

Emergency Medical Services for Children Innovation and Improvement Center

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Acknowledgements and Disclaimers



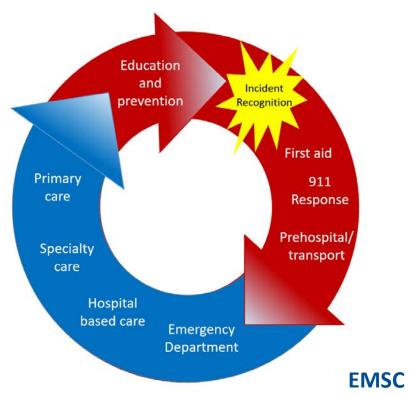
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Disclaimer

■ The content presented here and throughout this webinar and the collaborative is that of the authors and do not necessarily represent the official views of, nor an endorsement by HRSA, HHS, or the U.S. Government.

EMSC is "ensuring healthcare is pediatric ready"



EMSC grantees

	Innovation and Improvement	State	EMSC Data	Regionalization		PECARN
_	Center	Partnership	Center	of Care	Targeted Issues	Network
	Quality improvement	Infrastructure	Accountability	Systems integration	Innovation	Evidence generation



EMS for Children Innovation and Improvement Center Purpose



Analytics

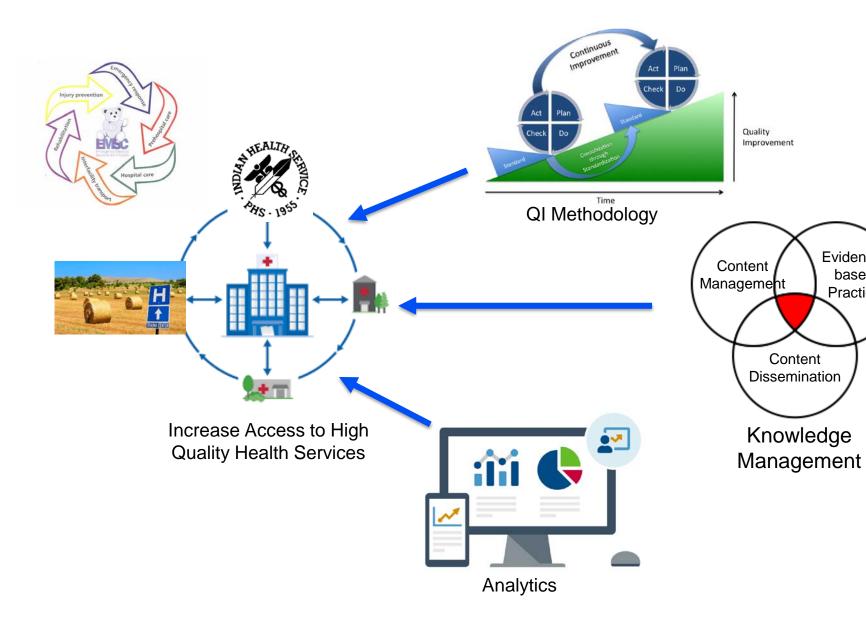
Science

Evidence

- Accelerating improvements in quality of care and outcomes for children who are in need of emergency care.
- Using an improvement science-based integration model, the EIIC was designed to link tools, efforts, and entities to effectively decrease child and youth mortality and morbidity sustained as a result of illness or injury.

EIIC Efforts to Improve Pediatric Emergency Care







Evidence-

based

Practice

Content

Partnerships



Issues



What is the National Pediatric Readiness Project?



 The National Pediatric Readiness Project (NPRP) is a multi-phase quality improvement initiative to ensure that all U.S. emergency departments have the essential guidelines and resources in place to provide effective emergency care to children.





