



EMERGENCY MEDICAL SERVICES FOR CHILDREN

PERFORMANCE MEASURES

**2023 Implementation Manual
for State Partnership Grantees**

Effective April 1, 2023

TABLE OF CONTENTS

Letter from HRSA	5
Federal Emergency Medical Services for Children Program	6
Introduction to Performance Measures	9
2023 National EMSC Performance Measures	9
Table 1: Summary of Changes to National EMSC Performance Measures	11
Table 2: National EMSC Performance Measures by Program Objectives	12
Federal EMSC Program Staff	14
EMSC Data Center Leadership	14
EMSC Innovation and Improvement Center Leadership	14
Methodology	15
Data Collection Information	16
Data Collection Through Surveys and Assessments	16
Survey and Assessment Type	17
Resources	19
Demonstrating Achievement of National EMSC Performance Measures	19
Organization of the Implementation Manual	20
National EMSC Performance Measures	21
National EMSC Performance Measures: ED	21
National EMSC Performance Measure 1.1	22
• Hospital Emergency Department Pediatric Readiness Recognition Program	
National EMSC Performance Measure 1.2	28
• Hospital Emergency Department Pediatric Emergency Care Coordinator	
National EMSC Performance Measure 1.3	32
• Hospital Emergency Department Weigh and Record Children's Weight in Kilograms	
National EMSC Performance Measure 1.4	36
• Hospital Emergency Department Disaster Plan	
National EMSC Performance Measures: EMS	39
National EMSC Performance Measure 2.1	39
• Prehospital Emergency Medical Services Pediatric Readiness Recognition Program	
National EMSC Performance Measure 2.2	46
• Prehospital Emergency Medical Services Pediatric Emergency Care Coordinator	
National EMSC Performance Measure 2.3	50
• Prehospital Emergency Medical Services Use of Pediatric-Specific Equipment	
National EMSC Performance Measure 2.4	53
• Prehospital Emergency Medical Services Disaster Plan	
National EMSC Performance Measures: FAN	56
National EMSC Performance Measure 3.1	56
• Family Representation on the State EMSC Advisory Committee	

National EMSC Performance Evaluations	60
Performance Evaluation I	61
• Permanence of EMSC	
Performance Evaluation II	65
• Integration of EMSC Priorities Into Statutes of Regulations	
Appendix A: Definitions	68
Appendix B: EHB Worksheets and Data Entry	72
National EMSC Performance Measure 1.1	73
National EMSC Performance Measure 1.2	74
National EMSC Performance Measure 1.3	75
National EMSC Performance Measure 1.4	75
National EMSC Performance Measure 2.1	76
National EMSC Performance Measure 2.2	77
National EMSC Performance Measure 2.3	78
National EMSC Performance Measure 2.4	79
National EMSC Performance Measure 3.1	80
Performance Evaluation I	81
Performance Evaluation II	82
Appendix C: Federal EMSC Program DGIS Forms	83
Endnotes	110

PREPARATION NOTICE

The *Emergency Medical Services for Children Performance Measures: 2023 Implementation Manual for State Partnership Grantees* was prepared by the U.S. Department of Health and Human Services' (HHS) Health Resources and Services Administration (HRSA) in collaboration with the Emergency Medical Services for Children (EMSC) Data Center (EDC) and the EMSC Innovation and Improvement Center (EIIC).

Special thanks to liaisons from the EIIC – Rachael Alter, State Partnership Domain Lead; Emily Lemiska, Director of Communications; and Andrew J. Oster, Creative Director – and Andrea Genovesi, Operations Manager at the EDC. HRSA appreciates their expertise and dedication in the execution of this manual.

ELECTRONIC ACCESS

This publication may be downloaded from emscimprovement.center/programs/partnerships/performance-measures/ or emscdatacenter.org/performance-measure-implementation-manual-and-development-process/.

DISCLAIMER NOTICE

This publication lists non-Federal resources that provide additional information. The views and content in those resources have not been formally approved by the HHS. Listing of the resources is not an endorsement by HHS or its components.

PUBLIC DOMAIN NOTICE

All material appearing in this publication is in the public domain and may be reproduced or copied without permission from HHS. Citation of the source is appreciated.

SUGGESTED CITATION

Department of Health and Human Services, Health Resources and Services Administration, *Emergency Medical Services for Children Program Performance Measures Manual*, 2023, 5600 Fishers Lane, Rockville, MD 20857.



DEPARTMENT OF HEALTH & HUMAN SERVICES
Health Resources and Services Administration

Maternal and Child Health Bureau
Rockville, Maryland 20857

June 30, 2023

Dear EMSC State Partnership Grantee,

As a recipient of the HRSA-23-063 Emergency Medical Services for Children (EMSC) State Partnership (SP) grant award, this Performance Measure Implementation Manual has been developed for you.

The EMSC SP performance measures establish a metrics of success for the EMSC SP Program with three key considerations: (1) measures that describe the policy and practice improvements advanced by the EMSC SP Program; (2) measures that tell both state and national stories of impact; and (3) measures that can be collected and reported periodically. This set of next generation performance measures are intended to unify state and jurisdictional partners to collaborate on and drive emergency system improvements for children across the U.S. The measures focus on overall Pediatric Readiness in emergency departments and prehospital EMS agencies; incorporate disaster preparedness; and elevate family centered care principles by rededicating support to the EMSC Family Advisory Network.

The definitions, descriptions, and details herein are intended to consistently guide SP grant recipients in a nationally uniform manner; and explain how the data will be collected and reported by you and the EMSC Data Center to the Health Resources and Services Administration (HRSA).

This Manual includes details related to 11 National EMSC Performance Measures; provides the fundamental and foundational elements of each performance measure, explains the evidence-based data collection methods, benchmarks, and targets by which each performance measure will be monitored and reported, and presents resources and strategies to achieve each performance measure.

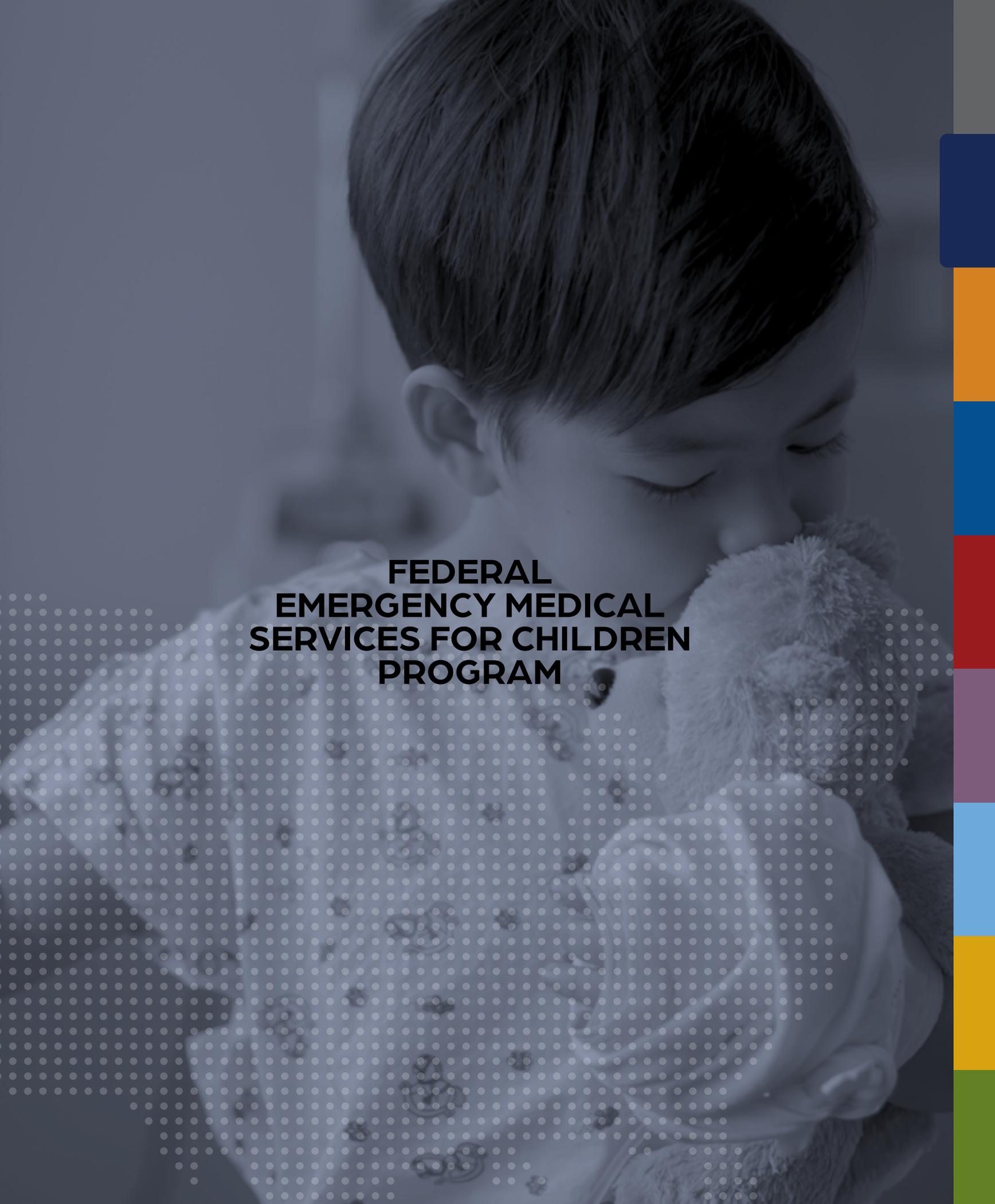
We encourage you to regularly connect with your HRSA project officers, the EMSC Data Center, and EMSC Innovation and Improvement Center Technical Assistance Liaisons for guidance and support. They are vested in your success and are available to support you.

Thank you for your dedication to improving pediatric emergency care.

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

Sara B. Kinsman, MD, PHD
Director, Division of Child, Adolescent, and Family Health
Maternal and Child Health Bureau
Health Resource and Services Administration
U.S Department of Health and Human Services



**FEDERAL
EMERGENCY MEDICAL
SERVICES 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, which is administered by the U.S. Department of Health and Human Services' (HHS) Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB). The HRSA EMSC Program, hereinafter referred to as "the Federal EMSC Program," makes grant funds available to help improve emergency medical care for critically ill and injured children in prehospital and hospital settings in all 59 states, territories, freely associated states, and the District of Columbia, hereinafter referred to as "states." The Federal EMSC Program is mandated by Congress for the expansion and improvement of emergency medical care for children. It promotes efforts to enhance the pediatric capability of existing emergency systems to reduce childhood death and disability caused by severe illness or injury.

The Federal EMSC Program seeks to raise awareness among health care professionals, administrators, and officials, as well as the general public. Compared with adults, children respond differently (physically, emotionally, and psychologically) to illness and injury and therefore require specialized emergency care. This specialized care requires having pediatric-specific champions, competencies, policies, equipment, and other resources in place to be "pediatric ready." The Federal EMSC Program aims to empower all emergency systems to be pediatric ready, most notably through two national initiatives in prehospital and hospital settings. In addition to its national efforts, the Federal EMSC Program has a heightened focus on supporting standardized systems of care that share resources and improve access to emergency care for children in tribal, territorial, and rural areas of the United States. Additional information on the history and origins of the Federal EMSC Program can be viewed on the [EMSC Innovation and Improvement Center \(EIIC\) webpage](#).

Federal EMSC Program's investments have supported the:

- Development of the National Pediatric Readiness Project (NPRP) and the National Prehospital Pediatric Readiness Project (PPRP), two initiatives that offer resources, assessments, and data to support improved emergency care for children
- Development of prehospital and acute care training and clinical resources to support improvements in direct patient care
- Establishment of evidence-based prehospital and hospital guidelines and resources that enable system-level improvements to care processes
- Formation of EMSC State Partnership Programs, national advisory committees, and collaborations to guide strategy for improving emergency care across the continuum
- Identification of national strategies for improving emergency systems of care for children, including the development of a national pediatric dashboard based on the National Emergency Medical Services Information System (NEMSIS)
- Foundational research that demonstrates the power of pediatric readiness, for example, high pediatric readiness in hospitals with an emergency department (ED) is associated with a fourfold lower mortality rate in children¹
- Infrastructure for multicenter pediatric emergency care research in both prehospital and ED settings to identify and promote improved clinical care

The EMSC State Partnership Program is one of several Federal EMSC Program investments administered by the HRSA MCHB. The EMSC State Partnership Program is designed to drive pediatric readiness across the United States through infrastructure development and systems integration.

The EMSC State Partnership Program is driven by four goals:

1. Expand the uptake of pediatric readiness in EDs by establishing a standardized pediatric readiness recognition program for hospitals, designating pediatric emergency care coordinators (PECCs) in hospitals, and ensuring staff weigh and record children's weight in kilograms.
2. Improve pediatric readiness in prehospital systems by establishing a standardized pediatric readiness recognition program for prehospital emergency medical services (EMS) agencies, increasing the number of PECCs in EMS agencies, and increasing the number of prehospital EMS agencies that have a process for skills-checking on the use of pediatric equipment.
3. Increase pediatric disaster readiness in both hospital EDs and prehospital EMS agencies by ensuring that disaster plans address the needs of children.
4. Prioritize and advance family partnership and leadership in efforts to improve EMSC systems of care, by including and engaging family representatives who can speak to the emergency care needs of children in their community while participating on State EMSC Advisory Committees.

The National EMSC Performance Measures outlined in this manual are designed to track progress toward these goals. The purpose of the manual is to provide the EMSC State Partnership Program grantees with a road map to improve the ease, accuracy, and consistency of data collection efforts for reporting on performance measures. This manual incorporates feedback received from the EICC State Partnership Advisory Committee (comprised of representatives from all nine **EMSC regions**).



Note: The contents of this manual are subject to change as Federal EMSC Program updates, details, and resources become available.

INTRODUCTION TO PERFORMANCE MEASURES

National 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 communicate to a broad constituency about agency 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 Federal EMSC Program created a systematic, uniform process of focusing and measuring program activities and promoting permanence of EMSC State Partnership Programs within states through the development of national performance measures. The National EMSC Performance Measures are a set of pediatric emergency care benchmarks to assess EMSC State Partnership Program progress at both the state and national levels. The purpose of the National EMSC Performance Measures is to document the activities and accomplishments of EMSC State Partnership Programs in improving the delivery of emergency care to children across the nation. Additionally, data from the performance measures provide guidance on programmatic changes and future areas for improvement.

Originally released in 2006, the National EMSC Performance Measures included three areas of focus:

- Ensuring operational capacity to provide pediatric emergency care
- Setting training requirements in pediatric emergency care for EMS
- Establishing permanence of EMSC within the state emergency response systems

As EMSC State Partnership Program metrics have demonstrated improvements, the National EMSC Performance Measures have undergone revisions over the years. Some performance measures have been retired, with others revised and new performance measures implemented. The performance measures released in 2023 have been redesigned to focus on overall pediatrics readiness, incorporate disaster preparedness, and provide an additional level of focus on the EMSC Family Advisory Network (FAN).

2023 NATIONAL EMSC PERFORMANCE MEASURES

The Federal EMSC Program has incorporated several changes to the National EMSC Performance Measures, as of April 2023 (see Table 1 on page 11).

Four National EMSC Performance Measures have been retired:

- Prehospital EMS agencies, NEMSIS compliant submissions (formerly EMSC 01)
- Hospital ED's ability to stabilize and/or manage pediatric trauma (formerly EMSC 05)
- Hospital ED's written interfacility transfer guidelines (formerly EMSC 06)
- Hospital ED's written interfacility transfer agreements that cover pediatric patients (formerly EMSC 07)



Note: Although these performance measures are no longer required for data collection, EMSC State Partnership Programs are still encouraged to work towards establishing state mandates and statutes related to these measures.

Three existing performance measures have been updated to continue tracking EMSC State Partnership Program activity:

- Hospital ED pediatric readiness recognition programs (EMSC 04)
- Prehospital EMS pediatric emergency care coordinator (EMSC 02)
- Prehospital EMS use of pediatric-specific equipment (EMSC 03)

Six new performance measures have been implemented to ensure the incorporation of pediatric readiness guidelines in prehospital and hospital settings:

- Hospital ED pediatric emergency care coordinator
- Hospital ED weigh and record children's weight in kilograms
- Hospital ED disaster plan
- Prehospital EMS pediatric readiness recognition program
- Prehospital EMS disaster plan
- Family Representative on State EMSC Advisory Committee

Two existing performance measures have been categorized as "performance evaluative measures" to assess program permanence and ensure mandates and statutes are in place:

- Established permanence of EMSC (EMSC 08)
- Established permanence of EMSC by integrating EMSC priorities into statutes/regulations (EMSC 09)



Note: EMSC State Partnership Programs should use these performance evaluative measures to evaluate and report on state mandates and statutes currently in place. Performance evaluative measure details and reporting requirements are outlined later in this manual.

Table 1: Summary of Changes to National EMSC Performance Measures

Program Objective	National EMSC Performance Measure Number	New/Updated Measure	Discretionary Grant Information System Performance Measure Number (If Applicable)	Topic
1	1.1	Updated	EMSC 04	Hospital Emergency Department Pediatric Readiness Recognition Program
	1.2	New	Not Applicable	Hospital Emergency Department Pediatric Emergency Care Coordinator
	1.3	New	Not Applicable	Hospital Emergency Department Weigh and Record Children's Weight in Kilograms
	1.4	New	Not Applicable	Hospital Emergency Department Disaster Plan
2	2.1	New	EMSC 10	Prehospital Emergency Medical Services Pediatric Readiness Recognition Program
	2.2	Updated	EMSC 02	Prehospital Emergency Medical Services Pediatric Emergency Care Coordinator
	2.3	Updated	EMSC 03	Prehospital Emergency Medical Services Use of Pediatric-Specific Equipment
	2.4	New	Not Applicable	Prehospital Emergency Medical Services Disaster Plan
3	3.1	New	Not Applicable	Family Representative on State EMSC Advisory Committee
Performance Evaluation I		Updated	EMSC 08	Established Permanence of EMSC
Performance Evaluation II		Updated	EMSC 09	Established Permanence of EMSC by Integrating EMSC Priorities into Statutes/Regulations

A brief description of the Federal EMSC Program's next phase of National EMSC Performance Measure evaluations is displayed in Table 2 on page 12. The performance measures have been restructured around three program objectives.

By 2027:

1. Expand the uptake of pediatric readiness in EDs
2. Improve pediatric readiness in EMS systems
3. Prioritize and advance family partnership and leadership in efforts to improve EMSC systems of care

For reference, the retired National EMSC Performance Measure number is displayed in parentheses next to the updated National EMSC Performance Measure throughout this manual. Each National EMSC Performance Measure will have a measure and established target to track performance. National baseline data are provided as an initial measurement, based on the 2020–2022 grantee performance reporting and national survey results, to assess the progress of each performance measure as targets are achieved. Three out of the nine performance measures will be reported by the grantee into the Electronic Handbook (EHB), and six performance measures will be captured through the NPRP, PPRP, and EMS for Children Survey as described in Table 2 on page 12.

