

# EMS FOR CHILDREN PERFORMANCE MEASURES

Implementation Manual for State Partnership Grantees

*Effective March 1st, 2017*

# TABLE OF CONTENTS

<b>01</b>	<b>Letter from HRSA to EMSC Grantees</b>
<b>03</b>	<b>The EMS for Children Program</b>
<b>04</b>	<b>Introduction to the Performance Measures</b> <ul style="list-style-type: none"><li>EMSC Performance Measures Background</li><li>Process for Developing the Next Generation of Performance Measures</li><li>List of the Nine Performance Measures</li><li>EMSC Program Contacts</li><li>Definitions</li><li>Data Collection Information</li><li>Demonstrating Performance Measure Achievement</li><li>Supporting Documentation</li><li>Organization of the Implementation Manual</li></ul>
<b>17</b>	<b>EMSC 01: Submission of NEMSIS Compliant Version 3.x Data</b>
<b>23</b>	<b>EMSC 02: Pediatric Emergency Care Coordinator (PECC)</b>
<b>31</b>	<b>EMSC 03: Use of Pediatric-Specific Equipment</b>

39	<b>EMSC 04:</b> Hospital Recognition for Pediatric Medical Emergencies
49	<b>EMSC 05:</b> Hospital Recognition for Pediatric Trauma
57	<b>EMSC 06:</b> Interfacility Transfer Guidelines
65	<b>EMSC 07:</b> Interfacility Transfer Agreements
73	<b>EMSC 08:</b> Permanence of EMSC
	A State or Territory EMSC Advisory Committee that Meets Regularly
	A Pediatric Representation on the EMS Board
	A Full-time EMSC Program Manager
89	<b>EMSC 09:</b> Integration of EMSC priorities into Statutes or Regulations
97	<b>EMSC Performance Measure Detail Sheets</b>

This project is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under U03MC0008 and U07MC09174, respectively. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

Icon artwork courtesy of Vecteezy and The Noun Project. *Line Medical Icons* and *Medical Icon Doodle* by funkyboy2014; *Ambulance*, *Contract* and *Hospital* by ProSymbols; *Laptop* by Ainsley Wagoner; *Health* by Julie Zoe; *Medical Symbol* by BomSymbol; *Form* by Kiryl Sytsko.





## DEPARTMENT OF HEALTH & HUMAN SERVICES

### Health Resources and Services Administration

---

Maternal and Child Health Bureau  
Rockville, Maryland 20857

January 15<sup>th</sup>, 2017

Dear EMSC State Partnership Grant Recipients:

It is our pleasure to present to you the EMS for Children Program Performance Measures Implementation Manual. The purpose of this manual is to further describe and define key components of each EMSC performance measure; establish benchmarks to measure progress along the way; provide target objectives for each performance measure; and provide resources that support each of the performance measures. This EMSC Performance Measures manual outlines the details for three new, as well as six continuing, EMSC Performance Measures.

A long journey began in 2013, when the Maternal and Child Health Bureau's EMS for Children Program enlisted the support of the National EMSC Data Analysis Resource Center (NEDARC) to develop the next generation of performance measures. We aimed to establish metrics of success with three key considerations: (1) measures that describe the policy and practice improvements advanced by the EMSC Program; (2) measures that tell both state and national stories of impact; and (3) measures that can be collected and reported periodically. As a first step, performance-measure data, from two periods of time (2010 and 2013), was analyzed and reviewed to determine where significant progress had already been made and where our efforts should continue. We also met individually and collectively with EMSC state leaders to understand opportunities and challenges in performance-measure data collection. As a result of your hard work, the analysis prompted the Program to advance to the next phase in the areas of pediatric medical direction, pediatric equipment on ambulances, and pediatric continuing education requirements.

The data you provide through the annual performance reports is critical in telling the story of the EMSC Program. Together, we can make a national impact as we focus on the new and continuing performance measures presented in this manual. Thank you for your support and dedication to improving pediatric emergency medical services in your states, the territories, the freely associated states, and the District of Columbia.

The performance measures have been released and are effective beginning March 1, 2017.

Sincerely,

Theresa Morrison-Quinata  
*Branch Chief, EMS for Children Branch  
Division of Child, Adolescent and Family Health  
Maternal and Child Health Bureau  
Health Resources and Services Administration  
U.S. Department of Health and Human Services*

Elizabeth A. Edgerton, MD, MPH  
*Director, Division of Child, Adolescent, and Family Health  
Maternal and Child Health Bureau  
Health Resources and Services Administration  
U.S. Department of Health and Human Services*





# THE EMS FOR CHILDREN PROGRAM

## The EMS for Children Program

In 1984, the U.S. Congress enacted legislation, authorizing the use of federal funds for the Emergency Medical Services for Children (EMSC) Program. The EMSC Program is administered by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), and Maternal and Child Health Bureau (MCHB). The EMSC Program provides grant funds to help improve emergency medical services for critically ill and injured children in U.S. states, territories, freely associated states, and the District of Columbia. The Program does not promote the development of a separate EMS system for children, but rather it promotes enhancing the pediatric capability of existing EMS systems.

The aim of the EMSC Program is to reduce childhood death and disability caused by severe illness or injury. The Program has successfully raised awareness among healthcare professionals, EMS and trauma system planners, and the general public that children respond differently—physically, emotionally, and psychologically—to illness and injury compared to adults.

### **EMSC grant funds have enabled the development of:**

- Prehospital and acute-care provider training
- The establishment of EMS guidelines and protocols, equipment lists, and other clinical-care resources
- The formation of advisory committees and national or federal partnerships
- The National Pediatric Readiness initiative and the identification of strategies for improving the EMS system for children.

The EMSC performance measures have set goals for states, territories, freely associated states, and the District of Columbia that will facilitate consistency in the EMS and trauma systems for the care of children across the nation.



Looking toward the future, the EMSC Program aims to ensure that all emergency departments (ED) are ready to care for children through the implementation of national quality-improvement initiatives. A heightened Program focus will be placed on regionalized care systems that share resources and improve access to health care services for children in tribal, territorial, insular, and rural areas of the United States. In addition, EMSC's funding of multicenter pediatric emergency research in both the prehospital and acute-care settings will support the infrastructure to enable new findings that will guide future advances in pediatric emergency care for decades to come.

The purpose of this Implementation Manual is to provide the EMSC Program State Partnership Grantees a roadmap to improve the ease, accuracy, and consistency of data collection and reporting for the performance measures. This Manual takes into account the feedback that the EMSC Program received from the State Partnership Grantees.

## INTRODUCTION TO THE PERFORMANCE MEASURES

### EMSC Performance-Measures Background

With the implementation of the Government Performance and Results Act of 1993 (GPRA), public sector agencies became accountable for achieving outcomes. GPRA focuses on a results-oriented approach, requiring federal agencies to develop performance measures that inform and guide organizational decisions and that communicate to a broad constituency about their success. As a result of GPRA, all federal agencies are obligated to provide information to Congress on the effectiveness of their programs.

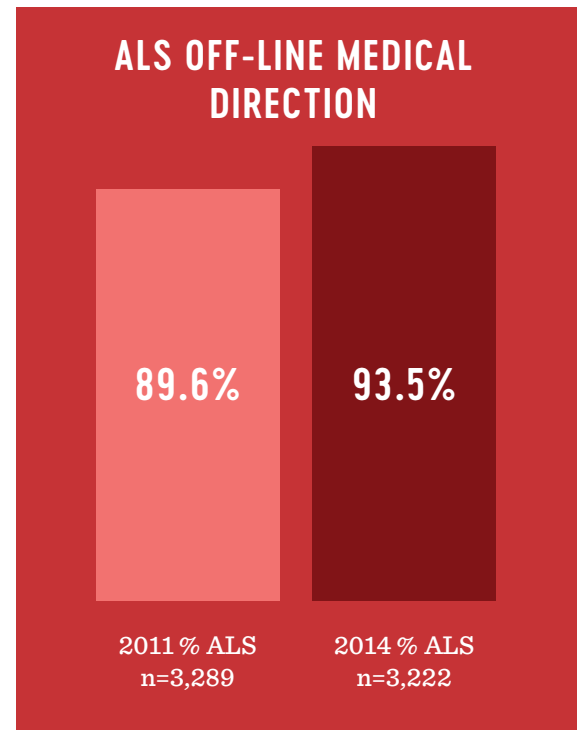


In response to GPRA, the EMSC Program created a systematic, uniform process of focusing and measuring Program activities and promoting permanence of EMSC Programs at the state level through the development of performance measures. The performance measures are a set of benchmarks, originally implemented in 2004, to measure the long-term progress at both state and national levels of the EMSC Program in key areas of pediatric emergency care. The purpose of the EMSC Program performance measures is to document activities and accomplishments of the Program in improving the delivery of emergency services to children. Additionally, information from the measures will provide guidance to the Program on future areas for improvement.

When implemented in 2004, the EMSC performance measures included three areas of performance: ensuring operational capacity to provide pediatric emergency care; setting training requirements in pediatric emergency care for prehospital providers; and establishing permanence of EMSC within the state EMS system. The performance measures underwent a series of revisions, and in 2009 they became ten distinct performance measures, each of which included specific benchmarks and metrics for achievement. Four of the areas concentrated on prehospital systems: the availability of on-line and off-line pediatric medical direction (written protocols), the availability of pediatric equipment on ambulances, and pediatric education requirements prior to the recertification of EMS personnel. Four measures concentrated on hospital systems: the development of pediatric medical-recognition systems and pediatric trauma systems, and the existence of interfacility transfer guidelines and agreements. The final two performance measures focused on establishing EMSC permanence and the institutionalization of pediatrics into state EMS systems.

Data have been collected from 56 states and territories three times since 2004. The findings from the data collection show that the majority of EMS agencies have medical direction and equipment, but there is still room for improvement in the hospital measures. In addition, the EMS and hospital measures concentrated on availability of services and equipment. While availability is an important first step, systematically measuring processes is the logical next step.

As a result, beginning March 2017, the EMS for Children Program will no longer collect data from EMS agencies on pediatric medical direction, pediatric equipment carried on ambulances, or pediatric education requirements for EMS personnel. However, these specific areas of focus are critical components of pediatric systems of care and will remain as priorities in EMS for Children performance measure EMSC 09.



National percentage of advance life support EMS agencies that have off-line medical direction available (2011 compared to 2014).



The process for developing the next generation of EMS performance measures was an iterative one over a three-year period involving research, interviews, and input from an advisory committee.

## Process for Developing the Next Generation of Performance Measures

In 2013, the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), and Maternal Child and Health Bureau's (MCHB) EMS for Children Program worked with the National EMSC Data Analysis Resource Center (NEDARC) to develop the next generation of EMSC performance measures. As a first step, performance-measure data from two periods in 2010 and 2013 were analyzed and reviewed to determine where efforts should continue and what areas were ready to move

to the next phase. Hence, the journey began to develop prehospital EMS systems-based performance measures.

The process for developing the next generation of EMS performance measures was an iterative one over a three-year period involving research, interviews, and input from an advisory committee. HRSA and NEDARC staff began by interviewing subject-matter experts in the EMS field. NEDARC also conducted a comprehensive literature review to identify the important topics in EMS. In 2013, NEDARC convened a two-day meeting of a twenty-person advisory committee and conducted follow-up conference calls to identify three core performance measures. As the performance measures evolved, cognitive interviews were conducted with eight EMS agencies in five states to further refine the three new performance measures. More information about the membership of the advisory committee and the process for creating the next generation of EMSC performance measures can be found on NEDARC's website at [www.nedarc.org/performanceMeasures](http://www.nedarc.org/performanceMeasures).

## List of the Nine Performance Measures

In this next phase of EMSC performance measures, three new performance measures will be implemented and six of the existing performance measures will continue. A brief description of each of these nine performance measures appears in the table below. The first three measures are the new prehospital EMS systems-based measures, and the last six are the hospital and permanence-performance measures. Please note that as part of this update, which includes other HRSA MCHB grant programs updating and revising their performance measures, the numbers for the EMSC performance measures have changed. The new performance-measure numbers are noted in the table below. Grantees will report data in the Electronic Handbook (EHB) on each of the nine measures.

## 9 PERFORMANCE MEASURES

### **EMSC 01 Performance Measure** ***Submission of NEMSIS Compliant Version 3.x-Data***

The degree to which EMS agencies submit NEMSIS compliant version 3.x data to the State EMS Office.

By 2018, baseline data will be available to assess the number of EMS agencies in the state or territory that submit National Emergency Medical Services Information System (NEMSIS) version 3.x-compliant patient-care data to the State Emergency Medical Services (EMS) Office for all 911-initiated EMS activations.

By 2021, 80 percent of EMS agencies in the state or territory submit NEMSIS version 3.x-compliant patient-care data to the State EMS Office for all 911-initiated EMS activations.

### **EMSC 02 Performance Measure** ***Pediatric Emergency Care Coordinator (PECC)***

The percentage of EMS agencies in the state or territory that have a designated individual who coordinates pediatric emergency care.

By 2020, 30 percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.

By 2023, 60 percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.

By 2026, 90 percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.

### **EMSC 03 Performance Measure** ***Use of Pediatric-Specific Equipment***

The percentage of EMS agencies in the state or territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.

By 2020, 30 percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of 6 or more on a 0–12 scale.

By 2023, 60 percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of 6 or more on a 0–12 scale.

By 2026, 90 percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of 6 or more on a 0–12 scale.

**EMSC 04 Performance Measure**  
***Hospital Recognition for Pediatric Medical Emergencies***

The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

By 2022, 25 percent of hospitals are recognized as part of a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

**EMSC 05 Performance Measure**  
***Hospital Recognition for Pediatric Trauma***

The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric trauma.

By 2022, 50 percent 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.

**EMSC 06 Performance Measure**  
***Interfacility Transfer Guidelines***

The percent of hospitals with an Emergency Department (ED) in the state or territory that have written interfacility transfer guidelines that cover pediatric patients and that include the following components of transfer:

- 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).
- Process for selecting the appropriate care facility.
- 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.)
- Process for patient transfer (including obtaining informed consent).
- Plan for transfer of patient medical record.
- Plan for transfer of copy of signed transport consent.
- Plan for transfer of personal belongings of the patient.
- Plan for provision of directions and referral institution information to family.

By 2021, 90 percent of hospitals in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer.



**EMSC 07 Performance Measure**  
***Interfacility Transfer Agreements***

The percent of hospitals with an Emergency Department (ED) in the state or territory that have written interfacility transfer agreements that cover pediatric patients.

By 2021, 90 percent of hospitals in the state or territory have written interfacility transfer agreements that cover pediatric patients.

**EMSC 08 Performance Measure**  
***Permanence of EMSC***

The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system.

Goal: To increase the number of states and territories that have established permanence of EMSC in the state or territory EMS system.

Each year:

- The EMSC Advisory Committee has the required members as per the implementation manual.
- The EMSC Advisory Committee meets at least four times a year.
- Pediatric representation incorporated on the state or territory EMS Board.
- The state or territory requires pediatric representation on the EMS Board.
- One full-time EMSC Manager is dedicated solely to the EMSC Program.

**EMSC 09 Performance Measure**  
***Integration of EMSC Priorities into Statutes or Regulations***

The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system by integrating EMSC priorities into statutes or regulations.

By 2027, EMSC priorities will have been integrated into existing EMS, hospital, or healthcare facility statutes or regulations.

## EMSC PROGRAM CONTACTS

### Federal Program

#### **Theresa Morrison-Quinata**

Branch Chief

Emergency Medical Services for Children Branch, U.S. Department of Health and Human Services (HHS)  
Health Resources and Services Administration (HRSA)  
Maternal and Child Health Bureau (MCHB)

301-443-1527

[tmorrison-quinata@hrsa.gov](mailto:tmorrison-quinata@hrsa.gov)

For a list of the HRSA Project Officers and their assigned states, territories, and freely associated states, please refer to the “State Partnership” section of the EMSC Innovation & Improvement Center (EIIC) website. Visit [emscimprovement.center/state-partnerships](https://emscimprovement.center/state-partnerships) to find a directory.

### Resource Centers

#### **Michael Ely, MHRM**

Director

National EMSC Data Analysis Resource Center (NEDARC)

801-585-9761

[michael.ely@hsc.utah.edu](mailto:michael.ely@hsc.utah.edu)



For more information and to view your individual state or territory technical assistance (TA) liaison, visit [www.nedarc.org](http://www.nedarc.org)

#### **Charles G. Macias, MD, MPH**

Executive Director and Principal Investigator

EMS for Children (EMSC) Innovation and Improvement Center (EIIC)

832-824-5416

[cgmacias@texaschildrens.org](mailto:cgmacias@texaschildrens.org)



For more information, visit [emscimprovement.center](https://emscimprovement.center)

### State, Territory, or Freely Associated State EMSC Programs

For a list of State Partnership program managers and project directors, please refer to the “State Partnership” section of the EIIC website. Visit [emscimprovement.center/state-partnerships](https://emscimprovement.center/state-partnerships) to find a directory.

## Definitions

**EHB:** The Health Resources and Services Administration (HRSA) Electronic Handbook (EHB). Grantees are required to submit data into the EHB during each grant cycle.

**EMS:** Emergency Medical Services

**EMS Agency:** A prehospital provider agency, an organization staffed with personnel who actively render medical care in response to a 911 or similar emergency call.

**EMS Providers:** Persons who are certified or licensed to provide emergency medical services during a 911 or similar emergency call.

**State EMS Office:** The governing body providing oversight for the EMS system in each state or territory.

**EMSC Program Manager:** The primary role of the EMSC Program manager is to coordinate and manage all aspects of the state or territory EMSC Program to ensure that the emergency care needs of children are well integrated throughout the entire continuum of care, from illness and injury prevention to bystander care, dispatch, prehospital EMS, definitive hospital care, rehabilitation, and return to community.

**EMSC Project Director:** The EMSC Project Director is the grant recipient of the Notice of Award who will implement work plans to ensure that the project's goals and objectives are achieved in an efficient and timely manner.

**Family Representative:** A parent, grandparent, or caregiver who represents the needs of families in the community related to emergency medical care. This individual is one of the eight required core members of a state, territory, or freely associated state EMSC Advisory Committee.

**Freely Associated States:** Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau. In this Manual, when the phrase "state or territory" is used, it is inclusive of the freely associated states.



**Hospitals:** Facilities that provide definitive medical or surgical assessment, diagnoses, and life- and limb-saving interventions for the ill and injured *and* have an Emergency Department (ED) open 24/7. This excludes military-based hospitals, Veterans Affairs (VA) medical centers, psychiatric institutions, Indian Health Service, or tribal hospitals.

**Mandate:** A mandate is defined as a state or territorial statute, rule, regulation, or policy developed and issued by a legally authorized entity with enforcement rights to ensure compliance.

**National Pediatric Readiness Project (NPRP):** The National Pediatric Readiness Project is a national multiphase quality-improvement initiative that ensures that all U.S. emergency departments open 24/7 have the essential guidelines and resources in place to provide effective emergency care for children. The guidelines and resources are based on the “Guidelines for Care of Children in the Emergency Department” policy statement.<sup>1</sup> This project is supported by numerous professional organizations and led by the EMS for Children Program, the American Academy of Pediatrics, the American College of Emergency Physicians, and the Emergency Nurses Association.

**NEMSIS:** National EMS Information System. NEMSIS is the national repository that is used to store EMS data from every state and territory in the nation.

**Pediatric:** Any person up to 18 years of age.

---

<sup>1</sup> American Academy of Pediatrics Committee on Pediatric Emergency Medicine, American College of Emergency Physicians Pediatric Committee, & Emergency Nurses Association Pediatric Committee (2009). Joint policy statement—guidelines for care of children in the emergency department. *Pediatrics*, 124(4), 1233–1243.

The National Pediatric Readiness Project is a national multiphase quality-improvement initiative that ensures that all U.S. emergency departments open 24/7 have the essential guidelines and resources in place to provide effective emergency care for children.



**Pediatric Readiness Assessment:** The assessment developed for the National Pediatric Readiness Project (see above). Emergency Departments are scored on a scale from 0 to 100 to evaluate their readiness to care for children based on current guidelines.

