

Caring for our *Children*

EMS Week 'Save a Life' Day Webinar
May 20th, 2021

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Brian Moore, MD FAAP

Sylvia Owusu-Ansah, MD MPH

Jeff Jarvis, MD, MS, EMT-P

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Melissa Winger

Capt. Steve Maselli

Funding Acknowledgement

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Overview

- **Policy Statement Overview:** Brian Moore, MD
- **Technical Report: “Putting the Statement into Action”:** Sylvia Owusu-Ansah, MD MPH
- **Importance of Pediatric Readiness for EMS Agencies:** Jeff Jarvis, MD *(recorded)*
- **Prehospital Pediatric Readiness Checklist Overview:** Manish Shah MD, MS *(recorded)*
- **Prehospital Pediatric Readiness Toolkit Overview:** Melissa Winger
- **Testimonial: What it means to be a PECC:** Capt. Steve Maselli
- **Time for Questions**

Tips and Tricks

Your microphones are muted by default

Feel free to add questions in the Q&A

We will take time to answer questions in the Q&A between speakers and at the end of the entire presentation

Recorded session will be posted to EMSCImprovement.center



National Prehospital Pediatric Readiness Project

Joint Policy Statement Overview

Brian Moore, MD, FAAP

Professor of Emergency Medicine

Division Pediatric Emergency Medicine

University of New Mexico

Goal

This presentation will provide an understanding of how a policy statement comes to approval and publication working with multiple national professional organizations

Background

- AAP EMS Subcommittee 2014
- Goal of the committee was to create a policy statement
- Few initial ideas
- Model after 2009 AAP/ACEP/ENA statement Care of Children in the Emergency Department
- Intent for Statement Submitted to AAP COPEM

Authoring Organizations



American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®



 American College of
Emergency Physicians®

ADVANCING EMERGENCY CARE 



Evolution

- Started as a 17 page document (not including references)
- Recommend to pair down by partner organizations
 - 5 pages
- Needed to be much shorter, to the point, statement in order align with statement format and to gain approval from partner organizations
 - 2 pages
- Significant negotiations and compromises with all authoring groups in order to get this statement to this point.
- In the meantime, the original AAP/ACEP/ENA ED statement was revised
 - Some of the language, including title change, adopted to align with changes in the Pediatric Readiness ED statement

Recommendations

Released in
January 2020

“In order to provide infrastructure designed to support the prehospital emergency care of children

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



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,j} Kathleen Adelgais, MD, MPH, FAAP,^k John Lyng, MD, FAEMS, FACEP, NRP,^l 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

**AAP/ACEP/ENA/NAEMSP/NAEMT
believe that EMS systems should:**

Recommendations

- Include **pediatric considerations in EMS planning, operations, and oversight**, for example as outlined in the NAEMSP position statement: *Physician Oversight of Pediatric Care in EMS*
- **Collaborate with medical professionals** with significant experience or expertise in pediatric emergency care, public health experts, and family advocates for the development and improvement of EMS operations, treatment guidelines and quality improvement initiatives
- **Integrate evidence-based, pediatric-specific elements** into the direct and indirect medical oversight that constitute the global EMS oversight structure

Recommendations

- Have **pediatric-specific equipment and supplies available**, using national consensus recommendations as a guide, and verify that EMS providers are competent in using them
- Develop processes for **delivering comprehensive, ongoing pediatric-specific education and evaluating pediatric-specific psychomotor and cognitive competencies** of EMS providers
- Promote education and awareness among EMS providers about the **unique physical characteristics, physiological responses, and psychosocial needs** of caring for children with an illness or injury

Recommendations

- **Implement practices to reduce pediatric medication errors.** These may include use of a length-based tape to estimate weight, use of pre-calculated drug dosing charts, or verifying doses by another provider
- Include **pediatric-specific measures in periodic QI/QA processes** that address morbidity and mortality
- **Submit data to a statewide database** that is compliant with the most recent version of the National EMS Information System (NEMSIS) and work with hospitals to which it transports patients to track pediatric patient-centered outcomes across the continuum of care

