant that those committed to improving care for children had to also address deficits of care within the existing emergency care system. Every committee member, regardless





of the committee on which he/she sits, brings his/her own agenda to each meeting. Recognizing these agendas and being open to the identification of opportunities for partnering to achieve common goals can be very helpful.

Timing is also helpful when pushing any initiative forward. Linking EMSC federal dollars to the trauma funding bill was extremely helpful. While trauma center funding was going to cost the state money, EMSC was not because of its federal funding. Educating others, both in the private sector and government, that EMSC dollars might be in jeopardy if the performance measures were not addressed was essential to facilitating the integration of EMSC priorities into state mandates.

**Champions and Partnerships Help to Mobilize Best Practice.** The New York DOH, the Bureau of EMS, the State Trauma Committee, the EMSC Advisory Committee, and SEMAC all worked to help ensure passage of this legislation.

**Important Lessons Learned.** Patience and consistent, credible voices to speak out for children are vital. It is important to constantly educate others about the value of EMSC to state systems and to the children residing in the state. Sharing the work involved in the causes of others can help in the adoption of your own causes.



#### For more information

- New York EMS website: <http://www.nyhealth.gov/nysdoh/ems/main.htm>
- New York EMSC website: <http://www.nyhealth.gov/nysdoh/ems/emsc/index.htm>

### Common Strategies Found in Achieving Performance Measure 80

In achieving performance measure 80, EMSC grantees have learned the importance of reaching out and forming partnerships with state government agencies and private organizations. In particular, EMSC advisory committee members, already formal partners by virtue of their committee membership, may be willing and able to assist with advocacy efforts. This is especially important since as federal grantees and sometimes state employees, EMSC grantees are largely prohibited from lobbying. Partnerships also increase the impact of one's message: the more champions and voices you have for a cause, the more likely policymakers will take up the cause.

Communication is also a necessary component of legal change. Policymakers and the general public need to be educated on the benefits of EMSC and the importance of enacting priorities into state mandate for their children, grandchildren, and the community. Crafting a single message and ensuring that all partners stay focused helps to provide a single voice thereby increasing the value of the proposed need and contributing to change.

# Appendix A: EMSC Terms and Acronyms

## A

Abstract	A summary of a journal article, presentation submission, or grant application.
ACLS	Advanced Cardiac Life Support, includes electricity (defibrillator) and drugs for life threatening conditions.
ACEP Guidelines	American College of Emergency Physicians Guidelines.
Acute care	Providing or concerned with short-term medical care especially for serious acute disease or trauma (e.g., ED, trauma center) Part of the Continuum of Care. EMSC History
ADA:	Americans with Disabilities Act of 1990
Advance directives	Pertain to treatment preferences and the designation of a surrogate decision-maker in the event that a person should become unable to make medical decisions on their own behalf (e.g., living will, power of attorney, health care proxy).
AED	Automated external defibrillators deliver an electrical shock to the heart to restore its normal rhythm, enabling oxygenated blood to circulate to vital organs. Once only used by medical personnel, the public now has access to them.
Ambulatory care	Medical care (including diagnosis, observation, treatment and rehabilitation) provided on an outpatient basis.
ALS	Advance Life Support providers administer certain life-saving medications, perform advanced monitoring of heart rhythms, and are trained to perform advanced procedures to open and manage a patient's airway. They include EMT-Paramedics and EMT-Intermediate (EMT-I) and Cardiac Rescue.
APLS	Advanced Pediatric Life Support, an educational program for physicians.
Appropriations act	Act of a legislative body that makes funds available for expenditure with specific limitations as to amount, purpose, and duration.
Authorization act	Legislation that empowers an agency to implement a particular program and also establishes an upper limit on the amount of funds that can be appropriated for that program.