**Prehospital:** This term is generally used to define any setting (private residence or public location) apart from and prior to the access of any definitive care facility where 911 services are requested for assessment, intervention, and transportation of a patient to a definitive care facility.

**Prehospital Providers:** Persons who are certified or licensed to provide emergency medical services during a 911 or similar emergency call.

**Sampling Frame:** A list of possible survey respondents with appropriate contact information.

## Data-Collection Information

The changes to the performance measures will begin with the 2017 State Partnership cycle (March 1, 2017, to February 28, 2018). Prior to beginning data collection, all states and territories must contact NEDARC. Performance-measure data will be entered into the HRSA EHB each year.

Data must be collected as specified by this Manual for each performance measure. The EMSC Program is interested in measuring change for these performance measures over time. It is essential that all states and territories collect data in a standardized fashion. Thus, any deviation from the methods described in this Manual needs approval from your federal project officer.





### Data Collection Through Surveys

- EMSC performance measures 02, 03, 06, and 07 require data collection through surveys.
  - Grantees must use surveys approved by the EMSC Program. Grantees should consult with NEDARC to ensure adequate representation of respondents for the survey.
  - A minimum survey response rate of 80 percent is required.
  - If grantees have a large number of EMS agencies or hospitals with EDs, they can contact NEDARC to discuss the feasibility of conducting a random sample survey.

### Data Collection Through Self-Reporting

- For performance measures 01, 04, 05, 08, and 09, data is self-reported by the EMSC Program Manager or designated state official, is reported each year in the awardee's performance report, and is submitted through the HRSA EHB.

## Demonstrating Performance-Measure Achievement

Grantees can demonstrate meeting a performance measure by:

- Providing supporting documentation to the EMSC Program (supporting documentation requirements are described under each specific measure) and requesting a letter from the EMSC Program, stating that they have achieved the measure(s).

## Supporting Documentation

- HRSA may request supporting documentation at any time. Supporting documentation must be available to support EHB data entries. Guidance as to where to submit the supporting documentation (if requested by HRSA) will be provided in the grant guidance or in a separate memo distributed by the EMSC Program.

## Organization of the Implementation Manual

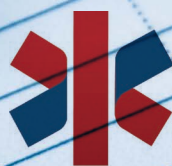
The remainder of this Manual includes the following information for each performance measure:

- **Performance Measure and Goal:** Lists the performance measure and HRSA's performance goal for each measure.
- **Significance of Measure:** Explains the importance and rationale for implementing the measure.

- **Resources:** A link to a list of helpful resources, publications, and other scientific references—including articles, reports, and expert testimonials.
- **Definitions:** Provides definitions of key terms in the measure.
- **Data-Collection Methods and Requirements:** Provides a description of the appropriate data-collection methods for each measure.
- **Electronic Handbook (EHB) Worksheet and Data Entry:** A worksheet that outlines the components that grantees will be asked to enter into the EHB.
- **Supporting Documentation:** A description of any documentation that should be made available to support EHB entries and may be requested by HRSA.
- **Strategic Plan:** Recommendations to grantees on tools and specific strategies toward achieving the performance measures.
- **Program Targets:** Targets or goals set by the EMSC Program for the implementation of the measure.







**NEMESIS**

BETTER DATA. BETTER CARE.





## EMSC 01

# SUBMISSION OF NEMSIS COMPLIANT VERSION 3.X DATA

The degree to which Emergency Medical Services (EMS) agencies submit National Emergency Medical Services Information System (NEMSIS) compliant version 3.x- data to the State EMS Office.

**Goal for this measure is that by 2021:**

*Eighty percent of EMS agencies in the state or territory submit NEMSIS version-compliant patient-care data to the State EMS Office for all 911-initiated EMS activations.*

### Significance of Measure:

Access to quality data and effective data management play an important role in improving the performance of an organization's health care systems. Collecting, analyzing, interpreting, and acting on data for specific performance measures allows health care professionals to identify where systems are falling short, to make corrective adjustments, and to track outcomes. However, uniform data collection is needed to consistently evaluate systems and develop quality-improvement programs. NEMSIS, operated by the National Highway Traffic Safety Administration (NHTSA), provides a basic platform for states and territories to collect and report patient-care data in a uniform manner.

NEMSIS enables both state and national EMS systems to evaluate their current prehospital delivery. As a first step toward quality improvement (QI) in pediatric emergency medical and trauma care, the EMSC Program seeks to first understand the proportion of EMS agencies reporting to the state EMS office NEMSIS version 3.x-compliant data, then use that information to identify pediatric patient care needs and promote its full use at the EMS agency level. In the next few years, NEMSIS will enable states and territories to evaluate patient outcomes and as a result, the next phase will employ full utilization of NEMSIS data on specific measures of pediatric data



Uniform data collection is needed to consistently evaluate systems and develop quality-improvement programs.

utilization. This will include implementing pediatric-specific EMS Compass measures in states, publishing results, publishing research using pediatric EMS data, linking EMS data, providing performance information back to agencies, and building education programs around pediatric data, etc. This measure also aligns with the Healthy People 2020 objective PREP-19: Increase the number of states reporting 90% of emergency medical services (EMS) calls to National EMS Information System (NEMSIS) using the current accepted dataset standard.

While most localities currently collect and most states report NEMSIS version 2.x-compliant data, NEMSIS version 3.x is available and in use in several states. Version 3 includes an expanded dataset, which significantly increases the information available on critically ill or injured children. NHTSA is encouraging states and localities to upgrade to version 3.x-compliant software and submit version 3.x data by January 1, 2017.<sup>1</sup>

## Resources:

Visit [nemsis.org](https://nemsis.org) to find the name of your state or territory data manager and for information about the implementation of version 3.x, or higher.

In addition, the most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state or territory. This section is updated as resources related to each performance measure become available.

## Definitions:

**EMS Agency:** A prehospital provider agency, an organization staffed with personnel who actively render medical care in response to a 911 or similar emergency call.

**NEMSIS:** National EMS Information System. NEMSIS is the national repository that is used to store EMS data from every state and territory in the nation.

**NEMSIS version 3.x-compliant patient-care data:** A national set of standardized data elements collected by EMS agencies.

---

<sup>1</sup> Becknell, J., Simon, L. (2016, December). Beyond EMS data collection: Envisioning an information-driven future for Emergency Medical Services (Report No. DOT HS 812 361). Washington, DC: National Highway Traffic Safety Administration.

**NEMSIS Technical Assistance Center (TAC):** The NEMSIS TAC is the resource center for the NEMSIS project. The NEMSIS TAC provides assistance to states, territories, and local EMS agencies; creates reference documents; maintains the NEMSIS database and XML schemas; and creates compliance policies ([nemsis.org](https://nemsis.org)).

**NHTSA:** National Highway Traffic Safety Administration

**State EMS Office:** The governing body providing oversight for the EMS system in each state or territory.

## Data-Collection Methods and Requirements:

**DATA-COLLECTION METHOD:** This measure does not require data collection through a survey administered by the National EMS for Children Program. To report progress on this measure, the EMS for Children Program Manager will work with the state or territory Emergency Medical Services Office to gather the information necessary to calculate a percentage of EMS agencies that submit NEMSIS version 3.x-compliant patient-care data to the state or territorial Emergency Medical Services Office. These numbers will be used to enter data into the Electronic Handbook (EHB).

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the national EMSC Program and may be used for other analyses. The data is stored in a secured environment at the Health Resources and Services Administration (HRSA) facility.



## EHB WORKSHEET AND DATA ENTRY:

*Below is an example of the EHB fields you will need to enter data into for this measure.*

**Numerator:** Number of EMS agencies in the state or territory that submit National Emergency Medical Services Information System (NEMSIS) version 3.x-compliant patient-care data to their State Emergency Medical Services Office for all 911 initiated EMS activations.

**Denominator:** Total number of EMS agencies in the state or territory actively responding to 911 requests for assistance.

Following the above data entries, the EMS for Children Program Manager will work with the state or territory EMS Office to select which of six statements best describes their current status. The measure will be determined on a scale of 0–5. The following table shows the scoring rubric for responses. Achievement for grantees will be reached when the state or territory EMS Office submits NEMSIS version 3.x-compliant patient-care data to the NEMSIS TAC with at least 80 percent of the EMS agencies reporting to the state or territory EMS Office. This is represented by a score of 5.

**NOTE:** In the table below, the term “state” refers to a state, territory, or freely associated state.

WHICH STATEMENT BEST DESCRIBES YOUR CURRENT STATUS?	CURRENT PROGRESS
Our state EMS Office has not yet transitioned to NEMSIS compliant version 3.x.	0
Our state EMS Office intends to transition to NEMSIS version 3.x-compliant, patient-care data to submit to the NEMSIS TAC by or before 2021.	1
Our state EMS Office submits NEMSIS version 3.x-compliant, patient-care data to the NEMSIS TAC with less than 10 percent of EMS agencies reporting.	2
Our state EMS Office submits NEMSIS version 3.x-compliant, patient-care data to the NEMSIS TAC with at least 10 percent and less than 50 percent of the EMS agencies reporting.	3
Our state EMS Office submits NEMSIS version 3.x-compliant, patient-care data to the NEMSIS TAC with at least 50 percent and less than 80 percent of the EMS agencies reporting.	4
Our state EMS Office submits NEMSIS version 3.x-compliant patient care-data to the NEMSIS TAC with at least 80 percent of the EMS agencies reporting.	5

## Supporting Documentation:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any point.

## Strategic Plan:

### ***Baseline Data-Collection Phase:***

Once performance-measure data have been collected, the results should be presented to the EMS for Children Advisory Committee to evaluate the starting point, discuss setting of targets, and explore opportunities to implement strategies for growth.

### ***Planning Phase:***

Some specific strategic-planning activities that grantees can undertake to effect system change in their state or territory to meet this measure include:

- Reviewing data for the measure with the state EMS director, medical director, and data manager.
- Assessing reasons that EMS agencies are not submitting NEMSIS version 3.x-compliant data to the state.
- Engaging regional and agency directors and medical directors to better understand barriers to submitting NEMSIS version 3.x-compliant data to the state.
- Sharing quality-improvement resources with state, regional, and agency directors and with medical directors that utilize NEMSIS version 3.x-compliant data.
- Contacting the EMS for Children resource centers to identify other states and territories that have achieved this measure.

### ***Action and Implementation Phase:***

- Send data results to EMS agencies.
- Meet with EMS agencies to discuss barriers and brainstorm potential strategies for improving compliance.
- Research state EMS agency or available Federal grant opportunities.

### ***Evaluation Phase:***

- Collect data.
- Reconcile data, and send results to EMS agencies.

## Program Targets:

YEAR	TARGET
2018	Baseline data will be available to assess the number of EMS agencies in the state or territory that submit National Emergency Medical Services Information System (NEMSIS) version 3.x-compliant patient-care data to the State Emergency Medical Services (EMS) Office for all 911-initiated EMS activations.
2021	80% of EMS agencies in the state or territory submit NEMSIS version 3.x compliant patient-care data to the State EMS Office for all 911-initiated EMS activations.







## EMSC 02

# PEDIATRIC EMERGENCY CARE COORDINATOR (PECC)

The percentage of EMS agencies in the state or territory that have a designated individual who coordinates pediatric emergency care.

**Goal for this measure is that by 2026:**

*Ninety percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.*

### Significance of Measure:

The Institute of Medicine (IOM) report “Emergency Care for Children: Growing Pains”<sup>1</sup> recommends that EMS agencies and emergency departments (EDs) appoint a pediatric emergency care coordinator to provide pediatric leadership for the organization. This individual need not be dedicated solely to this role and could be personnel already in place with a special interest in children who assumes this role as part of their existing duties.

Gausche-Hill et al.<sup>2</sup> in a national study of EDs found that the presence of a physician or nurse pediatric emergency care coordinator was associated with an ED being more prepared to care for children. EDs with a coordinator were more likely to report having important policies in place and a quality improvement plan that addressed the needs of children than EDs that reported not having a coordinator.

The IOM report further states that pediatric coordinators are necessary to advocate for improved competencies and the availability of resources for pediatric patients. The presence of an individual who coordinates pediatric emergency care at EMS agencies may result in ensuring that the agency and its providers are more prepared to care for ill and injured children.

<sup>1</sup> Institute of Medicine Committee on the Future of Emergency Care in the U. S. Health System (2007). Emergency care for children: growing pains.

<sup>2</sup> Gausche-Hill, M., Ely, M., Schmuhl, P., Telford, R., Remick, K. E., Edgerton, E. A., & Olson, L. M. (2015). A national assessment of pediatric readiness of emergency departments. *JAMA Pediatrics*, 169(6), 527–534.



The presence of an individual who coordinates pediatric emergency care at EMS agencies may result in ensuring that the agency and its providers are more prepared to care for ill and injured children.

The Pediatric Emergency Care Coordinator (PECC) should be a member of the EMS agency and be familiar with the day-to-day operations and needs at the agency. However, some states or territories may use a variety of models to coordinate pediatric emergency care at the county or regional levels. If there is a designated individual who coordinates pediatric activities for a county or region, that individual could serve as the PECC for one or more individual EMS agencies within the county or region.

Some of the roles that the individual who coordinates pediatric emergency care might oversee at an EMS agency include:

- Ensuring that the pediatric perspective is included in the development of EMS protocols.
- Ensuring that fellow providers follow pediatric clinical-practice guidelines.
- Promoting pediatric continuing-education opportunities.
- Overseeing pediatric-process improvement.
- Ensuring the availability of pediatric medications, equipment, and supplies.
- Promoting agency participation in pediatric-prevention programs.
- Promoting agency participation in pediatric-research efforts.
- Liaises with the emergency department pediatric emergency care coordinator.
- Promoting family-centered care at the agency.



## Resources:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state or territory. This section is updated as resources related to each performance measure become available.

## Definitions:

**EMS Agency:** An organization staffed with personnel who actively render medical care in response to a 911 or similar emergency call.

**Family-Centered Care:** An innovative approach to the planning, delivery, and evaluation of health care that is grounded in a mutually beneficial partnership among patients, families, and providers that recognizes the importance of the family in the patient’s life.<sup>3</sup>

## Data-Collection Methods and Requirements:

**SAMPLING FRAME:** You are encouraged to work with your National EMSC Data Analysis Resource (NEDARC) technical-assistance (TA) liaison on developing your sampling frame—a list of possible EMS agencies and their contact information, in your state or territory, that are potential respondents. The criteria are:

- All EMS agencies that respond to a 911 or similar emergency call, including transporting and nontransporting agencies.
- **Exclusions:**
  - Tribal and Indian Health Service EMS Agencies
  - Air- and water-only EMS agencies

---

<sup>3</sup> Institute, F. P., & Family-Centered, C. A. R. E. (2012). Patient- and family-centered care and the pediatrician’s role. *Pediatrics*, 129 (2), 394-404.

**DATA-COLLECTION METHOD:** The *only* acceptable data-collection method is the National EMS for Children EMS Survey, which is developed and administered by NEDARC and approved by the Health Resources and Services Administration (HRSA). This survey is developed to correctly measure the data points necessary for reporting purposes. NEDARC will reach out to each state or territory to review the National Survey for each data-collection period.

NEDARC will assist you in setting up the mechanism for surveying the EMS agencies in your state or territory—this allows the National EMSC Program to have a national data repository that is comparable. This includes a portal to verify the agency name, county, state or territory, followed by access to the actual survey. To complete this process, NEDARC will need your complete sampling frame. Your NEDARC TA liaison will contact you with more information.

**SURVEY TIME FRAME:** With assistance from NEDARC, states and territories are given three months to collect their data. Each state and territory chooses which months (within the data-collection period) to disseminate the National EMSC EMS Survey. You are encouraged to work with your NEDARC TA liaison to address any concerns you may have.

**RESPONSE-RATE REQUIREMENT:** To provide the most accurate representation of the data, an 80 percent response rate is required for your state or territory as a whole. Your NEDARC TA liaison will provide resources and guidance, assist you with developing a response-rate plan, and help track your response rate throughout the process of data collection. HRSA strongly advises all grantees to work closely with their NEDARC TA liaison to ensure the best possible response rate.

**TARGET RESPONDENTS:**

- EMS Agency Directors

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. A complete dataset will be provided to each state or territory's Program Manager or Project Director. The data is stored in a secure environment at NEDARC's facility.



## EHB WORKSHEET AND DATA ENTRY:

NEDARC will clean, analyze, and calculate your state or territory data and determine your response rate for the Electronic Handbook (EHB) with your assistance. The numbers to be entered into the EHB will be given to you by your NEDARC TA liaison via an email report. This report will list the numerator and denominator to be entered into the EHB for this performance measure. All numbers on the report are independently reviewed by two individuals, including the NEDARC statistician.

***Below is an example of the EHB fields you will need to enter data into for this measure:***

**Numerator:** Number of EMS agencies in the state or territory (as defined in the sampling frame above) that have a designated individual who coordinates pediatric emergency care.

**Denominator:** Total number of EMS agencies (as defined in the sampling frame above) that provided data.

***You may also be asked the following regarding your response rate:***

**Numerator:** Total number of responding EMS agencies (as defined in the sampling frame above).

**Denominator:** Total number of EMS agencies (as defined in the sampling frame above) in your state or territory.



## Supporting Documentation:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any time. Supporting documentation for this measure includes the following:

- The report with the numerator and denominator generated by NEDARC.
- The complete dataset for this measure.
- Any additional documentation that may be requested by HRSA.

## Strategic Plan:

### ***Baseline Data-Collection Phase:***

Once performance-measure data have been collected, the results should be presented to the EMS for Children Advisory Committee to evaluate the starting point, discuss target setting, and explore opportunities to implement strategies for growth.

### ***Planning Phase:***

Some specific strategic-planning activities that grantees can undertake to effect system change in their state or territory to meet this measure include:

- Reviewing baseline data for the measure, discussing gaps with the EMS director and medical director, and tracking changes in the data after the baseline is collected to monitor quality-improvement efforts.
- Assessing reasons that EMS agencies do not have a designated individual who coordinates pediatric emergency care.

### ***Action and Implementation Phase:***

- Engage regional, agency, and medical directors to better understand barriers to designating an individual to coordinate pediatric emergency care.
- Consider systematically evaluating pediatric patient outcomes and comparing EMS agencies with a designated individual who coordinates pediatric emergency care to agencies without.
- Contact the EMS for Children resource centers to identify other states, territories, and freely associated states that have achieved this measure.

### ***Evaluation Phase:***

- Collect data.
- Reconcile data and send results to EMS agencies.

Program Targets:

YEAR	TARGET
2020	30% of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.
2023	60% of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.
2026	90% of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.









## EMSC 03

# USE OF PEDIATRIC-SPECIFIC EQUIPMENT

The percentage of EMS agencies in the state or territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.

**Goal for this measure is that by 2026:**

*Ninety percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.*

### Significance of Measure:

The Institute of Medicine (IOM) report “Emergency Care for Children: Growing Pains”<sup>1</sup> states that because EMS providers rarely treat seriously ill or injured pediatric patients, providers may be unable to maintain the necessary skill level to care for these patients. For example, Lammers et al.<sup>2</sup> reported that paramedics manage an adult respiratory patient once every 20 days compared to once every 625 days for teens, once every 958 days for children, and once every 1,087 days for infants. As a result, skills needed to care for pediatric patients may deteriorate. Another study by Su et al.<sup>3</sup> found that EMS provider knowledge rose sharply after a pediatric resuscitation course, but when providers were retested six months later, their knowledge was back to baseline.