Recommendations

- Develop and maintain **policies for the safe transport of children** in emergency vehicles
- Develop **protocols for destination of pediatric patients**, with consideration of regional resources and weighing the risks and benefits of keeping children in their own communities
- **Collaborate, along with receiving EDs**, to provide pediatric readiness across the care continuum

Recommendations

- Include **considerations for caring for children and families in emergency preparedness planning and exercises**, including the care and tracking of unaccompanied children and timely family reunification in the event of disasters
- **Promote overall patient and family-centered care by:** encouraging providers to provide situational awareness using lay terms to communicate with patients, families, and bystanders on scene; narrating actions; and alerting them before doing a procedure.
- In addition, **allow family members to remain close to their child during resuscitation activities** and to practice cultural or religious customs, as long as they do not interfere with patient care

Recommendations

- Have policies and procedures in place to **allow a family member or guardian to accompany a pediatric patient during transport**, when appropriate and feasible
- Consider utilizing resources compiled by the EMSC program when implementing the recommendations noted above

Lesson Learned

- Need a 'champion' early in the process for each organization and committee
- Each organization has their own processes for statements
- Authorship, endorsement, review
- Bridge Building, Collaboration, Flexibility

Conclusions

- Ill and injured children and their families have unique needs that can be magnified when the child's ailment is serious or life-threatening.
- Resource availability and pediatric readiness across EMS agencies is variable.
- Providing high-quality EMS care to children requires an infrastructure designed to support the care of pediatric patients and their families.
- **Therefore, it is important that EMS physicians, administrators, and EMS personnel collaborate with pediatric acute care experts to optimize EMS care through the development of care models in order to minimize morbidity and mortality in children as a result of illness and injuries.**

Acknowledgments

Manish I. Shah, MD, MS

Sylvia Owusu-Ansah MD, MPH

Toni Gross, MD, MPH

Kathleen Brown, MD

Marianne Gausche-Hill, MD

Kate Remick, MD

Kathleen Adelgaiss, MD

John Lyng, MD

Lara Rappaport, MD

Sally Snow, RN, BSN

Cynthia Wright-Johnson, MSN,
RNC

Julie Leonard, MD

National Prehospital Pediatric Readiness Project



Technical Report: “Putting the Statement into Action”

Sylvia Owusu-Ansah MD, MPH

Assistant Professor of Pediatrics

Associate Vice Chair of Diversity, Equity, and Inclusion

Prehospital-EMS Medical Director (Medical Command Physician
MD- 22)

UPMC Children's Hospital of Pittsburgh

Assistant Professor of University of Pittsburgh School of Health
and Rehabilitation Services