## B

BELSS	Basic Emergency Life Saving Skills, a project to identify developmentally appropriate levels at which students in grades K-12 could receive education and training in first aid, rescue breathing, and CPR.
Block grant	A consolidated grant of Ffunds, formerly allocated for specific programs, that a state or local government may use at its discretion for such programs as education or urban development.
BLS	Basic Life Support; includes CPR and removal of foreign body airway obstruction
Broselow tapes	Short for Broselow-Luten emergency tape, a color-coded system used to simplify the use of medications and equipment in pediatric emergency settings
Bystander care	Emergency roadway assistance by a bystander that includes recognizing an emergency, stopping to help, calling for help, starting breathing, and stopping bleeding.

## C

Call for Abstracts:	An announcement for potential presenters to submit summary statements of their presentation to a review panel for consideration.
Categorization:	An effort to identify the readiness and capability of a health care facility and its staff to provide optimal emergency care. EMSC History
CHUMS:	Child Health Updated Medical Summary
Color-Coding:	A strategy designed to eliminate errors in the treatment of children related to wrong dosages of medicines, incorrect amounts of fluids, and wrong sizes of equipment.
Continuum of Care:	A "seamless" system of care that includes prevention, prehospital care, ED care, inpatient and critical care, and follow-up care including rehabilitation.
Contract Officer:	A person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings.
Cooperative Agreement:	A financial assistance mechanism to be used in lieu of a grant when the awarding office anticipates substantial federal programmatic involvement with the recipient during performance.
CODES:	Crash Outcome Data Evaluation System
CPR:	Cardiopulmonary resuscitation, which involves breathing for the victim and applying external chest compression to make the heart pump.
Critical Paths:	Documentation of essential steps in the diagnosis and treatment of a condition or the performance of a condition, and development of a standard pattern of care to be followed for each patient.
CSHCN:	Children with Special Health Care Needs
Cultural Competence:	Integration of culturally-sensitive approaches to products and services. Sensitivity addresses language barriers, geographic differences, and other culturally-based distinctions.

## D

Demonstration Projects:	A federal term for grant-funded projects designed to demonstrate on a particular issue, for a stated period of grant funding.
Discretionary Funds:	Any funds whose distribution is not automatic. Decisions on the distribution of discretionary funds are usually made by an agency on the basis of that agency's choice or judgment and in accordance with criteria set out in law or regulations.
DNR:	Do Not Resuscitate, which is requested or ordered for terminally ill patients.

## E

E9-1-1:	Enhanced 9-1-1 universal emergency communications number that automatically identifies the telephone number and location of the caller.
ECHO:	Everyone Can Help Others
ECIC:	Emergency Communications & Information Center at CNMC.
ED:	Emergency department
EDAP:	Emergency Departments Approved for Pediatrics
EMS:	Emergency Medical Services
EMT:	Emergency Medical Technician (Basic, Intermediate, or Paramedic accredited).
EMTALA:	Emergency Medical Treatment and Labor Act, the federal "anti-dumping law" that ensures that emergency care is provided to anyone who needs it, regardless of their ability to pay or insurance coverage.
EPROS:	EMSC Product/Resource/Order System, internal database of EMSC and non-EMSC products or resources that are determined to be useful or effective by NRC staff.

## F

Facility Recognition	Classification of a hospital emergency department where staff are specially trained to care for children, using appropriate pediatric equipment and following guidelines for age-appropriate medications
Family-Centered Care:	An approach to health care that offers a new way of thinking about the relationships between families and health care providers (e.g., emotional, social, developmental support).
FARS:	Fatality Analysis Reporting System, designed to assist the traffic safety community in identifying traffic safety problems and evaluating both motor vehicle safety standards and highway safety initiatives.
Federal Register:	Government document announcing the availability and deadlines for applying for federal grant programs.
First Responder:	The initial level of care within an EMS system as defined by the EMS Education and Practice Blueprint, as opposed to a bystander.
402 Funds:	DOT funds to support state highway safety programs designed to reduce traffic crashes and resulting deaths, injuries, and property damage.
FY:	Fiscal Year, a business year for an organization. For the federal government and the NRC, it is October 1 through September 30. For CNMC, it is July 1 through June 30.