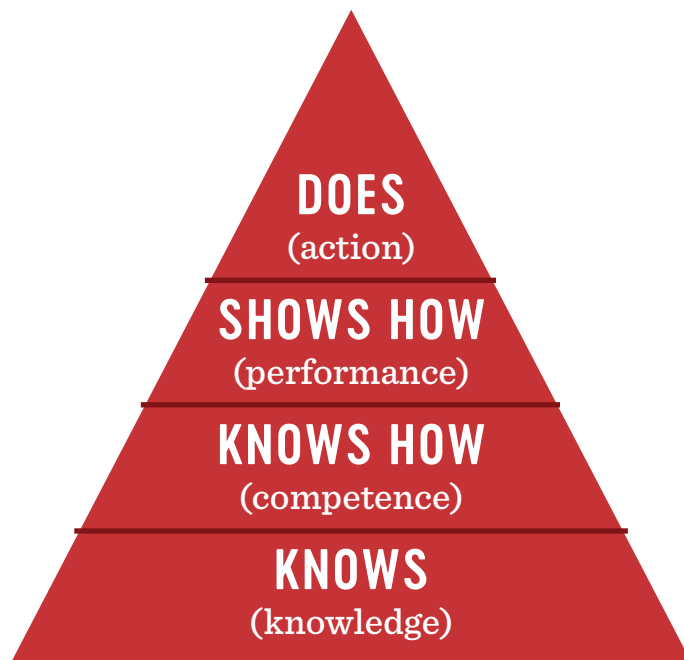
Continuing education such as the Pediatric Advance Life Support (PALS) and Pediatric Education for Prehospital Professionals (PEPP) courses are vitally important for maintaining skills and are considered an effective remedy for skill atrophy. These courses are typically required only every two years. More frequent practice of skills using

1 Institute of Medicine Committee on the Future of Emergency Care in the U. S. Health System (2006). Emergency care for children: growing pains.

2 Lammers, R. L., Byrwa, M. J., Fales, W. D., & Hale, R. A. (2009). Simulation-based assessment of paramedic pediatric resuscitation skills. *Prehospital Emergency Care*, 13(3), 345–356.

3 Su, E., Schmidt, T. A., Mann, N. C., & Zechnich, A. D. (2000). A randomized controlled trial to assess decay in acquired knowledge among paramedics completing a pediatric resuscitation course. *Academic Emergency Medicine*, 7(7), 779–786.





*Framework for clinical assessment*

different methods of skill ascertainment are necessary for EMS providers to ensure their readiness to care for pediatric patients when faced with these infrequent encounters.

Demonstrating skills using EMS equipment is best done in the field on actual patients, but in the case of pediatric patients, this can be difficult given how infrequently EMS providers see seriously ill or injured children. Other methods for assessing skills include simulation, case scenarios and skill stations. In the absence of pediatric patient encounters in the field, there is no definitive evidence that shows that one method is more effective than another for demonstrating clinical skills. But, Miller's Model of Clinical Competence<sup>4</sup> posits via the skills complexity triangle that performance assessment can be demonstrated by a combination of task training, integrated skills training, and integrated team performance. In the EMS environment this can be translated to task training at skill stations, integrated skills training during case scenarios, and integrated team performance while treating patients in the field.

### Resources:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the "Measurement" section of the EIIC's website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state or territory. This section is updated as resources related to each performance measure become available.

---

<sup>4</sup> Miller, G. E. (1990). The assessment of clinical skills/competence/performance. *Academic Medicine*, 65(9), S63-7.



## Definitions:

**EMS Agency:** An organization staffed with personnel who actively render medical care in response to a 911 or similar emergency call.

**EMS Providers:** Persons who are certified or licensed to provide emergency medical services during a 911 or similar emergency call.

**Pediatric Patient Encounter Method:** A method of checking the skills of EMS providers wherein a field training officer, medical director, or supervisor observes a provider providing care.

**Skill Station Method:** A method of checking the skills of EMS providers that involves providers being observed practicing a specific skill on a mannequin.

**Simulated Event Method:** A method of checking the skills of EMS providers that involves providers being observed practicing a set of skills in the context of a case scenario or mock incident.

## Data-Collection Methods and Requirements:

**SAMPLING FRAME:** You are encouraged to work with your National EMSC Data Analysis Resource (NEDARC) technical-assistance (TA) liaison on developing your sampling frame—a list of possible EMS agencies and their contact information, in your state or territory, that are potential respondents. The criteria are:

- All EMS agencies that respond to a 911 or similar emergency call, including transporting and nontransporting agencies.
- **Exclusions:**
  - Tribal and Indian Health Service EMS agencies
  - Air- and water-only EMS agencies

**DATA-COLLECTION METHOD:** The *only* acceptable data-collection method is the National EMS for Children EMS Survey, which is developed and administered by NEDARC and approved by the Health Resources and Services Administration (HRSA). This survey is developed to correctly measure the data points necessary for reporting purposes. NEDARC will reach out to each state or territory to review the National Survey for each data-collection period.

NEDARC will assist you in setting up the mechanism for surveying the EMS agencies in your state or territory. This allows the National EMSC Program to have a national data repository that is comparable. This includes a portal to verify the agency name, county, state or territory, followed by access to the actual survey. To complete this process, NEDARC will need your complete sampling frame. Your NEDARC TA liaison will contact you with more information.

Emergency Department of a local Connecticut community hospital during a full day of in-situ pediatric simulations to test the hospital system's preparedness to take care of critically ill and injured pediatric patients.

**SURVEY TIME FRAME:** With assistance from NEDARC, states and territories are given three months to collect their data. Each state or territory chooses which months (within the data-collection period) to disseminate the National EMSC EMS Survey. You are encouraged to work with your NEDARC TA liaison to address any concerns you may have.

**RESPONSE-RATE REQUIREMENT:** To provide the most accurate representation of the data, an 80 percent response rate is required for your state or territory as a whole. Your NEDARC TA liaison will provide resources and guidance, assist you with developing a response-rate plan, and help track your actual response rate throughout the data-collection process. HRSA strongly advises all grantees to work closely with their NEDARC TA liaison to ensure the best possible response rate.

**TARGET RESPONDENTS:**

- EMS Agency Directors

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. A complete dataset will be provided to each state or territory's Program Manager or Project Director. The data is stored in a secure environment at NEDARC's facility.





## EHB WORKSHEET AND DATA ENTRY:

NEDARC will clean, analyze, and calculate your state or territory data and response rate for the Electronic Handbook (EHB) with your assistance. The numbers to be entered into the EHB will be given to you by your NEDARC TA liaison via an email report. This report will list the numerator and denominator to be entered into the EHB for this measure. All numbers on the report are independently reviewed by two individuals, including the NEDARC statistician.

***Below is an example of the EHB fields you will need to enter data into for this measure:***

**Numerator:** Number of EMS agencies in the state or territory (as defined in the sampling frame above) that score a 6 or more on a 0-12 scale.

***NOTE: This score is indicative of an EMS agency having a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment. NEDARC will calculate this number for you as it is an aggregation of ALL your EMS agencies. See the scale below.***

**Denominator:** Total number of EMS agencies (as defined in the sampling frame above) that provided data.

### ***Reference Table:***

EMS agencies will be asked to select the frequency of each of three methods used to evaluate EMS providers' use of pediatric-specific equipment. The measure will be determined on a scale of 0 – 12. The following table shows the scoring rubric for responses. The score for an agency is calculated by summing the total points in the table; if an agency enters a 4, "Two or more times per year," for each of the 3 questions; they would score a 12 which is the highest score possible. Achievement for the grantees will be reached when at least 90% of the EMS agencies in a state or territory report a combined score of 6 or higher from a combination of the methods:

	Two or more times per year	At least once per year	At least once every two years	Less frequency than once every two years
How often are your providers required to demonstrate skills via a SKILL STATION?	4	2	1	0
How often are your providers required to demonstrate skills via a SIMULATED EVENT?	4	2	1	0
How often are your providers required to demonstrate skills via a FIELD ENCOUNTER?	4	2	1	0

***You may also be asked the following regarding your response rate:***

**Numerator:** Total number of responding EMS agencies (as defined in the sampling frame above).

**Denominator:** Total number of EMS agencies (as defined in the sampling frame above) in your state or territory.

### Supporting Documentation:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any time. Supporting documentation for this measure includes the following:

- The report with the numerator and denominator generated by NEDARC.
- The complete dataset for this measure.
- Any additional information that may be requested by HRSA

### Strategic Plan:

#### ***Baseline Data-Collection Phase:***

Once performance-measure data have been collected, the results should be presented to the EMS for Children Advisory Committee to evaluate the starting point, discuss target setting, and explore opportunities to implement strategies for growth.

#### ***Planning Phase:***

Some specific strategic-planning activities that grantees can undertake to effect system change in their state or territory to meet this measure include:

- Reviewing baseline data for the measure, discussing gaps with the EMS director and medical director, and tracking changes in the data after the baseline is collected to monitor quality-improvement efforts.
- Assessing reasons that EMS agencies do not have a process that requires their EMS providers to physically demonstrate the correct use of pediatric-specific equipment.

#### ***Action and Implementation Phase:***

- Engage regional, agency, and medical directors to better understand barriers to having a process that requires their EMS providers to physically demonstrate the correct use of pediatric-specific equipment.



- Consider systematically evaluating pediatric-patient outcomes and comparing EMS agencies that have a process that requires their EMS providers to physically demonstrate the correct use of pediatric-specific equipment versus the agencies that do not.
- Contact EMS for Children resource centers to identify other states and territories that have achieved this measure.

***Evaluation Phase:***

- Collect data.
- Reconcile data and send results to EMS agencies.

**Program Targets:**

YEAR	TARGET
2020	30 % of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of 6 or more on a 0-12 scale.
2023	60 % of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of 6 or more on a 0-12 scale.
2026	90 % of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of 6 or more on a 0-12 scale.



New Jersey Paramedic conducts an assessment of a pediatric burn patient while comforting the mother during the 2016 New Jersey Statewide Conference on EMS Simulation Competition.







## EMSC 04

# HOSPITAL RECOGNITION FOR PEDIATRIC MEDICAL EMERGENCIES

The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

**Goal for this measure is that by 2022:**

*Twenty-five percent of hospitals are recognized as part of a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.*

### Significance of Measure:

The performance measure emphasizes the importance of the existence of a standardized statewide, territorial, or regional system of care for children that includes a recognition program for hospitals capable of stabilizing and/or managing pediatric medical emergencies. A standardized recognition and/or designation program, based on compliance with the current published pediatric emergency and trauma care guidelines,<sup>1</sup> contributes to the development of an organized system of care that assists hospitals in determining their capacity and readiness to effectively deliver pediatric emergency, trauma, and specialty care.

This measure helps to ensure essential resources and protocols are available in facilities where children receive care for medical and trauma emergencies. A recognition program can also facilitate EMS transfer of children to appropriate levels of resources.

Additionally, a pediatric recognition program that includes a verification process to identify facilities meeting specific criteria has been shown to increase the degree to which EDs are compliant with published guidelines and improve hospital pediatric readiness statewide.<sup>2</sup>

1 American Academy of Pediatrics Committee on Pediatric Emergency Medicine, American College of Emergency Physicians Pediatric Committee, & Emergency Nurses Association Pediatric Committee (2009). Joint policy statement—guidelines for care of children in the emergency department. *Pediatrics*, 124(4), 1233–1243.

2 Remick, K. E, Kaji, A. H., Olson, L. M., Ely, M., Schmuhl, P., McGrath, N., Edgerton, E. A., & Gausche-Hill, M. (2016). Pediatric readiness and facility verification. *Annals of Emergency Medicine*, 67(3), 320–328.





On July 28, 2011, Minnie Hamilton Health Systems became the first West Virginia acute care facility to meet the criteria for achieving the Always Ready for Kids hospital recognition program. Individuals attending the media event to recognize the staff dedication and commitment to children were: Front Row: Penny Burnside, RN, MSN, Director, Division of Trauma, Categorization and Designation, West Virginia Bureau of Public Health, Steve Whited, CEO, CFO. Back Row: Vicki Hildreth, Emergency Medical Services for Children Coordinator, Trudi Anderson, Emergency Department Nurse Manager, Sandra Ellis, Risk Manager, Critical Care RN, Rocki Loudon, WV Emergency Medical Services Technical Support Network, Bill Ellis, Director of Emergency Services.

Performance Measure EMSC 04 does not require that the recognition program be mandated. Voluntary facility recognition is accepted.

Recognition programs and criteria should be based upon the most current version of the “Guidelines for Care of Children in the Emergency Department,”<sup>1</sup> a joint policy statement by the American Academy of Pediatrics Committee on Pediatric Emergency Medicine, American College of Emergency Physicians Pediatric Committee, and the Emergency Nurses Association Pediatric Committee. These guidelines include criteria that address:

- Administration and coordination of pediatric care
- The qualifications of physicians, nurses, and other ED staff
- A formal pediatric quality-improvement or monitoring program
- Patient safety
- Policies, procedures, and protocols
- The availability of pediatric equipment, supplies, and medications

The 2013 National Pediatric Readiness Assessment (see the National Pediatric Readiness Project below) scored EDs on their readiness to care for pediatric medical or trauma events, based on the “Guidelines for Care of Children in the Emergency Department.”<sup>1</sup> EDs were scored on a scale from 0 to 100 based on a modified Delphi method by a group of clinical experts. Throughout the nation, emergency departments received a median score of 69 out of 100, indicating a need for improvement in the emergency care of children.

A recognition program should be monitored by the state or territory or some other governing body, and it needs to include a process for on-site verification of hospital emergency department capabilities for treating children.

## Resources:

Additional information about developing a facility recognition program to identify hospitals with an emergency department that are capable of stabilizing and managing pediatric medical emergencies can be found in information collected by the EMSC Facility Recognition Collaborative, located on the EIIC website. This collaborative was developed to create best practices for developing a medical facility recognition program in states or territories.

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state or territory. This section is updated as resources related to each performance measure become available.

## Definitions:

**Hospitals:** Facilities that provide definitive medical or surgical assessment, diagnoses, and life- and limb-saving interventions for the ill and injured and have an Emergency Department (ED) open 24/7. This excludes military-based hospitals, Veterans Affairs (VA) medical centers, psychiatric institutions, Indian Health Service, or tribal hospitals.

**Medical Facility Recognition Collaborative:** The Facility Recognition Collaborative (FRC) is a quality-improvement initiative that involves fifteen states across the United States. This collaborative is working to develop a best practices program to recognize emergency departments that have the necessary infrastructure to care for children with medical emergencies based on the 2009 “Guidelines for Care of Children in the Emergency Department.”<sup>1</sup> The FRC uses a modified version of the Institute for Healthcare Improvement Collaborative Model with the addition of coaches and workgroups focused on interventions, analytics, and education. Content and resources from this collaborative are available on the EIIC website.

**National Pediatric Readiness Project (NPRP):** The National Pediatric Readiness Project is a national multiphase quality-improvement initiative that ensures that all U.S. emergency departments open 24/7 have the essential guidelines and resources in place to provide effective emergency care for children. The guidelines and resources are based on the “Guidelines for Care of Children in the Emergency Department” policy statement.<sup>1</sup> This project is supported by numerous professional organizations and led by the EMS for Children Program, the American Academy of Pediatrics, the American College of Emergency Physicians, and the Emergency Nurses Association.



As a busy community hospital in WV, becoming ARK [Always Ready for Kids] recognized has been a great experience for us. Not only did it ensure that we had the equipment, education, and personnel that we needed, but it also opened up a much-needed dialogue between our providers, staff, local EMS, and the community.

—Thomas C. Marshall, MD  
FACEP  
Emergency Department  
Medical Director, United  
Hospital Center, WV

**Pediatric:** Any person 0 to 18 years of age.

**Pediatric Medical Facility Recognition:** A recognition program designed to identify hospitals with an emergency department that are capable of stabilizing and/or managing pediatric medical emergencies.

**Standardized System:** A system of care that provides a framework for collaboration across agencies, health care organizations and services, families, and youth for the purposes of improving access and expanding coordinated culturally and linguistically competent care for children and youth. The system is coordinated, accountable, and includes a facility recognition program for pediatric medical emergencies. Recognizing the pediatric emergency care capabilities of hospitals supports the development of a system of care that is responsive to the needs of children and extends access to specialty resources when needed.

## Data-Collection Methods and Requirements:

**DATA-COLLECTION METHOD:** This measure does not require data collection through a survey administered by the National EMS for Children Program. To report progress on this measure in the Electronic Handbook (EHB), the EMS for Children Program Manager will need to work with their state or territory EMSC Program and EMSC Advisory Committee as well as with their Health Resources and Services Administration (HRSA) Project Officer to:

1. Review the criteria and the application packet for your medical recognition program with your HRSA Project Officer.
2. Create a list of the number of recognized hospitals with an emergency department in your state or territory that are able to stabilize and/or manage pediatric medical emergencies according to your state or territory's medical facility recognition program.

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the national EMSC Program and may be used for other analyses. The data is stored in a secured environment at HRSA's facility.







## EHB WORKSHEET AND DATA ENTRY:

*Below is an example of the EHB fields you will need to enter data into for this measure:*

**Numerator:** Number of hospitals with an ED that are recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

**NOTE:** *You may want to work with your HRSA Project Officer to review your criteria for your recognition program prior to entering these numbers.*

**Denominator:** Total number of hospitals with an ED in the state or territory.

*You will also be asked to enter the following:*

Using a scale of 0–5, please rate the degree to which your state or territory has made toward establishing a recognition program for pediatric medical emergencies.

- 0** = No progress has been made towards developing a statewide, territorial, or regional program that recognizes hospitals that are able to stabilize and/or manage pediatric medical emergencies.
- 1** = Research has been conducted on the effectiveness of a pediatric medical facility recognition program (for improved pediatric outcomes), and/or developing a pediatric medical facility recognition program has been discussed by the EMSC Advisory Committee and members are working on the issue.
- 2** = Criteria that facilities must meet in order to receive recognition as being able to stabilize and/or manage pediatric medical emergencies have been developed.
- 3** = An implementation process or plan for the pediatric medical facility recognition program has been developed.
- 4** = The implementation process or plan for the pediatric medical facility recognition program has been piloted.
- 5** = At least one facility has been formally recognized through the pediatric medical facility recognition program.

ELEMENT	0	1	2	3	4	5
Indicate the degree to which a facility recognition program for pediatric medical emergencies exists						

## Supporting Documentation:

Supporting documentation for this measure should be available to support EHB entries and may be requested by HRSA at any point. Examples include:

- Facility-recognition application packet for part of the recognition process.
- Criteria that facilities must meet in order to receive recognition as a facility able to stabilize and/or manage pediatric medical emergencies.
- A list of hospitals participating in the pediatric medical emergency facility recognition program and their corresponding categorization, recognition, or designation level.
- Any additional documentation that may be requested by HRSA

## Strategic Plan:

The following phases and terminology are used as best practices in developing a facility recognition program (based on the Medical Facility Recognition Collaborative) and will be helpful as you develop your program.

### ***Planning Phase:***

- Identify key stakeholders and champions for an improvement team.
- Develop a process map or a fishbone diagram for the state-specific approach to developing a state-approved recognition program:
  - Understand how the state functions.
  - Map the political framework.
- Meet with the EMSC Advisory Committee to discuss framework and additional stakeholders:
  - Identify barriers.
  - Develop action steps.

### ***Research Phase:***

Research and review current pediatric medical recognition programs (see the EIIC website [emscimprovement.center/measurement](https://emscimprovement.center/measurement)):

- Evaluate potential effectiveness in your state.
- Choose characteristics of a recognition program for your state or territory.



Alaska's first Pediatric Emergency Care Facility Recognition, October 6, 2015. Alaska Native Medical Center, located in Anchorage, Alaska, has been recognized as a Comprehensive Pediatric Emergency Care Facility by the Alaska EMS for Children Facility Review team.

#### ***Stakeholder Agreement Phase:***

- Identify stakeholders and potential host institutions for the recognition program.
- Meet with stakeholders to review and discuss opportunities and barriers.
- Obtain a stakeholder agreement that shows that the following have been reviewed and accepted:
  - Recognition criteria based on the latest release of the "Guidelines for Care of Children in the Emergency Department"
  - Program characteristics (for example, voluntary, single-tier, and so forth)



***Implementation Plan Phase:***

- Develop a process map to include:
  - Identification of host institution(s) and sustainability plan
  - Application for recognition program and criteria
  - Timeline
  - Tracking system
  - Recognition process
  - Marketing plan
  - Method of recognition

***Piloting and Recognition Phase:***

- Develop a process map for an initial pilot, including:
  - Selection of participants
  - Evaluation and revision of recognition process
  - Initial recognition

**Program Targets:**

YEAR	TARGET
2022	25% of hospitals are recognized as part of a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.