Table 2: National EMSC Performance Measures by Program Objectives

National EMSC Performance Measure	Measure	National Baseline	National Target	Data Source	Data Collection Frequency*	Assessment and Survey Time Frame
Program Objective 1: By 2027, expand the uptake of pediatric readiness in EDs						
1.1 Hospital Emergency Department Pediatric Readiness Recognition Program (EMSC 04)	States/jurisdictions have a standardized pediatric readiness recognition program for EDs	2020: 29% (n = 17/58)	59%	Grantee Performance Report	Annual	N/A
1.2 Hospital Emergency Department Pediatric Emergency Care Coordinator	Hospital EDs have a designated pediatric emergency care coordinator	2021: 46% (n = 1666/3645)	75%	National Pediatric Readiness Assessment	Every 5 Years (2026)**	3–4 months
1.3 Hospital Emergency Department Weigh and Record Children’s Weight in Kilograms	Hospital EDs weigh and record children’s weight in kilograms	2021: 74% (n = 2716/3645)	84%	National Pediatric Readiness Assessment	Every 5 Years (2026)**	3–4 months
1.4 Hospital Emergency Department Disaster Plan	Hospital EDs have disaster plans that address the needs of children	2021: 47% (n = 1724/3639)	75%	National Pediatric Readiness Assessment	Every 5 Years (2026)**	3–4 months
Program Objective 2: By 2027, improve pediatric readiness in EMS systems						
2.1 Prehospital Emergency Medical Services Pediatric Readiness Recognition Program	States/jurisdictions have a standardized pediatric readiness recognition program for prehospital EMS agencies	2021: 7% (n = 4/58)	21%	Grantee Performance Report	Annual	N/A
2.2 Prehospital Emergency Medical Services Pediatric Emergency Care Coordinator (EMSC 02)	Prehospital EMS agencies have a designated pediatric emergency care coordinator	2022: 36% (n = 2934/8234)	50%	EMS for Children Survey	Annual (except for the years of the PRRP Assessment)	3–4 months
				National Prehospital Pediatric Readiness Assessment	Every 5 Years (2024)**	3–4 months
2.3 Prehospital Emergency Medical Services Use of Pediatric-Specific Equipment (EMSC 03)	Prehospital EMS agencies have a process for conducting a pediatric skills-check on the use of pediatric equipment	2022: 26% (n = 2145/8234)	46%	EMS for Children Survey	Annual (except for the years of the PRRP Assessment)	3–4 months
				National Prehospital Pediatric Readiness Assessment	Every 5 Years (2024)**	3–4 months
2.4 Prehospital Emergency Medical Services Disaster Plan	Prehospital EMS agencies have disaster plans that address the needs of children	0%	75%	National Prehospital Pediatric Readiness Assessment	Every 5 Years (2024)**	3–4 months

Table 2: National EMSC Performance Measures by Program Objectives (continued)

National EMSC Performance Measure	Measure	National Baseline	National Target	Data Source	Data Collection Frequency*	Assessment and Survey Time Frame
Program Objective 3: By 2027, prioritize and advance family partnership and leadership in efforts to improve EMSC systems of care						
3.1 Family Representation on the State EMSC Advisory Committee	States/jurisdictions have a family representative on their State EMSC Advisory Committee who represents the emergency needs of children in their community	98% (n=57/58)	100%	Grantee Performance Report	Annual	N/A
Performance Evaluation Measure	Measure		National Target Score	Data Source	Data Collection Frequency*	
Program Performance Evaluation						
I: Established Permanence of EMSC (EMSC 08)	Degree to which the state has established permanence of EMSC in the state EMS system		5	Grantee Performance Report	Annually	
II: Established Permanence of EMSC by Integrating EMSC Priorities Into Statutes/Regulations (EMSC 09)	Degree to which the state has established permanence of EMSC in the state EMS system by integrating EMSC priorities into statutes or regulations		11	Grantee Performance Report	Annually	



* Data collection frequencies are subject to change by the Federal EMSC Program

** Next assessment/survey scheduled

FEDERAL EMSC PROGRAM STAFF

Sara B. Kinsman, MD, PhD

Director, Division of Child, Adolescent, and Family Health
HHS/HRSA/MCHB

☎ 301-443-2250

✉ skinsman@hrsa.gov

Bethany D. Miller, MSW, MEd

Deputy Director, Division of Child, Adolescent, and Family Health
HHS/HRSA/MCHB

☎ 301-945-5156

✉ bmillier@hrsa.gov

Theresa Morrison-Quinata

Branch Chief, EMSC
HHS/HRSA/MCHB

☎ 301-443-1527

✉ tmorrison-quinata@hrsa.gov

Jocelyn C. Hulbert

Lead Public Health Analyst
Project Officer, State
Partnership & EIC

☎ 301-443-7436

✉ jhulbert@hrsa.gov

Patricia L. Fanflik, PhD, MFT, MS

Health Scientist
EMSC Data Center Lead

☎ 301-443-2564

✉ pfanflik@hrsa.gov

Lorah Ludwig, MA

Lead Public Health Analyst
Regional Pediatric Pandemic
Network

☎ 301-443-2560

✉ lludwig@hrsa.gov

Ellis E. Perez, MPH

Public Health Analyst/Project Officer
Project Officer, State Partnership

☎ 240-463-3955

✉ eperez@hrsa.gov

Melissa Esmero, MSW

Public Health Analyst
Project Officer, State Partnership

☎ 301-945-9389

✉ mesmero@hrsa.gov

Sofia Arias, MSHE

Management Analyst
Project Officer, State Partnership

☎ 240-472-9628

✉ sarias@hrsa.gov

Yolanda Baker

Public Health Analyst
Project Officer, State Partnership

☎ 301-710-3316

✉ ybaker@hrsa.gov

EDC LEADERSHIP

Michael Ely, MHRM

Program Director

☎ 801-585-9761

✉ michael.ely@hsc.utah.edu

T. Charlie Casper, PhD

Co-Director and Principal
Investigator

☎ 801-581-6410

✉ charlie.casper@hsc.utah.edu

Hillary Hewes, MD

Co-Director and Principal
Investigator

☎ 801-662-1000

✉ hiliary.hewes@hsc.utah.edu



For more information, visit [emscdatacenter.org](https://www.emscdatacenter.org).

EIIC LEADERSHIP

Kate Remick, MD

Co-Director and
Principal Investigator

☎ 512-393-1496

✉ kate.remick@austin.utexas.edu

Charles G. Macias, MD, MPH

Co-Director and
Principal Investigator

☎ 832-444-8340

✉ charles.macias@uhhospitals.org



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

Staffing Assignments

For a current list of EMSC State Partnership staffing assignments and contact information, visit

 [media.emscimprovement.center/documents/EMSC-SP-Grantee_Staff_Assignments.pdf](https://www.emscimprovement.center/documents/EMSC-SP-Grantee_Staff_Assignments.pdf).

METHODOLOGY



DATA COLLECTION INFORMATION

The changes to the National EMSC Performance Measures will begin with the 2023 EMSC State Partnership Program grant cycle (April 1, 2023–March 31, 2027). For each performance measure, data are required to be collected and entered into HRSA's EHB as specified in this manual. For data collection efforts that are supported by the EDC, all EMSC State Partnership Program grantees must work with their [EDC Technical Assistance \(TA\) Liaison](#) to ensure all state contact information is accurate prior to collecting data.

The Federal Program is interested in measuring change over time. However, to do this, data collection must be standardized; therefore, it is essential that all EMSC State Partnership Program grantees collect data in a similar way. Any deviation from the methods described in this manual will need approval from the [HRSA Project Officer](#).

EMSC Program Managers are to support data collection, analysis, and continuous quality improvement through monitoring and oversight of EMSC State Partnership Program activities, which include the collection of data from prehospital EMS agencies and hospital EDs. Some examples of data collection activities include, collaborating with the EDC to manage and maintain the EMSC State Partnership Program's [Contact List Management System](#) (CLMS); disseminating information to prehospital EMS agencies and hospital EDs; and providing technical assistance for pediatric readiness surveys and assessments of prehospital EMS agencies and hospital EDs.

DATA COLLECTION THROUGH SURVEYS AND ASSESSMENTS

Six of the National EMSC Performance Measures require data collection through online surveys and assessments hosted by the EDC. Refer to Table 2 on page 12 for more information on data collection frequency and survey/assessment time frames for each performance measure. Grantees are required to use the online tool hosted by the EDC and approved by the Federal EMSC Program. Grantees should consult with the EDC to ensure their state is represented. The EDC will clean, analyze, and report state performance measure data and determine response rates for the EHB. This information will be independently reviewed internally by EDC staff, including an EDC statistician. The EDC will report the state performance measure data directly to the Federal EMSC Program. The [EDC TA Liaison](#) can assist EMSC Program Managers with accessing the results of the report at any time.

SURVEY AND ASSESSMENT TYPE

NPRP Assessment

Assessment is one component in the NPRP, a national initiative to ensure that all hospitals with an ED open 24/7 have the essential guidelines and resources in place to provide effective emergency care for children. In addition to questions related to the domains listed below, the assessment will capture data for National EMSC Performance Measures 1.2, 1.3, and 1.4.

Assessment Domains

- Administration and Coordination of Care for Children in the ED
- Competencies for Physicians, Advanced Practice Providers, Nurses, and other ED Health Care Providers
- Quality Improvement and/or Performance Improvement in the ED
- Policies, Procedures, and Protocols for the ED
- Pediatric Patient and Medication Safety in the ED
- Equipment, Supplies, and Medications

Assessment Frequency: every five years; next assessment scheduled for 2026

PPRP Assessment

Assessment is one component in the PPRP, a national initiative to ensure that all prehospital EMS agencies that are *physically* located in the state, respond to public 911 or similar emergency calls, and render care, have the essential guidelines and resources in place to provide effective emergency care for children. In addition to questions related to the domains listed below, the assessment will capture data for National EMSC Performance Measures 2.2, 2.3 and 2.4.

Assessment Domains

- Education and Competencies for Providers
- Equipment and Supplies
- Interactions with Systems of Care
- Coordination of Pediatric Emergency Care
- Patient and Family-Centered Care in EMS
- Patient and Medication Safety
- Policies, Procedures, and Protocols
- Quality Improvement/Performance Improvement

Assessment Frequency: every five years; first assessment scheduled for 2024.



Note: Through a consensus-based process with subject matter experts (SMEs), the PPRP Steering Committee created the questions and response options for the PPRP Assessment.

EMS for Children Survey

A brief survey is sent to all prehospital EMS agencies that respond to public 911 or similar emergency calls, render care, and are *physically* located in a state to collect National EMSC Performance Measures 2.2 and 2.3. This survey is suspended during the years when the PPRP Assessment is conducted (the survey questions for these performance measures will be incorporated into the PPRP Assessment).

Survey Focus

- Prehospital EMS agency designation of PECCs
- Prehospital EMS agency process to evaluate EMS practitioners' skills using pediatric equipment

Survey Frequency: annually (except for the years of the PPRP Assessment).

Response Rate

For an accurate representation of and confidence in the data, an 80% assessment response rate is recommended by the Federal EMSC Program. The Federal EMSC Program strongly advises all grantees to work closely with their **EDC TA Liaison** to ensure the best possible response rate that is representative of how well the state meets the performance measures.

Assessments and Survey Time Frame

With assistance from the EDC, states are given approximately three to four months to collect data. The Federal EMSC Program will determine the assessment/survey launch and close dates, which will be communicated to EMSC Program Managers when finalized.

Please note that data collection timelines are subject to change; EMSC Program Managers will be notified in advance of any changes. EMSC Program Managers are encouraged to work with their **EDC TA Liaison** to address any concerns.

Data Collection Through Grantee Performance Report

National EMSC Performance Measures 1.1, 2.1, and 3.1, as well as both Performance Evaluation Measures I and II are self-reported by the EMSC Program Manager or designated state official. Data is reported each year in the non-competing continuation (NCC) progress report, which is submitted to the Federal EMSC Program through the EHB.

Data Ownership

All data collected by states belong to the EMSC State Partnership Program as well as to the Federal EMSC Program. The data is stored in a secure environment at the EDC's facility and HRSA's headquarters and may be used by the Federal EMSC Program for analyses.

Data Confidentiality

All data collected and warehoused by the EDC are subject to the contents of the “EMSC Data Center Best Practices” guide, which specify the type of data that can be shared publicly, used for research, and used for national and internal EMSC Program projects. The EDC staff is dedicated to protecting the names and contact information of individuals on the list of prehospital EMS agencies and hospital EDs, as well as any data that may compromise the integrity of the nation’s prehospital EMS agencies and/or hospital EDs. This personal contact information is considered Personally Identifiable Information and is kept confidential and secure. This information is stored in the CLMS and is only accessible by EMSC Program Managers and the EDC, and will not be sold or distributed. Research requests go through a rigorous examination process to ensure Institutional Review Board approval and other best data practice guidelines are followed.

Data Security

The EDC has been involved with EMSC data collection since 1995. The EDC coordinates its network infrastructure and security with University Information Technology at the University of Utah. This setup provides a robust firewall hardware, automatic network intrusion detection, and the expertise of dedicated security experts working at the university. Centralized authentication and communication over public networks are encrypted using transport layer security and/or virtual private network (VPN) technologies. Direct access to data center machines is only available for someone who is physically on premise or via a VPN client.

Security is maintained with Windows user/group domain-level security, and users (e.g., EMSC Program Managers) are required to change their passwords every 90 days. All files are protected at the user level. Database security is managed similarly with group-level access to databases, tables, and views. Furthermore, the EDC uses monitoring tools to continuously safeguard applications and servers.

DEMONSTRATING ACHIEVEMENT OF NATIONAL EMSC PERFORMANCE MEASURES

Grantees can demonstrate meeting a National EMSC Performance Measure by providing supporting documentation to the Federal EMSC Program (described under each performance measure). The Federal EMSC Program 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 the Federal EMSC Program) will be provided in the grant guidance or in a separate Federal EMSC Program memo.



Note: A letter can be requested from the Federal EMSC Program as official documentation of achieving a performance measure(s).

RESOURCES

The most recent resources and tools – such as publications, templates, scientific references, and reports – are available to support the implementation of all National EMSC Performance Measures. These materials can be found on the EIIC’s [**State Partnership Grants Performance Measures**](#) page. This page will be updated as additional resources become available.

ORGANIZATION OF THE IMPLEMENTATION MANUAL

The remainder of this manual includes the following information for each National EMSC Performance Measure:

- **Program Goal:** EMSC State Partnership Program performance goal
- **National Target:** Targets set by the Federal EMSC Program to achieve the national goal
- **State Targets:** Targets set for each State Partnership Program
- **Annual Targets:** Annual goals of the performance measure to guide states to achieve the program goal (where applicable)
- **Significance of Measure:** Explanation of the importance and rationale behind the performance measure
- **Federal EMSC Program Expectations:** Expectations determined by the Federal EMSC Program to meet the performance measure (where applicable; not included for all sections)
- **Data Collection Methods and Requirements:** A description of the approved data collection methods for each performance measure
- **Supporting Documentation:** A description of possible documentation that can be requested by the Federal EMSC Program to verify EHB entries
- **Action Plan Recommendations:** Recommended tools and strategies to assist grantees in achieving the performance measure

Additional documents related to the performance measures can be found in the appendices:

- **Definitions:** Definitions of key terms in each National EMSC Performance Measure
- **EHB Worksheet and Data Entry:** A worksheet that outlines the components that grantees will be asked to enter into the EHB
- **Discretionary Grant Information System (DGIS) Forms:** Detailed forms for National EMSC Performance Measures 1.1 and 2.1, and Performance Evaluation Measures I and II



lance

NATIONAL EMSC PERFORMANCE MEASURES



NATIONAL EMSC PERFORMANCE MEASURE 1.1

Hospital Emergency Department Pediatric Readiness Recognition Program (EMSC 04)



PROGRAM GOAL

To increase the percent of hospitals with an ED recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.

NATIONAL TARGET



of states/jurisdictions have a standardized program for EDs by 2027.

STATE TARGET



of hospitals with an ED are recognized through a statewide, territorial, or regional standardized program by 2027.

ANNUAL TARGETS

2024	30% of hospitals with an ED are recognized through a statewide, territorial, or regional standardized program as being able to stabilize and/or manage pediatric emergencies
2025	35% of hospitals with an ED are recognized through a statewide, territorial, or regional standardized program as being able to stabilize and/or manage pediatric emergencies
2026	40% of hospitals with an ED are recognized through a statewide, territorial, or regional standardized program as being able to stabilize and/or manage pediatric emergencies
2027	45% of hospitals with an ED are recognized through a statewide, territorial, or regional standardized program as being able to stabilize and/or manage pediatric emergencies

SIGNIFICANCE OF MEASURE

This National EMSC Performance Measure emphasizes the importance of the existence of a statewide, territorial, or regional standardized program of care for children that recognizes hospitals with EDs that are capable of stabilizing and/or managing pediatric emergencies. A standardized program, based on compliance with the current published pediatric emergency/trauma care guidelines, contributes to the development of an organized system of care and assists hospitals in determining their capacity and readiness to effectively deliver pediatric emergency care. This performance measure helps to ensure essential resources and protocols are in place, in facilities where children receive care for emergencies. A standardized program can also facilitate EMS transfer of children to EDs with appropriate resources. Additionally, a standardized program that includes a verification process to identify a facility's ability to meet specific criteria has been shown to increase the degree to which EDs are compliant with published guidelines and to improve hospitals' pediatric readiness statewide.²

FEDERAL EMSC PROGRAM EXPECTATIONS

Every state is required to implement a standardized program for hospitals with EDs.

All standardized programs should:

- Be monitored by a governing body, such as the State EMSC Advisory Committee
- Have an application guidance with program criteria
- Include a verification process to validate each hospital ED's capability to treat, manage, and transfer children when medically necessary to a specialized facility with the resources to care for children with severe illnesses and injuries. Verification should include a facility site review, in person and/or virtual
- Be based on the most recent joint policy statement, "[Pediatric Readiness in the Emergency Department](#)," recommendations that cover topics such as:
 - Administration and coordination of pediatric care
 - Qualifications of physicians, nurses, and other ED staff
 - Formal pediatric quality improvement or monitoring program
 - Patient safety, policies, procedures, and protocols
 - Availability of pediatric equipment, supplies, and medication
- Include, at a minimum, the following elements in the highest tier/level (effective performance period beginning April 1, 2024):
 - Weigh pediatric patients in kilograms only
 - Record pediatric patients' weights in kilograms only
 - Have a nurse and physician designated as PECCs
 - Have a disaster plan that addresses the needs of children
- Track all hospitals with an ED that are recognized by their corresponding category, recognition, or designation level
- Work with the [HRSA Project Officer](#) and have supporting documents reviewed by the Federal EMSC Program before starting a pilot program

Established standardized programs should:

- Work on increasing the number of EDs formally recognized by the program
- Aim to achieve annual targets (page 22)
- Seek guidance from the [support team](#) to explore strategies to incorporate the new elements (see Figure 1 on page 27)
- Update CLMS annually (effective performance period beginning April 1, 2024) to reflect each hospital formally recognized (the EDC will provide the Federal EMSC Program with the updated CLMS)
- Work towards completing the NPRP Assessment

Note: This performance measure does not require that the standardized program to be mandated; voluntary recognition is accepted.



DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Method: Data for this performance measure is collected through the Grantee Performance Reports in the EHB (e.g. annual NCC progress report and DGIS forms).

Data Collection Requirements: To report progress on this performance measure in the EHB, EMSC Program Managers will need to:

- Ensure that all supporting documentation for the standardized program has been submitted to and reviewed by their **HRSA Project Officer**
- Create a list of hospitals endorsed by the standardized program (including the level of recognition)
- Review the EHB data entry sheet (Appendix B on page 73) for this performance measure

SUPPORTING DOCUMENTATION

Documentation for this performance measure should be available to support EHB entries and can be requested by the Federal EMSC Program at any point. Supporting documentation includes an application package with the standardized program's guidance and criteria.



ACTION PLAN RECOMMENDATIONS

The following recommendations are in alignment with the scoring scale used to report state progress in the EHB (see the scoring scale in Appendix B on page 74). These recommendations are used as examples of best practices in developing a standardized program. Throughout all phases, states should always involve their State EMSC Advisory Committee. Forming a working group that specifically focuses on this performance measure could be beneficial.

Phase 1: Research and Planning

- Contact the [EIIC Support Specialists](#) for guidance, education, and support
- Gain an understanding of the state's hospital system and other state verification programs (i.e., trauma, stroke, time-sensitive care)
- Identify and track key partners and champions:
 - Invite partners to the table and obtain buy-in
 - Consider working with other Federal and local offices, departments, or systems (e.g. Office of Rural Health, hospital preparedness programs [HPP], trauma system)



Note: This performance measure is also in the Administration for Strategic Preparedness and Response's (ASPR) HPP grant performance measures. Collaboration with HPP recipients could provide additional support in moving this performance measure forward.

- Consider conducting a Strength, Weakness, Opportunity, and Threat (SWOT) analysis to identify enablers and barriers
- Develop a detailed action plan and timeline
- Review current standardized model programs. For a list of model programs, consult with the [HRSA Project Officer](#)

Phase 2: Development

- Evaluate potential effectiveness in the state
- Based on the review of other programs, choose characteristics that may work in the state
- Identify a lead agency/organization with the authority to define essential pediatric standards. Consider options for shared roles or leverage activities with neighboring states (joint effort)
- Develop criteria for recognition: ensure well-defined standards are based on the 2018 ["Pediatric Readiness in the Emergency Department"](#) joint policy statement. These guidelines include criteria that address:
 - Administration and coordination of pediatric care
 - Qualifications of physicians, nurses, and other ED staff
 - Formal pediatric quality improvement or monitoring program
 - Patient safety, policies, procedures, and protocols
 - Availability of pediatric equipment, supplies, and medications
- Clearly define the verification process

Phase 3: Process Plan

- Identify characteristics of the program (e.g., tiered, minimum criteria, voluntary, or regulatory)
- Obtain partner agreement on recognition criteria and program characteristics
- Develop an implementation plan and timeline for:
 - Tracking, processing applications, reviewing applications, marketing, maintaining budget, and evaluating of program
 - Determining the frequency of and cycle for when sites are reviewed (staggered, by region)
- Outline workflow for designation process:
 - Time frames
 - Individuals and agencies/organizations involved
 - Site visit agenda
 - Documents that will be requested

Phase 4: Pilot

Develop a process to include:

- The identification of institution(s) to participate in pilot
- An application for the standardized program and criteria
- A timeline
- A recognition process
- A marketing plan (e.g., social media, newsletters, statewide conferences, listservs, regional trainings, PECC networks)
- A method of recognition
- A notification strategy for sites
- A report template for site visits

Phase 5: Formal Recognition

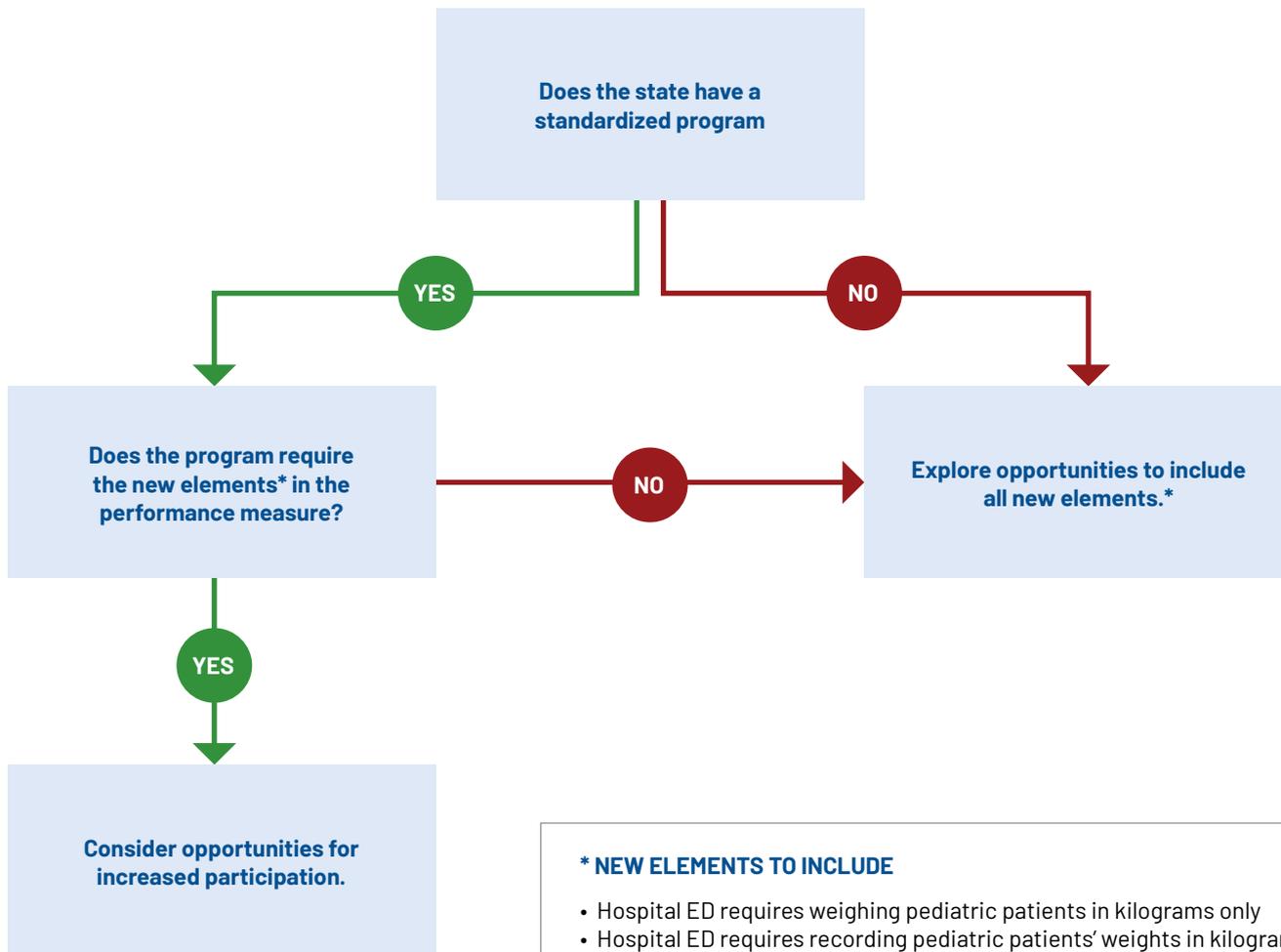
Develop a process map to include:

- Selection of participants
- Evaluation and revision of recognition process
- Initial recognition

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EIIIC website](#).

