

Pediatric Readiness in EMS

Introduction to EMSC and the PPRP



Announcements



Question and Answer Opportunities

Use the Chat feature during presentation – a panelist will respond

Dedicated time at the conclusion of today's presentation



Continuing Education Credit Offered

Details described at the end of today's presentation



Entire Education Series Archived

Access slides and recorded presentation

www.bcm.edu/emsc

HRSA Acknowledgement Statement

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Presenters

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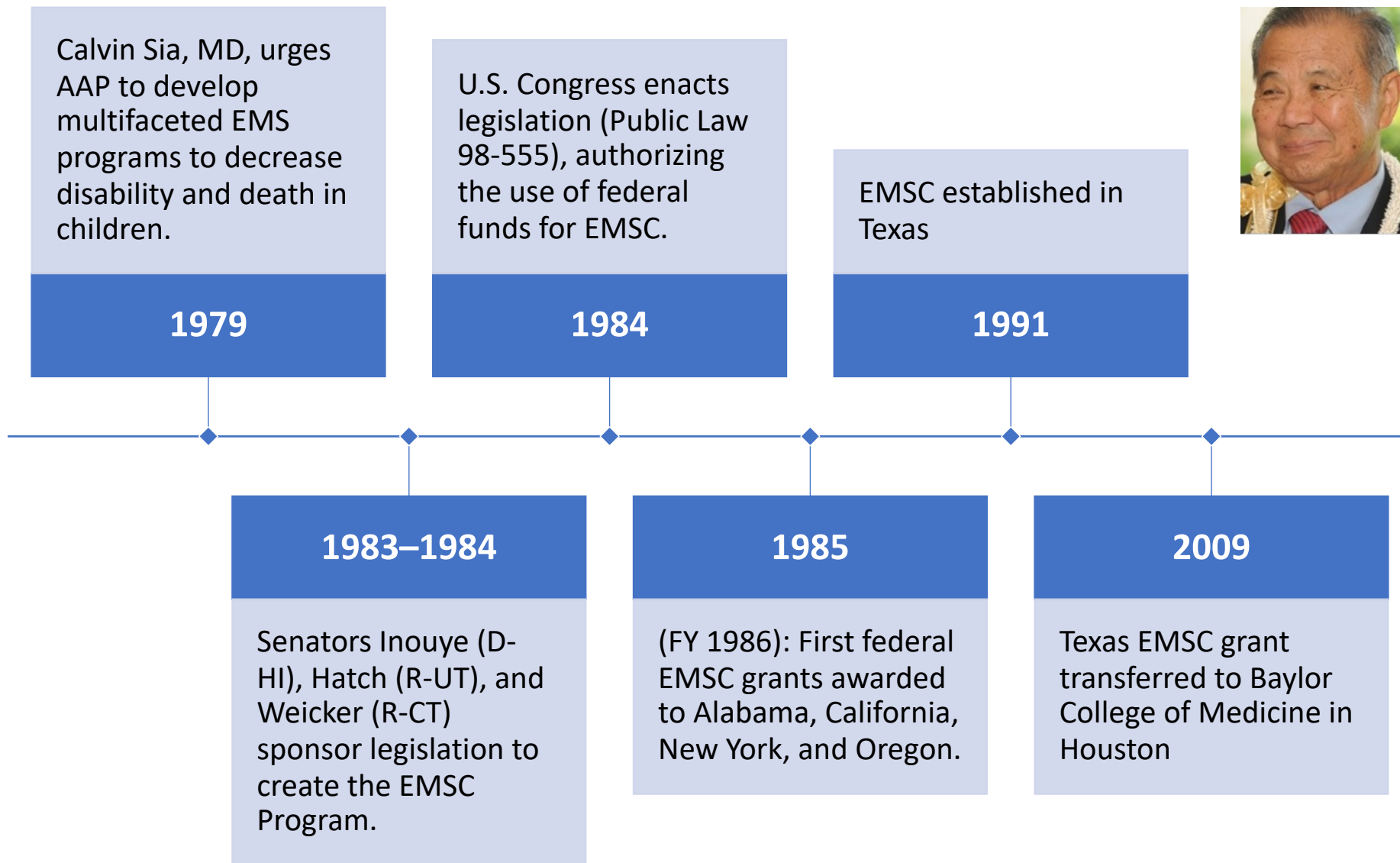


Objectives

1. Define the mission of the EMS for Children Program.
2. Outline the vision of the Prehospital Pediatric Readiness Project (PPRP).
3. Acknowledge the significance of the PPRP assessment as a pivotal tool for determining the initial baseline status of your organization.
4. List the roles and responsibilities of a Prehospital Pediatric Emergency Care Coordinator (PECC).



EMSC: A Brief History





- Established under the Preventative Health Amendments of 1984
- The **ONLY** federal program solely focused on improving the quality of pediatric emergency care



Health and Safety Code

Chapter 773. Emergency Medical Services

Subchapter G. Pediatric Emergency Medical Services

SUBCHAPTER G. PEDIATRIC EMERGENCY MEDICAL SERVICES

Sec. 773.171. EMERGENCY MEDICAL SERVICES FOR CHILDREN PROGRAM. (a) The emergency medical services for children program is in the department.

(b) The department shall provide coordination and support for a statewide pediatric emergency services system.

(c) The department may solicit, receive, and spend funds it receives from the federal government and public or private sources to carry out the purposes of this subchapter.

Added by Acts 1993, 73rd Leg., ch. 513, Sec. 1, eff. Aug. 30, 1993.

Amended by:

Acts 2015, 84th Leg., R.S., Ch. 1 (S.B. [219](#)), Sec. 3.1569, eff. April 2, 2015.

Sec. 773.173. RULES. (a) On the recommendation of the advisory council, the executive commissioner shall adopt minimum standards and objectives to implement a pediatric emergency services system, including rules that:

(1) provide guidelines for categorization of a facility's pediatric capability;

(2) provide for triage, transfer, and transportation policies for pediatric care;

(3) establish guidelines for:

(A) prehospital care management for triage and transportation of a pediatric patient;

(B) prehospital and hospital equipment that is necessary and appropriate for the care of a pediatric patient;

(C) necessary pediatric emergency equipment and training in long-term care facilities; and

(D) an interhospital transfer system for a critically ill or injured pediatric patient; and

(4) provide for data collection and analysis.