## EMSC 05

# HOSPITAL RECOGNITION FOR PEDIATRIC TRAUMA

The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial, or regional standardized system that are able to stabilize and/or manage pediatric *trauma*.

### Goal for this measure is that by 2022:

*Fifty percent 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**.*

### Significance of Measure:

The performance measure emphasizes the importance of the existence of a standardized statewide, territorial, or regional system of care for children that includes a recognition program for hospitals capable of stabilizing and/or managing pediatric trauma emergencies. A standardized recognition and/or designation program, based on compliance with the current published pediatric emergency and trauma care guidelines,<sup>1</sup> contributes to the development of an organized system of care that assists hospitals in determining their capacity and readiness to effectively deliver pediatric emergency, trauma, and specialty care.

This measure addresses the development of a pediatric trauma recognition program. Recognition programs are based upon state-defined criteria and/or adoption of national current published pediatric emergency and trauma care consensus guidelines<sup>1</sup> that address administration and coordination of pediatric care; the qualifications of physicians, nurses, and other ED staff; a formal pediatric quality-improvement or monitoring program; patient safety; policies, procedures, and protocols; and the availability of pediatric equipment, supplies, and medications.

<sup>1</sup> American Academy of Pediatrics Committee on Pediatric Emergency Medicine, American College of Emergency Physicians Pediatric Committee, & Emergency Nurses Association Pediatric Committee (2009). Joint policy statement—guidelines for care of children in the emergency department. *Pediatrics*, 124(4), 1233–1243.





This measure emphasizes the need for state and territory trauma systems to have a process in place that assures facilities providing pediatric trauma care have been verified as having integrated appropriate resources addressing the unique needs of children.

Additionally, EMSC 05 does not require that the recognition program be mandated. Voluntary facility recognition is accepted. However, the preferred status is to have a program that is monitored by the state or territory.

This measure emphasizes the need for state and territory trauma systems to have a process in place that assures facilities providing pediatric trauma care have been verified as having integrated appropriate resources addressing the unique needs of children.

State trauma systems have existed in the United States in some organized fashion since the early 1970s and have been championed by the Institute of Medicine as a model for delivery of care for traumatic injury.<sup>2</sup> Considering that traumatic injury is one of the most significant public health issues facing children, disparities in equipment, supplies, and training is concerning. Currently available research has not conclusively determined what the best type of trauma system or center is; however, research has identified “current gaps and disparities in the care of injured children that can be remedied through education and training.”<sup>3</sup>

The 2013 National Pediatric Readiness Assessment (see National Pediatric Readiness Project below) identified that not all emergency departments in the United States have the essential guidelines and resources in place to provide effective care to children.<sup>4</sup> This assessment, based on “Guidelines for Care of Children in the Emergency Department,”<sup>1</sup> scored hospitals on a scale from 0 to 100 based on a modified Delphi method developed by a group of clinical experts. Throughout the nation, emergency departments received a median score of 69 out of 100, indicating a need for improvement in the emergency care of children.

The Emergency Medical Services for Children Program continues to champion efforts to ensure that the ability to stabilize and/or manage pediatric trauma is fully integrated into all trauma systems. Most states have trauma systems in place that are either verified by the American College of Surgeons (ACS) Committee on Trauma (COT) or that are based on similar criteria.

2 Carr, B. G. & Nance, M. L. (2010). Access to pediatric trauma care: alignment of providers and health systems. *Current Opinion in Pediatrics*, 22(3), 326–331.

3 Petrosyan, M., Guner, Y. S., Emami, C. N., & Ford, H. R. (2009). Disparities in the delivery of pediatric trauma care. *Journal of Trauma*, 67(2 Suppl), S114–119.

4 Gausche-Hill, M., Ely, M., Schmuhl, P., Telford, R., Remick, K. E., Edgerton, E. A., & Olson, L. M. (2015). A National assessment of pediatric readiness of emergency departments. *JAMA Pediatrics*, 169(6), 527–534.



## Resources:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state. This section is updated as resources related to each performance measure become available.

## Definitions:

**Hospitals:** Facilities that provide definitive medical or surgical assessment, diagnoses, and life- and limb-saving interventions for the ill and injured and have an Emergency Department (ED) open 24/7. This excludes military-based hospitals, Veterans Affairs (VA) medical centers, psychiatric institutions, Indian Health Service, or tribal hospitals.

**National Pediatric Readiness Project (NPRP):** The National Pediatric Readiness Project is a national multiphase quality-improvement initiative that ensures that all U.S. emergency departments open 24/7 have the essential guidelines and resources in place to provide effective emergency care for children. The guidelines and resources are based on the “Guidelines for Care of Children in the Emergency Department” policy statement.<sup>1</sup> This project is supported by numerous professional organizations and led by the EMS for Children Program, the American Academy of Pediatrics, the American College of Emergency Physicians, and the Emergency Nurses Association.

**Pediatric:** Any person 0 to 18 years of age.

**Pediatric Trauma Facility Recognition:** A process that defines essential criteria for the care of a child having experienced a traumatic emergency. These criteria are verified as being available in facilities providing trauma care and are thereby recognized in the statewide or territorial trauma system.

**Standardized System:** A system of care that provides a framework for collaboration across agencies, health care organizations and services, families, and youth for the purposes of improving access and expanding coordinated culturally and linguistically competent care for children and youth. The system is coordinated, accountable, and includes a facility recognition program for pediatric traumatic injuries. Recognizing the pediatric emergency care capabilities of hospitals supports the development of a system of care that is responsive to the needs of children and extends access to specialty resources when needed.

## Data-Collection Methods and Requirements:

**DATA-COLLECTION METHOD:** This measure does not require data collection through a survey administered by the National EMS for Children Program. To report progress on this measure in the Electronic Handbook (EHB), the EMS for Children Program Manager will need to work with their state or territory EMSC Program and EMSC Advisory Committee as well as with their Health Resources and Services Administration (HRSA) Project Officer to:

1. Review the criteria of your trauma recognition system with your HRSA Project Officer.
2. Create a list of the number of recognized hospitals with an ED in your state or territory that are able to stabilize and/or manage pediatric traumatic emergencies according to your state or territory's trauma facility recognition system.

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the national EMSC Program and may be used for other analyses. The data is stored in a secured environment at HRSA's facility.





## EHB WORKSHEET AND DATA ENTRY:

***Below is an example of the EHB fields you will need to enter data into for this measure:***

**Numerator:** Number of hospitals with an ED that are recognized through a statewide, territorial, or regional standardized system that are able to stabilize and/or manage pediatric trauma.

**NOTE:** *You may want to work with your HRSA Project Officer to review your criteria for your recognition system prior to entering these numbers.*

**Denominator:** Total number of hospitals with an ED in the state or territory.

***You will also be asked to enter the following:***

Using a scale of 0–5, please rate the degree to which your state or territory has made towards establishing a recognition system for pediatric traumatic emergencies.

**0** = No progress has been made towards developing a statewide, territorial, or regional system that recognizes hospitals that are able to stabilize and/or manage pediatric trauma emergencies.

**1** = Research has been conducted on the effectiveness of a pediatric trauma facility recognition program (for improved pediatric outcomes), and/or developing a pediatric trauma facility recognition program has been discussed by the EMSC Advisory Committee and members are working on the issue.

**2** = Criteria that facilities must meet in order to receive recognition as a pediatric trauma facility have been developed.

**3** = An implementation process or plan for the pediatric trauma facility recognition program has been developed.

**4** = The implementation process or plan for the pediatric trauma facility recognition program has been piloted.

**5** = At least one facility has been formally recognized through the pediatric trauma facility recognition program.

ELEMENT	0	1	2	3	4	5
Indicate the degree to which a standardized system for pediatric traumatic emergencies exists.						

## Supporting Documentation:

Supporting documentation for this measure should be available to support EHB entries and may be requested by HRSA at any point. Examples include:

- Facility-recognition application packet for part of the recognition process.
- Criteria that facilities must meet in order to receive recognition as a facility able to stabilize and/or manage pediatric traumatic emergencies.
- A list of hospitals participating in the pediatric traumatic emergency facility recognition system and their corresponding categorization, recognition, or designation level.
- Any additional documentation that may be requested by HRSA.

## Strategic Plan:

### ***Review Current System Phase:***

- Review your most current Pediatric Readiness data at the hospital level, which contains many scored elements related to the care of pediatric trauma.
- Meet with your state or territory Trauma Manager. If you do not have state or territory Trauma Manager, you may want to meet with a representative of the hospital association in order to:
  - Review your most current Pediatric Readiness data together.
  - Review the existing statewide or territorial pediatric trauma criteria, looking for inclusion of pediatric trauma criteria.

### ***Champions and Consensus Phase:***

- Invite the Trauma Manager or trauma stakeholders to meet with your EMSC Advisory Committee:
  - Discuss the feasibility of a trauma system inclusive of children (whether improving an existing system or developing a similar trauma system).
  - Review or summarize your most recent Pediatric Readiness data.
  - Discuss deficits and gaps.
  - Discuss ways to assist hospitals that are not designated trauma centers to become at least Pediatric Ready.
- Develop a team of experts and champions who can assist you in developing a plan to move forward.



**Criteria Phase:**

- Work with your team to improve or develop trauma criteria that is inclusive of pediatric patients.
- Review pediatric elements used as criteria for other state or territory trauma systems or from the ACS.

**Verifying Body Phase:**

- Ensure that your state or territory has a verification body for designated trauma centers.
- Explore the current process for trauma verification.
- Incorporate the new pediatric criteria into the trauma-verification process.
- For nondesignated hospitals, explore ways to verify that they are at least Pediatric Ready.

**Program Targets:**

YEAR	TARGET
2022	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.





## EMSC 06

# INTERFACILITY TRANSFER GUIDELINES

The percent of hospitals with an Emergency Department (ED) in the state or territory that have written interfacility transfer guidelines that cover pediatric patients and that include the following components of transfer:

- 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).
- Process for selecting the appropriate care facility.
- 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.)
- Process for patient transfer (including obtaining informed consent).
- Plan for transfer of patient medical record.
- Plan for transfer of copy of signed transport consent.
- Plan for transfer of personal belongings of the patient.
- Plan for provision of directions and referral institution information to family.

### Goal for this measure is that by 2021:

*Ninety percent of hospitals in in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer.*

### Significance of Measure:

In order to assure that children receive optimal care, timely transfer to a specialty care center is essential. Such transfers are better coordinated through the presence of interfacility transfer agreements and guidelines.

Timely access to pediatric specialty services for a child in the acute stages of illness or injury is critical to reducing morbidity and mortality. Most children are treated first in a local community hospital, which may not have all of the processes, staff, and equipment



A critically ill or injured child may need to be transferred rapidly from the referring facility to a more specialized receiving facility, such as a pediatric-specialty hospital or a trauma center that has additional resources needed to treat children.

needed to provide specialty pediatric care.<sup>1</sup> When this is the case, a critically ill or injured child will need to be transferred rapidly from the referring facility to a more specialized receiving facility, such as a pediatric-specialty hospital or a trauma center that has additional resources needed to treat children. The development of written interfacility transfer guidelines promotes effective working relationships between referring hospitals and specialized receiving facilities.<sup>2</sup> Facilities are more prepared to receive and care for children when the interfacility transfer guidelines include the eight recommended components endorsed by the American

Academy of Pediatrics (AAP), American College of Emergency Physicians (ACEP), and Emergency Nurses Association (ENA).<sup>3</sup>

Interfacility transfer guidelines combined with the recommended components solidify the patient-transfer process through written steps and procedures among hospitals. This helps to ensure that critically ill and injured children receive needed services, that appropriate consultation services are available, and that children are rapidly transported to specialized centers.

The adoption of interfacility transfer guidelines at pediatric-specialty hospitals or other specialty-receiving facilities is also important in cases where specialty treatment such as burns is not available at the referring facility or in cases of surge capacity in the event of a disaster or mass-casualty event. In the case of regional disasters, pediatric-specialty hospitals and tertiary-level hospitals should have interfacility transfer guidelines to manage transfers to other hospitals within and across state lines.

### ***EMSC 06 and 07***

This measure is closely aligned with EMSC 07 – interfacility transfer agreements. Both of these measures ensure that the process for interfacility transfers are already in place through written interfacility transfer documentation. Your time may be best served by working on these two measures simultaneously. Both measures ensure virtually the same outcome— that when children need to be transferred to a more specialized facility, the proper guidelines are in place and the

- 1 Gausche-Hill, M., Ely, M., Schmuhl, P., Telford, R., Remick, K. E., Edgerton, E. A., & Olson, L. M. (2015). A national assessment of pediatric readiness of emergency departments. *JAMA Pediatrics*, 169(6), 527–534.
- 2 Arora, V., Johnson, J., Lovinger, D., Humphrey, H. J., Meltzer, D. O. (2005). Communication failures in patient sign-out and suggestions for improvement: a critical incident analysis. *Quality & Safety in Health Care*, 14(6), 401–407.
- 3 American Academy of Pediatrics Committee on Pediatric Emergency Medicine, American College of Emergency Physicians Pediatric Committee, & Emergency Nurses Association Pediatric Committee (2009). Joint policy statement—guidelines for care of children in the emergency department. *Pediatrics*, 124(4), 1233–1243.



relationship for transfer between facilities are established in writing. This can reduce delays in care as well as the loss of important patient information.

***NOTE: Compliance with the Emergency Medical Treatment and Labor Act (EMTALA) does not constitute having interfacility transfer guidelines.<sup>4</sup>***

## Resources:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state or territory. This section is updated as resources related to each performance measure become available.

## Definitions:

**Hospitals:** Facilities that provide definitive medical or surgical assessment, diagnoses, and life- and limb-saving interventions for the ill and injured and have an Emergency Department (ED) open 24/7. This excludes military-based hospitals, Veterans Affairs (VA) medical centers, psychiatric institutions, Indian Health Service, or tribal hospitals.

**Interfacility Transfer Guidelines:** Hospital-to-hospital, including out of state or territory, guidelines that outline procedural and administrative policies for transferring critically ill patients to facilities that provide specialized pediatric care or pediatric services not available at the referring facility. Interfacility guidelines do not have to specify transfers of pediatric patients only. A guideline that applies to **all patients** or **patients of all ages** would suffice, as long as it is not written **only** for adults. Grantees should consult their HRSA Project Officer if they have questions regarding guideline inclusion of pediatric patients. In addition, hospitals may have one document composed of both the interfacility transfer guidelines and agreement. This is acceptable as long as the document meets the definitions for pediatric interfacility transfer guidelines and agreements—in other words, contains all components of transfer.

**Pediatric:** Any person 0 to 18 years of age.

**Pediatric Readiness Assessment:** The assessment developed for the National Pediatric Readiness Project. Emergency Departments are scored on a scale from 0 to 100 to evaluate their readiness to care for children based on current guidelines.

---

<sup>4</sup> CMS Manual System, Department of Health & Human Services, Centers for Medicare & Medicaid Services (PDF). Retrieved in July 2016 from [www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R46SOMA.pdf](https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R46SOMA.pdf).

**Referring Facility:** The hospital that transfers a pediatric patient to another more specialized facility that is better equipped to handle critical pediatric patient care.

**Receiving Facility:** A hospital with specialized pediatric critical care or pediatric trauma services that is able to receive patients from referring facilities.

## Data-Collection Methods and Requirements:

**SAMPLING FRAME:** You are encouraged to work with your National EMSC Data Analysis Resource (NEDARC) technical-assistance (TA) liaison on developing your sampling frame—a list of possible hospitals and their contact information, in your state or territory, that are potential respondents. The criteria are:

- All hospitals with an ED that are open 24/7 in your state or territory.
- **Exclusions:**
  - Tribal and Indian Health Service facilities
  - Department of Defense facilities (Veterans Affairs or military hospitals)

**DATA-COLLECTION METHOD:** The *only* acceptable data-collection method is the National EMS for Children Hospital Survey, which is developed and administered by NEDARC and approved by the Health Resources and Services Administration (HRSA). The survey is developed to correctly measure the data points necessary for reporting purposes. NEDARC will reach out to each state or territory to review the National Survey for each data-collection period. It is possible that during certain collection years, the data-collection method for this measure will be the Pediatric Readiness Assessment (see [pediatricreadiness.org](http://pediatricreadiness.org)).

NEDARC will assist you in setting up the mechanism for surveying the hospitals in your state or territory. This allows the National EMSC Program to have a national data repository that is comparable. This includes a portal to verify the hospital name, county, state or territory, followed by access to the actual survey. To complete this process, NEDARC will need your complete sampling frame. Your NEDARC TA liaison will contact you with more information.

**SURVEY TIME FRAME:** With assistance from NEDARC, states and territories are given three months to collect their data. Each state or territory chooses which months (within the data-collection period) to disseminate the National EMS for Children Hospital Survey. You are encouraged to work with your NEDARC TA liaison to address any concerns you may have.

**RESPONSE-RATE REQUIREMENT:** To provide the most accurate representation of the data, an 80 percent response rate is required for your state or territory as a whole. Your NEDARC TA liaison

will provide resources and guidance, assist you with developing a response-rate plan, and help track your actual response rate throughout the process of data collection. HRSA strongly advises all grantees to work closely with their NEDARC TA liaison to ensure the best possible response rate.

**TARGET RESPONDENTS:**

- Emergency Department Nurse Manager or Leader
- Emergency Department Director or Manager
- Emergency Department Medical Director
- Hospital Chief Executive Officer

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. A complete dataset will be provided to each state or territory's Program Manager or Project Director. The data is stored in a secure environment at NEDARC's facility. In certain cases, such as with the Pediatric Readiness Assessment, a data-use agreement may accompany the data with instructions on how the data can be reported.



## EHB WORKSHEET AND DATA ENTRY:

NEDARC will clean, analyze, and calculate your state or territory data for the Electronic Handbook (EHB), with your assistance. The numbers to be entered into the EHB will be given to you by your NEDARC TA liaison via an email report. This report will list the correct numerator and denominator to be entered into the EHB for this measure. All numbers on the report are independently reviewed by two individuals, including the NEDARC statistician.

***Below is an example of the EHB fields you will need to enter data into for this measure:***

**Numerator:** Number of hospitals with an ED that have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer according to the data collected (as defined in the sampling frame above).

**Denominator:** Total number of hospitals with an ED that provided data (as defined in the sampling frame above).

***You may also be asked the following regarding your response rate:***

**Numerator:** Total number of responding hospitals (as defined in the sampling frame above).

**Denominator:** Total number of hospitals (as defined in the sampling frame above) in your state or territory.

An interfacility transfer guideline ensures that critically ill and injured children receive needed services, that appropriate consultation services are available, and that children are rapidly transported to specialized centers.

## Supporting Documentation:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any point. Supporting documentation for this measure includes the following:

- The report with the numerator and denominator generated by NEDARC.
- The complete dataset for this measure.
- Any additional documentation requested by HRSA

## Strategic Plan:

Using the previously collected data, the state or territory should assess its compliance with having pediatric interfacility transfer guidelines. Data should be presented to the EMS for Children Advisory Committee to develop a strategy for meeting the performance measure.

Some specific strategic-planning activities grantees can undertake to effect system changes to meet this measure in their states or territories include:

### ***Planning Phase:***

- Review baseline data and discuss gaps in the existence and use of interfacility transfer guidelines for pediatric patients with your EMS director and medical director.
- Review the data to determine which hospitals reported they are in the process of developing interfacility transfer guidelines, and contact hospital officials to see if they need any help, such as developing an interfacility guideline template.
- Review the data to determine which components recommended by AAP, ACEP, and ENA are missing from the guidelines for each hospital, and contact each hospital to discuss adding the missing components to their interfacility transfer document(s).
- Assess the reasons that hospitals do not have interfacility transfer guidelines for pediatric patients. For example, does the language of current guidelines include “patients of all ages”?