Pediatric Readiness Activities Timeline



2009:

Joint Policy
Statement:
Guidelines for the
Care of Children in
the Emergency
Department
Published

2012:

National Pediatric Readiness Project established

2013:

National Pediatric Readiness Assessment, 4,147 EDs participate

:

Pediatric Readiness
Medical
Recognition,
Pediatric Readiness
Quality
Collaborative

2016-2020:

2019-2020:

Pediatric Readiness in EMS Systems Prehospital Pediatric Readiness Project launched

2021:

National NPRP Re-Assessment PECC Workforce Development Collaborative

2022-2024:

Behavioral Health Collaborative

Pediatric Readiness Quality Collaborative v2.0

> Prehospital Pediatric Readiness Assessment

Infrastructure to meet the needs of critically ill an injured children

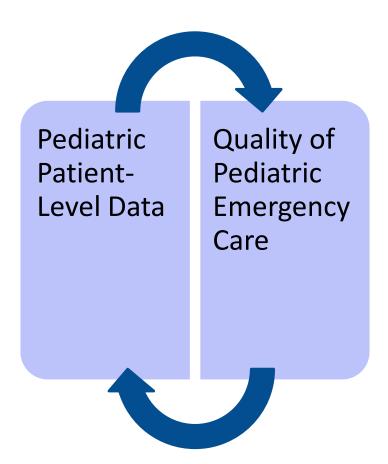
AAP, ACEP, ENA, and HRSA-EMSC co-lead effort Median Pediatric Readiness Score = 69/100 14 states develop pediatric readiness programs, 140 EDs establish pediatric QI plans AAP, ACEP, ENA, NAEMSP and NAEMT Assess for improvement Train >1,000 PECCs



Challenges in Achieving High Quality Pediatric Emergency Care



- >80% of children seen in general EDs
- ~70% of EDs see less than 15 pediatric patients a day
- Low volumes = difficult to establish pediatric quality metrics/performance standards at an individual site



Top Barriers to Pediatric Readiness



- Cost of training personnel
- Lack of educational resources
- Lack of a QI plan for children





Common Critical Gaps in Pediatric Readiness



Pediatric emergency care

coordinator(s)

Physician

Nurse



Disaster plan that includes children

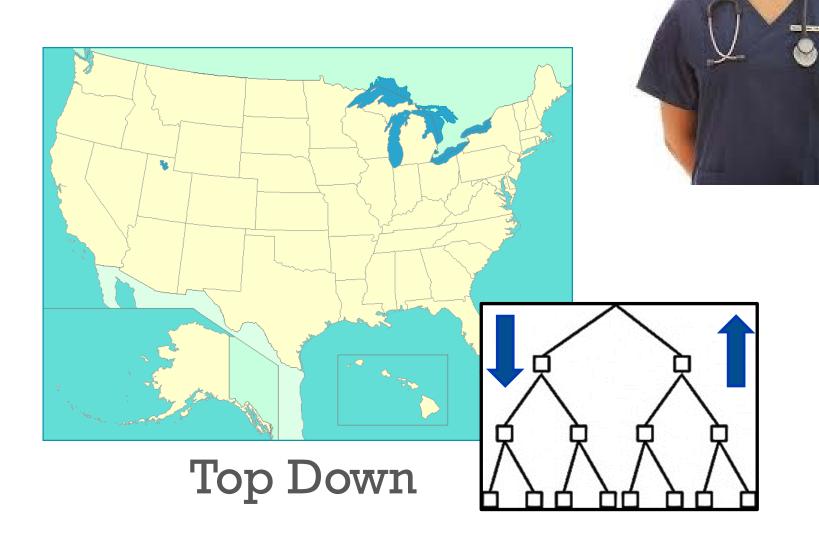
Pediatric Patient Safety Processes

QI process with pediatric-specific indicators

- Weighing children in kilograms
- Pediatric patient assessment and triage
- Inter-facility transfer guidelines