The EMSC Program

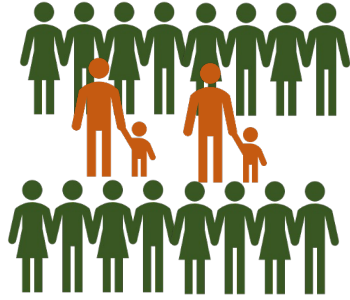
- Designed to reduce childhood death and disability due to severe illness or injury
- Enhances the pediatric capability of existing emergency care systems designed for adults



The Vision

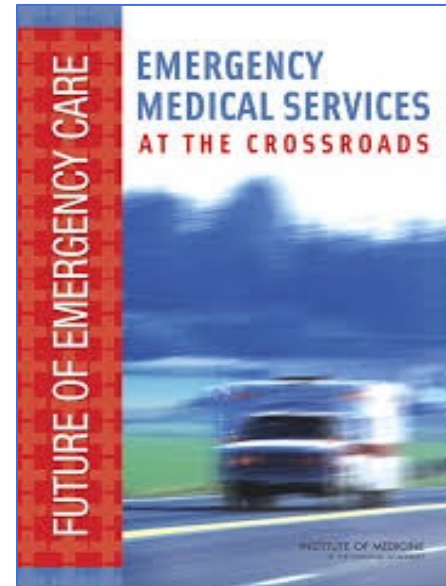
That all emergency care practitioners have the appropriate resources including trained and competent staff, education, policies, medications, equipment, and supplies, to provide effective emergency care for children across the spectrum of emergency care

Among the 30M EMS transports per year, <10% are children



>80% of EMS agencies see fewer than 8 children per month

- Variability in care across agencies
 - Trauma/pain, seizures, respiratory distress, cardiac arrest
- Known gaps in day-to-day readiness
 - Pediatric protocols
 - Pediatric equipment
 - Pediatric education requirements
 - Pediatric skills checks



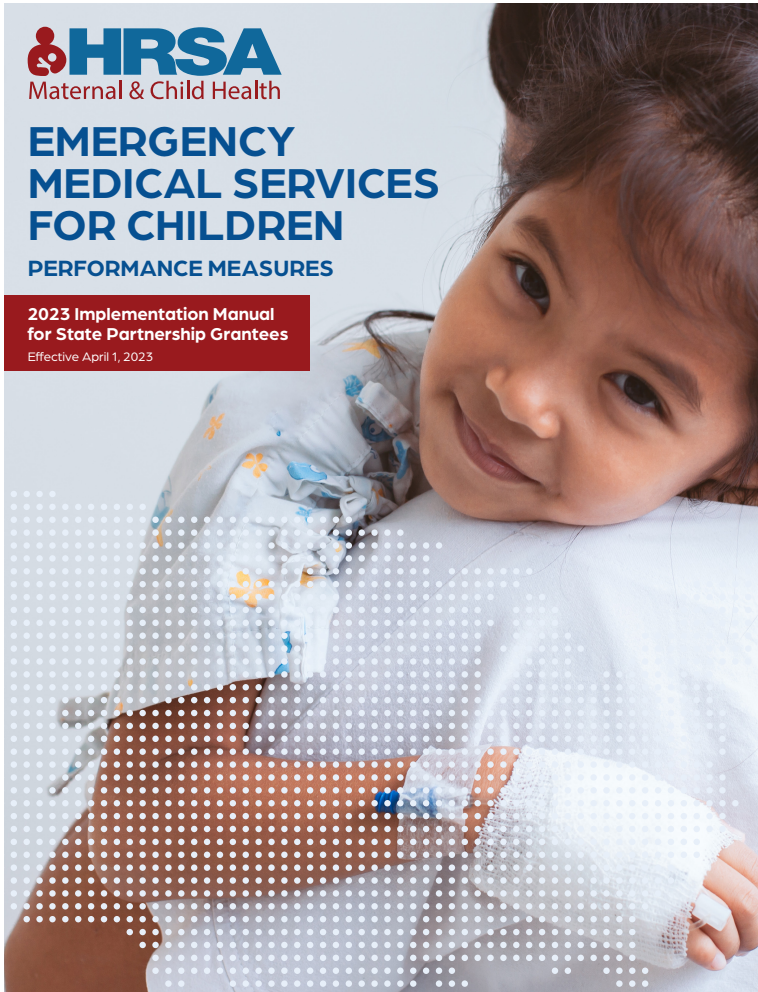
Pediatric EMS

- Pediatric patients constitute 5-10% of transports
- 1% critically ill
- Field interventions infrequently performed
- Consistent definitions across systems are limited
- Outcome measures are not validated



<https://www.unitekemt.com/blog/most-common-pediatric-emt-emergencies/>

The NEW EMSC Performance Measures



Pre-hospital

EMS recognition program

Pediatric Emergency Care Coordinator (PECC)

Proficiency of EMS providers in the use of pediatric-specific equipment

Disaster plan that includes children



Hospital

Facility recognition programs

Pediatric Emergency Care Coordinator (PECC)