Pediatric Liaison - Division of EMS - Department of Emergency
Medicine



EMERGENCY CARE FOR CHILDREN GROWING PAINS



Background: IOM

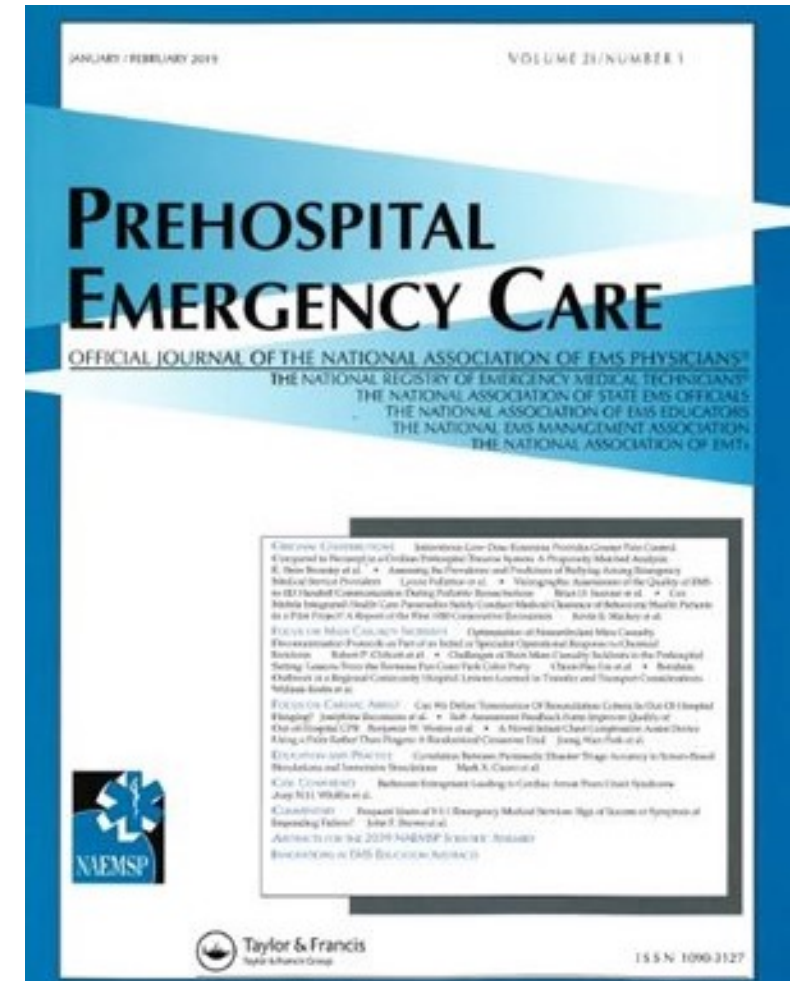
- Released in 2007
- Specifically recommends that EMS agencies designate a pediatric emergency coordinator to ensure that training and guidelines are available to field providers to maintain competence in the emergent care of children
- Role is now commonly referred to as a pediatric emergency care coordinator (PECC).
- The IOM report suggests the individual(s) filling this role would serve as a resource to oversee:
 - Any pediatric care quality improvement initiatives in the agency;
 - Provide skills-based training to agency staff; and
 - Assuring that all medications, equipment and supplies needed for a child are stocked and available in all responding vehicles.

PEM - EMS National Impact

- Pediatric Emergency Care is recognized as crucial to the development and maintenance of:
 - Pediatric protocols
 - Education and quality improvement
- A step above and beyond the participation of a medical director to recognize the specific needs of children in the EMS environment

Resource Document: Coordination of Pediatric Emergency Care in EMS Systems

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



Pediatric Readiness for Prehospital Care



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

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,j} Kathleen Adelgais, MD, MPH, FAAP,^k John Lyng, MD, FAEMS, FACEP, NRP,^l 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

TECHNICAL REPORT

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,j} 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

Essence of the Technical Report

- It is important for EMS agencies have the appropriate resources:
 - Physician oversight
 - Trained and competent staff
 - Education
 - Policies
 - Medications
 - Equipment and supplies
 - Effective care for children
- ****foundation to build optimal pediatric care within EMS systems and serve as a resource***



Key Components of the Technical Report

Policy, Procedures
and Protocols

Patient and
Medication Safety

Patient and Family
Centered Care

Pediatric Safe
Transport

Special Health
Care Needs

Health Disparities
in Pediatric
Prehospital Care

Mental Health and
Pediatric
Prehospital Care

Interaction with
Systems of Care

- Trauma, MCI and Disasters

Equipment,
Supplies and
Medications



Local and Regional Impact of the Technical Report



Pediatric Readiness in Emergency Medical Services Systems Technical Report

Pediatric
Readiness for
EMS is now a
national
initiative!!!

Steering Committee formed

Checklist for EMS agencies

EMS for Children Performance
Measures

Pediatric Prehospital Readiness Project Steering Committee

- Consists of pediatric prehospital experts that represent numerous EMS organizations throughout the country in various fields with various skill sets to put the technical report into practice
- EMS medical directors
- State EMSC directors and personnel
- National EMSC personnel
- Disaster preparedness experts
- Prehospital researchers
- EMS fellows
- Fire service leaders and providers

Conclusion

- **The technical report helps to serve this purpose**
- It is important that EMS physicians, administrators, and EMS personnel collaborate with pediatric acute care experts to optimize EMS care through the development of care models in order to minimize morbidity and mortality in children as a result of illness