## G

Glasgow Coma Scale:	This scale is used to quickly determine the status and degree of injury of a trauma victim to the head.
GMO:	Grants Management Officer, the official responsible for the business management aspects of particular grants or cooperative agreements.
GPRA:	Government Performance and Results Act
GME:	Graduate Medical Education, the period of medical training that follows graduation from medical school; commonly referred to as internship, residency, and fellowship training.
Grant Guidance:	Supporting documentation for federal grant applications.

## H

Healthy People 2010:	The prevention agenda for the nation. It is a statement of national opportunities—a tool that identifies the most significant preventable threats to health and focuses public and private sector efforts to address those threats.
----------------------	---

## I

I/O:	Intraosseous Infusion, a medical procedure that can be used to bypass the veins and inject critical fluids directly into the bone marrow.
ICD-9:	International Classification of Diseases, Ninth Edition, is the classification of diseases by diagnosis with four-digit numbers or alphanumeric descriptions. Used for billing purposes by hospitals and physicians.
ICU:	Intensive Care Unit, having special medical facilities, services, and monitoring devices to meet the needs of gravely ill patients.
Institutionalization:	The formal establishment of EMSC through the legislative or regulatory process, or by securing a private long-term funding commitment.



Interfacility transfer agreements:	Written contracts between a referring facility (e.g., community hospital) and a specialized pediatric center or facility with a higher level of care and the appropriate resources to provide needed care required by the child. The agreements must formalize arrangements for consultation and transport of a pediatric patient to the higher-level care facility.
Interfacility transfer guidelines:	Hospital-to-hospital, including out of state/Territory, guidelines that outline procedural and administrative policies for transferring critically ill pediatric patients to facilities that provide specialized pediatric care.
Intubation:	Insertion of an endotracheal tube to help an unconscious patient breathe.
IRECC:	Intermountain Regional EMSC Coordinating Council, a consortium of Rocky Mountain states that share common rural and frontier issues concerning EMSC.
ISS:	Injury Severity Score

## M

M&M:	Morbidity/Mortality, is a conference held by many departments on cases that either ended in death (where there was an interesting diagnosis)--mortality, or someone with a good diagnosis -- morbidity.
Managed Care:	Any form of health care plan that contracts selectively with providers, employers, or insurers to channel employees or patients to a specified set of cost-effective providers (a provider network). Providers implement procedures to ensure medically necessary and appropriate use of health care services.
MCH:	Maternal and Child Health
Medicaid:	A program of medical aid designed for those unable to afford regular medical service and financed jointly by the state and federal governments.
Medical Control:	Physician oversight of care provided by prehospital personnel. On-line medical control concerns real-time direction of prehospital providers by designated medical personnel. Off-line medical control relates to policies, training, and quality assurance.
Medical Home:	A concept of medical care that ideally is accessible, continuous, comprehensive, family-centered, coordinated, and compassionate.
Medicare:	A government program of medical care especially for the elderly.
Morbidity:	A measure of disease incidence or prevalence in a given population, location, or other grouping of interest.
Mortality:	A measure of deaths in a given population, location, or other grouping of interest.
MVA	Motor Vehicle Accident

## N

Needs Assessment:	Systematic appraisal of the type, depth, and scope of a problem.
NICU:	Neo-natal Intensive Care Unit

## O

Off-line Medical Direction:	Treatment guidelines and protocols used by EMS providers to ensure the provision of appropriate pediatric patient care, available in written or electronic (e.g., laptop computer) form in the patient care unit or with a provider, at the scene of an emergency.
On-line Medical Direction:	An individual is available 24/7 on the telephone, radio, or email to EMS providers who need on-line medical direction when transporting a pediatric patient to a hospital. The health professional (e.g., nurse, physician, physician assistant, EMT) providing medical direction is deemed to have pediatric expertise by the hospital in which they work and must have a higher level of pediatric training/expertise than the EMS provider to whom he/she is providing medical direction.