Weigh and record weight in kilograms only

Disaster plan that includes children



Family Partnership and Leadership

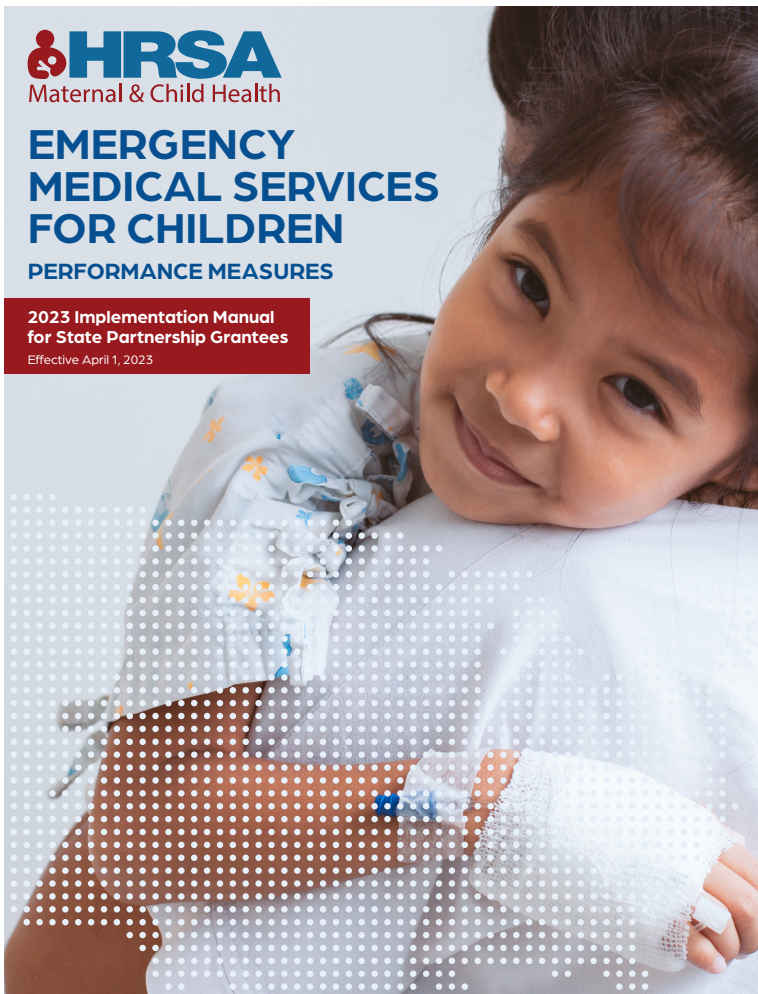
EMSC advisory committee

Pediatric representation on EMS board

Integration of EMSC priorities into state/territorial law or regulations



The NEW EMSC Performance Measures



Pre-hospital

EMS recognition program

Pediatric Emergency Care Coordinator (PECC)

Proficiency of EMS providers in the use of pediatric-specific equipment

Disaster plan that includes children



2023 Use of Pediatric Specific Equipment Overview

NATIONAL

Use of Pediatric-Specific Equipment (EMSC 03):

26.5%
(2,119/7,982)

(Exclusions See Above)

See pg. 35 in the "EMSC for Children Performance Measures, Implementation Manual for State Partnership Grantees, Effective March 1st, 2017" for an explanation of the scoring.

TEXAS

Use of Pediatric-Specific Equipment (EMSC 03):

34.3%
(60/175)

(Exclusions See Above)

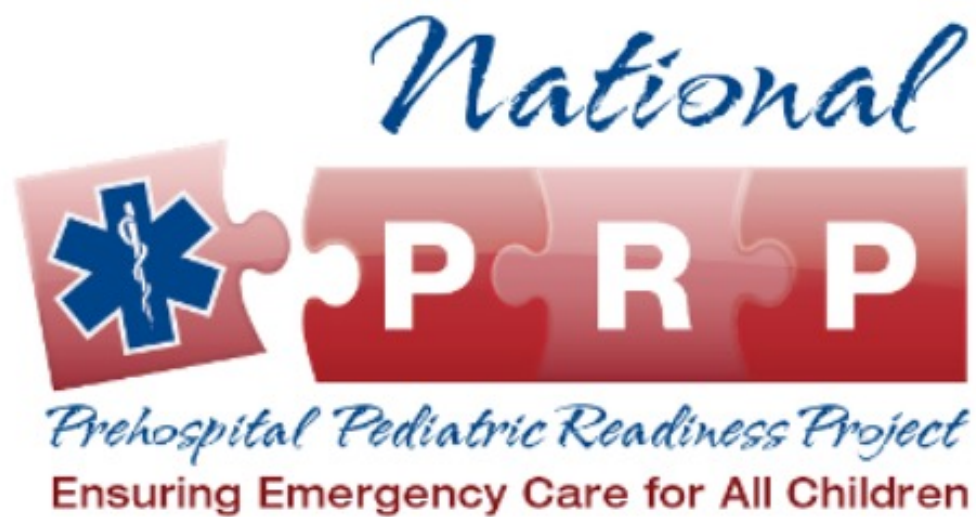
See pg. 35 in the "EMSC for Children Performance Measures, Implementation Manual for State Partnership Grantees, Effective March 1st, 2017" for an explanation of the scoring.



Initiatives: EMSC State Partnership, Texas

- CYSHCN Course
- EMS for Children Crew of the Year Award
- EMS Week/EMSC Day
- EMSC Advisory Committee
- EMS Recognition Program
- National EMS Survey
- National Association of State EMS Officials (NASEMSO)
- National Pediatric Readiness Quality Collaborative
- National Pediatric Readiness Project (NPRP)





Prehospital Pediatric Readiness

A National Collaborative to Address Gaps
in Pediatric Prehospital Care

Background



Where did the Prehospital Pediatric Readiness Project (PPRP) come from?

How was the PPRP Assessment created?