Two Approaches to ENSURING Pediatric Readiness





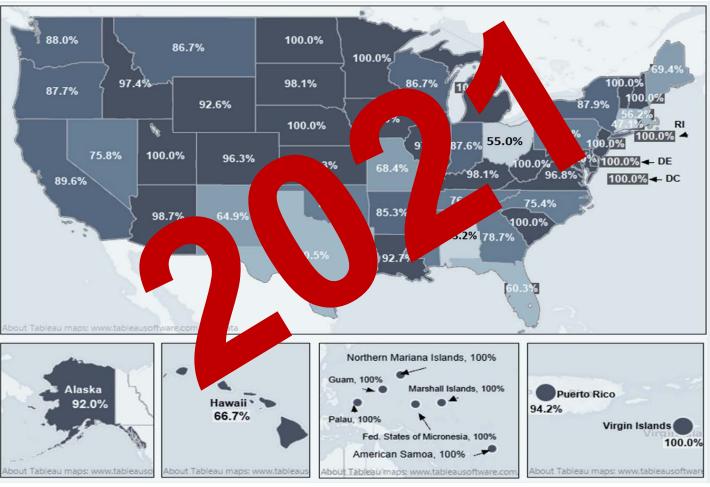


Bottom Up

NPRP Re-Assessment: May-July 2021







www.pedsready.org

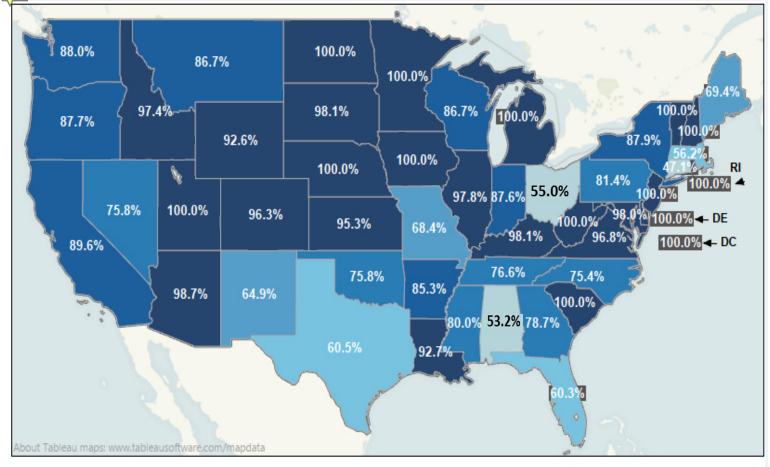
What is the 2021 NPRP Assessment?

A National Assessment of Emergency Departments (ED)s to:

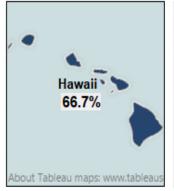
- Determine progress in pediatric readiness
- Identify existing gaps
- Promote quality improvement (QI) efforts in EDs across the country

- Develop national collaboratives to address common and critical gaps
- Identify best practices













A National Assessment of Pediatric Readiness of Emergency Departments

Marianne Gausche-Hill, MD; Michael Ely, MHRM; Patricia Schmuhl, BA; Russell Telford, MA; Katherine E. Remick, MD; Elizabeth A. Edgerton, MD, MPH; Lenora M. Olson, PhD, MA

5,017 assessments sent - 4,149 (82.7%) ED Managers responded

Average score = 69 out of 100



How does my ED participate?

Participating in the 2021 NPRP assessment is EASY!

ED Nurse Managers will receive several postal and email notifications with a link to the web-based assessment.

Since only one NPRP assessment per ED can be completed, we encourage you to collaborate with your ED leadership to participate in the NPRP assessment.





Why is participation important?



 The NPRP assessment helps ED personnel to be better prepared to provide quality care for all patients of all ages by evaluating the QI process of EDs over time.

Hospitals with high ED readiness scores demonstrate a 4-fold lower rate of mortality for children with critical illness than those with lower readiness scores; thus, improving pediatric readiness improves outcomes for children and their families.