Outcome Evaluation:	Used to obtain descriptive data on a project and to document short-term results.
Outcome Standards:	Long-term objectives that define optimal, measurable future levels of health status, maximum acceptable levels of disease, injury, or dysfunction, or prevalence of risk factors.
Outcome:	The consequence of a medical intervention on a patient.
Outcomes Research:	Medical or health services research that attempts to identify the clinical outcomes (including mortality, morbidity, and functional status) of the delivery of health care.
<b>P</b>	
PACE:	Planning to Avoid Childhood Emergencies
PALS:	Pediatric Advanced Life Support, an educational program for health care providers (e.g., physicians, nurses, EMTs)
Patient Care Units	any vehicle owned by an entity responsible for 911 services (eg; hospital, fire department, law enforcement, community, etc.) that is licensed/regulated by the state/territory/county/local jurisdiction and is staffed by state/territory/county/local jurisdiction certified/licensed prehospital personnel whose primary responsibility is delivering emergency medical care to any and all patients in the out-of-hospital setting. This definition excludes any individual's personal vehicle(s).
PCC:	Poison Control Center
PEP:	Pediatric Education for Prehospital Providers course.
Performance Measure:	A specific measure of how well a health plan does in providing health services to its enrolled population. Can be used as a measure of quality.
PFC:	EMS Partnership for Children Consortium
PI:	Principle Investigator, the individual designated by the recipient to direct the project or program being supported by the grant, and is responsible to recipient organization officials for the proper conduct of the project or program.
PIC:	MCH Partnership for Information and Communication Inter-organizational Work Group explores emerging policy issues affecting the health of mothers and children. PIC members include governmental, professional, and private sector organizations that have received MCHB grants.
PICU:	Pediatric Intensive Care Unit
PI&E:	Public information and education
Practice Guideline:	An explicit statement of what is known and believed about the benefits, risks, and costs of particular courses of medical action, and intended to assist decisions by practitioners, patients, and others about appropriate health care for specific clinical conditions.
Prehospital:	Time or care that occurs before or during transportation to a hospital. Part of the Continuum of Care. EMSC History
Prevention:	Actions taken to reduce susceptibility or exposure to health problems (primary prevention), detect and treat disease in early stages (secondary prevention), or alleviate the effects of disease and injury (tertiary prevention). Part of the Continuum of Care. EMSC History
Primary Care:	A basic level of health care provided by the physician from whom an individual has an ongoing relationship and who knows the patient's medical history (e.g., preventive services, treatment of minor illnesses/injuries, identification of problems that require referral to specialists). Traditionally, primary care physicians are family physicians, internists, gynecologists and pediatricians.
Process Evaluation:	Examination of the procedures and tasks involved in implementing a program.
Program/Project Officer:	An official who is responsible for the technical, scientific, or programmatic aspects of a grant, and works closely with the Grants Management Officer in the overall administration of grants.
Project Coordinator:	The individual responsible for executing activities supported by the grant, and directed by the PI or Project Director.

Project Director:	The individual designated by the recipient to direct the project or program being supported by the grant, and is responsible to recipient organization officials for the proper conduct of the project or program.
Protocols:	Standardized guidelines for treatment procedures. EMSC History
Public Health:	Activities that society does collectively to assure the conditions in which people can be healthy. This includes organized community efforts to prevent, identify, preempt, and counter threats to the public's health.
<b>Q</b>	
Quality Assurance:	A formal, systematic process to improve quality of care that includes monitoring quality, identifying inadequacies in delivery of care, and correcting those inadequacies.
QUART:	NRC database that once information is entered into, can breakdowns actions by scope of work
<b>R</b>	
Regionalization:	and generates reports for quarterly reporting requirements to MCHB. A formal effort by outside agencies to specify particular institutions that can offer complex, sophisticated services in a specific geographic area.
Registry:	A repository for information that is used for data collection.
Regulation:	A governmental order with the force of law.
Rehabilitation:	The physical restoration of a sick or disabled person by therapeutic measures and reeducation to participation in the activities of a normal life within the limitations of the person's physical disability. Part of the Continuum of Care. EMSC History
RFP:	Request for Proposals, a funding announcement used by the Federal government to solicit proposals from applicants.
<b>S</b>	
SCHIP:	State's Child Health Insurance Program
Septic Shock	Septic shock is a serious medical condition caused by decreased tissue perfusion and oxygen delivery as a result of infection and sepsis. It can cause multiple organ failure and death. Its most common victims are children, immunocompromised individuals, and the elderly, as their immune systems cannot cope with the infection as well as healthy adults are able. The mortality rate from septic shock is approximately 50%.
SKIP:	Special Kids Information Program
SPRANS:	Special Projects of Regional and National Significance (MCH Block grant funded)
Strategic Plan:	A comprehensive, incorporating goals, objectives, activities, and evaluation.
Surveillance:	Observation of a particular issue to collect data.
<b>T</b>	
TAD:	Technical Assistance Database, the EMSC database that includes contact information, organization information, and technical assistance action.
TBI:	Traumatic Brain Injury
Technical Assistance:	Provision of expert advice or guidance.
Telemedicine:	The investigation, monitoring, and management of patients and the education of patients and staff using systems which allow ready access to expert advice and patient information, no matter where the patient or the relevant information is located.