### ***Action and Implementation Phase:***

- Brief your family representative on the importance of interfacility transfer guidelines, and enlist the representative’s assistance as you make plans to meet with hospitals and the hospital association.
- Sponsor a meeting of all hospitals in partnership with the state or territory hospital association to assess the existence and use of interfacility transfer guidelines for pediatric patients among hospitals in the state or territory. Include a discussion of the barriers and challenges to using interfacility transfer guidelines for pediatric patients, and discuss potential solutions.



**Evaluation Phase:**

- Collect data.
- Reconcile data and send results to hospitals.

**Program Targets:**

YEAR	TARGET
2021	90% of hospitals in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer.











## EMSC 07

# INTERFACILITY TRANSFER AGREEMENTS

The percent of hospitals with an Emergency Department (ED) in the state or territory that have written interfacility transfer agreements that cover pediatric patients.

**Goal for this measure is that by 2021:**

*Ninety percent of hospitals in the state or territory have written interfacility transfer agreements that cover pediatric patients.*

### Significance of Measure:

In order to assure that children receive optimal care, timely transfer to a specialty care center is essential. Such transfers are better coordinated through the presence of interfacility transfer agreements and guidelines.

Timely access to pediatric specialty services for a child in the acute stages of illness or injury is critical to reducing morbidity and mortality. Most children are first treated in a local community hospital that may not have all of the processes, staff, and equipment needed to provide specialty pediatric care.<sup>1</sup> When this is the case, a critically ill or injured child will need to be rapidly transferred from the referring facility to a more specialized receiving facility, such as a pediatric-specialty hospital or a trauma center that has the additional resources needed to treat children.

The development of written interfacility transfer agreements promotes effective working relationships between referring hospitals and specialized receiving facilities.<sup>2</sup> Interfacility transfer agreements solidify the patient-transfer process through written contracts between hospitals, helping to ensure that critically ill and injured

1 Gausche-Hill, M., Ely, M., Schmuhl, P., Telford, R., Remick, K. E., Edgerton, E. A., & Olson, L. M. (2015). A national assessment of pediatric readiness of emergency departments. *JAMA Pediatrics*, 169(6), 527–534.

2 Arora, V., Johnson, J., Lovinger, D., Humphrey, H. J., & Meltzer, D. O. (2005). Communication failures in patient sign-out and suggestions for improvement: a critical incident analysis. *Quality & Safety in Health Care*, 14(6), 401–407.

The adoption of interfacility transfer agreements at pediatric-specialty hospitals or other specialty-receiving facilities is also important in cases where specialty treatment such as burns is not available at the referring facility or in cases of surge capacity in the event of a disaster or mass- casualty event.

children receive needed services, that appropriate consultation services are available, and that children are rapidly transported to specialized centers.

The adoption of interfacility transfer agreements at pediatric-specialty hospitals or other specialty-receiving facilities is also important in cases where specialty treatment such as burns is not available at the referring facility or in cases of surge capacity in the event of a disaster or mass-casualty event. In the case of regional disasters, pediatric-specialty hospitals and tertiary-level hospitals should have agreements with other hospitals within and across state lines.

### ***EMSC 06 and 07***

This measure is closely aligned with EMSC 06 – interfacility transfer guidelines. Both of these measures ensure that the process for interfacility transfers are already in place through written interfacility transfer documentation. Your time may be best served by working on these two measures simultaneously. Both measures ensure virtually the same outcome—that when children need to be transferred to a more specialized facility, the proper guidelines are in place and the relationship for transfer between facilities are established in writing. This can reduce delays in care as well as the loss of important patient information.

***NOTE: Compliance with the Emergency Medical Treatment and Labor Act (EMTALA) does not constitute having interfacility transfer agreements.***<sup>3</sup>

## **Resources:**

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](http://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state. This section is updated as resources related to each performance measure become available.

---

<sup>3</sup> CMS Manual System, Department of Health & Human Services, Centers for Medicare & Medicaid Services (PDF). Retrieved in July 2016 from [www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R46SOMA.pdf](http://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R46SOMA.pdf).



## Definitions:

**Hospital:** Facilities that provide definitive medical or surgical assessment, diagnoses, and life- and limb-saving interventions for the ill and injured and have an Emergency Department (ED) open 24/7. This excludes military-based hospitals, Veterans Affairs (VA) medical centers, psychiatric institutions, Indian Health Service, or tribal hospitals.

**Interfacility Transfer Agreements:** Written contracts between a referring facility (such as a 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 agreements do not have to specify transfers of pediatric patients only. An agreement that applies to ***all patients*** or ***patients of all ages*** would suffice, as long as it is not written ***only*** for adults. Grantees should consult their HRSA Project Officer if they have questions regarding inclusion of pediatric patients in established agreements.

**Pediatric:** Any person 0 to 18 years of age.

**Pediatric Readiness Assessment:** The assessment developed for the National Pediatric Readiness Project. Emergency Departments are scored on a scale from 0 to 100 to evaluate their readiness to care for children based on current guidelines.

**Referring Facility:** The hospital that transfers a pediatric patient to another more specialized facility that is better equipped to handle critical pediatric patient care.

**Receiving Facility:** A hospital with specialized pediatric critical care or pediatric trauma services that is able to receive patients from referring facilities.

Interfacility Transfer Agreements are written contracts between a referring facility 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.

## Data-Collection Methods and Requirements:

**SAMPLING FRAME:** You are encouraged to work with your National EMSC Data Analysis Resource (NEDARC) technical-assistance (TA) liaison on developing your sampling frame—a list of possible hospitals and their contact information, in your state or territory, that are potential respondents. The criteria are:

- All hospitals with an ED that are open 24/7 in your state or territory.
- **Exclusions:**
  - Tribal and Indian Health Service facilities
  - Department of Defense facilities (Veterans Affairs or military hospitals)

**DATA-COLLECTION METHOD:** The only acceptable data-collection method is the National EMS for Children Hospital Survey, which is developed and administered by NEDARC and approved by the Health Resources and Services Administration (HRSA). The survey is developed to correctly measure the data points necessary for reporting purposes. NEDARC will reach out to each state or territory to review the National Survey for each data-collection period. It is possible that during certain collection years, the data-collection method for this measure will be the Pediatric Readiness Assessment (see [pediatricreadiness.org](http://pediatricreadiness.org)).

NEDARC will assist you in setting up the mechanism for surveying the hospitals in your state or territory. This allows the National EMSC Program to have a national data repository that is comparable. This includes a portal to verify the hospital name, county, state or territory, followed by access to the actual survey. To complete this process, NEDARC will need your complete sampling frame. Your NEDARC TA liaison will contact you with more information.

### **SURVEY TIME FRAME:**

With assistance from NEDARC, states and territories are given three months to collect their data. Each state or territory chooses which months (within the data-collection period) to disseminate the National EMS for Children Hospital Survey. You are encouraged to work with your NEDARC TA liaison to address any concerns you may have.

### **RESPONSE-RATE REQUIREMENT:**

To provide the most accurate representation of the data, an 80 percent response rate is required for your state or territory as a whole. Your NEDARC TA liaison will provide resources and guidance, assist you with



developing a response-rate plan, and help track your actual response rate throughout the process of data collection. HRSA strongly advises all grantees to work closely with their NEDARC TA liaison to ensure the best possible response rate.

**TARGET RESPONDENTS:**

- Emergency Department Nurse Manager or Leader
- Emergency Department Director or Manager
- Emergency Department Medical Director
- Hospital Chief Executive Officer

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. A complete dataset will be provided to each state or territory's Program Manager or Project Director. The data is stored in a secure environment at NEDARC's facility. In certain cases, such as with the Pediatric Readiness Assessment, a data-use agreement may accompany the data with instructions on how the data can be reported.



## EHB WORKSHEET AND DATA ENTRY:

NEDARC will clean, analyze, and calculate your state or territory data for the Electronic Handbook (EHB), with your assistance. The numbers to be entered into the EHB will be given to you by your NEDARC TA liaison via an email report. This report will list the correct numerator and denominator to be entered into the EHB for this measure. All numbers on the report are independently reviewed by two individuals, including the NEDARC statistician.

***Below is an example of the EHB fields you will need to enter data into for this measure:***

**Numerator:** Number of hospitals with an ED that have written interfacility transfer agreements that cover pediatric patients according to the data collected (as defined in the sampling frame above).

**Denominator:** Total number of hospitals with an ED that provided data (as defined in the sampling frame above).

***You may also be asked the following regarding your response rate:***

**Numerator:** Total number of responding hospitals (as defined in the sampling frame above).

**Denominator:** Total number of hospitals (as defined in the sampling frame above) in your state or territory.

## Supporting Documentation:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any point. Supporting documentation for this measure includes the following:

- The report with the numerator and denominator generated by NEDARC.
- The complete dataset for this measure.
- Any additional documentation required by HRSA

## Strategic Plan:

Using the previously collected data, the state or territory should assess its compliance with having pediatric interfacility transfer agreements. Data should be presented to the EMS for Children Advisory Committee to develop a strategy for meeting the performance measure.

Some specific strategic-planning activities grantees may undertake to effect system changes to meet this measure in their states or territories include:

### ***Planning Phase:***

- Review baseline data, and discuss gaps in the existence and use of interfacility transfer agreements for pediatric patients with the EMS director and medical director.
- Review the data to determine which hospitals reported they are in the process of developing interfacility transfer agreements, and contact hospital officials to see if they need any help, such as developing an interfacility transfer-agreement template.
- Assess the reasons that hospitals do not have interfacility transfer agreements for pediatric patients. For example, does the language of current guidelines include “patients of all ages”?

### ***Action and Implementation Phase:***

- Brief your family representative on the importance of interfacility agreements, and enlist the representative’s assistance as you make plans to meet with hospitals and the hospital association.
- Sponsor a meeting of all hospitals in partnership with the state or territory hospital association to assess the existence and use of interfacility transfer agreements for pediatric patients among hospitals in the state or territory. Include a discussion of the barriers or challenges to using interfacility transfer agreements for pediatric patients, and discuss potential solutions.

### ***Evaluation Phase:***

- Collect data.
- Reconcile data and send results to hospitals.



Program Targets:

YEAR	TARGET
2021	90% of hospitals in the state or territory have written interfacility transfer agreements that cover pediatric patients.











## EMSC 08

# PERMANENCE OF EMSC

The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system.

### Annual goal for this measure is:

*To increase the number of states and territories that have established permanence of EMSC in the state or territory EMS system.*

### Components of this Measure:

*The purpose of this measure is to establish permanence of EMS for Children in your state or territory by establishing the following components:*

1. A state or territory EMSC Advisory Committee that meets regularly
2. A pediatric representative on the state or territory EMS Board
3. A full-time EMSC program manager

### Significance of Measure:

Establishing permanence of EMSC in the state or territory EMS system is important for building the infrastructure of the EMSC Program and is fundamental to its success. For the EMSC Program to be sustained in the long-term and reach permanence, it is important to establish an EMSC Advisory Committee to ensure that the priorities of the EMSC Program are addressed. It is also important to establish one full time equivalent EMSC Manager whose time is devoted solely (i.e., 100%) to the EMSC Program. Moreover, by ensuring pediatric representation on the State or Territory EMS Board, pediatric issues will more likely be addressed.

The three components, of this measure, are geared toward meeting the goal of EMSC representation and awareness in the prehospital and hospital system. This ensures that pediatric issues are always represented and discussed so that emergency care for children can be improved. Having these components in place as soon as possible will also assist you in meeting the performance measures.

This measure will be broken into three separate sections in order to address the significance of each component, the requirements, and the reporting of data.



## COMPONENT 1: A STATE OR TERRITORY EMSC ADVISORY COMMITTEE THAT MEETS REGULARLY

### Annual goal for this component is:

- An EMSC Advisory Committee has the required members as per the implementation manual (see below).
- The EMSC Advisory Committee meets at least four times a year.

### Significance of Component 1:

The purpose of this component is to establish permanence of the EMS for Children Program in your state or territory by ensuring that an EMS for Children Advisory Committee has been established and will remain in place for the future. An EMSC Advisory Committee is important because it assists EMSC grantees in meeting each of the performance measures and state or territory goals to improve the emergency care of children.

### Resources for Component 1:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state. This section is updated as resources related to each performance measure become available.



## Definitions for Component 1:

**EMSC Advisory Committee:** A group of either appointed or elected individuals who are responsible for guiding the EMSC Program, prioritizing EMSC issues, working on special projects, ensuring that pediatric emergency issues are addressed within the EMS system (including both the prehospital and hospital settings), and providing policy recommendations pertaining to the improvement of emergency medical services for children.

The EMSC Advisory Committee may be outside state or territorial government control; in other words, the Advisory Committee does not have to be mandated by the state or territory. To ensure program sustainability, however, it is strongly recommended that the committee be mandated by the state or territory. The EMSC Advisory Committee can be part of the state or territory EMS Committee or Subcommittee, such as the Pediatric Subcommittee of the EMS Board, provided that the eight core members (see below) are on the EMS Committee or Subcommittee as voting members (members who exercise full membership rights). If the state or territorial government controls or limits the number of EMSC Advisory Committee members, the grantee is still required to have the eight core members on the committee in order to achieve the measure.

**Establishment:** Establishment is defined by two elements: 1) The EMSC Advisory Committee is composed of the eight core members; and 2) the EMSC Advisory Committee meets at least four times during the grant year.

### 1. The EMSC Advisory Committee is composed of the following eight core members (required):

- Nurse with emergency pediatric experience
- Physician with pediatric training
- Emergency physician
- Emergency medical technician (EMT) or paramedic who is currently a practicing, ground-level prehospital provider
- EMS state agency representative
- EMSC project director
- EMSC grant manager
- Family representative

**Note:** No single individual may serve in more than one role for each of the following positions: EMT or paramedic, nurse, emergency physician, pediatric-trained physician, and family representative. Each of these roles must be served by a distinct individual. For the other core members, however, a single individual can function in dual or multiple roles as long as all eight roles are represented. For example, the EMSC project director may be the same person as the EMSC program manager.

Based on the unique needs of each individual state or territory, the EMSC Program has also identified a list of recommended committee members. The following sixteen members are strongly encouraged (but not required) to play a role on the Advisory Committee:

- Hospital association representative
- State trauma manager
- EMS training manager
- Tribal EMS representative
- EMS or hospital data manager
- School nurse
- Ambulance association representative
- Child death-review representative
- Fire-based EMS representative
- Police representative
- Bioterrorism representative
- Disaster preparedness representative
- Parent-teacher association representative
- Recipient of MCH block grant for Children with Special Health Care Needs (CSHCN)
- Highway Safety representative
- Legislator

2. **The EMSC Advisory Committee must meet either face-to-face or by conference call at least four times each grant year.** If one of the core EMSC Advisory Committee members is unable to attend a meeting, a substitute can be designated to attend on the member's behalf.

## Data-Collection Methods and Requirements for Component 1:

**DATA-COLLECTION METHOD:** This measure does not require data collection through a survey administered by the National EMS for Children Program. To report progress on this measure, the EMS for Children State or Territory Program Manager will enter a score directly into the Electronic Handbook (EHB) worksheet (see below).

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. The data is stored in a secured environment at Health Resources and Services Administration (HRSA) facility.



## EHB WORKSHEET AND DATA ENTRY FOR COMPONENT 1:

***Below is an example of the EHB fields you will need in order to enter data for this measure:***

The EMS for Children Program Manager will report on the current status of each of the two elements for establishment of an EMSC Advisory Committee (see definition above). The data entry for each question is simply 1 for “Yes” or 0 for “No.” The table below is a worksheet to help you prepare the information you will need when entering data into the EHB.

***You will be asked to verify the following:***

**Yes = 1**

**No = 0**

ELEMENT	YES, OR NO
1. The EMSC Advisory Committee has the required members as per the implementation manual.	
2. The EMSC Advisory Committee has met four or more times during the grant year.	

## Supporting Documentation for Component 1:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any point. Examples of supporting documentation for this measure include:

- Sign-in sheet of attendees at meetings
- Meeting agendas
- Meeting notes or minutes
- Any additional documentation requested from HRSA

## Strategic Plan for Component 1:

The EMSC Advisory Committee plays a pivotal role in ensuring that the state or territory meets all the required performance measures. While having an Advisory Committee that meets regularly is a requirement of State Partnership grant funding, building a strong and effective Advisory Committee that is passionate about making change and improving care for children should be a priority. The following can help you get started:

- Review the required eight core members with your project director and discuss individuals who may fit those roles and who can participate in regular meetings.
- Develop talking points about the reason you are establishing an EMSC Advisory Committee; use these talking points to invite individuals to participate.
- Consider implementing terms of membership for your Advisory Committee such as two or three years. This can help members assess their level of commitment.
- Review available best practices for running effective meetings.
- Organize and coordinate schedules of members and set regular meeting times (quarterly).
- Create an agenda and assign individuals to take minutes and record any “to-do items” or tasks. Follow-up on these items.
- Utilize EMSC Advisory Committee members as experts with the experience and expertise needed to help advise in the implementation of performance measures. The variety of representation is a strength to your program.



### Program Targets for Component 1:

YEAR	TARGET
Annually	An EMSC Advisory Committee will be established with the eight core members and will meet four or more times a year.



## COMPONENT 2: A PEDIATRIC REPRESENTATIVE ON THE STATE OR TERRITORY EMS BOARD

### Annual goal for this component is:

- There is pediatric representation on the EMS Board.
- There is a state or territory mandate requiring pediatric representation on the EMS Board.

### Significance of Component 2:

The purpose of this component is to establish permanence of the EMS for Children Program in your state or territory by incorporating pediatric representation into the decision-making body for EMS, which assures that pediatric issues will be addressed in EMS agendas, goals, practices, and policies.

### Resources for Component 2:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state. This section is updated as resources related to each performance measure becomes available.

## Definitions for Component 2:

**EMS Board:** The EMS Board is the state or territory governing entity that has the primary responsibility on EMS issues. The EMS Board's oversight and authority ultimately affect the decision-making process.

EMS regulatory structure and authority can vary across states and territories. The decision-making body for EMS rules, regulations, and procedures may be a board or Ministry of Health with broad healthcare oversight, an EMS subcommittee or advisory committee, or an independent EMS board. Regardless of the organizational structure, for the purposes of this performance measure, that body is referred to as the EMS Board.

If your state or territory does not have an EMS Board, please consult with your HRSA Project Officer.

**Mandate:** A mandate is defined as a state or territorial statute, rule, regulation, or policy developed and issued by a legally authorized entity with enforcement rights to ensure compliance.

**Representation:** Representation is defined by two elements: 1) a designated pediatric representative has been identified and is part of the EMS Board and 2) the incorporation of a voting position for the pediatric representative is mandated by the state or territory.

1. **Pediatric Representative:** A pediatric representative will be defined by each state or territory. Examples of pediatric representatives include but are not limited to:

- EMSC Advisory Committee chairperson
- Practicing pediatricians
- Pediatric critical care physicians
- Board-certified pediatric emergency physicians
- Neonatologists
- Pediatric rehabilitation physicians
- Registered nurses with pediatric interests
- EMTs or paramedics with pediatric interests
- Pediatric surgeons
- Parent or family representative

2. **Incorporation:** Incorporation of pediatric representation means the existence of a formal, designated **voting position** for a pediatric representative on the EMS Board. ***In addition, a state or territory mandate must exist to have a pediatric representative on the EMS Board.*** Without an official board member, there is no guarantee that pediatric considerations will be taken into account or considered for inclusion in EMS rules or regulations, even if presented by the EMSC Advisory Committee.

## Data-Collection Methods and Requirements for Component 2:

**DATA-COLLECTION METHOD:** This measure does not require data collection through a survey administered by the National EMS for Children Program. To report progress on this measure, the EMS for Children State or Territory Program Manager will enter a score directly into the EHB worksheet (see below).

**OWNERSHIP:** All data collected by the states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. The data is stored in a secured environment at HRSA's facility.



### EHB WORKSHEET AND DATA ENTRY FOR COMPONENT 2:

*Below is an example of the EHB fields you will need in order to enter data for this measure:*

The EMS for Children Program Manager will report on the current status of each of the two elements for pediatric representation on the EMS Board (see definition above). The data entry for each question is simply 1 for “Yes” or 0 for “No.” The table below is a worksheet to help you prepare the information you will need when entering data into the EHB.