2020: Pediatric Readiness in Emergency Medical Services Systems

POLICY STATEMENT Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

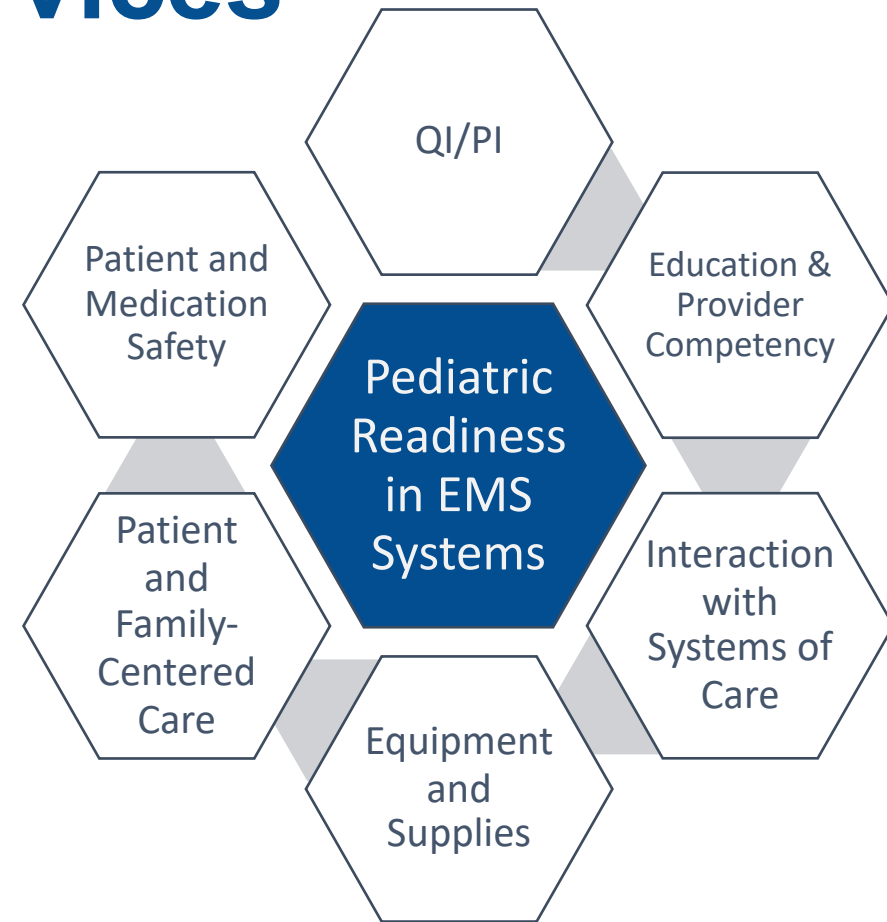
American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

Pediatric Readiness in Emergency Medical Services Systems

Brian Moore, MD, FAAP,^a Manish I. Shah, MD, MS, FAAP,^b Sylvia Owusu-Ansah, MD, MPH, FAAP,^c Toni Gross, MD, MPH, FAAP,^d Kathleen Brown, MD, FAAP,^{e,f} Marianne Gausche-Hill, MD, FACEP, FAAP, FAEMS,^g Katherine Remick, MD, FACEP, FAAP, FAEMS,^{h,i} Kathleen Adelgais, MD, MPH, FAAP,^b John Lyng, MD, FAEMS, FACEP, NRP,^j Lara Rappaport, MD, MPH, FAAP,^m Sally Snow, RN, BSN, CPEN, FAEN,ⁿ Cynthia Wright-Johnson, MSN, RNC,^o Julie C. Leonard, MD, MPH, FAAP,^p and the AMERICAN ACADEMY OF PEDIATRICS COMMITTEE ON PEDIATRIC EMERGENCY MEDICINE AND SECTION ON EMERGENCY MEDICINE EMS SUBCOMMITTEE, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS EMERGENCY MEDICAL SERVICES COMMITTEE, EMERGENCY NURSES ASSOCIATION PEDIATRIC COMMITTEE, NATIONAL ASSOCIATION OF EMERGENCY MEDICAL SERVICES PHYSICIANS STANDARDS AND CLINICAL PRACTICE COMMITTEE, NATIONAL ASSOCIATION OF EMERGENCY MEDICAL TECHNICIANS EMERGENCY PEDIATRIC CARE COMMITTEE



"In order to provide infrastructure designed to support the prehospital emergency care of children AAP, ACEP, ENA, NAEMSP, and NAEMT believe that EMS systems should..."



Technical Report

“...establish a foundation on which to build optimal pediatric care within EMS systems and serve as a resource for clinical and administrative EMS leaders.”

TECHNICAL REPORT

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

Pediatric Readiness in Emergency Medical Services Systems

Sylvia Owusu-Ansah, MD, MPH, FAAP;^a Brian Moore, MD, FAAP;^b Manish I. Shah, MD, MS, FAAP;^c Toni Gross, MD, MPH, FAAP;^d Kathleen Brown, MD, FAAP;^{e,f} Marianne Gausche-Hill, MD, FACEP, FAAP, FAEMS;^g Katherine Remick, MD, FACEP, FAAP, FAEMS;^{h,i} Kathleen Adelgais, MD, MPH, FAAP;^k Lara Rappaport, MD, MPH, FAAP;^l Sally Snow, RN, BSN, CPEN, FAEN;^m Cynthia Wright-Johnson, MSN, RNC;ⁿ Julie C. Leonard, MD, MPH, FAAP;^o John Lyng, MD, FAEMS, FACEP, NRP;^p Mary Fallat, MD, FACS, FAAP;^q COMMITTEE ON PEDIATRIC EMERGENCY MEDICINE, SECTION ON EMERGENCY MEDICINE, EMS SUBCOMMITTEE, SECTION ON SURGERY

- 16 recommendations – describes context and evidence base
- Medical oversight key to improved pediatric readiness
- Education, training and availability of equipment
- Policies and protocols
- Leverage evidence base and work by stakeholders
- Importance of data and QI



The National Prehospital Pediatric Readiness Project



STATE PARTNERSHIP PROGRAM



PECARN Pediatric Emergency Care Applied Research Network



National Prehospital Pediatric Readiness Project

- Assess the capacity of our nation's EMS system to meet the needs of children
- Ensure high quality emergency care for all children
- Develop and support the role of PECCs in EMS agencies
- Focus on EMSC Performance Measures



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American College of
Emergency Physicians®



Why It Matters



The Vision

That all EMS and fire-rescue agencies have the appropriate resources to provide effective emergency care for children.



How do you know if you're *really* ready?



Steps to Become Pediatric Ready



STEP 1: MEASURE

STEP 2: IMPROVE

Step 1: Measure



PPRP Assessment

The PPRP Assessment is based on the 2020 Pediatric Readiness in Emergency Medical Services Systems joint policy statement and technical report. It is a national multi-phase initiative, focused on the prehospital EMS system. The assessment is led by the EMS for Children Program in partnership with more than 30 national organizations and stakeholders.