Figure1: Hospital ED Standardized Program – Incorporating New Elements



*** NEW ELEMENTS TO INCLUDE**

- Hospital ED requires weighing pediatric patients in kilograms only
- Hospital ED requires recording pediatric patients' weights in kilograms only
- Hospital ED has designated PECC(s)
- Hospital ED has a disaster plan that addresses the needs of children

NATIONAL EMSC PERFORMANCE MEASURE 1.2

Hospital Emergency Department Pediatric Emergency Care Coordinator



PROGRAM GOAL

To increase the percent of hospitals with an ED that have a designated nurse, physician, or both who coordinates pediatric emergency care.

NATIONAL TARGET



of hospitals with an ED that have a designated pediatric emergency care coordinator by 2027.

STATE TARGET



of hospitals with an ED that have a designated nurse, physician, or both who coordinates pediatric emergency care by 2027.

ANNUAL TARGETS

2024	60% of hospitals with an ED that have a designated nurse, physician, or both who coordinates pediatric emergency care
2025	65% of hospitals with an ED that have a designated nurse, physician, or both who coordinates pediatric emergency care
2026	70% of hospitals with an ED that have a designated nurse, physician, or both who coordinates pediatric emergency care
2027	75% of hospitals with an ED that have a designated nurse, physician, or both who coordinates pediatric emergency care

SIGNIFICANCE OF MEASURE

The concept of a PECC — also referred to as a “pediatric champion” — has been around since the 1980s. However, increased focus on the importance of the role is commonly attributed to the 2007 Institute of Medicine (IOM) (now the National Academy of Medicine) report *Emergency Care for Children: Growing Pains*.³ This report noted significant inadequacies in the nation’s emergency care system’s capacity to manage ill or injured children and called for both hospitals and EMS systems to identify qualified coordinators of pediatric emergency care. Specifically, the report recommended that hospitals appoint two PECCs, one nurse and one physician, to this role. The physician/nurse dyad is ideal for ensuring pediatric leadership for the organization.

The PECC role encompasses many responsibilities (thus the need for two individuals), but the individual(s) do not need to be dedicated solely to this role. There are a variety of PECC models to coordinate pediatric emergency care. Depending on an ED’s size and pediatric volume, one person may assume all responsibilities. In a larger community ED that sees a higher number of pediatric patients, one person may be in a PECC leadership position and designate pediatric readiness tasks and efforts to others. Some models have

a designated nurse, physician, or both to coordinate pediatric activities in a system, with one PECC serving multiple EDs within the county or region. Regardless of the model, the PECC(s) should be familiar with day-to-day operations of the organization.

The PECC role should:

- Be recognized and supported by hospital administration
- Include protected time
- Include a job description with duties and responsibilities specific to improving the care for the pediatric patient

Roles that the PECC is recommended to oversee in the ED include, but are not limited to:

- Ensuring that training and guidelines are available to field practitioners to maintain competence in the emergent care of children
- Promoting pediatric continuing education opportunities
- Ensuring that the pediatric perspective is included in protocol/policy development and updates
- Ensuring that providers follow pediatric clinical practice guidelines and protocols
- Overseeing/facilitating pediatric quality improvement activities
- Ensuring the availability of pediatric medications, equipment, and supplies
- Liaising/collaborating with prehospital and regional PECCs
- Promoting participation in pediatric injury prevention programs
- Promoting participation in pediatric research efforts
- Promoting family-centered care

The overall purpose of the PECC is to ensure that children receive the same quality of emergency care as adults. This position is a critical driver of pediatric readiness⁴ — the more investment an organization has in PECC activities (e.g., dedicated time, job description, etc.), the more likely the organization will achieve a high level of pediatric readiness. In the **“Resource Document: Coordination of Pediatric Emergency Care in EMS Systems,”** Remick and colleagues point out that EDs that have a nurse or physician PECC have a higher rate of compliance with national guidelines for the care of children than those that do not.⁵

FEDERAL EMSC PROGRAM EXPECTATIONS

This performance measure is considered achieved when hospital EDs report having either a nurse or physician PECC. However, as grantees advocate to integrate the critical aspects of this role, an administratively supported physician/nurse dyad is ideal for the continuity and sustainability of pediatric leadership.

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Method: The only data-collection method available at this time is through the NPRP Assessment, which is hosted and administered by the EDC. Please refer to Table 2 on page 12 for more information on data collection frequency and assessment time frame. The assessment includes this performance measure, which is of critical importance to the Federal EMSC Program because these performance measures are required for Federal reporting purposes. Performance measures are used by the Federal EMSC Program to capture grant activities that can demonstrate EMSC State Partnership Program accomplishments. The EDC will reach out to each state to review the national assessment prior to each data collection period.

Sampling: EMSC Program Managers are required to work with their **EDC TA Liaison** to update and verify the hospitals with an ED in their state's **CLMS**, including contact information for the ED nurse manager. This list populates the NPRP Assessment website.

CLMS inclusion criteria:

- All hospitals that provide definitive medical or surgical assessment, diagnoses, and be capable of providing initial treatment and stabilization for the ill and injured
- Hospitals that have an ED open 24/7

Performance measure calculation exclusion criteria:

- Military-based hospitals
- Psychiatric institutions
- Tribal and/or Indian Health Services (IHS) hospitals
- Veteran Affairs medical centers



Note: States may include these types of hospitals in the CLMS.

Data Collection Requirements: For data collection details, please review the EHB data entry sheet for this performance measure (Appendix B on page 74).

SUPPORTING DOCUMENTATION

Supporting documentation should be available to support EHB entries and may be requested by the Federal EMSC Program at any time. Supporting documentation includes the response rate report and the performance measure numerators and denominators, which will be submitted by the EDC to the Federal EMSC Program upon completion of the assessment.

ACTION PLAN RECOMMENDATIONS

Marketing and Recruitment

Developing a marketing plan can help EDs recruit nurse and physician PECCs.

Consider the following:

- Collaborate with ED nurse managers/leadership to explore approaches to emphasize the importance of this role. Explore reasons EDs do not have a designated nurse, physician, or both to coordinate pediatric emergency care.
 - Ideally, EDs should identify both a physician and a nurse to serve as a PECC. Emphasize that formal pediatric training, or a title related to pediatric care is not necessary
 - The role can be within an ED/hospital, or a single individual may be shared across a hospital network or region.
 - Work with the ED nurse manager to perform a stakeholder analysis and garner support for the position. Identify relevant people who will support the role
- Consider the creation of a PECC network within a state or region
- Raise awareness of the importance of high-quality pediatric emergency care using data, such as the 2021 NPRP Assessment to determine how an ED compares with national and local averages

Collaboration and Learning Opportunities

Here are a few examples of such opportunities:

- Pursue and encourage opportunities for additional education in pediatric emergency care (eg. Pediatric Advanced Life Support [PALS], Emergency Nursing Pediatric Course, Emergency Nurse certification)
- Collaborate on a PECC conference or other training opportunities in a hospital network or in a region, state, or territory
- Identify prehospital EMS agencies that are interested in identifying/enhancing the PECC role for potential collaboration
- Assist ED leadership in creating onboarding materials to support the PECC role
- Consider systematically evaluating pediatric patient outcomes and comparing the impact of hospitals with or without a designated nurse, physician, or both to coordinate pediatric emergency care

Standardized Program Requirements

- Ensure PECCs are included in the hospital recognition criteria

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EICC website](#).

NATIONAL EMSC PERFORMANCE MEASURE 1.3

Hospital Emergency Department

Weigh and Record Children's Weight in Kilograms



PROGRAM GOAL

To increase the percent of hospitals with an ED that weigh and record children in kilograms.

NATIONAL TARGET



of hospitals with an ED weigh and record children's weight in kilograms by 2027.

STATE TARGET



of hospitals with an ED that weigh and record children in kilograms by 2027.

ANNUAL TARGETS

2024	78% of hospitals with an ED weigh and record children in kilograms
2025	80% of hospitals with an ED weigh and record children in kilograms
2026	82% of hospitals with an ED weigh and record children in kilograms
2027	84% of hospitals with an ED weigh and record children in kilograms

SIGNIFICANCE OF MEASURE

Patient safety is a key priority for health systems. An important component of patient safety is medication safety, as more than 40% of fatal medication errors can be traced to dosing errors.^{6,7} Children are especially vulnerable when a medication is dosed in pounds versus kilograms, which can cause a potentially twofold dose. When weight is recorded incorrectly in any pediatric setting, it can trigger a host of medical errors. Many factors contribute to the increased risk of medication errors in pediatric patients, including inaccurate weight-based dosing, off-label drug use, decreased communication abilities, an inability to self-administer medications, and high vulnerability to harm in young, critically ill and injured children, particularly those with immature renal and hepatic systems.⁸

As the point of entry for many patients who require health care services, the ED is one of the top three areas for medication errors – with serious consequences.^{9,10} For example, errors that originate in the ED can follow the patient throughout a hospital visit. The environment of the ED is characterized as fast-paced, high-stress, and fraught with frequent interruptions and numerous transitions in care. These factors contribute to the high risk of medication errors in this setting.¹¹ The varied processes of obtaining, documenting, and communicating patient weights in the ED create distinct opportunities for incorrect data. Recording an accurate patient weight in kilograms has implications for various clinical tasks in and beyond the ED, including accurately prescribing medication, fluid assessments, and nutritional and obesity screenings.¹²

The United States is one of only two industrialized nations that has not fully converted to metric measurement. However, product labeling for medications with weight-based dosing utilizes the metric system (e.g., mg/kg, units/kg).¹⁰ All children, especially newborn babies, are more vulnerable to the effects of medication dosing errors, which result from incorrect weights being documented or communicated. It is absolutely vital to eliminate these errors by weighing and recording children in kilograms only, especially in EDs.¹⁰

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Method: The only data-collection method available at this time is through the NPRP Assessment, which is hosted and administered by the EDC. Please refer to Table 2 on page 12 for more information on data collection frequency and assessment time frame. The assessment includes this performance measure, which is of critical importance to the Federal EMSC Program, because these performance measures are required for Federal reporting purposes. Performance measures are used by the Federal EMSC Program to capture grant activities that can demonstrate EMSC State Partnership Program accomplishments. The EDC will reach out to each state to review the national assessment prior to each data collection period.

Sampling: EMSC Program Managers are required to work with their **EDC TA Liaison** to update and verify the hospitals with an ED in their state's **CLMS**, including contact information for the ED nurse manager. This list populates the NPRP Assessment website.

CLMS inclusion criteria:

- All hospitals that provide definitive medical or surgical assessment, diagnoses, and be capable of providing initial treatment and stabilization for the ill and injured
- Hospitals that have an ED open 24/7

Performance measure calculation exclusion criteria:

- Military-based hospitals
- Psychiatric institutions
- Tribal and/or Indian Health Services (IHS) hospitals
- Veteran Affairs medical centers



Note: States may include these types of hospitals in the CLMS.

Data Collection Requirements: For data collection details, please review the EHB data entry sheet for this performance measure (Appendix B on page 75).

SUPPORTING DOCUMENTATION

Supporting documentation should be available to support EHB entries and may be requested by the Federal EMSC Program at any time. Supporting documentation includes the response rate report and the performance measure numerators and denominators, which will be submitted by the EDC to the Federal EMSC Program upon completion of the assessment.

ACTION PLAN RECOMMENDATIONS

Planning and Outreach

This step presents an opportunity to educate and garner information from all stakeholders. It is important to explore planning strategies prior to outreach. Planning strategies can help a program better manage and integrate multiple stakeholder perspectives and needs. Engage the State EMSC Advisory Committee and other local experts in foundational planning phases prior to outreach. Spend time hearing concerns, understanding implications, and exploring strategies to overcome anticipated barriers to achieving the full benefits of this National EMSC Performance Measure.

Collaborate with the ED nurse manager and/or PECC to assess current ED practices, barriers, and opportunities for improvement as it relates to the weighing children in kilograms and to address the following:

Guidelines should be in place that:

- Ensure weight is recorded at every ED encounter; scale/gurney (electronic) is preferred over length-based tape
- Ensure the actual weight is obtained whenever possible. When it is not possible, weight should be estimated using a standard method of estimating weight in metric units (e.g., length-based tape)
- Ensure that length-based tape is used for all resuscitations
- Include family-centered care elements within guidelines (e.g. informing families prior to weighing children and medication administration about the importance of weighing children in kilograms as a method for reducing medication errors)

Infrastructure changes that could be considered:

- Utilize a scale that weighs pediatric patients in kilograms only or that can be locked in kilograms mode
- Ensure length-based tape is available and secured in resuscitation bays
- Utilize a single formulation for each medication
- Optimize emergency medical rooms to include care team alerts when weight is not recorded in the correct unit and automatic calculation of medication dosing based on weight entered in medical record

Education and Implementation:

- Suggest the nurse manager/PECC/designee conduct chart audits and provide direct feedback to care team
- Attend statewide and regional conferences
 - Present and/or have a booth with information on this performance measure
 - Highlight strategies and resources for weighing children in kilograms
- Develop training/educational content for care teams
 - Learning objectives should include proper use of length-based tape, necessity of weight measurement in cases of resuscitation, safety issues (e.g., number of reported medication errors), methods for measuring weight, institution-specific guidelines, and reinforcements that weight should not be estimated but measured
 - Identify training modality (e.g., online, in-person, staff-meetings, peer to peer, electronic medical record alerts)

Standardized Program Requirements

- Ensure the elements of weighing and recording pediatric patients' weights in kilograms only is included in the hospital recognition criteria

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EIIIC website](#).



NATIONAL EMSC PERFORMANCE MEASURE 1.4

Hospital Emergency Department Disaster Plan



PROGRAM GOAL

To increase the percent of hospitals with an ED that have a disaster plan that addresses the needs of children.

NATIONAL TARGET



of hospitals with an ED have a disaster plan that addresses the needs of children by 2027.

STATE TARGET



of hospitals with an ED have a disaster plan that addresses the needs of children by 2027.

ANNUAL TARGETS

2024	60% of hospitals with an ED have a disaster plan that addresses the needs of children
2025	65% of hospitals with an ED have a disaster plan that addresses the needs of children
2026	70% of hospitals with an ED have a disaster plan that addresses the needs of children
2027	75% of hospitals with an ED have a disaster plan that addresses the needs of children

SIGNIFICANCE OF MEASURE

Disaster preparedness and recovery for children has shown improvement over the past several years but remains incomplete and fragmented. In 2015, hospitals only met 21% of the recommendations outlined in the National Commission on Children and Disasters 2010 report.¹³ The National Academy of Medicine has issued two reports over the past 10 years, raising concerns about the care of children in the emergency medical care system, given that children are involved in most mass casualty events and there are deficiencies in the day-to-day emergency care of children.¹⁴

This performance measure emphasizes the importance of considering the unique needs of children prior to a disaster by addressing those needs in hospital disaster plans. While the performance measure outlines no specific requirements that must be included in a pediatric disaster preparedness plan, there are policies and tools to comprehensively support hospitals in planning and integrating pediatric needs.

An effective pediatric disaster preparedness plan takes into consideration several components. These considerations are outlined in the [Pediatric Disaster Preparedness Toolkit](#), which is broken down into 11 domains. The checklist is designed to support a hospital to improve pediatric disaster preparedness through a quality improvement approach. The checklist is an effective tool for all hospitals, including community hospitals, critical access hospitals, and children's hospitals.

Hospital disaster plans should consider the following topics related to the needs of children, which correspond with the 11 domains in the checklist:

- Care coordination
- Regional coalition-building
- Surge capacity
- Triage, infection control, and decontamination
- Evacuation
- Patient tracking and family reunification
- Legal and ethical considerations
- Behavioral health
- Children and youth with special health care needs
- Exercises, drills, and training
- Recovery and resiliency

Preparing in advance of a disaster to establish lines of communication with community partners and identifying additional hospital staff to support the ED (particularly during a surge of pediatric patients) are both particularly critical. Without a tested preparedness plan in place, the needs of children, who are particularly vulnerable during disasters, will not be appropriately met. This performance measure is the first step in ensuring that the unique needs of children are effectively addressed during disasters.

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Method: The only data-collection method available at this time is through the NPRP Assessment, which is hosted and administered by the EDC. Please refer to Table 2 on page 12 for more information on data collection frequency and assessment time frame. The assessment includes this performance measure, which is of critical importance to the Federal EMSC Program because these performance measures are required for Federal reporting purposes. Performance measures are used by the Federal EMSC Program to capture grant activities that can demonstrate EMSC State Partnership Program accomplishments. The EDC will reach out to each state to review the national assessment prior to each data collection period.

Sampling: EMSC Program Managers are required to work with their **EDC TA Liaison** to update and verify the hospitals with an ED in their state's **CLMS**, including contact information for the ED nurse manager. This list populates the NPRP Assessment website.

CLMS inclusion criteria:

- All hospitals that provide definitive medical or surgical assessment, diagnoses, and be capable of providing initial treatment and stabilization for the ill and injured
- Hospitals that have an ED open 24/7

Performance measure calculation exclusion criteria:

- Military-based hospitals
- Psychiatric institutions
- Tribal and/or Indian Health Services (IHS) hospitals
- Veteran Affairs medical centers



Note: States may include these types of hospitals in the CLMS.

Data Collection Requirements: For data collection details, please review the EHB data entry sheet for this performance measure (Appendix B on page 75).

SUPPORTING DOCUMENTATION

Supporting documentation should be available to support EHB entries and may be requested by the Federal EMSC Program at any time. Supporting documentation includes the response rate report and the performance measure numerators and denominators, which will be submitted by the EDC to the Federal EMSC Program upon completion of the assessment.

ACTION PLAN RECOMMENDATIONS

Discovery

Important questions to consider:

- Does the state use a statewide triage system? If not, has a statewide program been discussed?
- Are hospitals aware of and do they use the [Pediatric Disaster Preparedness Toolkit](#)?
- Are there transportation resources in the region that are specific to pediatric patients?
- Are there disaster resource centers in the state?

Collaboration Opportunities

- Connecting with the state's HPP and discuss opportunity to collaborate
- Joining regional health care coalitions (HCCs), including pediatric and disaster committees
- Reaching out to hospital-based disaster task forces or strike teams to collaborate on opportunities to address any pediatric gaps, and provide support
- Connecting with the state's [Family-to-Family Health Information Centers](#)
- Connecting with HRSA's [Pediatric Pandemic Network \(PPN\)](#), including any hub sites in the state, and identifying available resources and support
- Reaching out to ASPR Pediatric Care Disaster Centers of Excellence in the region

Standardized Program Requirement

- Ensure a disaster plan is included in the hospital recognition criteria

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EHC website](#).