*You will be asked to verify the following:*

**Yes = 1**

**No = 0**

ELEMENT	YES, OR NO
3. There is pediatric representation on the EMS Board.	
4. There is a state or territory mandate requiring pediatric representation on the EMS Board.	



Supporting Documentation for Component 2:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any point. Examples of supporting documentation for this measure include:

- Identification (name, title, position) of the representative on the state or territory EMS Board.
- Copy of the state or territory mandate describing requirements for a formal, designated voting pediatric representative on the state or territory EMS Board.
- Any additional documented requested by HRSA

Strategic Plan for Component 2:

Some specific strategic-planning activities grantees may undertake to effect system change and work toward achieving this measure include:

- Assessing the reasons, if applicable, that the state or territory has not incorporated pediatric representation on the state or territory EMS Board.
- Engaging the EMSC Advisory Committee and other stakeholders to discuss the barriers and challenges to incorporating pediatric representation on the state or territory EMS Board, and brainstorming solutions with these individuals.
- Engaging the EMS Board in a discussion regarding the addition of a pediatric position, and presenting relevant data, including census data on the percentage of children in the state or territory (on average, about 23 percent nationally<sup>1</sup>), the number of children that enter the EMS or hospital system annually, EMSC performance measures, and other national or state EMSC initiatives, such as the National Pediatric Readiness Project.
- Engaging pediatric champions in the state or territory, such as state or territory pediatric leaders or family advocates, to assist in making a case for a pediatric representative.
- Determining the feasibility of the state or territory to incorporate pediatric representation on the state or territory EMS Board.

Program Targets for Component 2:

YEAR	TARGET
Annually	Pediatric representation will have been incorporated on the state or territory EMS Board.
Annually	The state or territory will mandate pediatric representation on the EMS Board.

1 United States Census Bureau (July 1, 2015). QuickFacts: United States. Retrieved in July 2016 from [www.census.gov/quickfacts/table/PST045215/00](http://www.census.gov/quickfacts/table/PST045215/00).



### COMPONENT 3: FULL-TIME EMSC PROGRAM MANAGER

#### Annual goal for this component is:

- There is one full-time EMSC Manager that is dedicated solely to the EMSC Program.

#### Significance of Component 3:

The purpose of this component is to establish permanence of the EMS for Children Program in your state or territory by ensuring that one full-time EMSC Program Manager is dedicated solely to the EMSC program. The EMSC Program Manager is an integral staff member of the EMSC Program tasked to manage and coordinate the activities of the program. Having at least one full-time manager dedicated solely to the EMSC Program is an indication that the program is achieving permanence in the state or territory.

#### Resources for Component 3:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the “Measurement” section of the EIIC’s website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state. This section is updated as resources related to each performance measure becomes available.

## Definitions for Component 3:

### **Federal, state, territory, and other-funding for an EMSC**

**Program Manager:** Federal funding refers to any funding received from a federal government agency. State- or territory-funded refers to any funds provided by state or territorial government organizations or by the state or territorial legislature (a line item in the state or territorial budget, for example) to support the EMSC program manager position. Other funding refers to any funding received from other sources, such as professional, private, or philanthropic groups (foundations, nonprofits).

**Dedicated Solely:** The EMSC manager's effort is dedicated 100 percent to the EMSC Program, EMSC activities, and other EMSC-related projects or initiatives. Each state or territory ***needs one individual*** who is designated as the full-time equivalent (FTE) for EMSC and who is responsible for the program. If the position is split among multiple individuals, EMSC Program goals may become a lower priority than other activities.

## Data-Collection Methods and Requirements for Component 3:

**DATA-COLLECTION METHOD:** This measure does not require data collection through a survey administered by the National EMS for Children Program. To report progress on this measure, the EMS for Children State or Territory Program Manager will enter a score directly into the EHB worksheet (see below).

**OWNERSHIP:** All data collected by the states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. The data is stored in a secured environment at HRSA's facility.

National Seat Check Saturday Community Event (Sat, Sept 24, 2016). EMSC in conjunction with the Injury Prevention, Community Outreach, and Research (IPCOR) department of Yale New Haven Children’s Hospital. Over 150 children were fitted with free helmets.



EHB WORKSHEET AND DATA ENTRY FOR COMPONENT 3:

*Below is an example of the EHB fields you will need in order to enter data for this measure:*

The EMS for Children Program Manager will report on the current status of a full-time EMSC Program Manager dedicated solely to the EMSC Program. The data entry for the following question is simply 1 for “Yes” or 0 for “No.” The table below is a worksheet to help you prepare the information you will need when entering data into the EHB.

*You will be asked to verify the following:*

- Yes = 1
- No = 0

ELEMENT	YES, OR NO
5. There is one full-time EMSC Manager that is dedicated solely to the EMSC Program.	



Supporting Documentation for Component 3:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any time. Examples of supporting documentation for this measure include:

- Name of full-time EMSC Program Manager
- Job description
- Biographical sketch
- Any other requested documentation from HRSA

Strategic Plan for Component 3:

Some specific strategic-planning activities grantees may undertake to effect system changes in their states or territories that are needed to meet this measure include:

- Assessing the reasons that the state or territory has not established a federal, state, territorial, or other-funded 100 percent FTE for an EMSC manager.
- Engaging the EMSC Advisory Committee, EMS director, EMS medical director, and other stakeholders to discuss the barriers and challenges of establishing a federal, state, territorial, or other-funded FTE for an EMSC manager who is dedicated solely to the EMSC Program, and brainstorming solutions with these individuals.
- Determining the feasibility of the state or territory of establishing a federal, state, territorial, or other-funded FTE for an EMSC manager.

Program Targets for Component 3:

YEAR	TARGET
Annually	One full-time EMSC Manager who is dedicated solely to the EMSC Program has been established.





## EMSC 09

# INTEGRATION OF EMSC PRIORITIES INTO STATUTES OR REGULATIONS

The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system by integrating EMSC priorities into statutes or regulations.

**Goal for this measure is that by 2027:**

*EMSC priorities will be integrated into existing EMS or hospital and healthcare facility statutes or regulations.*

### Significance of Measure:

For the EMSC Program to be sustained in the long-term and reach permanence, it is important for the Program's priorities to be integrated into existing state or territory mandates. Integration of the EMSC priorities into mandates will help ensure pediatric emergency care issues and/or deficiencies are being addressed state- or territory-wide for the long-term.

### Resources:

The most recent resources and tools available to support the implementation of the EMSC performance measures are available within the "Measurement" section of the EIIC's website. Visit [emscimprovement.center/measurement](https://emscimprovement.center/measurement) to find the resources available to support your efforts to implement the performance measures in your state or territory. This section is updated as resources related to each performance measure become available.

## Definitions:

**Mandate:** A mandate is defined as a state or territorial statute, rule, regulation, or policy developed and issued by a legally authorized entity with enforcement rights to ensure compliance.

**NEMSIS:** National EMS Information System. NEMSIS is the national repository that is used to store EMS data from every state and territory in the nation.

**Regulation:** A rule with legal enforcement rights to ensure compliance; issued by a legally authorized entity.

**Patient-Care Units:** Basic Life Support (BLS) or Advanced Life Support (ALS) vehicles that transport a pediatric patient – an ambulance.

**State EMS Office:** The governing body providing oversight for the EMS system in each state or territory.

**Statute:** a law enacted by a legislative body of a state or territorial government.

## The EMSC Program Priorities:

1. EMS agencies are required to submit NEMSIS-compliant data to the state EMS Office.
2. EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.
3. EMS agencies in the state or territory have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.
4. A statewide, territorial, or regional standardized system that recognizes hospitals that are able to stabilize and/or manage pediatric medical emergencies and pediatric trauma.
5. Hospitals in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include the following components of transfer:
  - 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).
  - Process for selecting the appropriate care facility.
  - 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.).
  - Process for patient transfer (including obtaining informed



- consent).
  - Plan for transfer of patient medical record.
  - Plan for transfer of a signed copy of transport consent.
  - Plan for transfer of personal belongings of the patient.
  - Plan for provision of directions and referral-institution information to family.
6. Hospitals in the state or territory have written interfacility transfer agreements that cover pediatric patients.
  7. Basic life support (BLS) and advanced life support (ALS) prehospital provider agencies in the state or territory have on-line and off-line pediatric medical direction available.
  8. BLS and ALS patient-care units in the state or territory have the essential pediatric equipment and supplies, as outlined in the nationally recognized and endorsed guidelines.
  9. Requirements adopted by the state or territory for pediatric continuing education prior to the renewal of BLS and ALS licensing and/or certification.

## Data-Collection Methods and Requirements:

**DATA-COLLECTION METHOD:** This measure does not require data collection through a survey administered by the National EMS for Children Program. To report progress on this measure, the EMS for Children State Program Manager will enter a score directly into the Electronic Handbook (EHB) worksheet (see below).

**OWNERSHIP:** All data collected by states and territories belongs to the respective state or territory EMSC Program as well as to the National EMSC Program and may be used for other analyses. The data is stored in a secured environment at HRSA's facility.





## EHB WORKSHEET AND DATA ENTRY:

***Below is an example of the EHB fields you will need to enter data into for this measure:***

The EMS for Children Program Manager will work with the EMS for Children Advisory Board to report which of the nine elements best describes your current status. The data entry for each question is simply 1 for “Yes” or 0 for “No.”

The table below is a worksheet to help you prepare the information you will need when entering data into the EHB. The “Yes” answers will be added together to calculate a simple count of the total number of elements of your grant program that have been incorporated into statutes or regulations.

**NOTE:** In the table below, the term “state” refers to a state, territory, or freely associated state.

***You will be asked to verify the following:***

**Yes = 1**

**No = 0**

Total number of elements your grant program has established (possible 0–11 score):

ELEMENTS	YES, OR NO
1. There is a statute or regulation that requires the submission of NEMESIS-compliant data to the state or territorial EMS office.	
2. There is a statute or regulation that assures that an individual is designated to coordinate pediatric emergency care.	
3. There is a statute or regulation that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.	
4. There is a statute or regulation for a hospital-recognition program for identifying hospitals capable of dealing with pediatric medical emergencies.	
5. There is a statute or regulation for a hospital-recognition system for identifying hospitals capable of dealing with pediatric traumatic emergencies.	
6. There is a statute or regulation for written interfacility transfer guidelines that cover pediatric patients and include specific components of transfer.	

7. There is a statute or regulation for written interfacility transfer agreements that cover pediatric patients.	
8. There is a statute or regulation for pediatric on-line medical direction for ALS and BLS prehospital provider agencies.	
9. There is a statute or regulation for pediatric off-line medical direction for ALS and BLS prehospital provider agencies.	
10. There is a statute or regulation for pediatric equipment for BLS and ALS patient-care units.	
11. There is a statute or regulation for the adoption of requirements for continuing pediatric education prior to recertification and/or relicensing of BLS and ALS providers.	
<b>Total:</b>	

### Supporting Documentation:

Supporting documentation should be available to support EHB entries and may be requested by HRSA at any point. Examples of supporting documentation for this measure include:

- Legislation or other structural framework
- Copies of statutes or regulations
- State or territory requirements for each priority
- Any additional documentation requested by HRSA

If grantees have not integrated the EMSC priorities into existing statutes or regulations, supporting documentation will be required to demonstrate progress made toward such integration.

### Strategic Plan:

Some specific strategic-planning activities grantees may undertake to effect system changes in their states or territories to meet this measure include:

- Familiarizing themselves with the processes and schedules for the legislative- and rule-making procedures in the state or territory, especially as they relate to EMS and hospital regulation. These processes vary widely in each state, territory, and freely associated state; knowing the procedural rules is critical to success.

- Reviewing existing state or territory statutes and regulations, and discussing gaps in the integration of EMSC priorities with the EMSC Advisory Committee.
- Assessing the reasons that the state or territory has not integrated EMSC priorities into existing statutes or regulation.
- Engaging family representatives to brainstorm ideas for educating the public about EMSC priorities.
- Educating and informing state legislators and officials on EMSC priorities and their importance to the community served. When educating and informing, grantees are not expressing a view about legislation and are not asking a legislator to introduce, support, or oppose legislation. Instead, grantees are strictly providing factual information on a particular topic. Examples of educating and informing include:
  - Providing factual information on a particular topic to help policymakers or the general public form an independent opinion about the topic.
  - Providing factual testimony or technical advice and assistance to a committee or subcommittee, when invited to do so.
  - Communicating with government officials for purposes other than influencing legislation, such as commenting on regulations.
  - Contacting Program Managers in other states or territories who have met the measure to discuss how they overcome challenges.
- Engaging state legislators and officials, as well as EMS and hospital stakeholders, to discuss the barriers and challenges to integrating EMSC priorities into existing statutes or regulations, and facilitating solutions with these groups.
- Determining the feasibility of the state or territory to integrate the EMSC priorities into existing statutes or regulations.



- Working with professional organizations and other state pediatric advocates to inform and engage their legislative and advocacy efforts. The following list provides examples of professional organizations with chapters in most states:
  - American Academy of Pediatrics
  - American College of Emergency Physicians
  - American Hospital Association
  - Children's Hospital Association
  - Emergency Nurse Association
  - Family Voices
  - National Association of EMTs
  - National Association of EMS Physicians
  - National Association of School Nurses

### Program Targets:

YEAR	TARGET
2027	EMSC priorities will have been integrated into existing EMS or hospital and healthcare facility statutes or regulations.







# EMSC DETAIL SHEETS

## DIVISION OF CHILD ADOLESCENT, AND FAMILY HEALTH

### Emergency Medical Services for Children Program

#### PERFORMANCE MEASURE DETAIL SHEET SUMMARY TABLE

Performance Measure	New/Revised Measure	Prior PM Number (if applicable)	Topic
EMSC 01	New	N/A	Using NEMSIS Data to Identify Pediatric Patient Care Needs.
EMSC 02	New	N/A	Pediatric Emergency Care Coordination
EMSC 03	New	N/A	Use of pediatric-specific equipment
EMSC 04	Unchanged	74	Pediatric medical emergencies
EMSC 05	Unchanged	75	Pediatric traumatic emergencies
EMSC 06	Unchanged	76	Written inter-facility transfer guidelines that contain all the components as per the implementation manual.
EMSC 07	Unchanged	77	Written inter-facility transfer agreements that covers pediatric patients.
EMSC 08	Unchanged	79	Established permanence of EMSC
EMSC 09	Updated	80	Established permanence of EMSC by integrating EMSC priorities into statutes/regulations.

**EMSC 01 PERFORMANCE MEASURE**

The degree to which EMS agencies submit NEMSIS compliant version 3.x data to the State EMS Office.

**Goal: Submission of NEMSIS compliant version 3.x data**

**Level: Grantee**

**Domain: Emergency Medical Services for Children**

**GOAL**

By 2018, baseline data will be available to assess the number of EMS agencies in the state/territory that submit National Emergency Medical Services Information System (NEMSIS) version 3.X compliant patient care data to the State Emergency Medical Services (EMS) Office for all 911 initiated EMS activations.

By 2021, 80% of EMS agencies in the state/territory submit NEMSIS version compliant patient care data to the State EMS Office for all 911 initiated EMS activations.

**MEASURE**

The degree to which EMS agencies submit NEMSIS compliant version 3.x data to the State EMS Office.

**DEFINITION****Numerator:**

The number of EMS agencies in the state/territory that submit NEMSIS version 3.X compliant patient care data to the State Emergency Medical Services Office.

**Denominator:**

Total number of EMS agencies in the state/territory actively responding to 911 requests for assistance.

**Units:** 100

**Text:** Percent

**EMS:** Emergency Medical Services

**EMS Agency:** A prehospital provider agency. An EMS agency is defined as an organization staffed with personnel who are actively rendering medical care in response to a 911 or similar emergency call. Data will be gathered from State EMS Offices for both transporting and non-transporting agencies (excludes air- and water-only EMS services).

**NEMSIS:** National EMS Information System. NEMSIS is the national repository that is used to store EMS data from every state in the nation.

**NEMSIS Version 3.X compliant patient care data:**  
**A national set of standardized data elements collected by EMS agencies.**

**NEMSIS Technical Assistance Center (TAC):** The NEMSIS TAC is the resource center for the NEMSIS project. The NEMSIS TAC provides assistance states, territories, and local EMS agencies, creates reference documents, maintains the NEMSIS database and XML schemas, and creates compliance policies.

**NHTSA – National Highway Traffic Safety Administration**



**EMSC 01 PERFORMANCE MEASURE**

The degree to which EMS agencies submit NEMSIS compliant version 3.x data to the State EMS Office.

**Goal: Submission of NEMSIS compliant version 3.x data**

**Level: Grantee**

**Domain: Emergency Medical Services for Children**

---

**HRSA STRATEGIC OBJECTIVE**

Improve Access to Quality Health Care and Services by strengthening health systems to support the delivery of quality health services.

Improve Health Equity by monitoring, identifying, and advancing evidence-based and promising practices to achieve health equity.

**GRANTEE DATA SOURCES**

State EMS Offices

**EMSC 01 PERFORMANCE MEASURE**

The degree to which EMS agencies submit NEMSIS compliant version 3.x data to the State EMS Office.

**Goal: Submission of NEMSIS compliant version 3.x data**

**Level: Grantee**

**Domain: Emergency Medical Services for Children**

**SIGNIFICANCE**

Access to quality data and effective data management play an important role in improving the performance of an organization's health care systems. Collecting, analyzing, interpreting, and acting on data for specific performance measures allows health care professionals to identify where systems are falling short, to make corrective adjustments, and to track outcomes. However, uniform data collection is needed to consistently evaluate systems and develop Quality Improvement programs. The NEMSIS operated by the National Highway Traffic Safety Administration, provides a basic platform for states and territories to collect and report patient care data in a uniform manner.

NEMSIS enables both state and national EMS systems to evaluate their current prehospital delivery. As a first step toward Quality Improvement (QI) in pediatric emergency medical and trauma care, the EMSC Program seeks to first understand the proportion of EMS agencies reporting to the state EMS office NEMSIS version 3.X compliant data, then use that information to identify pediatric patient care needs and promote its full use at the EMS agency level. In the next few years, NEMSIS will enable states and territories to evaluate patient outcomes and as a result, the next phase will employ full utilization of NEMSIS data on specific measures of pediatric data utilization. This will include implementing pediatric-specific EMS Compass measures in states, publishing results, publishing research using statewide EMS kids data, linking EMS data, providing performance information back to agencies, and building education programs around pediatric data, etc. This measure also aligns with the Healthy People 2020 objective PREP-19: Increase the number of states reporting 90% of emergency medical services (EMS) calls to National EMS Information System (NEMSIS) using the current accepted dataset standard.

While most localities collect and most states report NEMSIS version 2.X compliant data currently, NEMSIS version 3.x is available today and in use in several states. Version 3 includes an expanded data set, which significantly increases the information available on critically ill or injured children. NHTSA is encouraging states and localities to upgrade to version 3.X compliant software and submit version 3.X data by January 1, 2017.

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 01

The percentage of EMS agencies in the state/territory that submit National Emergency Medical Services Information System (NEMSIS) version 3.X compliant patient care data to the State Emergency Medical Services Office for all 911 initiated EMS activations.

State EMS Offices will be asked to select which of six (6) statements best describes their current status. The measure will be determined on a scale of 0-5. The following table shows the scoring rubric for responses. Achievement for grantees will be reached when 80% of EMS agencies are submitting NEMSIS version 3.X compliant patient care data to the State EMS Office. This is represented by a score of “5”.