Endorsed by the Governor's EMS and Trauma Advisory Council



Readiness Focus Areas



**Education and
Competencies for
Providers**



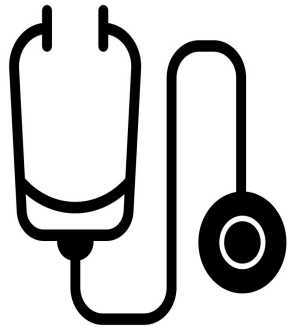
**Patient and
Medication Safety**



**Policies, Procedures,
and Protocols**



**Interaction with
Systems of Care**



**Equipment and
Supplies**

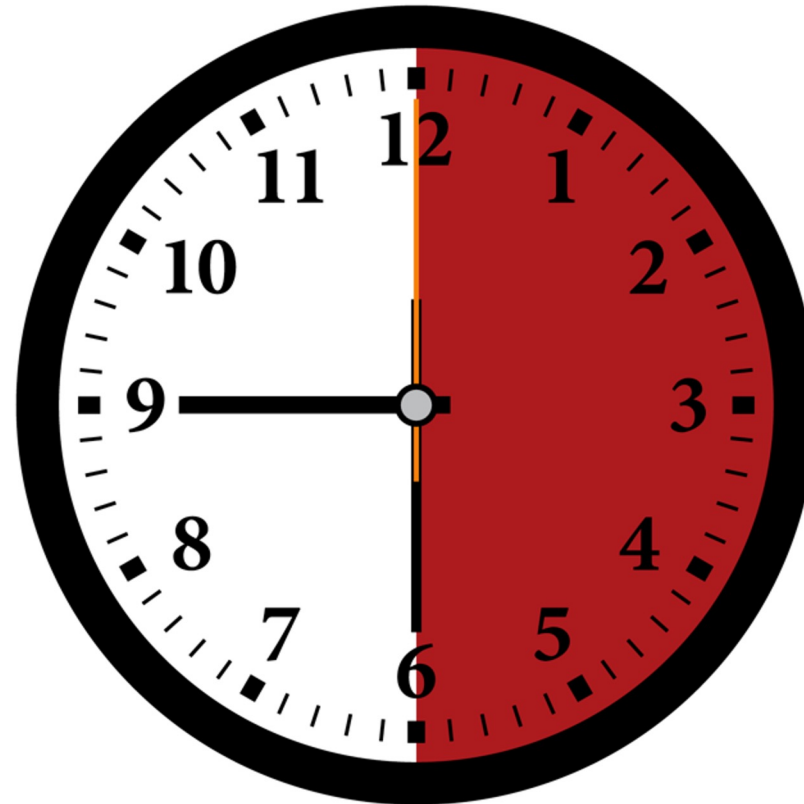


**Patient- and Family-
Centered Care**



**Quality and Performance
Improvement**

Increase Your Comfort & Confidence



~30 MINUTES

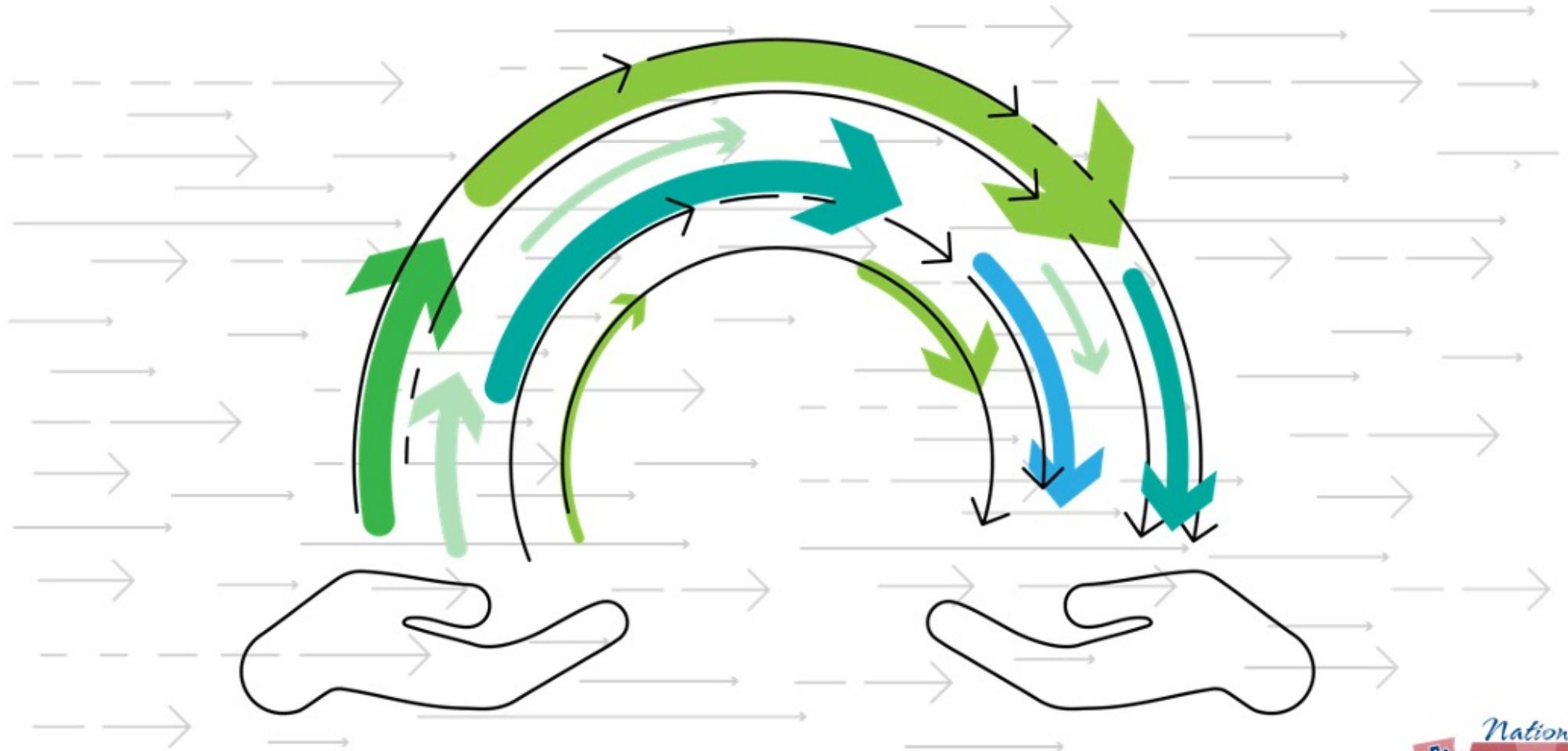
Collect Data in Advance

**1.
ANNUAL
CALL
VOLUME**

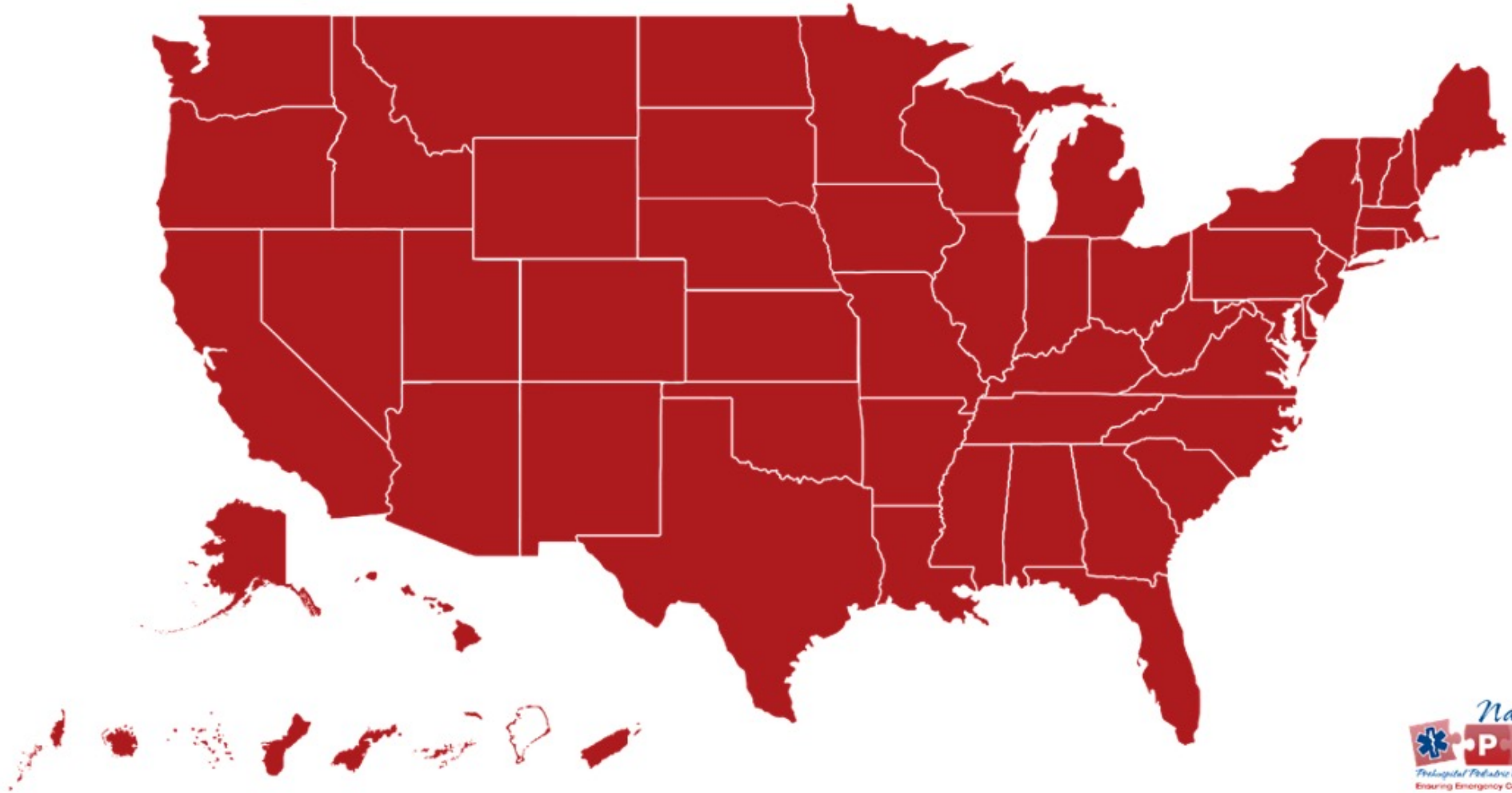
**2.
ANNUAL
PEDIATRIC
CALL
VOLUME**

**3.
NUMBER OF
PERSONNEL
AT EACH
LEVEL OF
CERTIFICATION**

What's in It for Me?



Advancing Care Nationally



Participation Drawing



Step 2: Improve



PPRP Checklist

National PPRP
Prehospital Pediatric Readiness Program
Ensuring Emergency Care for All Children

Prehospital Pediatric Readiness EMS Agency Checklist

This checklist is based on the 2020 joint policy statement "Pediatric Readiness in Emergency Medical Services Systems", co-authored by the Academy of Pediatrics (AAP), American College of Emergency Physicians (ACEP), Emergency Nurses Association (ENA), National Association of EMS Physicians (NAEMSP), and National Association of EMTs (NAEMT). Additional details can be found in the EBP Technical Report "Pediatric Readiness in Emergency Medical Services Systems".

Use this tool to check if your EMS agency is ready to care for children as recommended in the Policy Statement. Consider using resources compiled by the Health Resources & Services Administration's Emergency Medical Services for Children (EMSC) Program when implementing the recommendations noted here, to include the **Prehospital Pediatric Readiness Toolkit**.