National Prehospital Pediatric Readiness Project

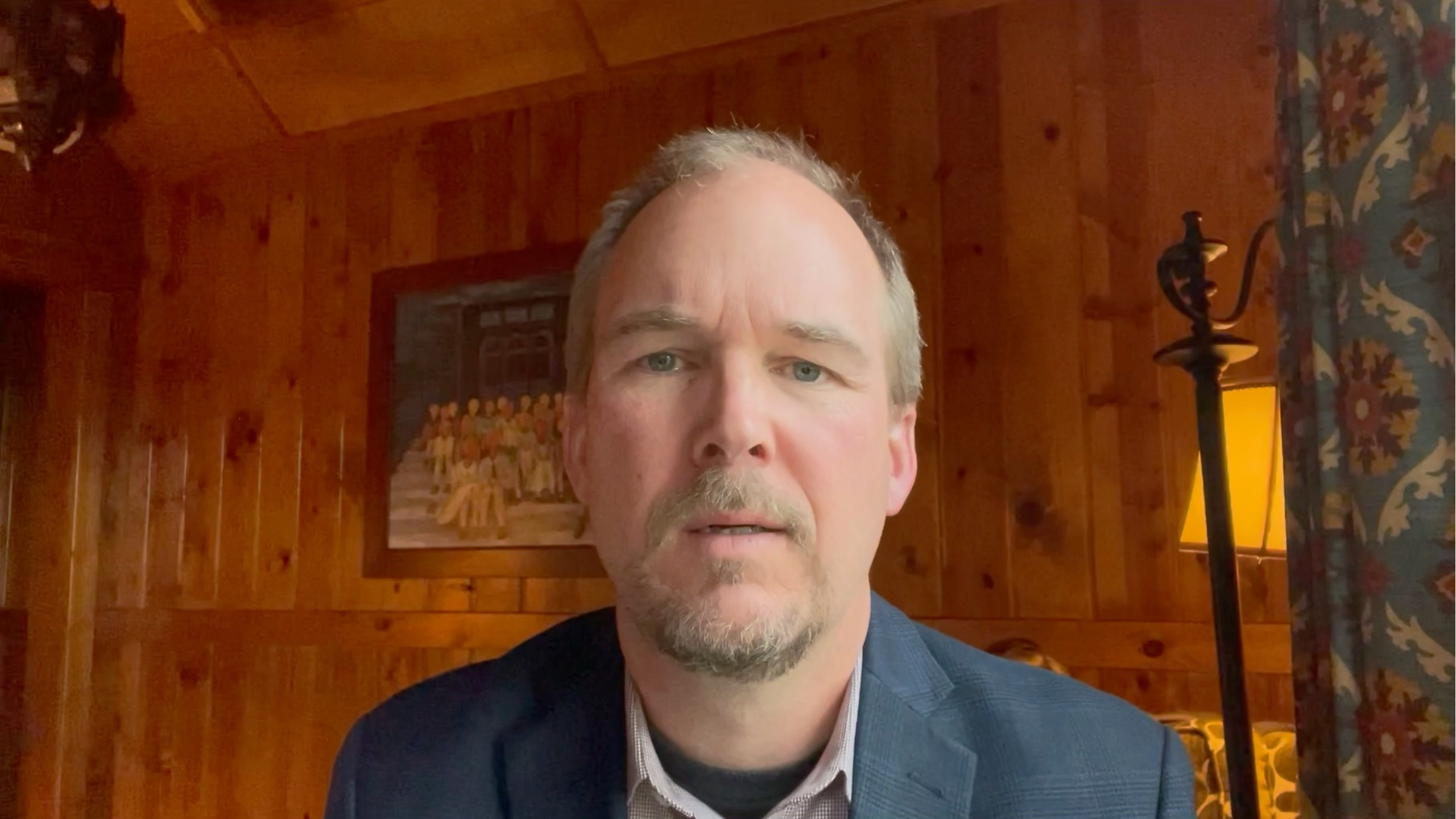


Testimonial: Importance of Pediatric Readiness for EMS Agencies

Jeff Jarvis, MD, MS, EMT-P, FACEP, FAEMS

EMS Medical Director for Williamson County EMS and Marble Falls Area EMS

Clinical Associate Professor in the Department of Emergency Medicine at the University of Texas at Houston, McGovern School of Medicine