Which statement best describes your current status?	Current Progress
Our State EMS Office has not yet transitioned to NEMSIS compliant version 3.x.	0
Our State EMS Office intends to transition to NEMSIS version 3.X compliant patient care data to submit to NEMSIS TAC by or before 2021.	1
Our State EMS Office submits NEMSIS version 3.X compliant patient care data to NEMSIS TAC with less than 10% of EMS agencies reporting.	2
Our State EMS Office submits NEMSIS version 3.X compliant patient care data to NEMSIS TAC with at least 10% and less than 50% of the EMS agencies reporting.	3
Our State EMS Office submits NEMSIS version 3.X compliant patient care data to NEMSIS TAC with at least 50% and less than 80% of the EMS agencies reporting.	4
Our State EMS Office submits NEMSIS version 3.X compliant patient care data to NEMSIS TAC with at least 80% of the EMS agencies reporting.	5
<b>Numerator:</b> The number of EMS agencies in the state/territory that submit National Emergency Medical Services Information System (NEMSIS) version 3.X compliant patient care data to the State Emergency Medical Services Office for all 911 initiated EMS activations	
<b>Denominator:</b> Total number of EMS agencies in the state/territory actively responding to 911 requests for assistance.	
<b>Percent:</b>	

### ***Proposed Survey Questions:***

As part of the HRSA’s quest to improve the quality of healthcare, the EMSC Program is interested to hear about current efforts to collect NEMSIS version 3.X compliant patient care data from EMS agencies in the state/territory. The EMSC Program aims to first understand the proportion of EMS agencies that are submitting NEMSIS version 3.X compliant patient care data to the state EMS office.

The NEMSIS Technical Assistance Center will only collect version 3.X compliant data beginning on January 1, 2017.

**Which one of the following statements best describes your current status toward submitting NEMSIS version 3.X compliant patient care data to the NEMSIS TAC from currently active EMS agencies in the state/territory? (Choose one)**

- ☐ Our State EMS Office does not submit patient care data to the NEMSIS Technical Assistance Center (TAC)
- ☐ Our State EMS Office intends to submit patient care data to the NEMSIS Technical Assistance Center (TAC) by or before 2021.
- ☐ Our State EMS Office submits NEMSIS version 3.X compliant patient care data to the NEMSIS Technical Assistance Center (TAC) with less than 10% of EMS agencies reporting.
- ☐ Our State EMS Office submits NEMSIS version 3.X compliant patient care data to the NEMSIS Technical Assistance Center (TAC) with at least 10% and less than 50% of EMS agencies reporting.
- ☐ Our State EMS Office submits NEMSIS version 3.X compliant patient care data to the NEMSIS Technical Assistance Center (TAC) with at least 50% and less than 80% of EMS agencies reporting.
- ☐ Our State EMS Office submits NEMSIS version 3.X compliant patient care data to the NEMSIS Technical Assistance Center (TAC) with at least 80% of EMS agencies reporting.

***Annual targets for this measure:***

<b>Year</b>	<b>Target</b>
2018	Baseline data
2019	10%
2020	50%
2021	80%



<b>EMSC 02 PERFORMANCE MEASURE</b>  <b>Goal: Pediatric Emergency Care</b> <b>Coordination Level: Grantee</b> <b>Domain: Emergency Medical Services for Children</b>	The percentage of EMS agencies in the state/territory that have a designated individual who coordinates pediatric emergency care.
<b>GOAL</b>	<p>By 2020, 30% of EMS agencies in the state/territory have a designated individual who coordinates pediatric emergency care.</p> <p>By 2023, 60% of EMS agencies in the state/territory have a designated individual who coordinates pediatric emergency care.</p> <p>By 2026, 90% of EMS agencies in the state/territory have a designated individual who coordinates pediatric emergency care.</p>
<b>MEASURE</b>	The percentage of EMS agencies in the state/territory that have a designated individual who coordinates pediatric emergency care.
<b>DEFINITION</b>	<p><b>Numerator:</b> The number of EMS agencies in the state/territory that score a '3' on a 0-3 scale.</p> <p><b>Denominator:</b> Total number of EMS agencies in the state/territory that provided data.</p> <p><b>Units:</b> 100      <b>Text:</b> Percent</p> <p>Recommended Roles: Job related activities that a designated individual responsible for the coordination of pediatric emergency care might oversee for your EMS agency are:</p> <ul style="list-style-type: none"> <li>• Ensure that the pediatric perspective is included in the development of EMS protocols</li> <li>• Ensure that fellow EMS providers follow pediatric clinical practice guidelines</li> <li>• Promote pediatric continuing education opportunities</li> <li>• Oversee pediatric process improvement</li> <li>• Ensure the availability of pediatric medications, equipment, and supplies</li> <li>• Promote agency participation in pediatric prevention programs</li> <li>• Promote agency participation in pediatric research efforts</li> <li>• Liaises with the emergency department pediatric emergency care coordinator</li> <li>• Promote family-centered care at the agency</li> </ul> <p><b>EMS:</b> Emergency Medical Services  <b>EMS Agency:</b> An EMS agency is defined as an organization staffed with personnel who render medical care in response to a 911 or similar emergency call. Data will be gathered from both transporting and non-transporting agencies.  <b>IOM:</b> Institute of Medicine</p>
<b>HRSA STRATEGIC OBJECTIVE</b>	Strengthen the Health Workforce

**EMSC 02 PERFORMANCE MEASURE**

The percentage of EMS agencies in the state/territory that have a designated individual who coordinates pediatric emergency care.

**Goal: Pediatric Emergency Care**

**Coordination Level: Grantee**

**Domain: Emergency Medical Services for Children**

**GRANTEE DATA SOURCES**

Survey of EMS agencies

**SIGNIFICANCE**

The Institute of Medicine (IOM) report “Emergency Care for Children: Growing Pains” (2007) recommends that EMS agencies and emergency departments (EDs) appoint a pediatric emergency care coordinator to provide pediatric leadership for the organization. This individual need not be dedicated solely to this role and could be personnel already in place with a special interest in children who assumes this role as part of their existing duties.

Gausche-Hill et al in a national study of EDs found that the presence of a physician or nurse pediatric emergency care coordinator was associated with an ED being more prepared to care for children. EDs with a coordinator were more likely to report having important policies in place and a quality improvement plan that addressed the needs of children than EDs that reported not having a coordinator.

The IOM report further states that pediatric coordinators are necessary to advocate for improved competencies and the availability of resources for pediatric patients. The presence of an individual who coordinates pediatric emergency care at EMS agencies may result in ensuring that the agency and its providers are more prepared to care for ill and injured children.

The Pediatric Emergency Care Coordinator (PECC) should be a member of the EMS agency and be familiar with the day-to-day operations and needs at the agency. However, some states/territories may use a variety of models to coordinate pediatric emergency care at the county or regional levels. If there is a designated individual who coordinates pediatric activities for a county or region, that individual could serve as the PECC for one or more individual EMS agencies within the county or region.

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 02

The percentage of EMS agencies in the state/territory that have a designated individual who coordinates pediatric emergency care.

<b>Numerator:</b> The number of EMS agencies in the state/territory that score a '3' on a 0-3 scale.	
<b>Denominator:</b> Total number of EMS agencies in the state/territory that provided data.	
<b>Percent:</b>	

EMS agencies will be asked to select which of four statements best describes their agency. The measure will be determined on a scale of 0-3. The following table shows the scoring rubric for responses. Achievement for grantees will be reached when at least 90% of the EMS agencies in the state/territory report a '3' on the scale below.

Which statement best defines your agency?	Scale
Our EMS agency does NOT have a designated INDIVIDUAL who coordinates pediatric emergency care at this time	0
Our EMS agency does NOT CURRENTLY have a designated INDIVIDUAL who coordinates pediatric emergency care but we would be INTERESTED IN ADDING this role	1
Our EMS agency does NOT CURRENTLY have a designated INDIVIDUAL who coordinates pediatric emergency care but we HAVE A PLAN TO ADD this role within the next year	2
Our EMS agency HAS a designated INDIVIDUAL who coordinates pediatric emergency care for our agency	3

### ***Proposed Survey Questions:***

Now we are interested in hearing about how pediatric emergency care is coordinated at your EMS agency. This is an emerging issue within emergency care and we want to gather information on what is happening across the country within EMS agencies.

One way that an agency can coordinate pediatric emergency care is by DESIGNATING AN INDIVIDUAL who is responsible for pediatric-specific activities that could include:

- Ensure that the pediatric perspective is included in the development of EMS protocols
- Ensure that fellow providers follow pediatric clinical practice guidelines
- Promote pediatric continuing education opportunities
- Oversee pediatric process improvement
- Ensure the availability of pediatric medications, equipment, and supplies
- Promote agency participation in pediatric prevention programs
- Promote agency participation in pediatric research efforts
- Liaise with the ED pediatric emergency care coordinator
- Promote family-centered care at the agency

A DESIGNATED INDIVIDUAL who coordinates pediatric emergency care need not be dedicated solely to this role; it can be an individual already in place who assumes this role as part of their existing duties. The individual may be located at your agency, county or region.

**Which one of the following statements best describes your EMS agency?** (Choose one)

- ☐ Our EMS agency does **NOT** have a designated **INDIVIDUAL** who coordinates pediatric emergency care at this time
- ☐ Our EMS agency does **NOT CURRENTLY** have a designated **INDIVIDUAL** who coordinates pediatric emergency care but we would be **INTERESTED IN ADDING** this role
- ☐ Our EMS agency does **NOT CURRENTLY** have a designated **INDIVIDUAL** who coordinates pediatric emergency care but we **HAVE A PLAN TO ADD** this role within the next year
- ☐ Our EMS agency **HAS** a designated **INDIVIDUAL** who coordinates pediatric emergency care

**You indicated that you have a designated individual who coordinates pediatric emergency care at your EMS agency.**

**How many EMS agencies does this individual oversee?**

**Is this individual:**

- located at your agency**
- located at the county level**
- located at a regional level**
- Other, please describe**

**To guide in the coordination of pediatric emergency care, specific roles are recommended for this individual. At this time, these roles do not determine achievement of this performance measure. However, these roles do support a variety of segments in the coordination of pediatric emergency care. Does a designated individual...**

(Check Yes or No for each of the following questions)

**Ensure that the pediatric perspective is included in the development of EMS protocols**

- ☐ Yes
- ☐ No

**Ensure that fellow providers follow pediatric clinical practice guidelines**

- ☐ Yes
- ☐ No

**Promote pediatric continuing education opportunities**

- ☐ Yes
- ☐ No

**Oversee pediatric process improvement**

- ☐ Yes
- ☐ No



**Ensure the availability of pediatric medications, equipment, and supplies**

☐ Yes

☐ No

**Promote agency participation in pediatric prevention programs**

☐ Yes

☐ No

**Liaise with the emergency department pediatric emergency care coordinator**

☐ Yes

☐ No

**Promote family-centered care at the agency**

☐ Yes

☐ No

**Promote agency participation in pediatric research efforts**

☐ Yes

☐ No

**Other**

☐ Yes

☐ No

**You marked ‘other’ to the previous question. Please describe the ‘other’ activity(s) performed by the designated individual who coordinates pediatric emergency care at your agency.\_\_\_\_\_**

**If you have any additional thoughts about pediatric emergency care coordination, please share them here:**

<b>EMSC 03 PERFORMANCE MEASURE</b>	The percentage of EMS agencies in the state/territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.
<b>Goal: Use of pediatric-specific equipment</b>	
<b>Level: Grantee</b>	
<b>Domain: Emergency Medical Services for Children</b>	
<b>GOAL</b>	<p>By 2020, 30% of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of '6' or more on a 0-12 scale.</p> <p>By 2023: 60% of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of '6' or more on a 0-12 scale.</p> <p>By 2026: 90% of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of '6' or more on a 0-12 scale.</p>
<b>MEASURE</b>	The percentage of EMS agencies in the state/territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.
<b>DEFINITION</b>	<p><b>Numerator:</b> The number of EMS agencies in the state/territory that score a '6' or more on a 0-12 scale.</p> <p><b>Denominator:</b> Total number of EMS agencies in the state/territory that provided data.</p> <p><b>Units:</b> 100                      <b>Text:</b> Percent</p> <p><b>EMS:</b> Emergency Medical Services</p> <p><b>EMS Agency:</b> An EMS agency is defined as an organization staffed with personnel who render medical care in response to a 911 or similar emergency call. Data will be gathered from both transporting and non-transporting agencies.</p> <p><b>IOM:</b> Institute of Medicine</p> <p><b>EMS Providers:</b> EMS providers are defined as people/persons who are certified or licensed to provide emergency medical services during a 911 or similar emergency call. There are four EMS personnel licensure levels: Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), and Paramedic. Reference the National Highway Traffic Safety Administration (NHTSA) National EMS Scope of Practice Model <a href="http://www.ems.gov/education/EMSScope.pdf">http://www.ems.gov/education/EMSScope.pdf</a></p>

**EMSC 03 PERFORMANCE MEASURE****Goal: Use of pediatric-specific equipment****Level: Grantee****Domain: Emergency Medical Services for Children**

The percentage of EMS agencies in the state/territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.

**HRSA STRATEGIC OBJECTIVE**

**Goal I:** Improve Access to Quality Health Care and Services (by improving quality) or;

**Goal II:** Strengthen the Health Workforce

**GRANTEE DATA SOURCES**

Survey of EMS agencies

**SIGNIFICANCE**

The Institute of Medicine (IOM) report “Emergency Care for Children: Growing Pains” reports that because EMS providers rarely treat seriously ill or injured pediatric patients, providers may be unable to maintain the necessary skill level to care for these patients. For example, Lammers et al reported that paramedics manage an adult respiratory patient once every 20 days compared to once every 625 days for teens, 958 days for children and once every 1,087 days for infants. As a result, skills needed to care for pediatric patients may deteriorate. Another study by Su et al found that EMS provider knowledge rose sharply after a pediatric resuscitation course, but when providers were retested six months later; their knowledge was back to baseline.

Continuing education such as the Pediatric Advance Life Support (PALS) and Pediatric Education for Prehospital Professionals (PEPP) courses are vitally important for maintaining skills and are considered an effective remedy for skill atrophy. These courses are typically only required every two years. More frequent practice of skills using different methods of skill ascertainment are necessary for EMS providers to ensure their readiness to care for pediatric patients when faced with these infrequent encounters. These courses may be counted if an in-person skills check is required as part of the course.

Demonstrating skills using EMS equipment is best done in the field on actual patients but in the case of pediatric patients this can be difficult given how infrequently EMS providers see seriously ill or injured children. Other methods for assessing skills include simulation, case scenarios and skill stations. In the absence of pediatric patient encounters in the field. There is not definitive evidence that shows that one method is more effective than another for demonstrating clinical skills. But, Miller's Model of Clinical Competence posits via the skills complexity triangle that performance assessment can be demonstrated by a combination of task training, integrated skills training, and integrated team performance. In the EMS environment this can be translated to task training at skill stations, integrated skills training during case scenarios, and integrated team performance while treating patients in the field.

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 03

The percentage of EMS agencies in the state/territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.

<b>Numerator:</b> The number of EMS agencies in the state/territory that score a '6' or more on a 0-12 scale.	
<b>Denominator:</b> Total number of EMS agencies in the state/territory that provided data.	
<b>Percent:</b>	

EMS agencies will be asked to select the frequency of each of three methods used to evaluate EMS providers' use of pediatric-specific equipment. The measure will be determined on a scale of 0 – 12. The following table shows the scoring rubric for responses. Achievement for the grantees will be reached when at least 90% of the EMS agencies in a state/territory report a combined score of '6' or higher from a combination of the methods.

	Two or more times per year	At least once per year	At least once every two years	Less frequency than once every two years
How often are your providers required to demonstrate skills via a SKILL STATION?	4	2	1	0
How often are your providers required to demonstrate skills via a SIMULATED EVENT?	4	2	1	0
How often are your providers required to demonstrate skills via a FIELD ENCOUNTER?	4	2	1	0

### *Proposed Survey Questions:*

In the next set of questions we are asking about the process that EMS agencies use to evaluate their EMS providers' skills using pediatric-specific equipment. While there are multiple processes that might be used, we are interested in the following three processes:

- At a skill station
- Within a simulated event
- During an actual pediatric patient encounter

At a **SKILL STATION** (not part of a simulated event), does your agency have a process which **REQUIRES** your EMS providers to **PHYSICALLY DEMONSTRATE** the correct use of **PEDIATRIC-SPECIFIC** equipment?

- ☐ Yes  
☐ No



**How often is this process required for your EMS providers? (Choose one)**

- ☐ Two or more times a year
- ☐ At least once a year
- ☐ At least once every two years
- ☐ Less frequently than once every two years

**Within *A SIMULATED EVENT* (such as a case scenario or a mock incident), does your agency have a process which *REQUIRES* your EMS providers to *PHYSICALLY DEMONSTRATE* the correct use of *PEDIATRIC-SPECIFIC* equipment?**

- ☐ Yes
- ☐ No

**How often is this process required for your EMS providers? (Choose one)**

- ☐ Two or more times a year
- ☐ At least once a year
- ☐ At least once every two years
- ☐ Less frequently than once every two years

**During an actual *PEDIATRIC PATIENT ENCOUNTER*, does your agency have a process which *REQUIRES* your EMS providers to be observed by a *FIELD TRAINING OFFICER* or *SUPERVISOR* to ensure the correct use of *PEDIATRIC-SPECIFIC* equipment?**

- ☐ Yes
- ☐ No

**How often is this process required for your EMS providers? (Choose one)**

- ☐ Two or more times a year
- ☐ At least once a year
- ☐ At least once every two years
- ☐ Less frequently than once every two years

**If you have any additional thoughts about skill checking, please share them here:**

<b>EMSC 04 PERFORMANCE MEASURE</b>	The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.
<b>Goal: Emergency Department Preparedness</b>	
<b>Level: Grantee</b>	
<b>Domain: Emergency Medical Services for Children</b>	
<b>GOAL</b>	By 2022: 25% of hospitals are recognized as part of a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.
<b>MEASURE</b>	The percent of hospitals recognized through a statewide, territorial or regional program that are able to stabilize and/or manage pediatric medical emergencies.
<b>DEFINITION</b>	<p><b>Numerator:</b> Number of hospitals with an ED that are recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.</p> <p><b>Denominator:</b> Total number of hospitals with an ED in the State/Territory.</p> <p><b>Units:</b> 100                      <b>Text:</b> Percent</p> <p><b>Standardized system:</b> A system of care provides a framework for collaboration across agencies, health care organizations/services, families, and youths for the purposes of improving access and expanding coordinated culturally and linguistically competent care for children and youth. The system is coordinated, accountable and includes a facility recognition program for pediatric medical emergencies. Recognizing the pediatric emergency care capabilities of hospitals supports the development of a system of care that is responsive to the needs of children and extends access to specialty resources when needed.</p> <p><b>Hospital:</b> Facilities that provide definitive medical and/or surgical assessment, diagnoses, and life and/or limb saving interventions for the ill and injured AND have an Emergency Department. Excludes Military and Indian Health Service hospitals.</p>
<b>EMSC STRATEGIC OBJECTIVE</b>	<p>Ensure the operational capacity and infrastructure to provide pediatric emergency care.</p> <p>Develop a statewide, territorial, or regional program that recognizes hospitals that are able to stabilize and/or manage pediatric medical emergencies..</p>
<b>GRANTEE DATA SOURCES</b>	This performance measure will require grantees to determine how many hospitals participate in their facility recognition program (if the state has a facility recognition program) for medical emergencies.

**EMSC 04 PERFORMANCE MEASURE****Goal: Emergency Department Preparedness****Level: Grantee****Domain: Emergency Medical Services for Children**

The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

**SIGNIFICANCE**

The performance measure emphasizes the importance of the existence of a standardized statewide, territorial, or regional system of care for children that includes a recognition program for hospitals capable of stabilizing and/or managing pediatric medical emergencies. A standardized recognition and/or designation program, based on compliance with the current published pediatric emergency/trauma care guidelines, contributes to the development of an organized system of care that assists hospitals in determining their capacity and readiness to effectively deliver pediatric emergency/trauma and specialty care.

This measure helps to ensure essential resources and protocols are available in facilities where children receive care for medical and trauma emergencies. A recognition program can also facilitate EMS transfer of children to appropriate levels of resources.

Additionally, a pediatric recognition program, that includes a verification process to identify facilities meeting specific criteria, has been shown to increase the degree to which EDs are compliant with published guidelines and improve hospital pediatric readiness statewide.

In addition, Performance Measure EMSC 04 does not require that the recognition program be mandated. Voluntary facility recognition is accepted.