NATIONAL EMSC PERFORMANCE MEASURE 2.1

Prehospital Emergency Medical Services Pediatric Readiness Recognition Program



PROGRAM GOAL

To increase the percent of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.

NATIONAL TARGET



of states/jurisdictions have a standardized program for prehospital EMS agencies by 2027.

STATE TARGET



of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies by 2027.

ANNUAL TARGETS

2024	10% of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.
2025	15% of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.
2026	20% of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.
2027	25% of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.

SIGNIFICANCE OF MEASURE

This performance measure emphasizes the importance of a statewide, territorial, or standardized program for prehospital EMS agencies capable of stabilizing and/or managing pediatric emergencies. A standardized program contributes to the development of an organized system of care, which can support improvement in prehospital EMS agency capacity and readiness to effectively deliver pediatric emergency care. This performance measure helps to ensure essential pediatric resources, trained personnel, and protocols are available in prehospital EMS agencies. A standardized program includes a verification process to identify prehospital EMS agencies meeting specific criteria.

FEDERAL EMSC PROGRAM EXPECTATIONS

Every state is required to work on a standardized program for prehospital EMS agencies.

All standardized programs should:

- Be monitored by a governing body, such as the State EMSC Advisory Committee
- Have an application guidance with program criteria
- Include a verification process to validate each prehospital EMS agency's capability for treating children. Verification is to include an agency site review, in person and/or virtual
- Be based on the joint policy statement, "[Pediatric Readiness in Emergency Medical Systems](#)" and [technical report](#) recommendations, which include:
 - Inclusion of pediatric considerations in guidelines and policies
 - Integration of EMS physician medical oversight
 - Presence of pediatric-appropriate equipment and medications
 - Availability of education and training
 - Promotion of education and awareness on the needs of children with an illness or injury
 - Inclusion of practices to reduce pediatric medication errors
 - Incorporation of statewide data submission
 - Inclusion of policies and protocols for the safe transport of children in emergency vehicles
 - Collaboration with EDs to provide pediatric readiness across the care continuum
 - Incorporation of performance improvement practices
 - Inclusion of family-centered care practices
 - Inclusion of pediatric considerations in disaster planning
- Include, at a minimum, the following in the highest tier/level (effective performance period beginning April 1, 2024):
 - Prehospital EMS agency has a designated PECC
 - Prehospital practitioners physically demonstrate the correct use of pediatric-specific equipment
 - Prehospital EMS agency has a disaster plan that addresses the needs of children
- Track all prehospital EMS agencies that are recognized by their corresponding category, recognition, or designation level
- Work with the [HRSA Project Officer](#) and have supporting documents reviewed by the Federal EMSC Program before starting a pilot program

Established standardized programs should:

- Work on increasing the number of prehospital EMS agencies that are recognized by the program
- Aim to achieve annual targets
- Seek guidance from the **support team** to explore strategies to incorporate the new elements in program requirements (see Figure 2 on page 45)
- Update CLMS annually (effective performance period beginning April 1, 2024) to reflect each prehospital EMS agency formally recognized by the program (the EDC will provide the Federal EMSC Program with the updated CLMS)
- Work towards completing the PPRP Assessment



Note: This performance measure does not require that the standardized program be mandated; voluntary recognition is accepted.

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Method: Data for this performance measure is collected through the Grantee Performance Reports in EHB (i.e., annual NCC progress report and DGIS forms).

Data Collection Requirements: To report progress on this measure in the EHB, the EMSC Program Manager will need to:

- Ensure that all supporting documentation for the recognition program has been submitted to and reviewed by their **HRSA Project Officer**
- Create a list of prehospital EMS agencies endorsed by the recognition program (including level of recognition)
- Review the EHB data entry sheet on page 76 for this performance measure

SUPPORTING DOCUMENTATION

Documentation for this performance measure should be available to support EHB entries and can be requested by the Federal EMSC Program at any point. Supporting documentation includes an application package with the standardized program's guidance and criteria.

ACTION PLAN RECOMMENDATIONS

The following recommendations are in alignment with the scoring scale used to report state progress in EHB (found in Appendix B on page 77). These recommendations are used as examples for developing a prehospital EMS agency recognition program. The examples were gleaned from states who have worked on prehospital EMS agency recognition programs and have identified lessons learned and implemented successful practices.

Phase 1: Research and Planning

- Contact the [EHC Support Specialist](#) for guidance, education, and support
- Gain an understanding of the state's EMS system and other state verification programs (e.g., trauma)
- Identify and track key partners and champions
- Invite the partners to the table and obtain buy-in
- Consider conducting a SWOT analysis to identify enablers and barriers
- Develop a detailed action plan and timeline
- Review current standardized model programs. For a list of model programs, consult with the [HRSA Project Officer](#)

Phase 2: Development

Develop a process to:

- Work on increasing the number of prehospital EMS agency PECCs (National EMSC Performance Measure 2.2): States with active standardized programs have found a higher uptake in program participation amongst agencies with PECCs. Important question to consider: Does the EMSC State Partnership Program have PECCs representing various prehospital EMS agency types and structures? (e.g., rural, urban, volunteer, paid, public, private, county, or fire-based)
- Create buy-in (i.e., who are the additional champions?): Stakeholders at this stage include both the state's EMS office and the most active PECCs/pediatric champions. Use the State EMSC Advisory Committee to determine what other stakeholders should be included at this stage (e.g., regional, or statewide EMS associations)
- Identify budget and marketing needs (e.g., certificate/frame/decal costs; graphic designer; challenge coins; etc.). Can other funding sources be identified (separate from the EMSC State Partnership Program grant)?
- Develop criteria for recognition: Ensure well-defined standards are based on the most current version of the ["Pediatric Readiness in the Emergency Medical Systems"](#) joint policy statement and the PPRP's corresponding [EMS Agency Checklist](#). Guidelines include recommendations that address the:
 - Inclusion of pediatric considerations in guidelines and policies
 - Integration of EMS physician medical oversight
 - Presence of pediatric-appropriate equipment and medications
 - Availability of education and training
 - Promotion of education and awareness on the needs of children with an illness or injury
 - Inclusion of practices to reduce pediatric medication errors
 - Incorporation of statewide data submission
 - Inclusion of policies and protocols for the safe transport of children in emergency vehicles

- Incorporation of performance improvement practices
- Inclusion of family-centered care practices
- Inclusion of pediatric considerations in disaster planning
- Clearly define the verification process
- Identify benefit to prehospital EMS agencies
 - Important questions to consider:
 - How can prehospital EMS agencies benefit from the standardized program?
 - Can resources, equipment, and/or training be provided?
 - What has the EMSC State Partnership Program provided in the past?
 - What incentives do agencies receive for being recognized (e.g., a decal, patches, certificate, or combination)?
Invest in something agencies will be proud to showcase.
 - What is the program's mission statement, objectives, or overarching goal?

Phase 3: Process Plan

- Identify characteristics of the program (e.g., tiered, minimum criteria, voluntary, or regulatory)
- Obtain a partner agreement on recognition criteria and program characteristics
- Develop an implementation plan and timeline for:
 - Tracking, processing applications, reviewing applications, marketing, maintaining budget, and evaluating the program
 - Determining the frequency and cycle of when sites are reviewed (staggered, by region)
- Outline workflow for designation process:
 - Time frames
 - Individuals and agencies/organizations involved
 - Site visit agenda
 - Documents that will be requested

Phase 4: Pilot

Develop a process to include:

- Identification of prehospital EMS agencies to participate in pilot program
- Application package, including guidance and program criteria (review [EIIIC Resources](#) to see how states have established their program criteria, including verification process, and recognition level(s))
- Application approval process and time frame (e.g., is the process always open vs. rolling out quarterly)
- Marketing plan (e.g., social media, newsletters, statewide conferences, listservs, regional trainings, PECC networks)
- Method of recognition
- Notification strategy and report template for site visits
- Make recognition attainable: consider one recognition level or a tiered structure



Note: States have varying levels of success as it relates to number of levels; it's important to discuss the pros and cons of both with the stakeholders

- Evaluate the pilot program by obtaining feedback from stakeholders and editing program documents accordingly. Important questions to consider:
 - Is the application packet too long or complicated?
 - Does the program need to be broken down into bite-sized pieces?
 - Does it need to be more user-friendly?

Phase 5: Formal Recognition

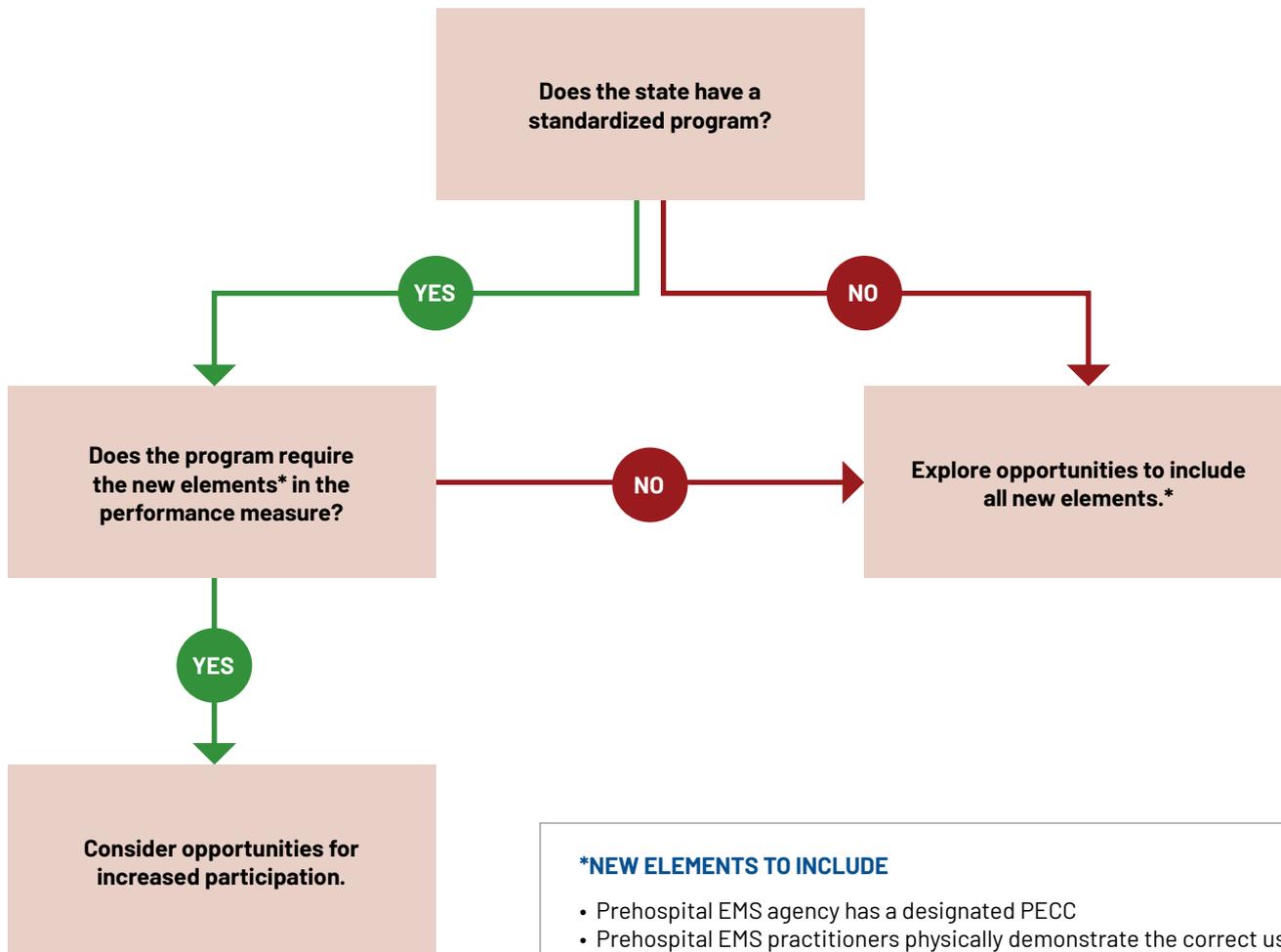
- Ensure program has all required materials (e.g., application package, program guidelines and criteria (including levels), and verification process)
- Seek formal endorsement from EMS advisory committees and stakeholder organizations
- Market program launch
- Review and revise program: create a policy and process for reviewing the program to allow for modifications as the program gains traction. It's important to leave the program open to modifications based on feedback and research
- Track prehospital EMS agencies who are recognized

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EIIIC website](#).



Figure 2: Prehospital Standardized Program – Incorporating New Elements*



***NEW ELEMENTS TO INCLUDE**

- Prehospital EMS agency has a designated PECC
- Prehospital EMS practitioners physically demonstrate the correct use of pediatric-specific equipment
- Prehospital EMS agency has a disaster plan that addresses the needs of children

NATIONAL EMSC PERFORMANCE MEASURE 2.2

Prehospital Emergency Medical Services

Pediatric Emergency Care Coordinator (EMSC 02)



PROGRAM GOAL

To increase the percent of prehospital EMS agencies in the state that have designated individual(s) who coordinates pediatric emergency care.

NATIONAL TARGET



of prehospital EMS agencies have a designated pediatric emergency care coordinator by 2027.

STATE TARGET



of prehospital EMS agencies have a designated pediatric emergency care coordinator by 2027.

ANNUAL TARGETS

2024	40% of prehospital EMS agencies have a designated pediatric emergency care coordinator
2025	43% of prehospital EMS agencies have a designated pediatric emergency care coordinator
2026	46% of prehospital EMS agencies have a designated pediatric emergency care coordinator
2027	50% of prehospital EMS agencies have a designated pediatric emergency care coordinator

SIGNIFICANCE OF MEASURE

EMS responses for pediatric patients represent 13% of total EMS responses in the United States. However, due to call volumes being highly variable, 41% of agencies in the United States report responding to fewer than two pediatric calls in a given week.¹⁵ The pediatric training requirements for EMS practitioner licensure and relicensure vary, from four to nine hours for emergency medical technicians (EMTs) and seven to 34 hours for paramedics, often combining pediatrics into a “special population” domain (e.g., geriatrics, obstetrics, etc.).¹⁶ The infrequency of seeing pediatric patients in the field means that pediatric care training does not become “hard-wired” into EMS practitioner’s “muscle memory.” Because many prehospital EMS agencies have such a limited chance to exercise their pediatric skills in real-life settings, responding EMS practitioners don’t feel confident in providing appropriate care.¹⁷ In addition, educational opportunities and even best practice guidelines are very limited in the prehospital setting, further exacerbating the quality-of-care gap between high- and low-resource settings.

As mentioned in National EMSC Performance Measure 1.2, the concept of a PECC — also referred to as a pediatric champion — has been around since the 1980s. However, increased focus on the importance of the role is commonly attributed to the 2007 IOM report ***Emergency Care for Children: Growing Pains***. This report noted significant inadequacies in the nation’s emergency care system’s capacity to manage ill or injured children. It called for both hospitals and EMS systems to identify qualified coordinators of pediatric emergency care. Potential benefits of having a PECC described in the report are:

- Identifying gaps and ensuring that resources to care for children are available
- Maintaining a relationship with the state EMSC infrastructure
- Working with state and local authorities and regional coalitions to develop strategies for addressing pediatric needs in the event of a disaster
- Establishing and maintaining offline and online pediatric EMS protocols
- Establishing quality improvement plans with pediatric-specific indicators
- Coordinating with dispatch to provide evidence-based, pre-arrival instructions for children and/or caretakers
- Reviewing on a regular basis the medications and devices available for prehospital care of children
- Liaising with hospitals to improve pediatric readiness of EDs
- Assisting in education and training of EMS practitioners in the care of children and principles of family-centered care

As learned in interviews conducted for the “PECCs in Prehospital EMS Agencies: Findings of a Multistate Learning Collaborative,” the presence of a PECC can provide increased confidence of agency personnel when caring for children and improved clinical processes.¹⁸ In ***“Resource Document: Coordination of Pediatric Emergency Care in EMS Systems,”*** Remick et al. point out that EDs that have a nurse or physician PECC have a higher rate of compliance with national guidelines for the care of children than those that do not.¹⁹ It is expected that prehospital EMS agencies that have a PECC will have similar results. It has been demonstrated that the more an organization invests in PECC activities, the more likely an organization is to achieve a high level of readiness.^{4,5}

The 2020 technical report ***“Pediatric Readiness in Emergency Medical Systems”*** highlights the importance of PECCs in prehospital EMS agencies, indicating that, “Regardless of how this role is incorporated into the structure of EMS, it is important that each agency include pediatric-specific guidance and expertise in the development and improvement of their operations.” In further support of the importance of prehospital EMS agency PECCs, recent studies “found that the availability of a PECC in an agency is associated with increased frequency of pediatric psychomotor skills evaluations.”^{20,21} Additionally, the National EMS Advisory Council published an advisory in 2020 outlining strategic goals that include the importance of establishing PECCs as an essential part of prehospital EMS agency infrastructure.²²

The PECC(s) should be a member of the prehospital EMS agency and be familiar with the day-to-day operations and needs at the agency. The PECC could be an active EMT/paramedic, but could also be in a leadership position designating pediatric tasks to others. A variety of models can be used 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 multiple individual prehospital EMS agencies within the county or region. Ideally, the PECC should

be credentialed at the highest level within the agency and is recognized and supported by administration. Administrative support includes protected time and a job description that includes duties and responsibilities specific to improving the care of pediatric patients.

Roles that the PECC is recommended to oversee at a prehospital EMS agency include, but are not limited to, the following:

- Ensuring that the pediatric perspective is included in the development of EMS protocols
- Ensuring that fellow practitioners follow pediatric clinical practice guidelines and protocols
- 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
- Interacting with ED PECCs
- Promoting family-centered care at the agency

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Methods: The only acceptable data collection methods at this time are the EMS for Children Survey and PPRP Assessment, which are hosted and administered by the EDC. Refer to Table 2 on page 12 for more information on data collection frequency and survey/assessment time frame. The survey and assessment are developed to correctly measure the data points necessary for Federal reporting purposes. The EDC will reach out to each state to review the survey and national assessment for each data collection period prior to the launch.

Sampling Frame: EMSC Program Managers are required to work with their [EDC TA Liaison](#) to update and verify the prehospital EMS agencies *physically* located in the state and contact information for the agency director/administration in their state's [CLMS](#). This list will populate the EMS for Children Survey and PPRP Assessment websites.

CLMS inclusion criteria:

- Transporting AND non-transporting prehospital EMS agencies that respond to public 911 or similar emergency calls and render care

Performance measure calculation exclusion criteria:

- Tribal and IHS prehospital EMS agencies
- Military-based prehospital EMS agencies
- Air- or water-only prehospital EMS agencies



Note: States may include these types of prehospital EMS agencies in the CLMS.

Data Collection Requirements: For data collection details, please review the EHB data entry sheet on page 77 for this performance measure.

SUPPORTING DOCUMENTATION

Supporting documentation should be available to support EHB entries and may be requested by the Federal EMSC Program at any time. Supporting documentation includes the report with the response rate and performance measure numerators and denominators, generated for the Federal EMSC Program by EDC.

ACTION PLAN RECOMMENDATIONS

Marketing and Recruitment

- Build value by:
 - Providing quarterly meetings with an education component
 - Creating a newsletter
 - Prioritizing training
 - Partnering with SMEs
- Raise awareness of the high-quality pediatric emergency care using data such as the EMS for Children Survey and/or PPRP Assessment, to determine how a prehospital EMS agency compares with national and local averages
- Embed EMSC in meetings (i.e., educate others on the value of EMSC in the state and the importance of PECCs)
- Recognize established PECCs
- Create friendly competitions

Establish and Maintain a PECC Network

- Work with prehospital EMS agencies to develop PECC onboarding materials and process
- Develop and maintain a contact list
- Communicate regularly (emails, newsletters, social media)
- Use short surveys to assess needs

Develop a PECC Education Program

- Host a statewide pediatric educational conference for PECCs

Establish and Sustain a Prehospital Standardized Program

- An important question to consider: If a prehospital EMS agency recognition program has been established, is a PECC included as a requirement?

Seek Inclusion in Prehospital EMS Agency Relicensure

- Work with the EMS office to answer this question: Can a PECC requirement be added to prehospital EMS agency relicensure requirements?

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EICC website](#).

NATIONAL EMSC PERFORMANCE MEASURE 2.3

Prehospital Emergency Medical Services

Use of Pediatric-Specific Equipment (EMSC 03)



PROGRAM GOAL

To increase the percent of prehospital EMS agencies in the state that have a process that requires prehospital practitioners to physically demonstrate the correct use of pediatric-specific equipment.

NATIONAL TARGET



of prehospital EMS agencies have a process for the correct use of pediatric-specific equipment by 2027.

STATE TARGET



of prehospital EMS agencies have a process for the correct use of pediatric-specific equipment by 2027.

ANNUAL TARGETS

2024	34% of prehospital EMS agencies have a process for the correct use of pediatric-specific equipment
2025	38% of prehospital EMS agencies have a process for the correct use of pediatric-specific equipment
2026	42% of prehospital EMS agencies have a process for the correct use of pediatric-specific equipment
2027	46% of prehospital EMS agencies have a process for the correct use of pediatric-specific equipment

SIGNIFICANCE OF MEASURE

The IOM report *Emergency Care for Children: Growing Pains*⁷ states that because prehospital practitioners rarely treat seriously ill or injured pediatric patients, practitioners may be unable to maintain the necessary skill level to care for these patients. The process and frequency of skill-checking evaluations for prehospital practitioners has long been established as important for improved patient outcomes. For example, Lammers and colleagues,²³ 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. In another study conducted by Su and team,²⁴ found that prehospital practitioner knowledge rose sharply after a pediatric resuscitation course, but when practitioners were retested six months later, their knowledge was back to baseline. Additionally, the Oregon Health & Science University's Children's Safety Initiative-EMS²⁵ performed a large national survey of prehospital practitioners that revealed important knowledge gaps related to pediatric care (pediatric airway management, assessment, and monitoring).