National Prehospital Pediatric Readiness Project



EMS Agency Checklist

Manish I. Shah, MD, MS

Associate Professor

Baylor College of Medicine

Department of Pediatrics,
Section of Emergency Medicine




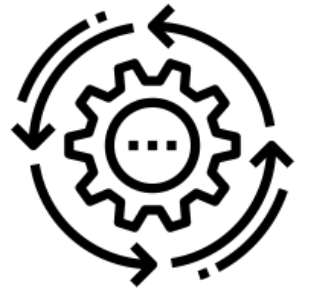
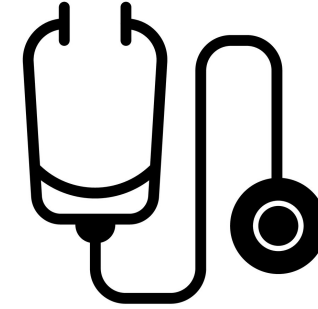
Checklist Overview

- Tangible resource to enhance EMS agency pediatric readiness
- Based on the *Policy Statement and Technical Report*
- Purpose: EMS agency self-assessment
- Expectation is to identify gaps in readiness
- Developed for all, regardless of EMS pediatric call volume



Checklist Domains

- Education and Competencies for Providers
- Equipment and Supplies
- Patient and Medication Safety 
- Patient- and Family-Centered Care
- Policies, Procedures, and Protocols
- Quality Improvement / Performance Improvement
- Interaction with Systems of Care



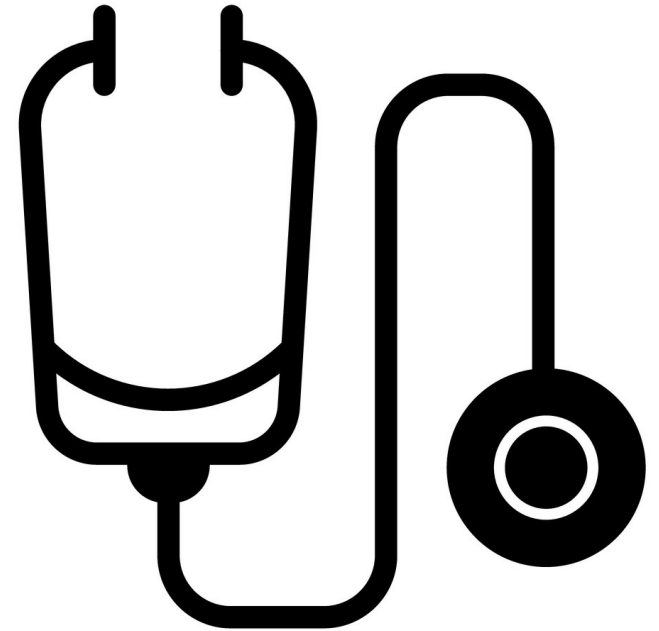
Education and Competencies for Providers

- Ongoing pediatric education using one or more modalities
- Evaluating competencies for the following types of skills:
 - Psychomotor
 - Cognitive
 - Behavioral



Equipment and Supplies

- Utilize national recommendations for equipment and supplies for all ages
- Determine competency on using available equipment and supplies



Patient and Medication Safety

- Tool to reduce medication dosing errors
- Policy for safe transport of children
- Equipment to safely transport children



Patient– and Family-Centered Care

- Using lay terms to communicate
- Accessing language services for non-English speaking people
- Narrating actions
- Family presence during resuscitation
- Practice of cultural or religious customs
- Family accompanying patient during transport