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 04

The percent of hospitals with an Emergency Department (ED) that are recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

Numerator:	
Denominator:	
Percent	

**Numerator:** Number of hospitals with an ED that are recognized through a statewide, territorial or regional program that are able to stabilize and/or manage pediatric medical emergencies.

**Denominator:** Total number of hospitals with an ED in the State/Territory.

Using a scale of 0-5, please rate the degree to which your State/Territory has made towards establishing a recognition system for pediatric medical emergencies.

Element	0	1	2	3	4	5
1. Indicate the degree to which a facility recognition program for pediatric medical emergencies exists.						

0= No progress has been made towards developing a statewide, territorial, or regional program that recognizes hospitals that are able to stabilize and/or manage pediatric medical emergencies

1= Research has been conducted on the effectiveness of a pediatric medical facility recognition program (i.e., improved pediatric outcomes)  
And/or  
Developing a pediatric medical facility recognition program has been discussed by the EMSC Advisory Committee and members are working on the issue.

2= Criteria that facilities must meet in order to receive recognition as being able to stabilize and/or manage pediatric medical emergencies have been developed.

3= An implementation process/plan for the pediatric medical facility recognition program has been developed. 4= The implementation process/plan for the pediatric medical facility recognition program has been piloted.

5= At least one facility has been formally recognized through the pediatric medical facility recognition program



<b>EMSC 05 PERFORMANCE MEASURE</b>  <b>Goal: Standardized System for Pediatric Trauma</b> <b>Level: Grantee</b> <b>Domain: Emergency Medical Services for Children</b>	The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric trauma.
<b>GOAL</b>	By 2022: 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.
<b>MEASURE</b>	The percent of hospitals recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric traumatic emergencies.
<b>DEFINITION</b>	<p><b>Numerator:</b>  Number of hospitals with an ED that are recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric trauma.</p> <p><b>Denominator:</b>  Total number of hospitals with an ED in the State/Territory.</p> <p><b>Units:</b> 100                      <b>Text:</b> Percent</p> <p><b>Standardized system:</b>  A system of care provides a framework for collaboration across agencies, health care organizations/services, families, and youths for the purposes of improving access and expanding coordinated culturally and linguistically competent care for children and youth. The system is coordinated, accountable and includes a facility recognition program for pediatric traumatic injuries. Recognizing the pediatric emergency care capabilities of hospitals supports the development of a system of care that is responsive to the needs of children and extends access to specialty resources when needed.</p> <p><b>Hospital:</b> Facilities that provide definitive medical and/or surgical assessment, diagnoses, and life and/or limb saving interventions for the ill and injured AND have an Emergency Department. Excludes Military and Indian Health Service hospitals.</p>
<b>EMSC STRATEGIC OBJECTIVE</b>	<p>Ensure the operational capacity and infrastructure to provide pediatric emergency care.</p> <p>Develop a statewide, territorial, or regional standardized system that recognizes hospitals that are able to stabilize and/or manage pediatric medical emergencies and trauma.</p>

<b>EMSC 05 PERFORMANCE MEASURE</b>  <b>Goal: Standardized System for Pediatric Trauma</b> <b>Level: Grantee</b> <b>Domain: Emergency Medical Services for Children</b>	The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric trauma.
<b>GRANTEE DATA SOURCES</b>	This performance measure will require grantees to determine how many hospitals participate in their facility recognition program (if the state has a facility recognition program) for pediatric trauma.
<b>SIGNIFICANCE</b>	<p>The performance measure emphasizes the importance of the existence of a standardized statewide, territorial, or regional system of care for children that includes a recognition program for hospitals capable of stabilizing and/or managing pediatric trauma emergencies. A standardized recognition and/or designation program, based on compliance with the current published pediatric emergency/trauma care guidelines, contributes to the development of an organized system of care that assists hospitals in determining their capacity and readiness to effectively deliver pediatric emergency/trauma and specialty care.</p> <p>This measure addresses the development of a pediatric trauma recognition program. Recognition programs are based upon State-defined criteria and/or adoption of national current published pediatric emergency and trauma care consensus guidelines that address administration and coordination of pediatric care; the qualifications of physicians, nurses and other ED staff; a formal pediatric quality improvement or monitoring program; patient safety; policies, procedures, and protocols; and the availability of pediatric equipment, supplies and medications.</p> <p>Additionally, EMSC 05 does not require that the recognition program be mandated. Voluntary facility recognition is accepted. However, the preferred status is to have a program that is monitored by the State/Territory.</p>

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 05

The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric traumatic emergencies.

Numerator:	
Denominator:	
Percent	

**Numerator:** Number of hospitals with an ED recognized through a statewide, territorial or regional standardized system that have been validated/designated as being capable of stabilizing and/or managing pediatric trauma patients.

**Denominator:** Total number of hospitals with an ED in the State/Territory.

Using a scale of 0-5, please rate the degree to which your State/Territory has made towards establishing a recognition system for pediatric traumatic emergencies.

Element	0	1	2	3	4	5
1. Indicate the degree to which a standardized system for pediatric traumatic emergencies exists.						

0= No progress has been made towards developing a statewide, territorial, or regional system that recognizes hospitals that are able to stabilize and/or manage pediatric trauma emergencies

1= Research has been conducted on the effectiveness of a pediatric trauma facility recognition program (i.e., improved pediatric outcomes)  
And/or  
Developing a pediatric trauma facility recognition program has been discussed by the EMSC Advisory Committee and members are working on the issue.

2= Criteria that facilities must meet in order to receive recognition as a pediatric trauma facility have been developed.

3= An implementation process/plan for the pediatric trauma facility recognition program has been

developed. 4= The implementation process/plan for the pediatric trauma facility recognition program has been piloted.

5= At least one facility has been formally recognized through the pediatric trauma facility recognition program

<b>EMSC 06 PERFORMANCE MEASURE</b>  <b>Goal: Inter-facility transfer guidelines</b> <b>Level: Grantee</b> <b>Domain: Emergency Medical Services for Children</b>	The percent of hospitals with an Emergency Department (ED) in the State/Territory that have written inter-facility transfer guidelines that cover pediatric patients and that contain all the components as per the implementation manual.
<b>GOAL</b>	By 2021 : 90% of hospitals in the State/Territory have written inter-facility transfer guidelines that cover pediatric patients and that include specific components of transfer.
<b>MEASURE</b>	<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>



**EMSC 06 PERFORMANCE MEASURE****Goal: Inter-facility transfer guidelines****Level: Grantee****Domain: Emergency Medical Services for Children**

The percent of hospitals with an Emergency Department (ED) in the State/Territory that have written inter-facility transfer guidelines that cover pediatric patients and that contain all the components as per the implementation manual.

**DEFINITION****Numerator:**

Number of hospitals with an ED that have written inter-facility transfer guidelines that cover pediatric patients and that include specific components of transfer according to the data collected.

**Denominator:**

Total number of hospitals with an ED that provided data.

**Units:** 100**Text:** Percent**Pediatric:** Any person 0 to 18 years of age.

Inter-facility transfer guidelines: Hospital-to-hospital, including out of State/Territory, guidelines that outline procedural and administrative policies for transferring critically ill patients to facilities that provide specialized pediatric care, or pediatric services not available at the referring facility. Inter-facility guidelines do not have to specify transfers of pediatric patients only. A guideline that applies to all patients or patients of all ages would suffice, as long as it is not written only for adults.

Grantees should consult the EMSC Program representative if they have questions regarding guideline inclusion of pediatric patients. In addition, hospitals may have one document that comprises both the inter-facility transfer guideline and agreement. This is acceptable as long as the document meets the definitions for pediatric inter-facility transfer guidelines and agreements (i.e., the document contains all components of transfer).

All hospitals in the State/Territory should have guidelines to transfer to a facility capable of providing pediatric services not available at the referring facility. If a facility cannot provide a particular type of care (e.g., burn care), then it also should have transfer guidelines in place. Consult the NRC to ensure that the facility (facilities) providing the highest level of care in the state/territory is capable of definitive care for all pediatric needs. Also, note that being in compliance with EMTALA does not constitute having inter-facility transfer guidelines.

**Hospital:** Facilities that provide definitive medical and/or surgical assessment, diagnoses, and life and/or limb saving interventions for the ill and injured AND have an Emergency Department (ED). Excludes Military and Indian Health Service hospitals.

**EMSC 06 PERFORMANCE MEASURE****Goal: Inter-facility transfer guidelines****Level: Grantee****Domain: Emergency Medical Services for Children**

The percent of hospitals with an Emergency Department (ED) in the State/Territory that have written inter-facility transfer guidelines that cover pediatric patients and that contain all the components as per the implementation manual.

**EMSC STRATEGIC OBJECTIVE**

Ensure the operational capacity and infrastructure to provide pediatric emergency care

Develop written pediatric inter-facility transfer guidelines for hospitals.

**GRANTEE DATA SOURCE(S)**

- Surveys of hospitals with an emergency department.
- Hospital licensure rules and regulations

**SIGNIFICANCE**

In order to assure that children receive optimal care, timely transfer to a specialty care center is essential. Such transfers are better coordinated through the presence of inter-facility transfer agreements and guidelines.

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 06

**Performance Measure EMSC 06:** 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:

- 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).
- Process for selecting the appropriate care facility.
- 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.).
- Process for patient transfer (including obtaining informed consent).
- Plan for transfer of patient medical record
- Plan for transfer of copy of signed transport consent
- Plan for transfer of personal belongings of the patient
- Plan for provision of directions and referral institution information to family

### **Hospitals with Inter-facility Transfer Guidelines that Cover Pediatric Patients:**

You will be asked to enter a numerator and a denominator, not a percentage. **NOTE:** This measure only applies to hospitals with an Emergency Department (ED).

**NUMERATOR:** \_\_\_\_\_

Number of hospitals with an ED that have written inter-facility transfer guidelines that cover pediatric patients and that include specific components of transfer according to the data collected.

**DENOMINATOR:** \_\_\_\_\_

Total number of hospitals with an ED that provided data.

<b>EMSC 07 PERFORMANCE MEASURE</b>	The percent of hospitals with an Emergency Department (ED) in the State/Territory that have written inter-facility transfer agreements that cover pediatric patients.
<b>Goal: Inter-facility Transfer Agreements</b>	
<b>Level: Grantee</b>	
<b>Domain: Emergency Medical Services for Children</b>	
<b>GOAL</b>	By 2021: 90% of hospitals in the State/Territory have written inter-facility transfer agreements that cover pediatric patients.
<b>MEASURE</b>	The percentage of hospitals in the State/Territory that have written inter-facility transfer agreements that cover pediatric patients.
<b>DEFINITION</b>	<p><b>Numerator:</b> Number of hospitals with an ED that have written inter-facility transfer agreements that cover pediatric patients according to the data collected.</p> <p><b>Denominator:</b> Total number of hospitals with an ED that provided data.</p> <p><b>Units:</b> 100      <b>Text:</b> Percent</p> <p><b>Pediatric:</b> Any person 0 to 18 years of age.</p> <p><b>Inter-facility transfer agreements:</b> 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. Inter-facility agreements do not have to specify transfers of pediatric patients only. An agreement that applies to all patients or patients of all ages would suffice, as long as it is not written ONLY for adults. Grantees should consult the NRC if they have questions regarding inclusion of pediatric patients in established agreements.</p>
<b>EMSC STRATEGIC OBJECTIVE</b>	<p>Ensure the operational capacity and infrastructure to provide pediatric emergency care.</p> <p>Develop written pediatric inter-facility transfer agreements to facilitate timely movement of children to appropriate facilities.</p>
<b>DATA SOURCE(S) AND ISSUES</b>	<ul style="list-style-type: none"> <li>•</li> <li>• Surveys of hospitals with an emergency department.</li> <li>• Hospital licensure rules and regulations</li> </ul>
<b>SIGNIFICANCE</b>	In order to assure that children receive optimal care, timely transfer to a specialty care center is essential. Such transfers are better coordinated through the presence of inter-facility transfer agreements and guidelines.

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 07

**Performance Measure EMSC 07:** The percentage of hospitals in the State/Territory that have written inter-facility transfer agreements that cover pediatric patients.

### **Hospitals with Inter-facility Transfer Agreements that Cover Pediatric Patients:**

You will be asked to enter a numerator and a denominator, not a percentage.

**NOTE:** *This measure only applies to hospitals with an Emergency Department (ED).*

**NUMERATOR:** \_\_\_\_\_

Number of hospitals with an ED that have written inter-facility transfer agreements that cover pediatric patients according to the data collected.

**DENOMINATOR:** \_\_\_\_\_

Total number of hospitals with an ED that provided data.



<b>EMSC 08 PERFORMANCE MEASURE</b>  <b>Goal: EMSC Permanence</b> <b>Level: Grantee</b> <b>Domain: Emergency Medical Service for Children</b>	The degree to which the State/Territory has established permanence of EMSC in the State/Territory EMS system.
<b>GOAL</b>	To increase the number of States/Territories that have established permanence of EMSC in the State/Territory EMS system.
<b>MEASURE</b>	The degree to which States/Territories have established permanence of EMSC in the State/Territory EMS system.
<b>DEFINITION</b>	<p>Permanence of EMSC in a State/Territory EMS system is defined as:</p> <ul style="list-style-type: none"> <li>• The EMSC Advisory Committee has the required members as per the implementation manual.</li> <li>• The EMSC Advisory Committee meets at least four times a year.</li> <li>• Pediatric representation incorporated on the State/Territory EMS Board.</li> <li>• The State/Territory require pediatric representation on the EMS Board.</li> <li>• One full time EMSC Manager is dedicated solely to the EMSC Program.</li> </ul> <p><b>EMSC</b> The component of emergency medical care that addresses the infant, child, and adolescent needs, and the Program that strives to ensure the establishment and permanence of that component. EMSC includes emergent at the scene care as well as care received in the emergency department, surgical care, intensive care, long-term care, and rehabilitative care. EMSC extends far beyond these areas yet for the purposes of this manual this will be the extent currently being sought and reviewed.</p> <p><b>EMS system</b> The continuum of patient care from prevention to rehabilitation, including pre-hospital, dispatch communications, out-of-hospital, hospital, primary care, emergency care, inpatient, and medical home. It encompasses every injury and illness</p>
<b>EMSC STRATEGIC OBJECTIVE</b>	<p>Establish permanence of EMSC in each State/Territory EMS system.</p> <p>Establish an EMSC Advisory Committee within each State/Territory</p> <p>Incorporate pediatric representation on the State/Territory EMS Board</p> <p>Establish one full-time equivalent EMSC manager that is dedicated solely to the EMSC Program.</p>

**EMSC 08 PERFORMANCE MEASURE**

The degree to which the State/Territory has established permanence of EMSC in the State/Territory EMS system.

**Goal: EMSC Permanence**

**Level: Grantee**

**Domain: Emergency Medical Service for Children**

**GRANTEE DATA SOURCES**

- Attached data collection form to be completed by grantee.

**SIGNIFICANCE**

Establishing permanence of EMSC in the State/Territory EMS system is important for building the infrastructure of the EMSC Program and is fundamental to its success. For the EMSC Program to be sustained in the long-term and reach permanence, it is important to establish an EMSC Advisory Committee to ensure that the priorities of the EMSC Program are addressed. It is also important to establish one full time equivalent EMSC Manager whose time is devoted solely (i.e., 100%) to the EMSC Program. Moreover, by ensuring pediatric representation on the State/Territory EMS Board, pediatric issues will more likely be addressed.

## DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 08

Please indicate the elements that your grant program has established to promote permanence of EMSC in the State/Territory EMS system.

Element	Yes	No
1. The EMSC Advisory Committee has the required members as per the implementation manual.		
2. The EMSC Advisory Committee has met four or more times during the grant year.		
3. There is pediatric representation on the EMS Board.		
4. There is a State/Territory mandate requiring pediatric representation on the EMS Board.		
5. There is one full-time EMSC Manager that is dedicated solely to the EMSC Program.		

Yes = 1

No = 0

Total number of elements your grant program has established (possible 0-5 score)\_\_\_\_\_

**EMSC 09 PERFORMANCE  
MEASURE**

The degree to which the State/Territory has established permanence of EMSC in the State/Territory EMS system by integrating EMSC priorities into statutes/regulations.

**Goal: Integration of EMSC  
priorities**

**Level: Grantee**

**Domain: Emergency Medical Services  
for Children**

**GOAL**

By 2027, EMSC priorities will have been integrated into existing EMS or hospital/healthcare facility statutes/regulations.

**MEASURE**

The degree to which the State/Territory has established permanence of EMSC in the State/Territory EMS system by integrating EMSC priorities into statutes/regulations.

**DEFINITION**

**Priorities:** The priorities of the EMSC Program include the following:

1. EMS agencies are required to submit NEMSIS compliant data to the State EMS Office.
2. EMS agencies in the state/territory have a designated individual who coordinates pediatric emergency care.
3. EMS agencies in the state/territory have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.
4. The existence of a statewide, territorial, or regional standardized system that recognizes hospitals that are able to stabilize and/or manage
  - pediatric medical emergencies
  - trauma

*(continued on next page)*

**EMSC 09 PERFORMANCE MEASURE**

The degree to which the State/Territory has established permanence of EMSC in the State/Territory EMS system by integrating EMSC priorities into statutes/regulations.

**Goal: Integration of EMSC priorities**

**Level: Grantee**

**Domain: Emergency Medical Services for Children**

**DEFINITION (continued)**

5. Hospitals in the State/Territory have written inter- facility transfer guidelines that cover pediatric patients and that include the following components of transfer:
  - 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).
  - Process for selecting the appropriate care facility.
  - 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.).
  - Process for patient transfer (including obtaining informed consent).
  - Plan for transfer of patient medical record
  - Plan for transfer of copy of signed transport consent
  - Plan for transfer of personal belongings of the patient
  - Plan for provision of directions and referral institution information to family
6. Hospitals in the State/Territory have written inter-facility transfer agreements that cover pediatric patients.
7. BLS and ALS pre-hospital provider agencies in the State/Territory are required to have on-line and off-line pediatric medical direction available.
8. BLS and ALS patient care units in the State/Territory have the essential pediatric equipment and supplies, as outlined in the nationally recognized and endorsed guidelines.
9. Requirements adopted by the State/Territory that requires pediatric continuing education prior to the renewal of BLS/ALS licensing/certification.

**EMSC STRATEGIC OBJECTIVE**

Establish permanence of EMSC in each State/Territory EMS system.

**GRANTEE DATA SOURCES**

Attached data collection form to be completed by grantee.

**SIGNIFICANCE**

For the EMSC Program to be sustained in the long-term and reach permanence, it is important for the Program's priorities to be integrated into existing State/Territory mandates. Integration of the EMSC priorities into mandates will help ensure pediatric emergency care issues and/or deficiencies are being addressed State/Territory-wide for the long-term.



**DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 09**

Please indicate the elements that your grant program has established to promote the permanence of EMSC in the State/Territory EMS system by integrating EMSC priorities into statutes/regulations.

Element	Yes	No
1. There is a statute/regulation that requires the submission of NEMSIS compliant data to the state EMS office		
2. There is a statute/regulation that assures an individual is designated to coordinate pediatric emergency care.		
3. There is a statute/regulation that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.		
4. There is a statute/regulation for a hospital recognition program for identifying hospitals capable of dealing with pediatric medical emergencies.		
5. There is a statute/regulation for a hospital recognition system for identifying hospitals capable of dealing with pediatric traumatic emergencies.		
6. There is a statute/regulation for written inter-facility transfer guidelines that cover pediatric patients and include specific components of transfer.		
7. There is a statute/regulation for written inter-facility transfer agreements that cover pediatric patients.		
8. There is a statute/regulation for pediatric on-line medical direction for ALS and BLS pre-hospital provider agencies.		
9. There is a statute/regulation for pediatric off-line medical direction for ALS and BLS pre-hospital provider agencies.		
10. There is a statute/regulation for pediatric equipment for BLS and ALS patient care units.		
11. There is a statute/regulation for the adoption of requirements for continuing pediatric education prior to recertification/relicensing of BLS and ALS providers.		

Yes = 1

No = 0

Total number of elements your grant program has established (possible 0-11 score) \_\_\_\_\_



## NOTES:

[illegible]

[illegible]