Tertiary Care:	Highly specialized health care usually over an extended period of time that involves advanced and complex procedures and treatments performed by medical specialists in state-of-the-art facilities.
Three-Point Restraint:	Three adjoining points where automotive lap and shoulder safety belts meet. Safety standard established by DOT.
Title V:	Title V of the Social Security Act, which authorizes the MCH Block grant and other MCH programs.
Tracheostomy:	The surgical formation of an opening into the trachea through the neck especially to allow the passage of air.
Transport:	The means by which ill or injured are transported to care (may be ground, air, or water). EMSC History
Trauma:	An injury caused by a physical force. Most often the consequences of motor vehicle crashes, falls, drowning, gun shots, fires and burns, stabbing, or blunt assault.
TRIPP:	An encyclopedic resource guide that helps instructors teach ambulance personnel basic life-saving procedures for children.
Trust Funds:	Accounts established by law to hold receipts collected by the federal government and earmarked for specific purposes and programs. These receipts are not available for the general purposes of the federal government.
<b>W</b>	
White Papers:	Topic-specific papers developed by experts that generally provide recommendations for addressing a particular issue.
Work Plan:	A plan of activities to be carried out to meet the scope of work approved in a grant or contract.



# Appendix B: State EMSC Program Websites

State	Website
Alabama	<a href="http://www.adph.org/emsc">http://www.adph.org/emsc</a>
Alaska	<a href="http://www.chems.alaska.gov/EMS/EMSC.htm">http://www.chems.alaska.gov/EMS/EMSC.htm</a>
Arizona	<a href="http://www.azdhs.gov/phs/owch/emsc.htm">http://www.azdhs.gov/phs/owch/emsc.htm</a>
Arkansas	N/A
California	<a href="http://www.emsa.ca.gov/emdivision/emsc_page.asp">http://www.emsa.ca.gov/emdivision/emsc_page.asp</a>
Colorado	<a href="http://www.cdph.state.co.us/em/emsc/about.html">http://www.cdph.state.co.us/em/emsc/about.html</a>
Connecticut	N/A
DC	<a href="http://www.childrensnational.org/DepartmentsandPrograms">http://www.childrensnational.org/DepartmentsandPrograms</a> . Once here, click on IPPER
Delaware	<a href="http://www.dhss.delaware.gov/dhss/dph/ems/emsc.html">http://www.dhss.delaware.gov/dhss/dph/ems/emsc.html</a>
Florida	<a href="http://www.doh.state.fl.us/demo/EMS/EMSC/EMSChome.html">http://www.doh.state.fl.us/demo/EMS/EMSC/EMSChome.html</a>
Georgia	<a href="http://health.state.ga.us/programs/ems/emsc/">http://health.state.ga.us/programs/ems/emsc/</a>
Hawaii	N/A
Idaho	N/A
Illinois	<a href="http://www.luhs.org/depts/emsc/">http://www.luhs.org/depts/emsc/</a>
Indiana	N/A
Iowa	<a href="http://www.idph.state.ia.us/ems/emsc.asp">http://www.idph.state.ia.us/ems/emsc.asp</a>
Kansas	<a href="http://www.kdheks.gov/emsc/">http://www.kdheks.gov/emsc/</a>