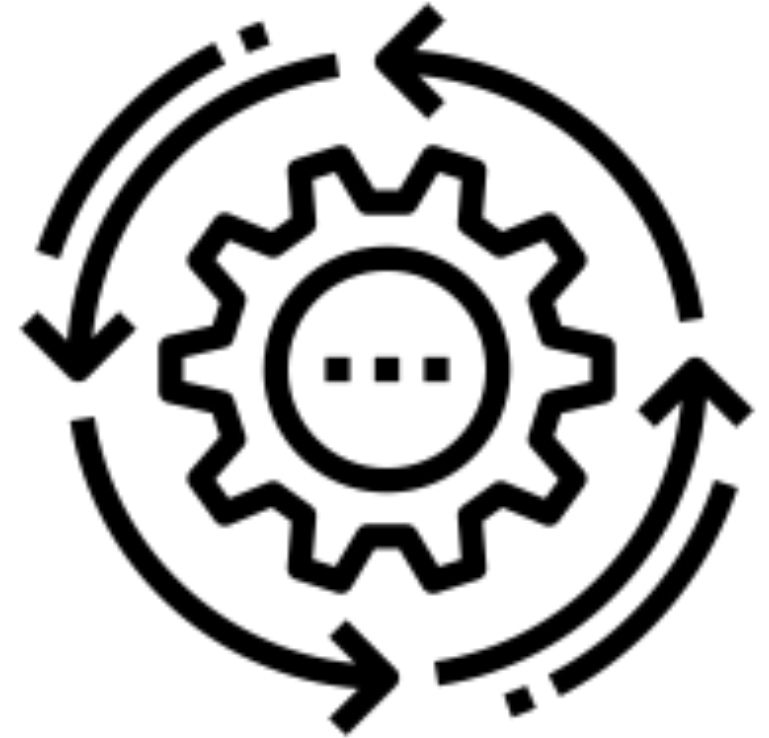
Policies, Procedures, and Protocols

- Pre-arrival instructions in EMS dispatch protocols
- Inclusion of pediatric considerations
- Direct medical oversight integrates pediatric-specific knowledge
- Protocols include pediatric evidence
- Destination policies for pediatric-specific resources



Quality Improvement / Performance Improvement

- Improvement processes include pediatric encounters
- Pediatric-specific metrics included
- Data submission to state 
- Data compliant with current version of NEMESIS
- Patient centered outcomes tracked




Interaction with Systems of Care

- Collaboration with pediatric emergency care, public health, and family advocates
- Disaster and mass casualty incident planning includes needs of children
- Internal support or external collaboration focused on enhancing pediatric care
- Understand pediatric capabilities of local and regional emergency departments
- Transfer of responsibility of patient care at destination



Summary

- Set goals based on checklist gaps
- Use the toolkit to achieve those goals
- Learn more at the EIIC website
- Provide feedback online at  **prrp@emscimprovement.center**



Emergency Medical
Services for Children
Innovation and Improvement Center





National Pediatric Readiness Project

EMS Agency Toolkit Overview

Melissa Winger

Toolkit Subcommittee Co-Chairperson

Minnesota Family Advisory Network (FAN) Representative

Devin's mom (sweet, amazing young adult with complex medical needs)

Toolkit Subcommittee Charter

The Prehospital Pediatric Readiness Steering Committee provides leadership and mission definition for efforts aimed at improving pediatric emergency care outcomes and patient safety in the prehospital environment. The Prehospital Pediatric Readiness Toolkit Subcommittee's scope concentrates on addressing identified pediatric readiness gaps within the prehospital environment and providing resources in the form of a toolkit to help EMS agencies align with the joint policy statement.

Toolkit Committee Members

Cam Brandt CoChair Toolkit Committee-*Emergency Nurses Association (ENA)*

Amanda Perry -*EMSC State Partnership Grantee - Louisiana*

Ann Dietrich, MD-*National Association of Emergency Medical Technicians (NAEMT)*

Christopher Metsgar- *National Association of EMS Educators (NAEMSE)*

Christopher Page -*Emergency Medical Services for Children DC State Partnership*

Diane Pilkey - (HRSA) *Emergency Medical Services for Children (EMSC)*

Eric Campion, MD -*American College of Surgeons (ACS) Committee on Trauma (COT)*

George Foltin, MD -*American Academy of Pediatrics (AAP)- Section on Emergency Medicine (SOEM)*