Continuing education courses (e.g., PALS) Pediatric Education for Prehospital Professionals (PEPP), and Emergency Pediatric Care (EPC)) are vitally important for maintaining skills and provide an opportunity to prevent skill atrophy. These courses are typically required every two years and more frequent practice of skills using different training and education methods are necessary for prehospital practitioners. Frequent practice of skills ensures readiness to care for pediatric patients when faced with a variety of infrequent patient encounters. Demonstrating skills using pediatric equipment is best done in the field on actual patients, but in the case of pediatric patients, this can be difficult given how infrequently prehospital practitioners see seriously ill or injured children. Other methods for assessing skills include simulation 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.

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Methods: The only acceptable data collection methods are the EMS for Children Survey and the PPRP Assessment, which are hosted and administered by the EDC. Refer to Table 2 on page 12 for more information on data collection frequency and survey/assessment time frame. The survey and assessment are developed to correctly measure the data points necessary for Federal reporting purposes. The EDC will reach out to each state to review the survey and national assessment for each data collection period.

Sampling Frame: EMSC Program Managers are required to work with their [EDC TA Liaison](#) to update and verify the prehospital EMS agencies *physically* located in the state and contact information for the agency director/administration in their state's [CLMS](#). This list will populate the EMS for Children Survey and PPRP Assessment websites.

CLMS inclusion criteria:

- Transporting AND non-transporting prehospital EMS agencies that respond to public 911 or similar emergency calls and render care

Performance measure calculation exclusion criteria:

- Tribal and IHS prehospital EMS agencies
- Military-based prehospital EMS agencies
- Air- or water-only prehospital EMS agencies



Note: States may include these types of prehospital EMS agencies in the CLMS.

Data Collection Requirements: For data collection details, please review the EHB data entry sheet on page 78 for this performance measure.

Prehospital EMS agencies will be asked to select the frequency of each method used to evaluate their practitioners' use of pediatric-specific equipment, which will be determined on a scale of 0 – 12. The score for an agency is calculated by summing the total points in the table (e.g., if an agency enters a four, "two or more times per year," for each of the three questions; they would score a 12, the highest score possible). This performance measure is achieved when at least 90% of the prehospital EMS agencies in a state report a total score of six or higher.

SUPPORTING DOCUMENTATION

Supporting documentation should be available to support EHB entries and may be requested by the Federal EMSC Program at any time. Supporting documentation includes the report with the response rate and performance measure numerators and denominators, generated for the Federal EMSC Program by EDC.

ACTION PLAN RECOMMENDATIONS

Planning and Outreach

- Assess prehospital EMS agencies current practices, barriers, and opportunities for improvement as it relates to the frequency of skills-checking and the inclusion of pediatric components. Hold focus groups with PECCs, training officers, and EMS medical directors
- Work with the state EMS office, EMS regional coordinators, state EMS committee/council, regional EMS/trauma advisory councils, EMS/ambulance associations, etc. to develop awareness among prehospital EMS agencies and EMS medical directors on the importance of regular pediatric skills checking
- Attend statewide and regional conferences:
 - Present and/or have a booth with information on this performance measure
 - Highlight strategies and resources for skills maintenance and reassessment
 - Encourage prehospital EMS agencies to analyze their run data to determine what types of pediatric calls they may see with more frequency

Education and Implementation

- Include twice yearly pediatric skills evaluation as a requirement in the prehospital EMS agency recognition program
- Ensure that pediatric competencies are integrated if the state has policies in place that require certain skills-check conditions for EMS practitioner certification renewals
- Provide pediatric emergency care train-the-trainer courses at regional meetings/conferences
- Coordinate regional pediatric simulation trainings
- Support local/regional educational conferences/symposiums
- Create a pediatric equipment lending program for prehospital EMS agency use

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EICC website](#).

NATIONAL EMSC PERFORMANCE MEASURE 2.4

Prehospital Emergency Medical Services Disaster Plan



PROGRAM GOAL

To increase the percent of prehospital EMS agencies that have a disaster plan that addresses the needs of children.

NATIONAL TARGET



of prehospital EMS agencies have a disaster plan that addresses the needs of children by 2027.

STATE TARGET



of prehospital EMS agencies have a disaster plan that addresses the needs of children by 2027.

ANNUAL TARGETS

2024	45% of prehospital EMS agencies have a disaster plan that addresses the needs of children
2025	55% of prehospital EMS agencies have a disaster plan that addresses the needs of children
2026	65% of prehospital EMS agencies have a disaster plan that addresses the needs of children
2027	75% of prehospital EMS agencies have a disaster plan that addresses the needs of children

SIGNIFICANCE OF MEASURE

National EMSC Performance Measure 2.4 emphasizes the importance of prehospital EMS agencies considering the unique needs of children prior to a disaster and addressing those needs in a pediatric disaster plan. Prehospital EMS agencies should have plans in place that include responding to disasters as well as everyday readiness for children.

These disaster plans should include the following considerations:

- Disaster triage systems for the unique needs of children
- Participation in regional and local exercises that include children
- Integration with regional and hospital disaster planning
- Field decontamination of children
- Patient tracking processes inclusive of children

Preparing in advance of a disaster to establish lines of communication with community partners and identifying additional staff to support the prehospital EMS agency during a disaster (particularly during a surge of pediatric patients) are both particularly critical. Without a tested preparedness plan in place, the needs of children, who are particularly vulnerable during disasters, will not be appropriately met. This performance measure is the first step in ensuring that the unique needs of children are effectively addressed during disasters.

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Methods: The only acceptable data collection method is the PPRP Assessment, which is hosted and administered by the EDC. Refer to Table 2 on page 12 for more information on data collection frequency and survey/assessment time frame. The survey and assessment are developed to correctly measure the data points necessary for Federal reporting purposes. The EDC will reach out to each state to review the national assessment for each data collection period.

Sampling Frame: EMSC Program Managers are required to work with their **EDC TA Liaison** to update and verify the prehospital EMS agencies *physically* located in the state and contact information for the agency director/administration in their state's **CLMS**. This list will populate the EMS for Children Survey and PPRP Assessment websites.

CLMS inclusion criteria:

- Transporting AND non-transporting prehospital EMS agencies that respond to public 911 or similar emergency calls and render care

Performance measure calculation exclusion criteria:

- Tribal and IHS prehospital EMS agencies
- Military-based prehospital EMS agencies
- Air- or water-only prehospital EMS agencies



Note: States may include these types of prehospital EMS agencies in the CLMS.

Data Collection Requirements: For data collection details, please review the EHB data entry sheet on page 79 for this performance measure.

SUPPORTING DOCUMENTATION

Supporting documentation should be available to support EHB entries and may be requested by the Federal EMSC Program at any time. Supporting documentation includes the report with the response rate and performance measure numerators and denominators, generated for the Federal EMSC Program by EDC.

ACTION PLAN RECOMMENDATIONS

Discovery

Important questions to consider:

- Does the state use a statewide triage system? If not, has a statewide program been discussed?
- Do EMS regions coordinate disaster training activities?
- Are there transportation resources in the region that are specific to pediatric patients?
- Are there disaster resource centers in the state?

Collaboration Opportunities

- Pursue integration with:
 - Regional HCCs – including pediatric, EMS, and disaster committees
 - Regional EMS advisory groups
- Ensure the pediatric-voice is represented on hospital-based disaster task force/strike teams (e.g., nursing, emergency medicine)
- Connect with the state's [Family-to-Family Health Information Centers](#).
- Connect with HRSA's [PPN](#), including any hub sites in the state, and identifying available resources and support
- Reach out to ASPR Pediatric Care Disaster Centers of Excellence in the region

Standardized Program

- Ensure a disaster plan is included in the prehospital EMS agency recognition criteria

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EIIIC website](#).

NATIONAL EMSC PERFORMANCE MEASURE 3.1

Family Representation on the State EMSC Advisory Committee



PROGRAM GOAL

To increase the percent of states that have a Family Representative on their State EMSC Advisory Committee who represents the emergency needs of children in their community.

NATIONAL TARGET

✓ 100%

of states have a Family Representative who represents the emergency needs of children in their community on their State EMSC Advisory Committee by 2027.

STATE TARGET



Have at least one Family Representative who represents the emergency needs of children in their community on their State EMSC Advisory Committee.

ANNUAL TARGETS

2024-2027	100% of states have a Family Representative who represents the emergency needs of children in their community on their State EMSC Advisory Committee
-----------	--

SIGNIFICANCE OF MEASURE

Patient- and family-centered care is a core component of high-quality health care.²⁶ The AAP emphasizes that the “perspectives and information provided by families, children, and young adults are essential components of high-quality decision making ... patients and families are integral partners for any health care team.”²⁷ The family and patient voice helps practitioners understand what outcomes families and patients desire, ensures that patient concerns and expectations are addressed, and allows patients to participate in shared decision-making with practitioners. Families report that in pediatric emergencies they value care that involves family members, respects family preferences, provides appropriate pain management, and is delivered in a safe and child-focused environment.²⁸ These principles can encourage collaboration across the care continuum, foster respect for the child and family interdependent dynamic, ensure that parental expertise is valued, and leads to improved patient satisfaction, safety, and quality of care, as well as provider satisfaction, and improved outcomes.^{29,30} Inclusion of patient and family representatives on the State EMSC Advisory Committee ensures that family voices and concerns are elevated and addressed as part of the emergency medical system. Family input and feedback helps ensure that EMSC State Partnership Programs provide the support and information families need to produce positive care outcomes.

FEDERAL EMSC PROGRAM EXPECTATIONS

EMSC State Partnership Programs are to prioritize and advance family partnership and leadership in efforts to improve EMSC systems of care. EMSC Program Managers are expected to create a strategic plan within six months of the start of the funding cycle (including all four years) for the Family Representative, which includes:

- Ensuring the Family Representative is engaged as an indispensable partner in the work by centering and integrating the patient and family perspective in EMSC Program efforts
- Ensuring they are on the State EMSC Advisory Committee meetings and quarterly meetings
- Providing details explaining how the Family Representative will be involved in developing and/or implementing the strategic plan, including the goals and objectives of the program. Example activities include:
 - Contributing to educational content
 - Reviewing materials/handouts/website
 - Presenting at events and/or trainings

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Methods: Data for this performance measure is collected through the Grantee Performance Reports in the EHB (i.e., annual NCC progress report and DGIS forms).

Data Collection Requirements: To report progress on this performance measure in the EHB, EMSC Program Managers will need to:

- Ensure that all supporting documentation has been submitted to and reviewed by their **HRSA Project Officer**
- Work with their HRSA Project Officer on which element best describes the state's current status. The data entry for each question is 1 for "Yes" or 0 for "No"
- Review the EHB data entry sheet on page 80 for this performance measure

SUPPORTING DOCUMENTATION

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

- Meeting attendance sign-in sheet
- Meeting agendas showing participation of the Family Representative
- Copy of detailed strategic plan
- Log of activities in which the Family Representative is involved

ACTION PLAN RECOMMENDATIONS

The Family Representative is one of eight required core members of all State EMSC Advisory Committees and is a member of the national Family Advisory Network (FAN). The State EMSC Advisory Committee is required to include at least one Family Representative who can advocate for the emergency care needs of children. Ideally, the Family Representative(s) should have some experience utilizing the emergency medical system for their child or young adult. Any parent, legal guardian, caregiver, current or former EMS practitioner, clinician, or other person with an interest in improving pediatric emergency care can serve as a Family Representative. There is no requirement for formal training or a specific knowledge base. They should be willing to familiarize themselves with the EMSC State Partnership Program and the local, state, and national EMS and hospital ED systems. They should also be willing to advocate to reduce disparities and improve health equity, especially in vulnerable and disadvantaged populations. The following recommendations are strategies for including a Family Representative in the state.

Recruiting Family Representative(s)

States without an identified or engaged Family Representative should notify EIIIC's **Advocacy Domain** FAN support staff. The FAN support staff can assist in identifying and connecting with key family-engaged entities in the state that may support outreach.

Engaging Family Representative(s) in State and National EMSC Program Activities (FAN Strategic Plan)

It is required that each EMSC State Partnership Program, in collaboration with their Family Representative, create a strategic plan outlining how the Family Representative will be integrated as an indispensable partner in program activities. The strategic plan should address all four grant years and should outline, at a minimum, which activities the state's Family Representative(s) will contribute and in what ways the family perspective will be centered in these efforts.

The strategic plan should be reviewed annually and updated as needed. The strategic plan should include:

- A communication plan – frequency and mode of communication (e.g., in-person, virtual, or a combination) between the EMSC Program Manager and Family Representative
- A meeting plan – outline indicating which meetings are required for the Family Representative to attend
- An engagement plan – summary of activities and projects to which the Family Representative will contribute

The Family Representative can assist the EMSC State Partnership Program in related activities, such as:

- Meeting the EMSC State Partnership Program goals and objectives
- Educating decision-makers regarding EMSC State Partnership Program initiatives and priorities
- Creating and disseminating pediatric emergency care educational content
- Reviewing fliers/handouts/websites to ensure family concerns are not overlooked
- Representing the EMSC State Partnership Program at meetings, events, or trainings

Family Representatives will also have opportunities to contribute to national EMSC initiatives and network across states with other members of the FAN. Interested Family Representatives are invited to participate in monthly FAN steering committee meetings to help shape the output of the FAN as a national network. All Family Representatives are encouraged to participate in the national meeting (typically three per year virtual with a fourth in-person), with the purpose of increasing Family Representatives' knowledge of the program and building the skills needed to meet program responsibilities. Additionally, meetings are intended to further the work of the FAN steering committee, such as developing resources in collaboration with EIIIC and supporting EMSC State Partnership Programs in National EMSC Performance Measure efforts.

Retaining Family Representative(s)

As experts in the emergency needs of children in communities across the country, Family Representatives bring a variety of assets to the EMSC State Partnership Program. In addition to their personal experiences, Family Representatives may also bring a wealth of professional experience such as EMS practitioners, clinicians, educators, clergy, and public service providers. Retention of Family Representatives may be enhanced by communicating regularly, ensuring projects that align with their interests, providing policies and job descriptions, and recognizing the important work each has contributed.³¹

Support

Contact the [support team](#) for guidance and education in developing a family representable recruitment and/or retention strategy, a strategic plan, and a FAN-related quality improvement project or access resources on the [EIIIC website](#).

A young girl with dark hair, wearing a light-colored knit sweater, is seated in a wheelchair and smiling warmly at the camera. The image is overlaid with a semi-transparent blue filter. A decorative pattern of white dots is arranged in a grid across the lower half of the page. On the right side, there is a vertical bar with several colored rectangular segments: grey, dark blue, orange, blue, red, purple, light blue, yellow, and green.

**NATIONAL EMSC
PERFORMANCE
EVALUATIONS**

PERFORMANCE EVALUATION I:

Permanence of EMSC (EMSC 08)



PROGRAM GOAL

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

NATIONAL TARGET

 **100%**

of state/territories have established permanence of EMSC in the state EMS system by 2027.

EMSC STRATEGIC OBJECTIVES

- Establish permanence of EMSC in each state EMS system
- Establish a State EMSC Advisory Committee within each state
- Incorporate pediatric representation on the State EMS Board
- Establish a full-time equivalent EMSC Program Manager who is dedicated solely to the EMSC State Partnership Program

SIGNIFICANCE OF MEASURE

Establishing permanence of EMSC in the state EMS system is important for building the infrastructure of the EMSC State Partnership Program and is fundamental to its success. For the Federal EMSC Program to be sustained in the long-term and reach permanence, it is important to establish a State EMSC Advisory Committee to ensure that the priorities of the Federal EMSC Program are addressed. It is also important to establish one full-time equivalent EMSC Program Manager whose time is devoted solely (i.e., 100%) to the EMSC State Partnership Program. Moreover, by ensuring pediatric representation on the State EMS Board, pediatric issues will more likely be addressed. A State EMSC Advisory Committee is also important to assist EMSC grantees in meeting program goals and objectives. Members of a State EMSC Advisory Committee can assist with strategic planning, obtaining buy-in from state/jurisdiction leadership to effect system change, and ensuring that family issues are not overlooked.



FEDERAL EMSC PROGRAM EXPECTATIONS

- The State EMSC Advisory Committee must meet either face-to-face or by conference call at least four times each grant year
- The State EMSC Advisory Committee is to be comprised of the following required eight core members:
 1. Nurse with emergency pediatric experience
 2. Physician with pediatric training
 3. Emergency physician
 4. EMT or paramedic who is currently a practicing, ground-level prehospital practitioner
 5. State EMS office representative
 6. EMSC Project Director
 7. EMSC Program Manager
 8. 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, the Federal EMSC Program has also identified additional committee members who could benefit the program. These representatives are strongly encouraged (but not required) to play a role on the State EMSC Advisory Committee:

- Hospital association representative
- State trauma manager
- EMS training manager
- Tribal EMS representative
- EMS data manager
- ED 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
- MCH Title V representative (strongly encouraged)
- Highway safety representative
- Legislator

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Methods: Data for this performance measure is collected through the Grantee Performance Reports in the EHB (i.e., annual NCC progress report and DGIS forms).

Data Collection Requirements: To report progress on this performance measure in the EHB, the EMSC Program Manager will need to:

- Ensure that all supporting documentation has been submitted to and reviewed by their **HRSA Project Officer**
- Work with their HRSA Project Officer on which of the five elements best describes the current status. The data entry for each question is simply 1 for “Yes” or 0 for “No”
- Review the EHB data entry sheet on page 81 for data entry guidance on this performance measure

SUPPORTING DOCUMENTATION

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

- Meeting attendance sign-in sheet
- Meeting agendas
- Meeting minutes/notes
- Identification (name, title) of the pediatric representative on the state EMS Board and EMSC Program Manager
- Copy of the state mandate identifying the pediatric representative is a required member of the State EMSC Advisory Committee or similar body
- Copies of the EMSC Program Manager job description and biographical sketch

ACTION PLAN RECOMMENDATIONS

State EMSC Advisory Committee

The State EMSC Advisory Committee plays a pivotal role in ensuring that the state meets all the National EMSC Performance Measures. While having a State EMSC Advisory Committee that meets regularly is a requirement of the EMSC State Partnership Program, building a strong and effective State EMSC Advisory Committee that is passionate about making change and improving care for children should be a priority. The following list can help the EMSC Program Managers get started.

- Review the required core members with the project director and discuss individuals who may fit those roles; ensure those selected can participate in regular meetings
- Consider implementing staggered membership terms limits (e.g., two or three years as opposed to every year)
- Review available best practices for running effective meetings
- Set regular meeting times (no less than quarterly)
- Utilize the State EMSC Advisory Committee members as experts with the experience needed to help in the implementation of National EMSC Performance Measures — this variety of representation is a strength to the program

Pediatric Representation on the EMS Board

A pediatric representative can be defined by each state. Examples of pediatric representatives include, but are not limited to the following:

- State EMSC Advisory Committee chairperson
- Pediatrician
- Pediatric critical care physician
- Board-certified pediatric emergency physician
- Registered nurse with pediatric interests
- EMT or paramedic with pediatric interests
- Parent or Family Representative

Some specific strategic planning activities program managers may undertake to effect system change and work toward having a pediatric representative on the State EMS Board include:

- Determine the feasibility of the state to incorporate pediatric representation on the state EMS Board
- Engage the State EMSC Advisory Committee to discuss the barriers and challenges to incorporating pediatric representation on the state EMS Board, brainstorm solutions
- Engage the EMS Board in a discussion regarding the addition of a pediatric position and present relevant data (e.g., census data on the percentage of children in the state, the number of children that enter the EMS system annually, National EMSC Performance Measures, etc.) and other national or state EMSC initiatives (e.g., NPRP and PPRP)
- Engage pediatric champions in the state (e.g., state pediatric leaders or family advocates) to assist in making a case for a pediatric representative

Full-Time EMSC Program Manager

Some specific strategic planning activities program managers may undertake to effect system change and work toward having a full-time (FTE) EMSC Program Manager:

- Determine the feasibility in establishing a state-funded FTE EMSC Program Manager
- Discuss the barriers and challenges of establishing an FTE EMSC Program Manager position who is dedicated solely to the EMSC State Partnership Program and brainstorm solutions

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EICC website](#).

PERFORMANCE EVALUATION II:

Integration of EMSC Priorities Into Statutes or Regulations (EMSC 09)



PROGRAM GOAL

To increase integration of EMSC priorities into existing prehospital or hospital statutes/regulations/rules.

NATIONAL TARGET



100%

of states/jurisdictions have established permanence of EMSC in the state EMS system by integrating EMSC priorities into statutes/regulations/rules by 2027.

SIGNIFICANCE OF MEASURE

It is important for the program's priorities to be integrated into existing state mandates so that the Federal EMSC Program will be sustained in the long-term and reach permanence in states (and therefore nationally). Integration of the EMSC priorities into mandates will help ensure pediatric emergency care issues and/or deficiencies are being addressed statewide for the long-term.