Education & Competencies for Providers	Equipment and Supplies
<p>Process(es) for ongoing pediatric specific education using one or more of the following modalities:</p> <ul style="list-style-type: none">- Classroom/in-person didactic sessions- Online/distributive education- Skills stations with practice using pediatric equipment, medication and protocols- Simulated events <p>Process for evaluating pediatric-specific competencies for the following types of skills:</p> <p>Psychomotor skills, such as, but not limited to:</p> <ul style="list-style-type: none">- Airway management- Fluid therapy- Medication administration- Vital signs assessment- Weight assessment for medication dosing and equipment sizing- Specialized medical equipment <p>Cognitive skills, such as, but not limited to:</p> <ul style="list-style-type: none">- Patient growth and development- Scene assessment- Pediatric Assessment Triangle (PAT) to perform assessment- Recognition of physical findings in children associated with serious illness <p>Behavioral skills, such as, but not limited to:</p> <ul style="list-style-type: none">- Communication with children of various ages and with special health care needs- Patient and family centered care- Cultural awareness- Health care disparities- Team communication	<p>Utilize national consensus recommendations for availability of equipment and supplies</p> <p>Process for determining complete availability of equipment and supplies</p> <p>Patient and Medication Management</p> <p>Utilization of tools to reduce pediatric dosing and administration errors, limited to:</p> <ul style="list-style-type: none">- Length-based tape- Volumetric dosing guide <p>Policy for the safe transport of pediatric patients</p> <p>Equipment necessary for the safe transport of pediatric patients</p> <p>Patient- and Family-Centered Care</p> <p>Partner with families to integrate family-centered care in policies, procedures, and practices, including:</p> <ul style="list-style-type: none">- Using lay terms to communicate with families- Having methods for accessing interpreters to communicate with non-English speaking patients and family members- Narrating actions, and alerting patients and caregivers before interventions are performed <p>Policies and procedures that facilitate:</p> <ul style="list-style-type: none">- Family presence during resuscitation- The practice of cultural or religious customs- A family member or guardian to accompany a pediatric patient during transport

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A clipboard with a red border and a silver clip at the top. It contains a checklist with five items, each with a red checkmark in a box to its left. The text of the items is mostly obscured by the checkmarks and the red border.





PPRP CHECKLIST



PPRP Toolkit

AUDIENCE

 ED clinicians 1

 EMS clinicians 14

DOMAIN

 Prehospital 1

MEDIA TYPE

 Article 1

 Document 13

SORT ORDER

 Pinned

 Most Recent

 Alphabetical

Search...

Search

14 Results

 Document  Pinned

Recommended Essential Equipment
for BLS & ALS Ground Ambulances
(2020)

10 pages

 Details



 Document

Access to Optimal Emergency Care
for Children (AAP)

9 pages

 Details



 Document

Consent for Emergency Medical
Services for Children and
Adolescents (AAP)

9 pages

 Details



 Document

Definition of Emergency Medicine
(ACEP)

1 page

 Details



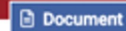
 Document

Drugs Used to Treat Pediatric
Emergencies (AAP)

5 pages

 Details



 Document

Joint Statement on Lights & Siren
Vehicle Operations on EMS
Responses

4 pages

 Details





EMS Recognition Program

- Launched July 2014
- Multi Phase Program
 - Bronze
 - Silver
 - Gold
- 2021-2022 Revised the program
 - PM 01: NEMSIS Data Submission
 - PM 02: PECC
 - PM 03: Use of Pediatric Equipment
 - Prehospital Pediatric Readiness Project (PPRP)
 - New recommended equipment list
- Air medical component added May 2023

EMS Recognition Program



Pictured from left: VFD Fire Chief Tracy Fox, VFD EMS Battalion Chief Mark Martyn, City of Victoria Mayor Jeff Bauknight, and Texas EMSC Program Manager Sam Vance

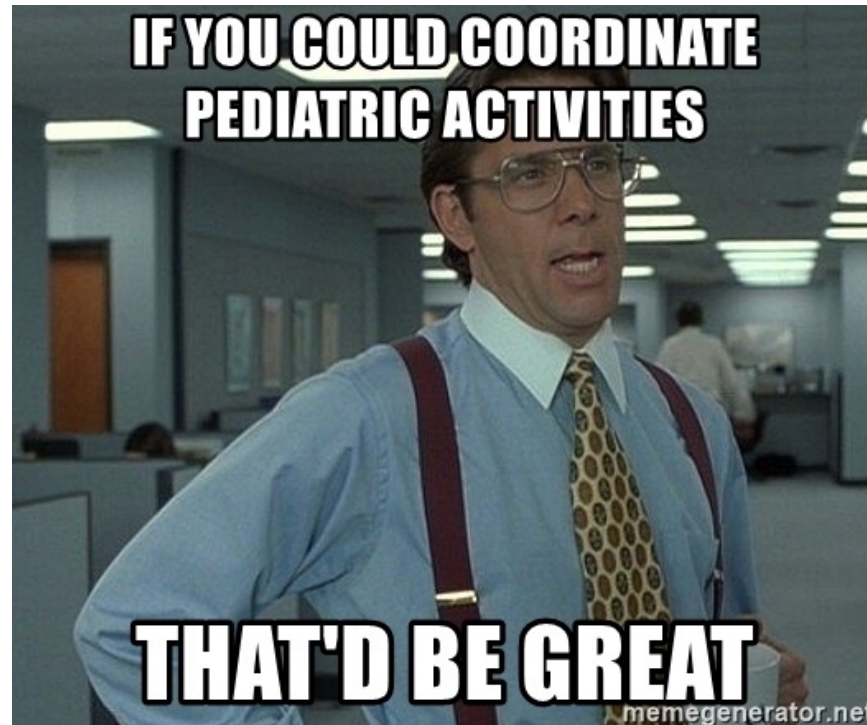


Wow...that's comprehensive, but isn't there something missing?

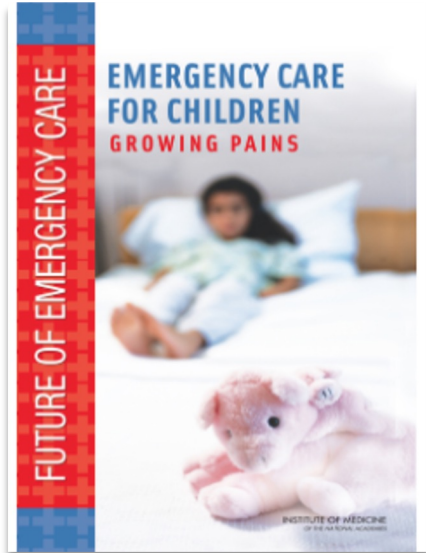


What is a PECC?