Kentucky	<a href="http://kbems.ky.gov/emsc/">http://kbems.ky.gov/emsc/</a>
Louisiana	N/A
Maine	<a href="http://www.maine.gov/dps/ems/emsc.html">http://www.maine.gov/dps/ems/emsc.html</a>
Maryland	<a href="http://miemss.umaryland.edu/EMSCwww/HomeEMSC.htm">http://miemss.umaryland.edu/EMSCwww/HomeEMSC.htm</a>
Massachusetts	<a href="http://www.mass.gov/dph/fch/emsc/maemsc.htm">http://www.mass.gov/dph/fch/emsc/maemsc.htm</a>
Michigan	<a href="http://www.michigan.gov/mdch/0,1607,7-132-2946_5093_28508-132264--,00.html">http://www.michigan.gov/mdch/0,1607,7-132-2946_5093_28508-132264--,00.html</a>
Minnesota	<a href="http://www.emscmn.org/">http://www.emscmn.org/</a>
Mississippi	<a href="http://www.ems.doh.ms.gov/emsc/index.html">http://www.ems.doh.ms.gov/emsc/index.html</a>
Missouri	<a href="http://www.dhss.mo.gov/EMS/Emsc.html">http://www.dhss.mo.gov/EMS/Emsc.html</a>
Montana	N/A
Nebraska	<a href="http://www.hhs.state.ne.us/ems/emsindex.htm">http://www.hhs.state.ne.us/ems/emsindex.htm</a>
Nevada	N/A
New Hampshire	<a href="http://dms.dartmouth.edu/cfm/faculty/development/emsc.php">http://dms.dartmouth.edu/cfm/faculty/development/emsc.php</a>
New Jersey	<a href="http://www.state.nj.us/health/ems/emsc.shtml">http://www.state.nj.us/health/ems/emsc.shtml</a>
New Mexico	<a href="http://hsc.unm.edu/EMERMED/PED/emsc/emsc.shtml">http://hsc.unm.edu/EMERMED/PED/emsc/emsc.shtml</a>
New York	<a href="http://www.health.state.ny.us/nysdoh/ems/nysemsc.htm">http://www.health.state.ny.us/nysdoh/ems/nysemsc.htm</a>
North Carolina	<a href="http://www.ncems.org/emsc.htm">http://www.ncems.org/emsc.htm</a>
North Dakota	<a href="http://ndhealth.gov/EMS/children/">http://ndhealth.gov/EMS/children/</a>
Ohio	<a href="http://www.ems.ohio.gov/EMSC%20web%20site_11_04/emschome.htm">http://www.ems.ohio.gov/EMSC%20web%20site_11_04/emschome.htm</a>
Oklahoma	<a href="http://emsc.ouhsc.edu/">http://emsc.ouhsc.edu/</a>
Oregon	<a href="http://egov.oregon.gov/DHS/ph/ems/emsc/index.shtml">http://egov.oregon.gov/DHS/ph/ems/emsc/index.shtml</a>
Pennsylvania	<a href="http://www.pehsc.org">http://www.pehsc.org</a>
Rhode Island	N/A
South Carolina	<a href="http://www.scdhec.net/health/ems/children.htm">http://www.scdhec.net/health/ems/children.htm</a>
South Dakota	<a href="http://www.sdemsc.org/">http://www.sdemsc.org/</a>
Tennessee	<a href="http://www.tnemsc.org/">http://www.tnemsc.org/</a>
Texas	N/A
Utah	<a href="http://health.utah.gov/ems/emsc/">http://health.utah.gov/ems/emsc/</a>
Vermont	N/A
Virginia	<a href="http://www.vdh.state.va.us/OEMS/EMSC/">http://www.vdh.state.va.us/OEMS/EMSC/</a>
Washington	N/A
West Virginia	<a href="http://www.wvoems.org/operations/ems/forchildren">http://www.wvoems.org/operations/ems/forchildren</a>
Wisconsin	<a href="http://dhs.wisconsin.gov/ems/emsc/index.htm">http://dhs.wisconsin.gov/ems/emsc/index.htm</a>