FEDERAL EMSC PROGRAM EXPECTATIONS

The priorities of the EMSC State Partnership Program are to include the following:

- Prehospital EMS agencies are required to submit NEMSIS-compliant version 3.x data to the state EMS office
- Prehospital EMS agencies in the state have a designated individual(s) who coordinates pediatric emergency care
- Prehospital EMS agencies in the state have a process that requires prehospital practitioners to physically demonstrate the correct use of pediatric-specific equipment
- The existence of a statewide, territorial, or regional standardized program that recognizes hospitals that are able to stabilize and/or manage pediatric emergencies
- Hospitals in the state have written interfacility transfer guidelines that cover pediatric patients and 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

- Hospitals in the state have written interfacility transfer agreements that cover pediatric patients
- BLS and ALS prehospital EMS agencies in the state have online and off-line pediatric medical direction available
- BLS and ALS patient care units in the state have the essential pediatric equipment and supplies, as outlined in the nationally recognized and endorsed guidelines
- Requirements adopted by the state for pediatric continuing education prior to the renewal of BLS/ALS licensing/certification

DATA COLLECTION METHODS AND REQUIREMENTS

Data Collection Methods: Data for this performance measure is collected through the Grantee Performance Reports in the EHB (i.e., annual NCC progress report and DGIS forms).

Data Collection Requirements: To report progress on this performance measure in the EHB, the EMSC Program Manager will need to:

- Ensure that all supporting documentation has been submitted to and reviewed by their **HRSA Project Officer**
- Work with their HRSA Project Officer on which of the eleven elements best describes the current status. The data entry for each question is simply 1 for “Yes” or 0 for “No”
- Review the EHB data entry sheet on page 82 for this performance measure

SUPPORTING DOCUMENTATION

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

- Copies of statutes, regulations, or other structural framework (e.g., policies)
- State requirements for each priority

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.

ACTION PLAN RECOMMENDATIONS

Some specific strategic planning activities EMSC Program Managers may undertake to effect system changes in the state include:

- Become familiar with the processes and schedules for the legislative and rule-making procedures in the state, especially as they relate to prehospital and hospital regulations. Knowing the procedural rules is critical to success
- Review and become familiar with existing state statutes, regulations, and policies
- Discuss gaps in the integration of EMSC priorities with the State EMSC Advisory Committee
- Determine the feasibility of integrating the EMSC priorities into existing statutes or regulations
- Engage the Family Representative(s) to brainstorm ideas for educating the public about EMSC priorities to increase advocacy

- Educate and inform state legislators and officials on EMSC priorities and their importance to their own communities. 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:
 - Provide factual information on a particular topic to help policymakers or the general public form an independent opinion
 - Provide factual testimony or technical advice and assistance to a committee or subcommittee when invited to do so
 - Communicate with government officials for purposes other than influencing legislation, such as commenting on regulations
- Contact EMSC Program Managers in other states who have met the performance measure to discuss how they overcome challenges (current state EMSC regulations and policies can be found on the [EIIIC website](#))
- Engage state legislators and officials, as well as prehospital and hospital stakeholders, to discuss the barriers and challenges to integrating EMSC priorities into existing statutes or regulations and facilitating solutions with these groups
- Work with professional organizations and other pediatric advocates to engage in 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 Nurses Association
 - Family Voices
 - National Association of School Nurses
 - National Association of EMS Physicians

Support

Contact the [support team](#) for guidance and education in developing/tailoring a strategic plan or a quality improvement project related to this performance measure or access resources on the [EIIIC website](#).

The image shows a library interior with bookshelves on the left and a large window on the right. The scene is overlaid with a semi-transparent yellow grid pattern. The text "Appendix A Definitions" is centered in the middle of the image.

Appendix A Definitions

Contact List Management System (CLMS): Is a secure online system created and managed by the EMSC Data Center (EDC) for EMSC State Partnership Programs. It serves as a centralized national repository for prehospital and hospital ED contact information. It was developed to reduce burden on EMSC Program Managers and more efficiently manage contact information for prehospital EMS agency and hospital EDs needed for data collection. The CLMS is always available so managers can easily update contact information regarding new contact people or new or closing prehospital EMS agencies and hospital.

Discretionary Grant Information System (DGIS): Available through the HRSA Electronic Handbooks (EHBs), the DGIS is where recipients will report annual performance data to HRSA. Award recipients are required to submit a DGIS Performance Report annually. Deadlines vary and are specified by the Federal EMSC Program.

Emergency Department (ED): A hospital facility that is open 24/7 and provides unscheduled outpatient services to patients whose condition requires immediate care.

Electronic Handbook (EHB): HRSA's web-based grants interface, used for all award or designation management activities. The EHB acts as a guide for users to learn about the system and processes. It contains electronic forms and menus that can be used in real-time to execute the described processes and workflows. Agencies can conduct their grants management activities and processes online using the EHB. All the steps in the grants management process, from planning and solicitation through close out, can be efficiently carried in this platform. Grantees are required to submit data into the EHB during each grant cycle.³²

Emergency Medical Services (EMS): A system that provides emergency medical care outside of hospital or other definitive care settings. Once it is activated by an incident that causes serious illness or injury, the focus of EMS is emergency medical care of the patient(s). Each component of this system has an essential role to perform as part of a coordinated and seamless system of emergency medical care. [Learn more about EMS here.](#)

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

EMS Board or Advisory Body: Each state may have an EMS Board or Advisory Council/Committee, but they vary in authority and may be one of multiple layers of boards through which statutory or regulation changes may be made. While EMS regulatory structure and authority can vary across states and jurisdictions, all EMS Boards/Advisory Bodies are ultimately decided by the state legislature in the manner prescribed by that state's Administrative Procedures Act.

EMS for Children Survey: An annual survey sent to all prehospital EMS agencies that respond to public 911 calls and render care to collect data for National EMSC Performance Measures 2.2 and 2.3 (EMSC 02 and 03). This survey is suspended the years of the National Prehospital Pediatric Readiness Project (PPRP) Assessment.

EMS Provider: Also referred to as EMS practitioner/clinician, are individuals who are certified or licensed by a state to assess, treat, and stabilize the ill or injured. This includes emergency medical responders, emergency medical technicians (EMT), advanced EMTs, and paramedics.

EMS System: The continuum of patient care from prevention to rehabilitation, including prehospital, dispatch communications, out-of-hospital, hospital, primary care, emergency care, inpatient, and medical home. It encompasses every injury and illness.

EMSC Data Center (EDC): One of the Federal EMSC Program's two resource centers, formerly known as two separate entities: the National EMSC Data Analysis Resource Center (NEDARC) and the Pediatric Emergency Care Applied Research Network's (PECARN) Data Coordinating Center. The EDC focuses on providing assistance and training to help EMSC State Partnership Programs develop capabilities to collect, analyze, and visualize their data so they can communicate and disseminate information to create greater awareness and improve the quality of care for children. The EDC also facilitates the development and implementation of high-quality, multi-center research into the prevention and management of acute illnesses and injuries in children across the continuum of emergency medicine health care.

EMSC Innovation and Improvement Center (EIIC): One of the Federal EMSC Program’s two resource centers. The EIIC accelerates the work of the Federal EMSC Program and EMSC State Partnership Programs through quality improvement science and multidisciplinary, multisystem collaboration.

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

EMSC Program Manager: The individual who coordinates and manages all aspects of the State Partnership EMSC Program to ensure that the emergency care needs of children are well-integrated throughout the entire continuum of care. A generic job description can be found [here](#).

Family Advisory Network (FAN): A network created by the Federal EMSC Program to facilitate the inclusion of Family Representatives in EMSC State Partnership Programs and various national initiatives. This national body of family advisors advocates for family-centered care within their states and across the country.

Family-Centered Care (FCC): A partnership approach to health care decision-making between the family and health care provider.³³ It is based on the understanding that the family is the child’s primary source of strength and support, and it recognizes that perspectives and information provided by families, children, and young adults are important in clinical decision-making. Family-centered care shapes the policies, programs, facility, design, and day-to-day interactions among patients, families, physicians, and other health care professionals.³⁴

Family Representative: A family representative is one of the eight required core members of all State EMSC Advisory Committees and is a member of the national Family Advisory Network (FAN). Any parent, legal guardian, caregiver, current or former EMS practitioner, clinician, or other person with an interest in improving pediatric emergency care can serve as a family representative. There is no requirement for formal training or a specific knowledge base. Family representatives must be willing to learn and become familiar with the EMSC State Partnership Program and the local, state, and national EMS and hospital emergency department systems. They must be willing to represent diverse perspectives of children and families equitably.

Freely Associated States: The Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau. In this manual, when the phrase “state” is used, it is inclusive of the freely associated states.

Hospital: Facilities that provide definitive medical or surgical assessment, diagnoses, and care for the ill and injured. For the purpose of the EMSC State Partnership Program, this excludes military-based hospitals, Veterans Affairs medical centers, psychiatric institutions, and Indian Health Service, or tribal hospitals. In this manual, when “hospital” is used, it is strictly referring to hospitals with an emergency department.

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

National Pediatric Readiness Project (NPRP): A national multiphase initiative to ensure that emergency departments open 24/7 have the essential resources in place to provide effective emergency care for children. NPRP resources and tools are based on the 2018 “Pediatric Readiness in the Emergency Department” joint policy statement.³⁵ This project is supported by numerous professional organizations and led by the Federal EMSC Program in collaboration with the American Academy of Pediatrics, the American College of Emergency Physicians, and the Emergency Nurses Association.

National Prehospital Pediatric Readiness Project (PPRP): A national multiphase initiative that ensures that all prehospital EMS agencies that respond to public 911 calls and render care have the essential resources in place to provide effective emergency care for children. PPRP resources and tools are based on the 2020 “Pediatric Readiness in Emergency Medical Services Systems” joint policy statement and technical report.³⁶ This project is led by the Federal EMSC Program and supported by numerous partners, including national associations, professional organizations, and Federal agencies.

National EMSC Performance Measures: The primary goals of the EMSC State Partnership Program, which serve as standards of achievement for grantees. In accordance with the Government Performance Results Act (GPRSA), grantees are required to regularly report on their performance measure progress to HRSA.

National EMS Information System (NEMSIS): Provides the framework for collecting, storing, and sharing standardized EMS data from states nationwide. The NEMSIS uniform dataset and database help state and national EMS stakeholders more accurately assess EMS needs and performance, as well as support better strategic planning for the EMS system of tomorrow. Data from NEMSIS is also used to help benchmark performance, determine the effectiveness of clinical interventions, and facilitate cost-benefit analyses.

Non-Competing Continuation (NCC) Progress Report: The NCC Progress Report is the HRSA mechanism for renewing the budget period and releasing funding for the ongoing award. The NCC is designed to solicit program-related progress and challenges for the current grant year. All reports must be completed in HRSA's Electronic Handbook (EHB).

Pediatric Readiness: An overarching concept that prehospital agencies and hospital emergency departments have the essential guidelines and resources in place to provide effective emergency care for children. Pediatric readiness in hospitals has been linked to improved outcomes in children.³⁷

Pediatric Emergency Care Coordinator (PECC): A PECC, sometimes referred to as a pediatric champion, is a designated individual(s), who coordinates and oversees administrative aspects of pediatric emergency care. An individual need not be dedicated solely to this role; it can be filled by an individual already in place who assumes this role as part of their existing duties OR can be filled by multiple people.

Prehospital: An essential part of the continuum of emergency health care, frequently initiated by a public 911 call to a dispatch center. Prehospital refers to procedures administered, or care provided, prior to patients' arrival at a definitive care setting (or hospital).

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

Standardized Program: A program or system of care, also referred to as a pediatric readiness recognition program, that 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 program/system is coordinated, accountable and recognizes the pediatric emergency care capabilities of hospitals and prehospital EMS agencies in a state, territory or region. The program supports the development of a standardized system of care that is responsive to the emergency needs of children and extends access to specialty resources when needed.

State: In this manual, "state" refers to all states, territories, freely associated states, and the District of Columbia in the United States.

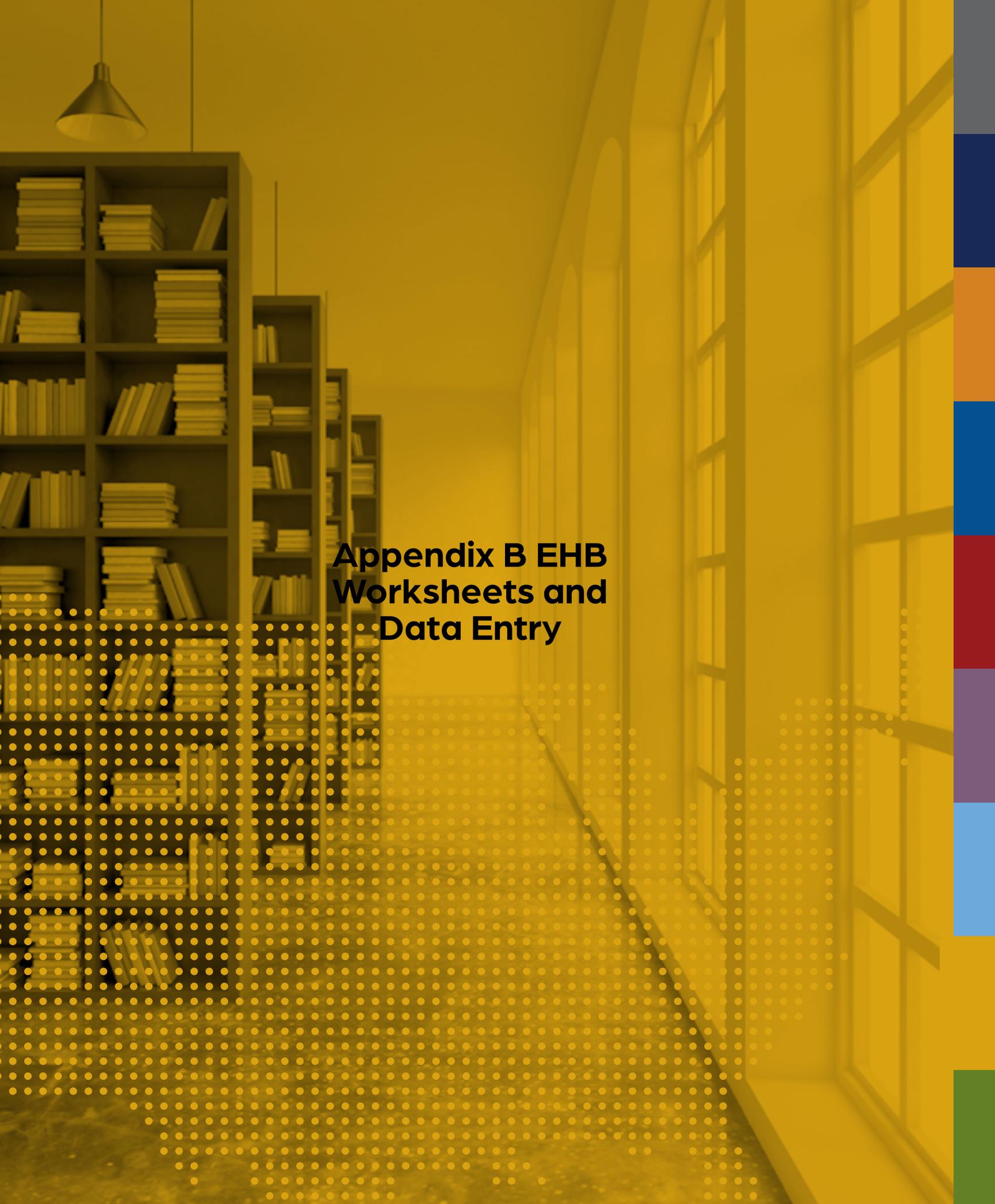
State EMS Office: The EMS lead agency in a state, often part of the state health department, but can be an independent, executive-level agency. The state EMS office is responsible for the coordination and oversight of all emergency medical services in the state. Depending on their charge, the state EMS office could be responsible for creating clinical care protocols or guidelines, providing education to prehospital practitioners, licensing of both ambulances (ground and air) and personnel, data collection, and EMS compliance with state rules.

State EMSC Advisory Committee: A group of either appointed or elected individuals who are responsible for guiding the EMSC State Partnership Program. This group should prioritize EMSC issues, work on special projects, ensure pediatric emergency issues are addressed, and provide policy recommendations. The State EMSC Advisory Committee may be outside state government control. To ensure program sustainability, however, it is strongly recommended that the committee be mandated by the state. The State EMSC Advisory Committee can be part of the state EMS Board, provided that the eight core members are on the EMS Committee or Subcommittee as voting members (members who exercise full membership rights).

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



For a guide to EMSC-related acronyms, visit emscimprovement.center/programs/partnerships/acronyms/.



**Appendix B EHB
Worksheets and
Data Entry**



NATIONAL EMSC PERFORMANCE MEASURE 1.1: Hospital Emergency Department Pediatric Readiness Recognition Program (EMSC 04)

Measure: The percent 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 emergencies



NOTE: EMSC Program Managers will need to work with their HRSA Project Officer to review the criteria for the standardized program prior to entering these numbers.

Data reported in the EHB for calculating results 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 emergencies

Denominator: Total number of hospitals with an ED in the state. For the purposes of data collection, excludes military and tribal/Indian Health Service hospitals

HOSPITAL DATA BY GEOGRAPHIC DISTRIBUTION

Rural/Nonmetropolitan: A population of less than 50,000

Urban/Metropolitan: A core urban area population of 50,000 or more

Numerator: Number of hospitals with an ED located in a rural area that are recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.	
Denominator: 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 emergencies	
Percent	

Numerator: Number of hospitals with an ED located in an urban area that are recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies	
Denominator: Number of hospital with an ED that are recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies	
Percent	

EMSC Program Managers will also be asked to enter the following:

Using a scale of 0 to 5, please rate the degree to which the state has made progress towards establishing a standardized program for pediatric emergencies.

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

1 = Research has been conducted on the effectiveness of an ED standardized program (i.e., improved pediatric outcomes)

And/or

Developing an ED standardized program has been discussed by the State 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 emergencies have been developed

3 = An implementation process/plan for an ED standardized program has been developed.

4 = The implementation process/plan for the ED standardized program has been piloted

5 = At least one facility has been formally recognized through the ED standardized program

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



**NATIONAL EMSC PERFORMANCE MEASURE 1.2:
Hospital Emergency Department Pediatric
Emergency Care Coordinator**

Measure: The percent of hospitals with an ED in a state that have a designated nurse, physician, or both who coordinates pediatric emergency care

Data reported in the EHB for calculating the response rate for this measure:

Numerator: Total number of responding hospitals with an ED in the state

Denominator: Total number of hospitals with an ED in the state

Data reported in the EHB for calculating results for this measure:

Numerator: Number of hospitals with an ED in the state that have a designated nurse, physician, or both who coordinates pediatric emergency care according to the data collected

Denominator: Total number of hospitals with an ED in the state that provided data



NATIONAL EMSC PERFORMANCE MEASURE 1.3: Hospital Emergency Department Weigh and Record Children's Weight in Kilograms

Measure: The percent of hospitals with an ED in a state that weigh and record children in kilograms

Data reported in the EHB for calculating the response rate for this measure:

Numerator: Total number of responding hospitals with an ED in the state

Denominator: Total number of hospitals with an ED in the state

Data reported in the EHB for calculating results for this measure:

Numerator: Number of hospitals with an ED in the state that weigh and record children in kilograms according to the data collected

Denominator: Total number of hospitals with an ED in the state that provided data



NATIONAL EMSC PERFORMANCE MEASURE 1.4: Hospital Emergency Department Disaster Plan

Measure: The percent of hospitals with an ED in a state that have a disaster plan that addresses the needs of children

Data reported in the EHB for calculating the response rate for this measure:

Numerator: Total number of responding hospitals with an ED in the state

Denominator: Total number of hospitals with an ED in the state

Data reported in the EHB for calculating results for this measure:

Numerator: Number of hospitals with an ED in the state that have a disaster plan that addresses the needs of children according to the data collected

Denominator: Total number of hospitals with an ED in the state that provided data



NATIONAL EMSC PERFORMANCE MEASURE 2.1: Prehospital Emergency Medical Services Pediatric Readiness Recognition Program

Measure: The percent of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized pediatric readiness program that are able to stabilize and/or manage pediatric emergencies



NOTE: EMSC Program Managers need to work with their HRSA Project Officer to review the criteria for the recognition program prior to entering these numbers.

Data reported in the EHB for calculating results for this measure:

Numerator: Number of prehospital EMS agencies that are recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies

Denominator: Total number of prehospital EMS agencies in the state.
Prehospital EMS agency data by geographic distribution

HOSPITAL DATA BY GEOGRAPHIC DISTRIBUTION

Rural/Nonmetropolitan: A population of less than 50,000

Urban/Metropolitan: A core urban area population of 50,000 or more

Numerator: Number of prehospital EMS agencies located in a rural area that are recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies	
Denominator: Total number of prehospital EMS agencies in the state	
Percent	

Numerator: Number of prehospital EMS agencies located in an urban area that are recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage predicate emergencies	
Denominator: Total number of prehospital EMS agencies in the state	
Percent	

Number of children served during the reporting period by prehospital EMS agencies recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies. (If an exact number cannot be obtained, your best estimate is fine).

Data reported in the EHB for calculating results for this measure:

Using a scale of 0 to 5, please rate the degree to which the state has made toward establishing a standardized program for pediatric emergencies.