Hezedeane Smith -*National EMS Management Association*

Joelle Simpson, MD- *American College of Emergency Physicians (ACEP): PEM Committee*

Jules Scadden- *National Volunteer Fire Council*

Kate Elkins-*National Highway Traffic Safety Administration (NHTSA) Office of EMS*

Kathleen Adelgais -*Project Co-Lead*

Mark X Cicero, MD- *Pediatrics Committee of the National Association of EMS Physicians (NAEMSP)*

Paul Brennan- *International Association of EMS Chiefs (IAEMSC)*

Robert McClintock -*International Association of Fire Fighters (IAFF)*

Toolkit Committee Fellows

Tabitha Cheng, MD PPRP Steering Committee Fellow
PEM Fellow at Harbor – UCLA

Lindsay Jaeger, MD PPRP Steering Committee Fellow
EMS Fellow at the University of Chicago

Anne Runkle, MD PPRP Steering Committee Fellow
PEM Fellow at Cincinnati Children's Hospital

Toolkit Process

- Items gathered by submissions of the committee members
- Divided & organized by domains listed in the Checklist
- Reviewed and vetted to ensure most updated information, best practices, and relevant to the domains
- Organized into categories and cross referenced to ensure we had a resource to cover all checklist items and obtain any resources we were missing
- Sorted and formatted to develop a user-friendly experience on the website



Now Available Online!



<https://emscimprovement.center/domains/prehospital-care/prehospital-pediatric-readiness/pprp-toolkit/>

Now Available Online!

Home / Focus Areas / Prehospital Based Care / Prehospital Pediatric Readiness / Prehospital Pediatric Readiness Toolkit / Patient & Medication Safety

Patient & Medication Safety



This section has tools to reduce medication errors and safe transport.

The resources in this section are organized into the following categories:

- Medication Safety
- Safe Transport

9 Results

Document

Safe Transport - Safe Transport of Children by EMS: Interim Guidance

3 pages

 Details

Video

Safe Transport - Pediatric Transportation Webinar

Document

Safe Transport - Sample Pediatric Transport Guideline (New Hampshire)

2 pages

Document

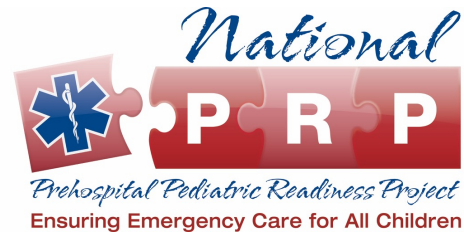
Medication Safety - Ambulance Personnel Perceptions of Near Misses and Adverse Events in Pediatric Patients

10 pages

<https://emscimprovement.center/domains/prehospital-care/prehospital-pediatric-readiness/pprp-toolkit/>

THANK YOU !

National Prehospital Pediatric Readiness Project



Testimonial: What it means to be a PECC

**Captain Steve Maselli,
Paramedic**

EMS Supervisor

Walton Fire Protection District



Walton Fire Protection District

- Located in Southern Boone County Kentucky (25 miles south of Cincinnati Ohio)
- We operate 2 ALS Ambulances out of 2 stations within our district
- In 2020 we had 1382 EMS Calls for service
- 5.6% or 78 of which were Pediatric Calls
- Cincinnati Children's Medical Center (Level 1 Trauma)



Reasons PECCs are needed

- Network with other PECC agencies
- Sharing of ideas
- Equipment
- Training
- Protocols

What having a PECC has done for us

- Handtevy
- Pediatric 1st in Bags
- Specialized Equipment
- Coordinate training with University of Cincinnati AirCare Crews



Registration Now Open!