Emergency Department Pediatric Readiness and Mortality in Critically Ill Children

Stefanie G. Ames, MD, MS,^a Billie S. Davis, PhD,^e Jennifer R. Marin, MD, MSc,^{ad} Ericka L. Fink, MD, MS,^{ae} Lenora M. Olson, PhD, MA,^g Marianne Gausche-Hill, MD,^{e,bj} Jeremy M. Kahn, MD, MS^{e,f}

- Study of 20,483 critically ill children presenting to 426 hospitals
- Unadjusted mortality decreased by increased readiness score [11%-5.4%-4.9%-3.4%] *P*<.001
- Hospital in highest pediatric readiness quartile vs lowest had improved chance of survival OR 0.25 [0.18-0.37; P<.001]

Highest readiness 4 X lower mortality











Focus Areas V Funded Programs V QI Collaboratives V Education V Our Impact V

Home / Focus Areas / Hospital Based Care / National Pediatric Readiness Project / Readiness Toolkit



About the Readiness Toolkit



Download the Latest Guidelines!

POLICY STATEMENT

Pediatric Readiness in the Emergency Department

Katherine Remick, MD, FAAP, FACEP, FAEMS; Marianne Gausche-Hill, MD, FAAP, FACEP, FAEMS; Madeline M. Joseph, MD, FAAP, FACEP; Kathleen Brown, MD, FAAP, FACEP; Sally K. Snow, BSN, RN, CPEN; Joseph L. Wright, MD, MPH, FAAP

AMERICAN ACADEMY OF PEDIATRICS
Committee on Pediatric Emergency Medicine, Section on Surgery

AMERICAN COLLEGE OF EMERGENCY PHYSICIANS Pediatric Emergency Medicine Committee

EMERGENCY NURSES ASSOCIATION Pediatric Committee

Pediatric Readiness in the Emergency Department

POLICY STATEMENT

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

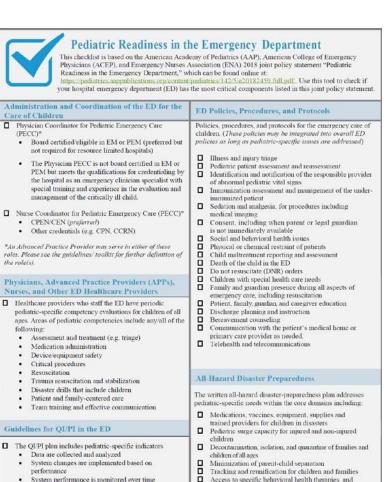


National Pediatric Readiness Project: Checklist and Toolkit

 Updated checklist based on 2018 guidelines, revised in 2020



https://emscimprovement.center



Please see the guidelines / toolkit for additional details

social services for children

at least every two years

Disaster drills include a pediatric mass casualty incident

Care of children with special health care needs



Administration and Coordination of the ED for the Care of Children

This section contains resources regarding the qualifications and responsibilities for the physician and nursing Pediatric emergency care coodinator (PECC) staffing your emergency department (ED).

Close ^

- Importance of the Pediatric Care Coordinator
- Role Responsibilities of a MD ED Coordinator □
- Role Responsibilities of a Nursing ED Coordinator
- Is Your ED Ready for Children? Pediatric Emergency Care Coordinators Lead the Way to Readiness! ♂ This webinar shares data supporting the need for pediatric emergency care coordinators (PECC), as well as strategies employed to identify and assure availability of PECCs in the EDs of a large hospital system.



Physicians, Advanced Practice Providers (APPs), Nurses, and Other ED Healthcare Providers

This section contains resources regarding the necessary skills, knowledge, and training in emergency evaluation and treatment of children of all ages among staff in your emergency department (ED).