- 0** = No progress has been made towards developing a statewide, territorial, or regional standardized program that recognizes prehospital EMS agencies that are able to stabilize and/or manage pediatric emergencies
- 1** = Research has been conducted on the importance of a prehospital EMS standardized program
And/or
Developing a prehospital EMS standardized program has been discussed by the State EMSC Advisory Committee and members are working on the issue
- 2** = Criteria that prehospital EMS agencies must meet in order to receive pediatric readiness recognition for the stabilization and/or management of pediatric emergencies have been developed
- 3** = An implementation process/plan for the prehospital EMS standardized program has been developed
- 4** = The implementation process/plan for the prehospital EMS standardized program has been piloted
- 5** = At least one prehospital EMS agency has been formally recognized through the prehospital standardized program

Element	0	1	2	3	4	5
Indicate the degree to which a prehospital EMS standardized program for pediatric emergencies exists						



**NATIONAL EMSC PERFORMANCE MEASURE 2.2:
Prehospital Emergency Medical Services
Pediatric Emergency Care Coordinator (EMSC 02)**

Measure: The percent of prehospital EMS agencies in the state that have a designated individual(s) who coordinates pediatric emergency care

Data reported in the EHB for calculating the response rate for this measure:

Numerator: Total number of responding prehospital EMS agencies in the state

Denominator: Total number of prehospital EMS agencies in the state

Data reported in the EHB for calculating results for this measure:

Numerator: Number of prehospital EMS agencies in the state that have a designated individual(s) who coordinates pediatric emergency care according to the data collected

Denominator: Total number of prehospital EMS agencies in the state that provided data



NATIONAL EMSC PERFORMANCE MEASURE 2.3: Prehospital Emergency Medical Services Use of Pediatric-Specific Equipment (EMSC 03)

Measure: The percent of prehospital EMS agencies in the state that have a process that requires prehospital practitioners to physically demonstrate the correct use of pediatric-specific equipment

Data reported in the EHB for calculating the response rate for this measure:

Numerator: Total number of responding prehospital EMS agencies in the state

Denominator: Total number of prehospital EMS agencies in the state

Data reported in the EHB for calculating the response rate for this measure:

Numerator: Number of prehospital EMS agencies in the state that score a six or more on a 0–12 scale

Denominator: Total number of prehospital EMS agencies in the state that provided data



NOTE: This score is representative of a prehospital EMS agency having a process that requires prehospital practitioners to physically demonstrate the correct use of pediatric-specific equipment. The EDC will calculate this number, as it is a sum of all of the prehospital EMS agencies that scored six points or higher based on a combination of the availability of the methods of physical demonstration and their frequency.

Reference Table

Prehospital EMS agencies will be asked to select the frequency of each method used to evaluate their practitioner’s use of pediatric-specific equipment, which 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 (e.g., if an agency enters a four, “Two or more times per year,” for each of the three questions; they would score a 12, the highest score possible). Achievement for the grantees will be reached when at least 90% of the prehospital EMS agencies in a state report a total score of six or higher.

DEFINITIONS

- **Skill Station:** A method of checking the skills of prehospital practitioners that involves providers being observed practicing a specific skill on a mannequin
- **Simulated Event:** A method of checking the skills of prehospital practitioners that involves providers being observed practicing a set of skills in the context of a case scenario or mock incident
- **Field Encounter:** A method of checking the skills of prehospital practitioners that involves providers being observed by a field training officer or supervisor practicing a set of skills in the context of a real-life pediatric patient encounter

SCORING FOR SKILLS-CHECKING METHODS

Methods of Physical Demonstration of Pediatric Skill-Checking	Two or more times per year	At least once per year	At least once every two years	Less than once every two years
How often are the providers required to demonstrate skills via a SKILL STATION?	4	2	1	0
How often are the providers required to demonstrate skills via a SIMULATED EVENT?	4	2	1	0
How often are the providers required to demonstrate skills via a FIELD ENCOUNTER?	4	2	1	0



NATIONAL EMSC PERFORMANCE MEASURE 2.4: Prehospital Emergency Medical Services Disaster Plan

Measure: The percent of prehospital EMS agencies in the state that have a disaster plan that addresses the needs of children

Data reported in the EHB for calculating the response rate for this measure:

Numerator: Total number of responding prehospital EMS agencies in the state

Denominator: Total number of prehospital EMS agencies in the state

Data reported in the EHB for calculating results for this measure:

Numerator: Number of prehospital EMS agencies in the state that have a disaster plan that addresses the needs of children

Denominator: Total number of prehospital EMS agencies in the state that provided data



NATIONAL EMSC PERFORMANCE MEASURE 3.1: Family Representation on the State EMSC Advisory Committee

Measure: The percent of states that have a Family Representative on their State EMSC Advisory Committee who represents the emergency needs of children in their community

 **Note:** Data for this performance measure will be reported in the Performance Evaluation I EHB details sheet and in the annual NCC report:

EMSC Program Managers will report on the current status of the State EMSC Advisory Committee. The data entry for each question is simply 1 for “Yes” or 0 for “No.” The table below is a worksheet to help EMSC Program Managers prepare the information needed when entering data into the EHB.

EMSC Program Managers will be asked to verify the following in the annual NCC report:

Yes = 1

No = 0

Element	Yes/No
The State EMSC Advisory Committee has a family representative	



PERFORMANCE EVALUATION I: Permanence of EMSC (EMSC 08)

Included below is an example of the EHB fields EMSC Program Managers will need in order to enter data into for this measure:

The EMSC Program Manager will work with their HRSA Project Officer on which of the five elements best describes the current status. The data entry for each question is simply 1 for "Yes" or 0 for "No."

EMSC Program Managers will report on the current status of each of the five elements for establishment of a State EMSC Advisory Committee. The table below is a worksheet to help prepare the information needed when entering data into the EHB.

EMSC Program Managers will be asked to verify the following:

Yes = 1

No = 0

Total number of elements the grant program has established (possible 0–5 score):

Elements	Yes/No
1. The State EMSC Advisory Committee has the required 8 core members	
2. The State EMSC Advisory Committee has met at least four times during the grant year	
3. There is pediatric representation on the EMS Board	
4. There is a state mandate requiring pediatric representation on the EMS Board	
5. There is one full-time EMSC Program Manager who is dedicated solely to the EMSC State Partnership Program	
TOTAL	



PERFORMANCE EVALUATION II: Integration of EMSC Priorities into Statutes or Regulations (EMSC 09)

Included below is an example of the EHB fields EMSC Program Managers will need to enter data into for this measure:

EMSC Program Managers will work with their HRSA Project Officer on which of the nine elements best describes the 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 prepare the information needed 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 the grant program that have been incorporated into statutes or regulations.

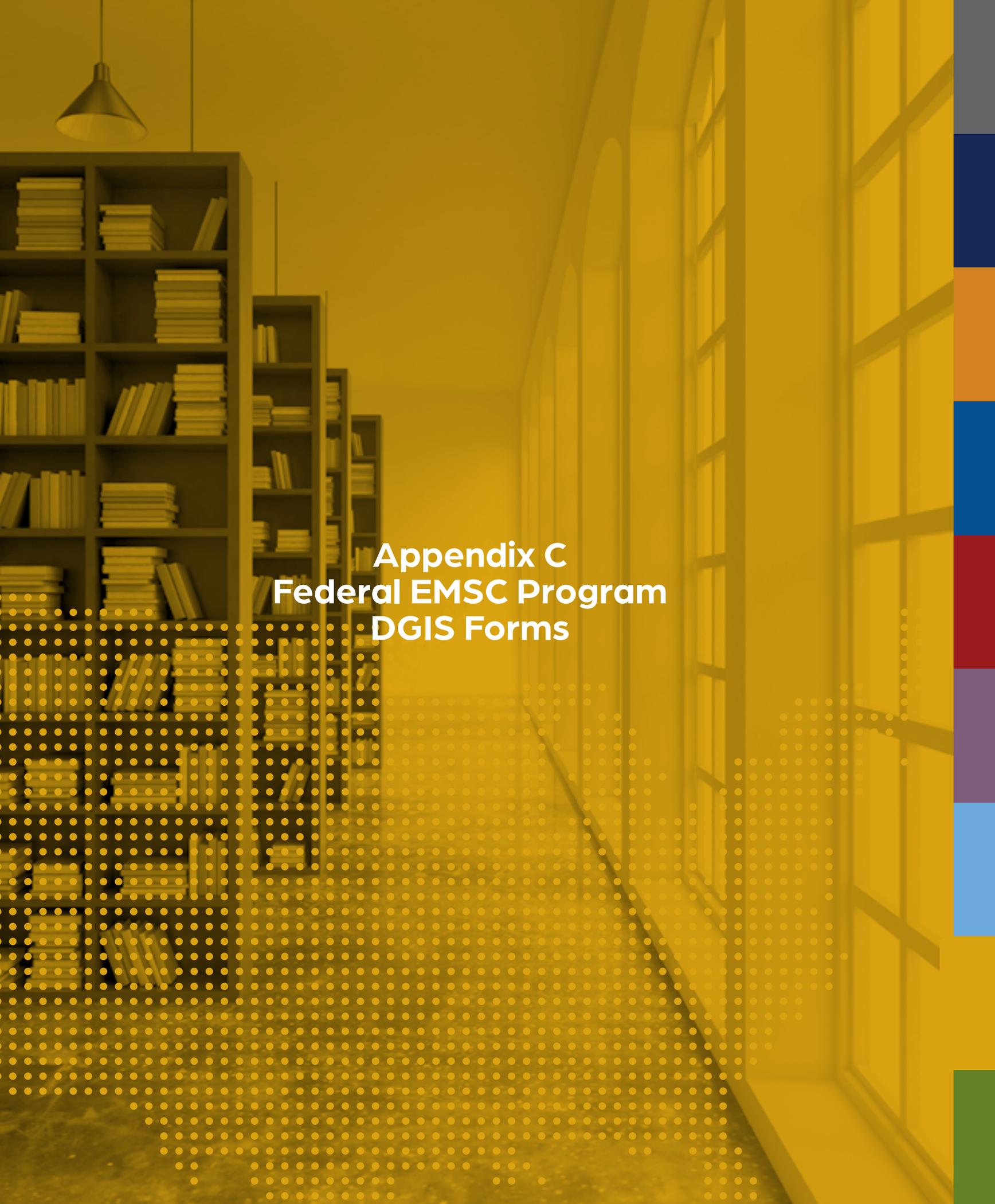
EMSC Program Managers will be asked to verify the following:

Yes = 1

No = 0

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

Elements	Yes/No
1. There is a statute/regulation that requires the submission of NEMSIS-compliant version 3.x data to the state EMS office.	
2. There is a statute/regulation that assures that an individual(s) 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 interfacility transfer guidelines that cover pediatric patients and include specific components of transfer.	
7. There is a statute/regulation for written interfacility transfer agreements that cover pediatric patients.	
8. There is a statute/regulation requiring pediatric online medical direction for prehospital provider agencies.	
9. There is a statute/regulation requiring off-line pediatric medical direction for prehospital provider agencies.	
10. There is a statute/regulation for pediatric equipment for BLS and ALS patient care units.	
11. There is a statute/regulation requiring pediatric continuing education for the recertification/relicensing of BLS and ALS providers.	
TOTAL	



Appendix C
Federal EMSC Program
DGIS Forms



EMSC 02 PERFORMANCE MEASURE

The percent of prehospital 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

GOAL	To increase the percent of prehospital EMS agencies in the state/territory that have a designated individual who coordinates pediatric emergency care.
MEASURE	The percent of prehospital EMS agencies in the state/territory that have a designated individual who coordinates pediatric emergency care.
DEFINITION	<p>Numerator: The number of prehospital EMS agencies in the state/territory that report having a designated individual who coordinates pediatric emergency care for the agency or a score a '3' on a 0-3 scale.</p> <p>Denominator: Total number of prehospital EMS agencies in the state/territory that provided data.</p> <p>Units: 100 Text: Percent</p> <p>Recommended Roles: Job related activities that a designated individual responsible for the coordination of pediatric emergency care might oversee for a prehospital EMS agency are:</p> <ul style="list-style-type: none"> • Ensure that the pediatric perspective is included in the development of EMS protocols • Ensure that fellow EMS 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 • Liaises with the emergency department pediatric emergency care coordinator • Promote family-centered care at the agency <p>EMS: Emergency Medical Services</p> <p>Prehospital EMS Agency: A prehospital 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>
HRSA STRATEGIC OBJECTIVE	Strengthen the Health Workforce
GRANTEE DATA SOURCES	Survey of prehospital EMS agencies

SIGNIFICANCE	<p>The Institute of Medicine (IOM) report³⁸ "Emergency Care for Children: Growing Pains" (2007) recommends that prehospital 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.</p> <p>Gausche-Hill et al in a national study³⁹ 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.</p> <p>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 prehospital EMS agencies may result in ensuring that the agency and its practitioners are more prepared to care for ill and injured children.</p> <p>The individual designated as the Pediatric Emergency Care Coordinator (PECC) may be a member of the prehospital EMS agency or that individual could serve as the PECC for one of more individual prehospital EMS agencies within the county or region.</p>
--------------	--

DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 02

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

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

Prehospital 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 prehospital EMS agencies in the state/territory report a '3' on the scale below.

Which statement best defines your agency?	Scale
Our prehospital EMS agency does NOT have a designated INDIVIDUAL who coordinates pediatric emergency care at this time	0
Our prehospital 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 prehospital 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 prehospital 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 prehospital EMS agency. This is an emerging issue within emergency care, and we want to gather information on what is happening across the country within prehospital 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 practitioners 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 prehospital EMS agency. Is this individual:

- A person who coordinated care only for your agency
- A person who coordinated care for your agency as well as other agencies

We are interested in understanding a little bit more about what this individual does for your agency in the coordination of pediatric emergency care. Does this 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 practitioners follow pediatric clinical practice guidelines and/ or protocols

- 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:



EMSC 03 PERFORMANCE MEASURE

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

Goal: Use of pediatric-specific equipment

Coordination Level: Grantee

Domain: Emergency Medical Services for Children

GOAL	To increase the percent of prehospital EMS agencies that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.
MEASURE	The percent of prehospital EMS agencies in the state/territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.
DEFINITION	<p>Numerator: The number of prehospital EMS agencies in the state/territory that score a '6' or more on a 0-12 scale.</p> <p>Denominator: Total number of prehospital EMS agencies in the state/territory that provided data.</p> <p>Units: 100 Text: Percent</p> <p>EMS: Emergency Medical Services</p> <p>Prehospital EMS Agency: A prehospital 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>EMS Providers: 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 http://www.ems.gov/education/EMSScope.pdf</p>
HRSA STRATEGIC OBJECTIVE	<p>Goal I: Improve Access to Quality Health Care and Services (by improving quality) or;</p> <p>Goal II: Strengthen the Health Workforce</p>
GRANTEE DATA SOURCES	Survey of prehospital EMS agencies

SIGNIFICANCE	<p>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.</p> <p>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.</p> <p>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.</p>
--------------	---

DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 03

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

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

Prehospital 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 prehospital EMS agencies in a state/territory report a combined score of '6' or higher from a combination of the methods.

Methods of Physical Demonstration of Pediatric Skill-Checking	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 the providers required to demonstrate skills via a SKILL STATION?	4	2	1	0
How often are the providers required to demonstrate skills via a SIMULATED EVENT?	4	2	1	0
How often are the providers required to demonstrate skills via a FIELD ENCOUNTER?	4	2	1	0

PROPOSED SURVEY QUESTIONS

EMS runs involving pediatric patients are a small percentage of runs for most agencies. As a result, EMS providers rarely apply life-saving skills using pediatric equipment on children such as:

- Airway adjunct use/ventilation
- Clearing airway/suctioning
- CPR
- AED use/cardio-monitoring
- IV/IO insertion and administration of fluids
- Weight/length-based tape use
- Child safety restraint vehicle installation and pediatric patient restraint

In the next set of questions, we are asking about the process or plan that your agency uses to evaluate your EMS providers' skills using pediatric-specific equipment.

While individual providers in your agency may take PEPP or PALS or other national training courses in pediatric emergency care, we are interested in learning more about the process or plans that your agency employs to evaluate skills on pediatric equipment.

We realize that there are multiple processes that might be used to assess correct use of pediatric equipment. Initial focus of this measure metrics is on 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 or plan 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 or plan 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 or plan 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 thought about skill checking, please share here:



EMSC 04 PERFORMANCE MEASURE

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: Emergency Department Preparedness

Coordination Level: Grantee

Domain: Emergency Medical Services for Children

GOAL	To increase the percent of hospitals that are recognized as part of a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.
MEASURE	The percent of hospitals recognized through a statewide, territorial or regional program that are able to stabilize and/or manage pediatric medical emergencies.
DEFINITION	<p>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.</p> <p>Denominator: Total number of hospitals with an ED in the state/territory.</p> <p>Units: 100 Text: Percent</p> <p>Standardized program: A program or system of care, also referred to as a pediatric readiness recognition program, that 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 program/system is coordinated, accountable and recognizes the pediatric emergency care capabilities of hospitals in a state, territory or region. The program supports the development of a standardized system of care that is responsive to the emergency needs of children and extends access to specialty resources when needed.</p> <p>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. Excludes Military and Indian Health Service hospitals.</p>
EMSC STRATEGIC OBJECTIVE	<ul style="list-style-type: none"> • Ensure the operational capacity and infrastructure to provide pediatric emergency care. • Develop a statewide, territorial, or regional program that recognizes hospitals that are able to stabilize and/or manage pediatric medical emergencies.
GRANTEE DATA SOURCES	This performance measure will require grantees to determine how many hospitals participate in their statewide, territorial or regional standardized program (if the state has a standardized program) for emergencies.

SIGNIFICANCE	<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 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.</p> <p>This performance measure helps to ensure essential resources and protocols are available in facilities where children receive care for emergencies. A standardized program can also facilitate EMS transfer of children to appropriate levels of resources.</p> <p>Additionally, a standardized 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.</p> <p>This performance measure does not require that the standardized program be mandated. Voluntary recognition is accepted.</p>
--------------	--

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 standardized program for pediatric medical emergencies.

Element	0	1	2	3	4	5
Indicate the degree to which a prehospital EMS standardized program for pediatric 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 State 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



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

Coordination Level: Grantee

Domain: Emergency Medical Services for Children

GOAL	To increase the number of states/territories that have established permanence of EMSC in the state/territory EMS system
MEASURE	The degree to which states/territories have established permanence of EMSC in the state/territory EMS system
DEFINITION	<p>The number of elements that are associated with permanence of EMSC in a state/territory EMS system on a scoring system ranging from a possible score of no elements (0) to five elements (5).</p> <p>Permanence of EMSC in a state/territory EMS system is defined as:</p> <ul style="list-style-type: none"> • The State EMSC Advisory Committee has the required members as per the implementation manual • The State EMSC Advisory Committee meets at least four times a year • Pediatric representation incorporated on the State/territory EMS Board • The state/territory require pediatric representation on the EMS Board • One full-time EMSC Program Manager is dedicated solely to the EMSC State Partnership Program <p>EMSC: 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>EMS system: The continuum of patient care from prevention to rehabilitation, including prehospital, dispatch communications, out-of-hospital, hospital, primary care, emergency care, inpatient, and medical home. It encompasses every injury and illness.</p>
EMSC STRATEGIC OBJECTIVE	<ul style="list-style-type: none"> • Establish permanence of EMSC in each state/territory EMS system • Establish a State EMSC Advisory Committee within each state/territory • Incorporate pediatric representation on the state/territory EMS Board • Establish one full-time equivalent EMSC Program Manager that is dedicated solely to the EMSC State Partnership Program
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 State Partnership Program and is fundamental to its success. For the EMSC State Partnership Program to be sustained in the long-term and reach permanence, it is important to establish a State EMSC Advisory Committee to ensure that the priorities of the Federal EMSC Program are addressed. It is also important to establish one full-time equivalent EMSC Program Manager whose time is devoted solely (i.e., 100%) to the EMSC State Partnership 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 State EMSC Advisory Committee has the required members as per the implementation manual		
2. The State 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 Program Manager that is dedicated solely to the EMSC State Partnership Program		

Yes = 1

No = 0

Total number of elements your grant program

has established (possible 0–5 score) _____



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

Coordination Level: Grantee

Domain: Emergency Medical Services for Children

GOAL	To increase the number of states/territories that have established permanence of EMSC in the state/territory EMS system
MEASURE	The degree to which states/territories have established permanence of EMSC in the state/territory EMS system
DEFINITION	<p>The number of elements that are associated with permanence of EMSC in a state/territory EMS system on a scoring system ranging from a possible score of no elements (0) to five elements (5).</p> <p>Permanence of EMSC in a state/territory EMS system is defined as:</p> <ul style="list-style-type: none"> • The State EMSC Advisory Committee has the required members as per the implementation manual • The State EMSC Advisory Committee meets at least four times a year • Pediatric representation incorporated on the State/territory EMS Board • The state/territory require pediatric representation on the EMS Board • One full-time EMSC Program Manager is dedicated solely to the EMSC State Partnership Program <p>EMSC: 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>EMS system: 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>
EMSC STRATEGIC OBJECTIVE	<ul style="list-style-type: none"> • Establish permanence of EMSC in each state/territory EMS system • Establish an EMSC Advisory Committee within each state/territory • Incorporate pediatric representation on the state/territory EMS Board • Establish one full-time equivalent EMSC Program Manager that is dedicated solely to the EMSC State Partnership Program
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 State Partnership Program and is fundamental to its success. For the EMSC State Partnership Program to be sustained in the long-term and reach permanence, it is important to establish a State EMSC Advisory Committee to ensure that the priorities of the Federal EMSC Program are addressed. It is also important to establish one full-time equivalent EMSC Program Manager whose time is devoted solely (i.e., 100%) to the EMSC State Partnership 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 State EMSC Advisory Committee has the required members as per the implementation manual		
2. The State EMSC Advisory Committee has met at least four 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 Program Manager that is dedicated solely to the EMSC State Partnership 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

Coordination Level: Grantee

Domain: Emergency Medical Services for Children

GOAL	To increase the integration of EMSC priorities into existing EMS or hospital/health care 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	<p>The number of elements that are associated with integrating EMSC priorities in a state/territory EMS system on a scoring system ranging from a possible score of no elements (0) to eleven elements (11)</p> <p>Priorities: The priorities of the EMSC State Partnership Program include the following:</p> <ul style="list-style-type: none"> • Prehospital EMS agencies are required to submit NEMSIS compliant data to the state EMS Office • Prehospital EMS agencies in the state/territory have a designated individual who coordinates pediatric emergency care • Prehospital EMS agencies in the state/territory have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment • The existence of a statewide, territorial, or regional standardized program that recognizes hospitals that are able to stabilize and/or manage pediatric emergencies • Hospitals in the state/territory have written interfacility transfer guidelines that cover pediatric patients and that include the following components of transfer: <ul style="list-style-type: none"> • 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 in the state/territory have written inter-facility transfer agreements that cover pediatric patients.