Learn More & Register: <https://emscimprovement.center/collaboratives/pwdc/>



Time Commitment

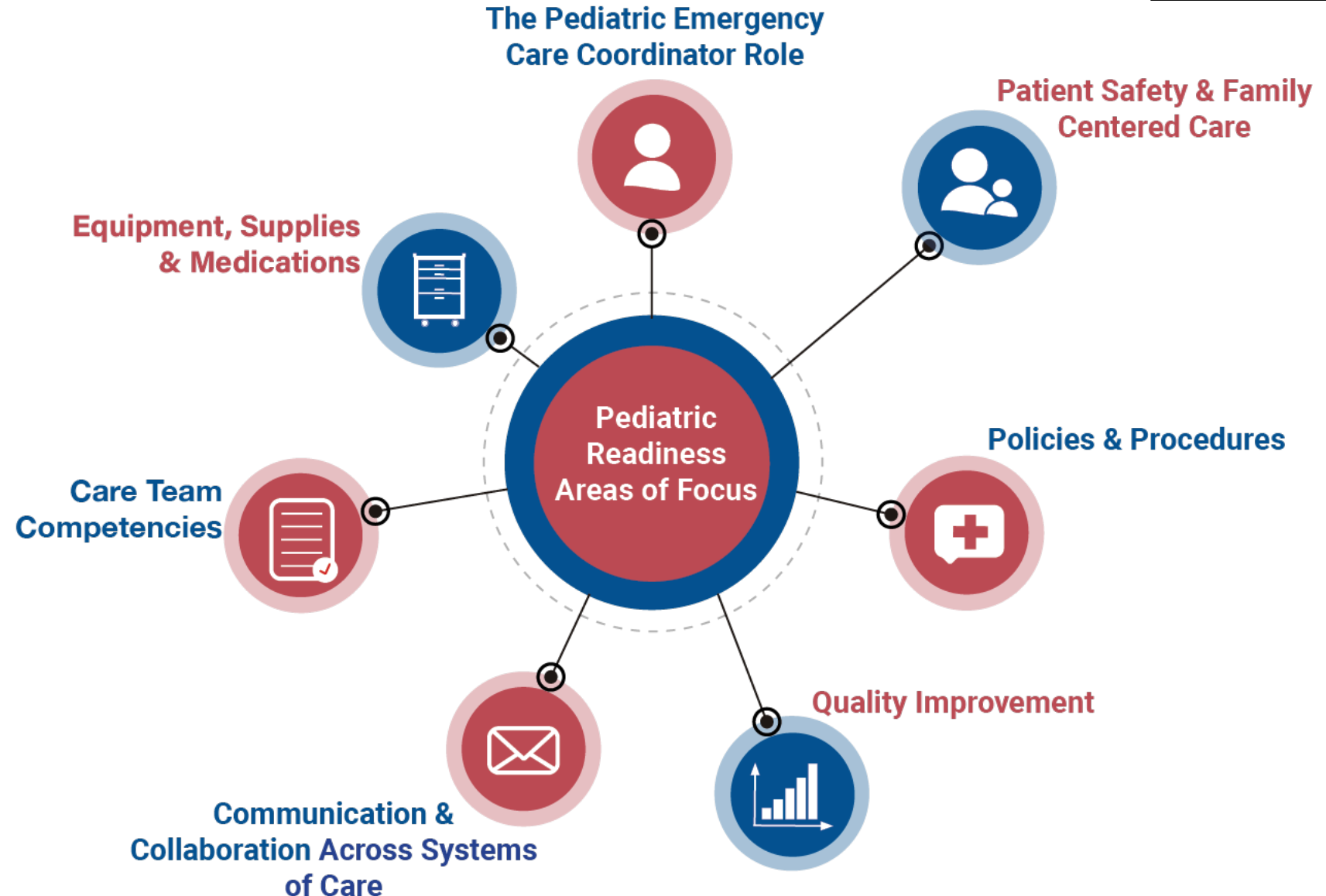
2 hr. / month

Purpose

Develop any healthcare professional working in the prehospital or emergency department systems into a highly effective champion of pediatric readiness.

Who Should Participate?

Prehospital Practitioners
Nurses & Other Healthcare Professionals
Physicians & Advanced Practice Providers
EMSC State Partnership Managers



Thank you....

Questions for Panel

Please put your questions in the Q&A....