An individual(s) who is responsible for coordinating pediatric specific activities.



Pediatric Readiness in Emergency Medical Services Systems



NAEMSP RESOURCE DOCUMENT

RESOURCE DOCUMENT: COORDINATION OF PEDIATRIC EMERGENCY CARE
IN EMS SYSTEMS

Katherine Remick, MD, Toni Gross, MD, MPH, Kathleen Adalgais, MD, MPH,
Manish I. Shah, MD, MS, Julie C. Leonard, MD, MPH, Marianne Gausche-Hill, MD

serves as a
pediatric
health care
liaison

incorporated
into an EMS
system as a
single
provider or
team of
providers

oversees the
system-based
care of
pediatric
patients

Highlights the
importance of
PECC leadership in
EMS systems

promotes
integration of
pediatric
elements into
day-to-day
services and
disaster
planning

Value of the PECC Role



of EMS agencies *see fewer than 1 pediatric patient* a month
(on average)

<10%

of EMS calls are for pediatric patients

Background



EMSC 02 PEDIATRIC EMERGENCY CARE COORDINATOR (PECC)

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

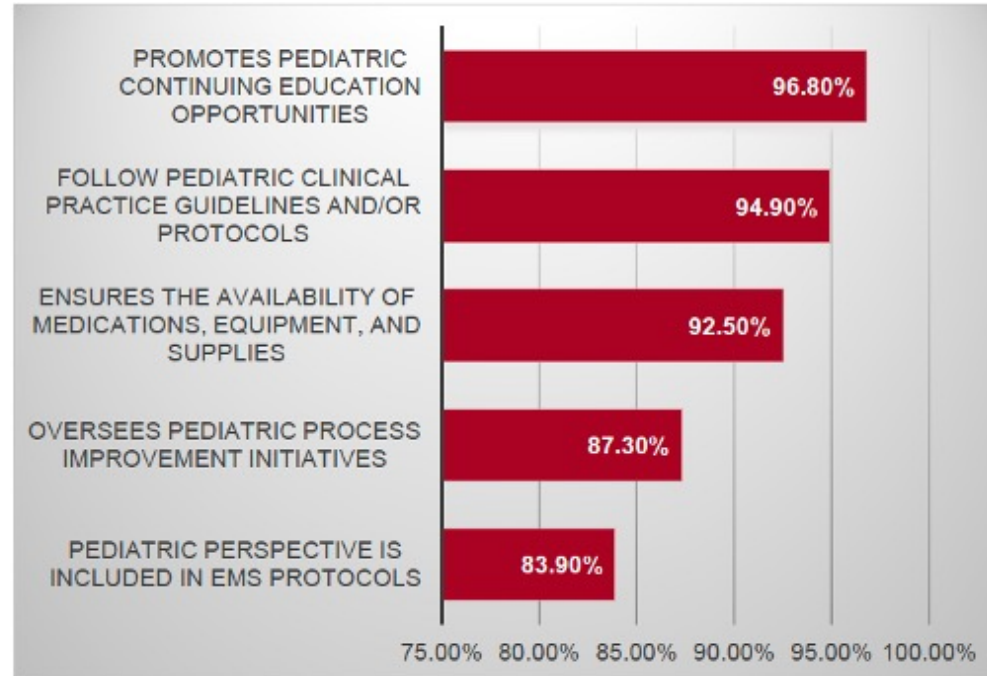
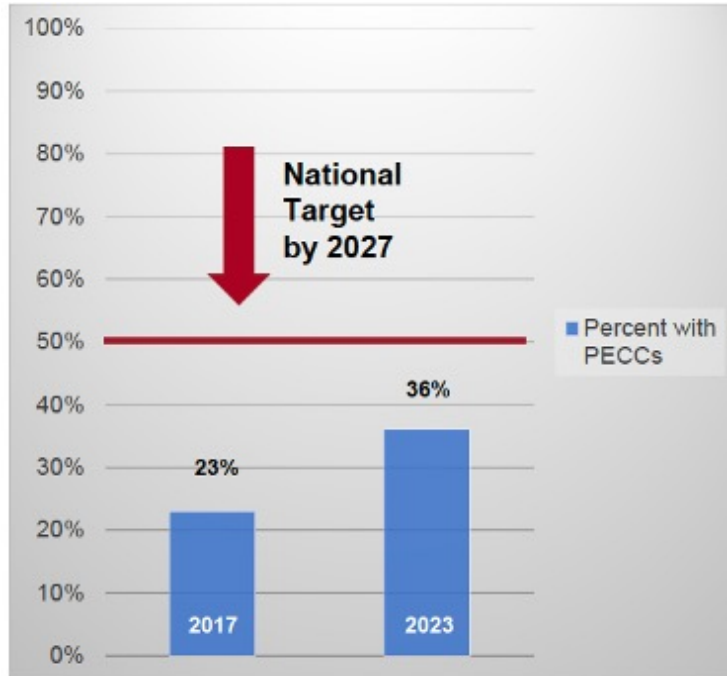
Goal for this measure is that by 2026:

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

- Percent of EMS agencies that have a Pediatric Emergency Care Coordinator
- Annually measured since 2017
- Numerous EMSC initiatives to promote
- Published research describing role, barriers, enablers



PECCs in EMS Agencies



Why This Role Matters



Increased staff
confidence



Additional training
opportunities



Improved care



Pediatric Voice

Role Benefits

Ensure resources are available

Maintain relationships

Disaster preparedness

Establish/maintain protocols

Establish QI plans

Equipment & supplies

Hospital and EMS liaisons

Family-centered care



Who can fill this role?



Passion for kids is all that's required.



Summary

EMS providers face many barriers to providing the best possible care for children and to being pediatric ready

The Pediatric Prehospital Readiness Project is a large-scale, years-long effort to improve knowledge and implement change for EMS agencies on the care of children





Questions

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Special thanks to Kathleen Adalgais, MD, MPH EMSC Colorado!