DEFINITION (Continued)	<p>Priorities (continued):</p> <ul style="list-style-type: none"> • BLS and ALS prehospital provider agencies in the state/territory are required to have on-line and off-line pediatric medical direction available • 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 • 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	<p>For the EMSC State Partnership Program to be sustained in the long-term and reach permanence, it is important for the State Partnership 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.</p>

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.

Elements	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 program for identifying hospitals capable of dealing with pediatric traumatic emergencies	
6. There is a statute/regulation for written interfacility transfer guidelines that cover pediatric patients and include specific components of transfer	
7. There is a statute/regulation for written interfacility transfer agreements that cover pediatric patients	
8. There is a statute/regulation for pediatric online medical direction for ALS and BLS prehospital provider agencies	
9. There is a statute/regulation for pediatric offline medical direction for ALS and BLS prehospital 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) _____



EMSC 10 PERFORMANCE MEASURE

The percent of prehospital Emergency Medical Services (EMS) agencies recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies.

Goal: Prehospital Emergency Medical Services Readiness

Coordination Level: Grantee

Domain: Emergency Medical Services for Children

GOAL	To increase the percent of prehospital EMS agencies that are recognized as part of a statewide, territorial, or regional pediatric readiness recognition program that are able to stabilize and/or manage pediatric emergencies.
MEASURE	The percent of prehospital EMS agencies recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies.
DEFINITION	<p>Numerator: Number of prehospital EMS agencies that are recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies.</p> <p>Denominator: Total number of prehospital EMS agencies in the state/territory.</p> <p>Units: 100 Text: Percent</p> <p>Prehospital EMS Pediatric Readiness Recognition Program: A program that recognizes the pediatric emergency care capabilities of prehospital EMS agencies in a state, territory or region. This program supports the development of a standardized system of care that is responsive to the emergency needs of children and extends access to specialty resources when needed. Additional details included in the significance section.</p> <p>Standardized Program: A program or system of care that provides a framework for collaboration across agencies, health care organizations/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 recognition program for pediatric emergencies. Recognizing the pediatric emergency care capabilities of prehospital EMS agencies supports the development of a system of care that is responsive to the needs of children.</p> <p>EMS: Emergency Medical Services</p> <p>Prehospital EMS Agency: A prehospital 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>

EMSC STRATEGIC OBJECTIVE	<ul style="list-style-type: none"> • Ensure the operational capacity and infrastructure to provide pediatric emergency care. • Develop a statewide, territorial, or regional program that recognizes prehospital EMS agencies that are able to stabilize and/or manage pediatric emergencies.
GRANTEE DATA SOURCES	<p>This performance measure will require grantees to determine how many prehospital EMS agencies participate in their standardized program (if the state has a standardized program) for emergencies.</p>
SIGNIFICANCE	<p>The performance measure emphasizes the importance of the existence of a standardized statewide, territorial, or regional program of care for children that includes a recognition program for prehospital EMS agencies capable of stabilizing and/or managing pediatric emergencies. A standardized program contributes to the development of an organized system of care in determining their capacity and readiness to effectively deliver pediatric emergency.</p> <p>This measure helps to ensure essential pediatric resources, pediatric-trained personnel and pediatric protocols are available in prehospital EMS agencies. A standardized program can also facilitate EMS transfer of children to appropriate levels of resources and includes a verification process to identify prehospital EMS agencies meeting specific criteria.</p> <p>This performance measure does not require that the standardized program be mandated. Voluntary recognition is accepted.</p>

DATA COLLECTION FORM FOR DETAIL SHEET: EMSC 10

The percent of prehospital EMS agencies that are recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies.

Numerator: number of prehospital EMS agencies that are recognized through a statewide) territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies.	
Denominator: Total number of prehospital EMS agencies in the state/territory	
Percent	

Numerator: number of prehospital EMS agencies located in rural areas that are recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies.	
Denominator: Total number of prehospital EMS agencies in the state/territory	
Percent	

Numerator: number of prehospital EMS agencies located in urban areas that are recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies.	
Denominator: Total number of prehospital EMS agencies in the state/territory	
Percent	

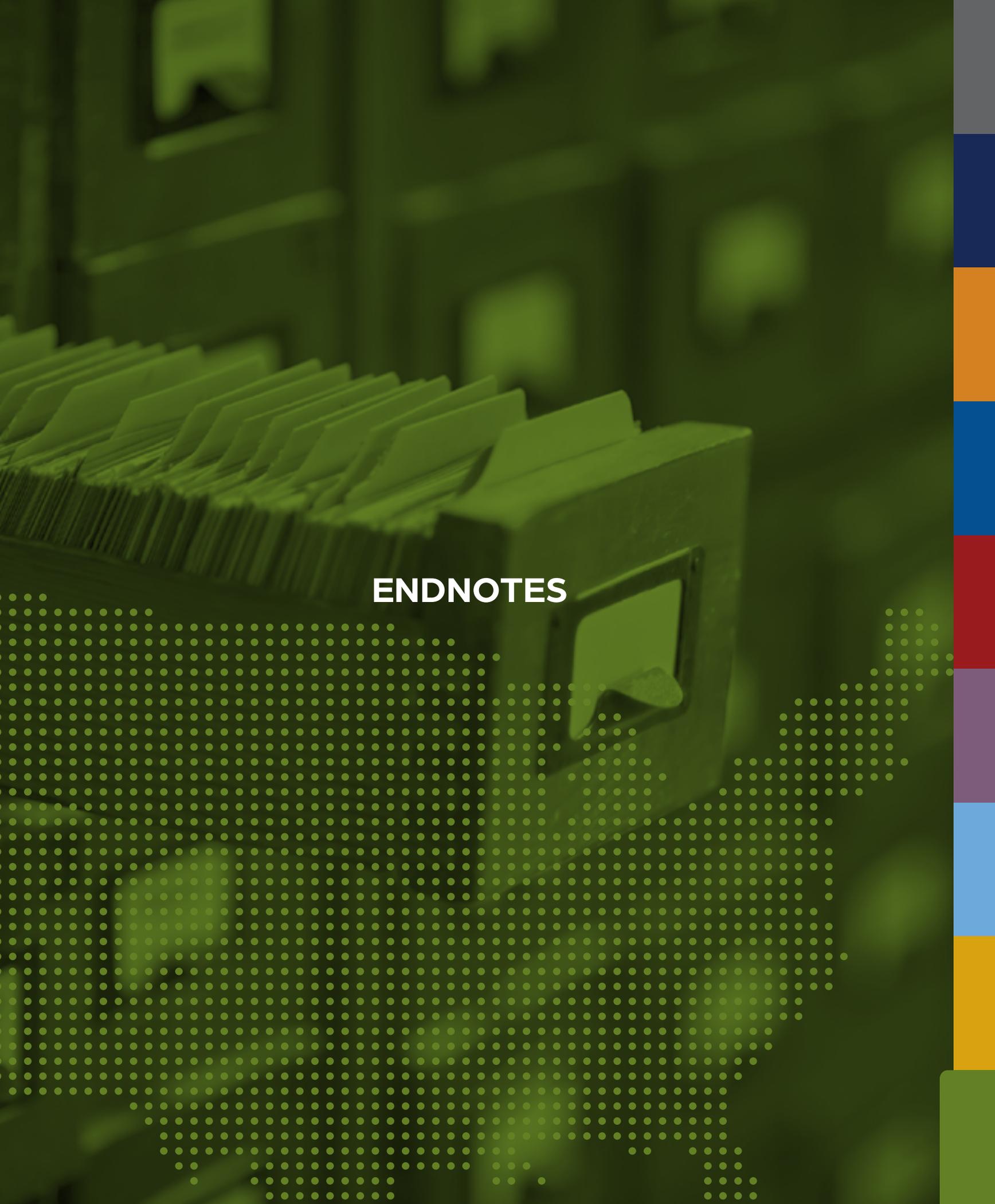
Number of children served during the reporting period by prehospital EMS agencies recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric emergencies. (If an exact number cannot be obtained, your best estimate is fine.)

Check this box if the number reported above is an estimate

Using a scale of 0–5, please rate the degree to which your state/territory has made towards establishing a prehospital EMS standardized program for pediatric emergencies.

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

- 0** = No progress has been made towards developing a statewide, territorial, or regional standardized program that recognizes prehospital EMS agencies that are able to stabilize and/or manage pediatric emergencies
- 1** = Research has been conducted on the importance of a prehospital EMS standardized program
And/or
Developing a prehospital EMS standardized program has been discussed by the State EMSC Advisory Committee and members are working on the issue
- 2** = Criteria that prehospital EMS agencies must meet in order to receive recognition for the stabilization and/or management of pediatric emergencies has been developed
- 3** = An implementation process/plan for the prehospital EMS standardized program has been developed
- 4** = The implementation process/plan for the prehospital EMS standardized program has been piloted
- 5** = At least one prehospital EMS agency has been formally recognized through the prehospital standardized program. Documents to support achievement must be uploaded here. Include the standardized program application, any instructions/guidance for prehospital EMS agencies to be recognized, and a list of the prehospital EMS agencies recognized by the EMSC State Partnership Program



ENDNOTES

ENDNOTES

1. Remick, K., Smith, M., Newgard, C. D., Lin, A., Hewes, H., Jensen, A. R., Glass, N., Ford, R., Ames, S., Cook, J., & Malveau, S. (2023). Impact of individual components of emergency department pediatric readiness on pediatric mortality in US trauma centers. *Journal of Trauma and Acute Care Surgery*, 94(3), 417–424.
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.
3. Institute of Medicine. (2007). *Emergency care for children: Growing pains*. National Academies Press. <https://doi.org/10.17226/11655>
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), 527–354. <https://doi.org/10.1001/jamapediatrics.2015.138>
5. Remick, K., Gross, T., Adelgais, K., Shah, M. I., Leonard, J. C., & Gausche–Hill, M. (2017). Resource document: Coordination of pediatric emergency care in EMS systems. *Prehospital Emergency Care*, 21(3), 399–407. <https://doi.org/10.1080/10903127.2016.1258097>
6. Koriotoh, T. (2016). *FYI: Weigh in kilograms to cut dosing errors*. *AAP News*, August 19. <https://publications.aap.org/aapnews/news/10258>
7. Rasool, M. F., Rehman, A. U., Imran, I., Abbas, S., Shah, S., Abbas, G., Khan, I., Shakeel, S., Ahmad Hassali, M. A., & Hayat, K. (2020). Risk factors associated with medication errors among patients suffering from chronic disorders. *Frontiers in Public Health*, 8, 531038. <https://doi.org/10.3389/fpubh.2020.531038>
8. Mueller, B. U., Neuspiel, D. R., Stucky Fisher, E. R., et al. (2019). Principles of pediatric patient safety: Reducing harm due to medical care. *Pediatrics*, 143(2), e20183649. <https://doi.org/10.1542/peds.2018-3649>
9. Bailey, B. R., Gaunt, M. J., Grissinger, M., & Pennsylvania Patient Safety Authority. (2016). Update on medication errors associated with incorrect patient weights. *Pennsylvania Patient Safety Authority*, 13(2), 50–57. http://patientsafety.pa.gov/ADVISORIES/documents/201606_50.pdf
10. Institute of Medicine. (2000). *To err is human: Building a safer health system*. National Academies Press.
11. Emergency Nurses Association. (2020). *Weighing all patients in kilograms* [Position statement]. Emergency Nurses Association. <https://www.pedsnurses.org/assets/docs/Engage/Position-Statements/Weighing%20All%20Patients%20in%20Kilograms%20Final%20Web.pdf>
12. Flentje, K., Knight, C., Stromfeldt, I., Chakrabarti, A., & Friedman, N. (2018). Recording patient bodyweight in hospitals: Are we doing well enough? *Internal Medicine Journal*, 48(2) 124–128. <https://doi.org/10.1111/imj.13519>

13. Save the Children. (2015). *Still at risk: U.S. children 10 years after Hurricane Katrina: 2015 National Report Card on Protecting Children in Disasters*. https://rems.ed.gov/docs/DisasterReport_2015.pdf
14. Thompson, T., Lyle, K., Mullins, S. H., Dick, R., & Graham, J. (2009). A state survey of emergency department preparedness for the care of children in a mass casualty event. *American Journal of Disaster Medicine*, 4(4), 227–232. <https://pubmed.ncbi.nlm.nih.gov/19860165/>
15. Hewes, H. A., Ely, M., Richards, R., Shah, M. I., Busch, S., Pilkey, D., Dixon Hert, K., & Olson, L. M. (2019). Ready for children: Assessing pediatric care coordination and psychomotor skills evaluation in the prehospital setting. *Prehospital Emergency Care*, 23(4), 510–518. <https://doi.org/10.1080/10903127.2018.1542472>
16. Ngo, T. L., Belli, K., & Shah, M. (2014). EMSC program manager survey on education of prehospital providers. *Prehospital Emergency Care*, 18(3), 424–428. <https://doi.org/10.3109/10903127.2013.869641>
17. Cushman, J. T., Fairbanks, R. J., O’Gara, K. G., Crittenden, C. N., Pennington, E. C., Wilson, M. A., Chin, N. P., & Shah, M. N. (2010). Ambulance personnel perceptions of near misses and adverse events in pediatric patients. *Prehospital Emergency Care*, 14(4), 477–484. <https://doi.org/10.3109/10903127.2010.497901>
18. Tsao, H. S., Alter, R., Kane, E., Gross, T., Browne, L. R., Auerbach, M., Leonard, J. C., Ludwig, L., & Adalgais, K. M. (2022). Pediatric emergency care coordination in EMS agencies: Findings of a multistate learning collaborative. *Prehospital Emergency Care*, 1–12. Advance online publication. <https://doi.org/10.1080/10903127.2022.2126040>
19. Remick, K., Gross, T., Adalgais, K., Shah, M. I., Leonard, J. C., & Gausche-Hill, M. (2017). Resource document: Coordination of pediatric emergency care in EMS systems. *Prehospital Emergency Care*, 21(3), 399–407. <https://doi.org/10.1080/10903127.2016.1258097>
20. Hewes, H. A., Ely, M., Richards, R., Shah, M. I., Busch, S., Pilkey, D., Dixon Hert, K., & Olson, L. M. (2019). Ready for children: Assessing pediatric care coordination and psychomotor skills evaluation in the prehospital setting. *Prehospital Emergency Care*, 23(4), 510–518. <https://doi.org/10.1080/10903127.2018.1542472>
21. Hewes, H. A., Genovesi, A. L., Codden, R., Ely, M., Ludwig, L., Macias, C. G., Schmuhl, P., & Olson, L. M. (2022). Ready for children part II: Increasing pediatric care coordination and psychomotor skills evaluation in the prehospital setting. *Prehospital Emergency Care*, 26(4), 503–510. <https://doi.org/10.1080/10903127.2021.1942340>
22. National EMS Advisory Council Preparedness and Education Committee. (2020). *Pediatric emergency care coordinator (PECC) for emergency medical services*. https://www.ems.gov/assets/PECC_for_EMS_Aug_2020.pdf
23. 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.

24. 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.
25. Hansen, M., Meckler, G., Dickinson, C., Dickenson, K., Jui, J., Lambert, W., & Guise, J. M. (2015). Children's safety initiative: A national assessment of pediatric educational needs among emergency medical services providers. *Prehospital Emergency Care*, 19(2), 287–291. <https://doi.org/10.3109/10903127.2014.959223>.
26. Institute of Medicine Committee on Quality of Health Care in America. (2001). *Crossing the quality chasm: A new health system for the 21st century*. National Academies Press.
27. Committee on Hospital Care & Institute for Patient- and Family-Centered Care. (2012). Patient- and family-centered care and the pediatrician's role. *Pediatrics*, 129(2), 394–404. <https://doi.org/10.1542/peds.2011-3084>
28. Byczkowski, T. L., Gillespie, G. L., Kennebeck, S. S., Fitzgerald, M. R., Downing, K. A., & Alessandrini, E. A. (2016). Family-centered pediatric emergency care: A framework for measuring what parents want and value. *Academic Pediatrics*, 16(4), 327–335. <https://doi.org/10.1016/j.acap.2015.08.011>
29. Dudley, N., Ackerman, A., Brown, K. M., Snow, S. K., American Academy of Pediatrics Committee on Pediatric Emergency Medicine, American College of Emergency Physicians Pediatric Emergency Medicine Committee, & Emergency Nurses Association Pediatric Committee (2015). Patient- and family-centered care of children in the emergency department. *Pediatrics*, 135(1), e255–e272. <https://doi.org/10.1542/peds.2014-3424>
30. Nicholas, D. B., Muskat, B., Zwaigenbaum, L., Greenblatt, A., Ratnapalan, S., Kilmer, C., Craig, W., Roberts, W., Cohen-Silver, J., Newton, A., & Sharon, R. (2020). Patient- and family-centered care in the emergency department for children with autism. *Pediatrics*, 145(Suppl 1), S93–S98. <https://doi.org/10.1542/peds.2019-1895L>
31. Hager, M. A., & Brudney, J. L. (2004). *Volunteer management practices and retention of volunteers*. Urban Institute. <https://www.urban.org/sites/default/files/publication/58001/411005-Volunteer-Management-Practices-and-Retention-of-Volunteers.PDF>
32. National Rural Health Resource Center. (n.d.). *HRSA electronic handbook (EHB)*. National Rural Health Resource Center. <https://www.hrsa.gov/sites/default/files/hrsa/grants/manage/june-2022-ehb-questions.pdf>
33. Kuo, D. Z., Houtrow, A. J., Arango, P., Kuhlthau, K. A., Simmons, J. M., & Neff, J. M. (2012). Family-centered care: Current applications and future directions in pediatric health care. *Maternal and Child Health Journal*, 16(2), 297–305. <https://doi.org/10.1007/s10995-011-0751-7>
34. Committee on Hospital Care. (2003). Family-centered care and the pediatrician's role. *Pediatrics*, 112(3), 691–696. <https://doi.org/10.1542/peds.112.3.691>

35. Remick, K., Gausche-Hill, M., Joseph, M. M., Brown, K., Snow, S. K., Wright, J. L., et al. (2018). Pediatric readiness in the emergency department. *Pediatrics*, *142*(5), e20182459. <https://doi.org/10.1542/peds.2018-2459>
36. Moore, B., Shah, M. I., Owusu-Ansah, S., Gross, T., Brown, K., Gausche-Hill, M., Remick, K., Adelgais, Lyng, J., K., Rappaport, L., Snow, S., Wright-Johnson, C., Leonard, J. C., et al. (2020). Pediatric readiness in emergency medical services systems. *Pediatrics*, *145*(1), e20193307. <https://doi.org/10.1542/peds.2019-3307>
37. Newgard, C. D., Lin, A., Olson, L. M., Cook, J. N. B., Gausche-Hill, M., Kuppermann, N., Goldhaber-Fiebert, J. D., Malveau, S., Smith, M., Dai, M., Nathens, A. B., Glass, N. E., Jenkins, P. C., McConnell, K. J., Remick, K. E., Hewes, H., & Mann, N. C. (2021). Evaluation of emergency department pediatric readiness and outcomes among US trauma centers. *JAMA Pediatrics*, *175*(9), 947–956. <https://doi.org/10.1001/jamapediatrics.2021.1319>
38. Institute of Medicine. (2007). *Emergency care for children: Growing pains*. National Academies Press. <https://doi.org/10.17226/11655>
39. 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), 527–354. <https://doi.org/10.1001/jamapediatrics.2015.138>
40. HRSA defines “rural areas” as all counties that are not designated as parts of metropolitan areas (MAs) by the Office of Management and Budget. In addition, HRSA uses Rural-Urban Commuting Area codes to designate rural areas within MAs. This definition of “rural” can be accessed at <https://www.hrsa.gov/rural-health/about-us/what-is-rural>. If the county is not entirely rural or urban, use the Rural Health Grants Eligibility Analyzer at <https://data.hrsa.gov/tools/rural-health?hmpgdshbrd=1> to determine if a site qualifies as rural based on its specific census tract within an otherwise urban county.



Health Resources and Services Administration
5600 Fishers Lane
Rockville, MD 20857

www.hrsa.gov