Expand ~



When you complete the NPRP assessment will immediately receive:



- An ED pediatric readiness score from 0 − 100
- The average pediatric readiness score of EDs of similar pediatric volume
- The average pediatric readiness score of all participating EDs to use as a benchmark
- An ED Gap Report to target efforts for improvement in pediatric readiness

Statewide Pediatric Facility Recognition Programs and Their Association with Pediatric Readiness in Emergency Departments in the United States

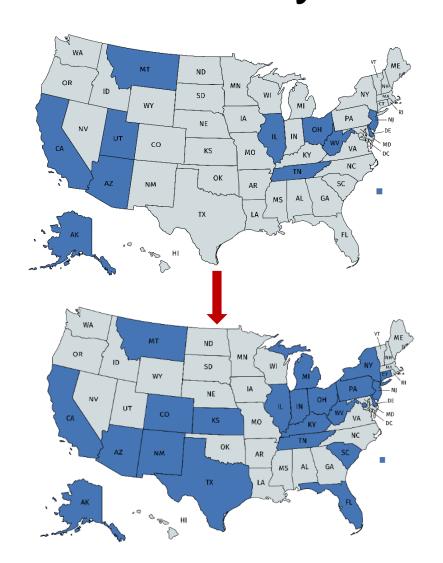
Travis M. Whitfill, MPH¹, Katherine E. Remick, MD^{2,3,4,5}, Lenora M. Olson, PhD, MA⁶, Rachel Richards, MStat⁶, Kathleen M. Brown, MD^{7,8}, Marc A. Auerbach, MD, MSci¹, and Marianne Gausche-Hill, MD^{9,10,11}

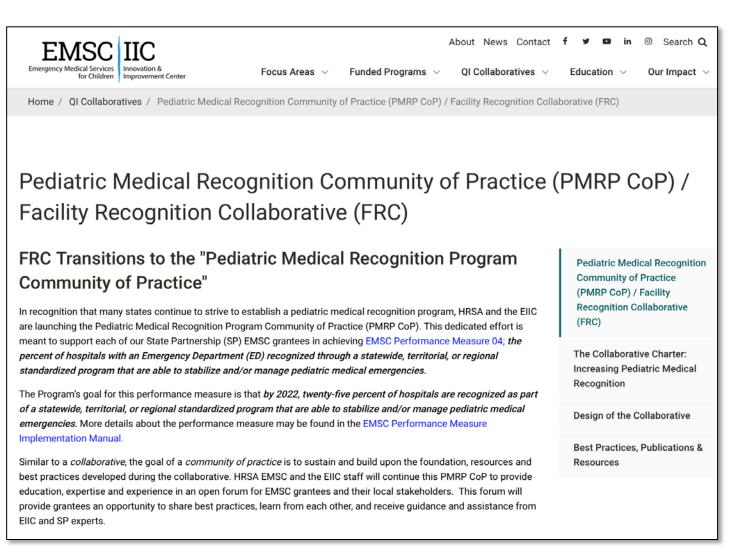




EDs recognized in states with pediatric recognition programs had a 22-point higher pediatric readiness scores

Pediatric Medical Recognition Program Community of Practice







Pediatric Readiness and Specialty Center Verification ()



Pediatric Verified EDs (n=51)	Non-Verified EDs (n=218)		
89.6 [IQR 84.1, 94.1]	65.5 [IQR 55.5, 76.3] p<0.0001		

Trauma Hospital Type									
	Children	EDAP	Trauma	Overall					
	(N = 49)	(N = 110)	(N = 1088)	(N = 1247)	P-value				
Score					<.0011				
Median (Q1, Q3)	98.6 (95.1, 100.0)	90.7 (82.7, 95.8)	68.4 (56.6, 81.9)	71.7 (58.1, 87.0)					
¹ Kruskal-Wallis test.									

Prehospital Pediatric Readiness Project





Using a nationwide assessment, evaluate pediatric readiness within EMS systems (2020-2024)





IMPROVE

Define and implement two specific pediatric readiness improvements (2022-2024)

MEASURE

Assess the impact of pediatric readiness within EMS systems (TBD)



2020-2024

SUSTAIN

Continue to develop improvement efforts for prehospital pediatric emergency care (2022-2024)

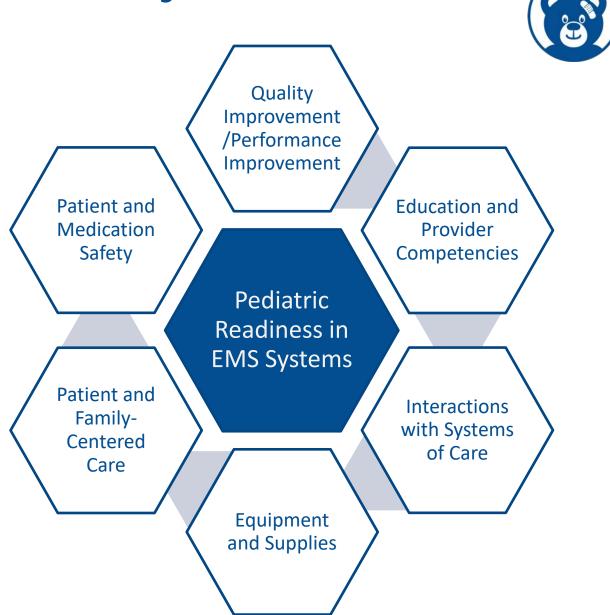
2020: Pediatric Readiness in EMS Systems

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



Pediatric Readiness in Emergency **Medical Services Systems**

Kathleen Brown, MD, FAAP, Marianne Gausche-Hill, MD, FACEP, FAAP, FAEMS, Katherine Remick, MD, FACEP, FAAP, FAEMS, Hill, MD, FACEP, FAAP, FAEMS, Kathleen Brown, MD, FACEP, FAAP, FAEMS, Hill, MD, FACEP, FAAP, FAEMS, Kathleen Brown, MD, FACEP, FAAP, FAEMS, Hill, MD, FACEP, FAAP, FAEMS, Kathleen Brown, MD, FACEP, FAAP, FAEMS, Hill, MD, FACEP, FAAP, FAEMS, Kathleen Brown, MD, FACEP, FAAP, FAEMS, Hill, MD, FACEP, FAAP, FAEMS, Kathleen Brown, MD, FACEP, FAAP, FAEMS, MD, FACEP, FAEMS, MD, FAEM Kathleen Adelgais, MD, MPH, FAAP, John Lyng, MD, FAEMS, FACEP, NRP, Lara Rappaport, MD, MPH, FAAP, Sally Snow, RN, BSN, CPEN, FAEN, Cynthia Wright-Johnson, MSN, RNC, Julie C. Leonard, MD, MPH, FAAP, 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



PECC Workforce Development Collaborative: September 2021-June 2022



Increase the number and effectiveness of Pediatric Emergency Care Coordinators (PECC) across the

continuum of emergency care. **Physicians Nurses** FUTURE OF EMERGENCY CARE **EMERGENCY CARE EMS** FOR CHILDREN **Providers** GROWING PAINS **EMSC State Partnership Managers**

■ SMART Aim: By June 30th, 2022, ensure that at least 1,000 prehospital and hospital Pediatric Emergency Care Coordinators (PECCs) develop and implement systems-based strategies for improving pediatric emergency care.

Activities include:

- Developing communication strategies for hospital and ED leadership
- Creating pediatric-specific policies and protocols
- Establishing pediatric competency initiatives
- Ensuring processes to maintain pediatric equipment and supplies
- Implementing system-level quality improvement interventions



Review the 2018 joint policy statement: https://tinyurl.com/PedsReady



Explore the new NPRP toolkit & checklist: https://tinyurl.com/NPRP-Toolkit-QI



Download and print the assessment: www.pedsready.org



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Questions?

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