Pediatric Readiness

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GEORGIA
EMSC State Partnership

What is EMSC?

Emergency Medical Services for Children

The goal of the EMSC program is to improve the care of pediatric patients in the state by bringing the pediatric perspective to the forefront for EMS agencies and hospitals.

EMSC Background

- EMSC is grant funded by HRSA (Health and Resources and Services Administration)
- GA EMSC is one of 57 EMSC programs across all states and territories
- EMSC has been federally funded in Georgia since 1994

Nine 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

Pediatric Acute Care Nationally

Emergency Medical Services

- EMS pediatric transports 350,000
  - 10% of all transfers
  - infants and adolescents

Emergency Departments

- 30 million ED visits annually
  - 40% of visits in < 5 years old
  - 90% seen in general EDs
  - 95% patients are discharged

Pediatric Acute Care Nationally

Urgent Care or retail clinics

- 1 in 4 children
- Fastest growing : pediatric urgent cares

Pediatrician's Offices

- Preventive care visits increased by 10%
- Problem based visits decreased by 24%
- Out of pocket cost for problem- based care increased by 42%

Changes in the landscape of pediatric acute care

- 250 children's hospitals
  - 1 for every 20 general hospitals
  - Increasingly overcrowded
  - Burden of the nation's specialty care
  - Often in metropolitan areas

- Between 2002 and 2011 more than 2300 beds in 5000 hospitals closed across the US (ahadata.com)
- Care has transitioned to outpatient and children stay only for a day or two

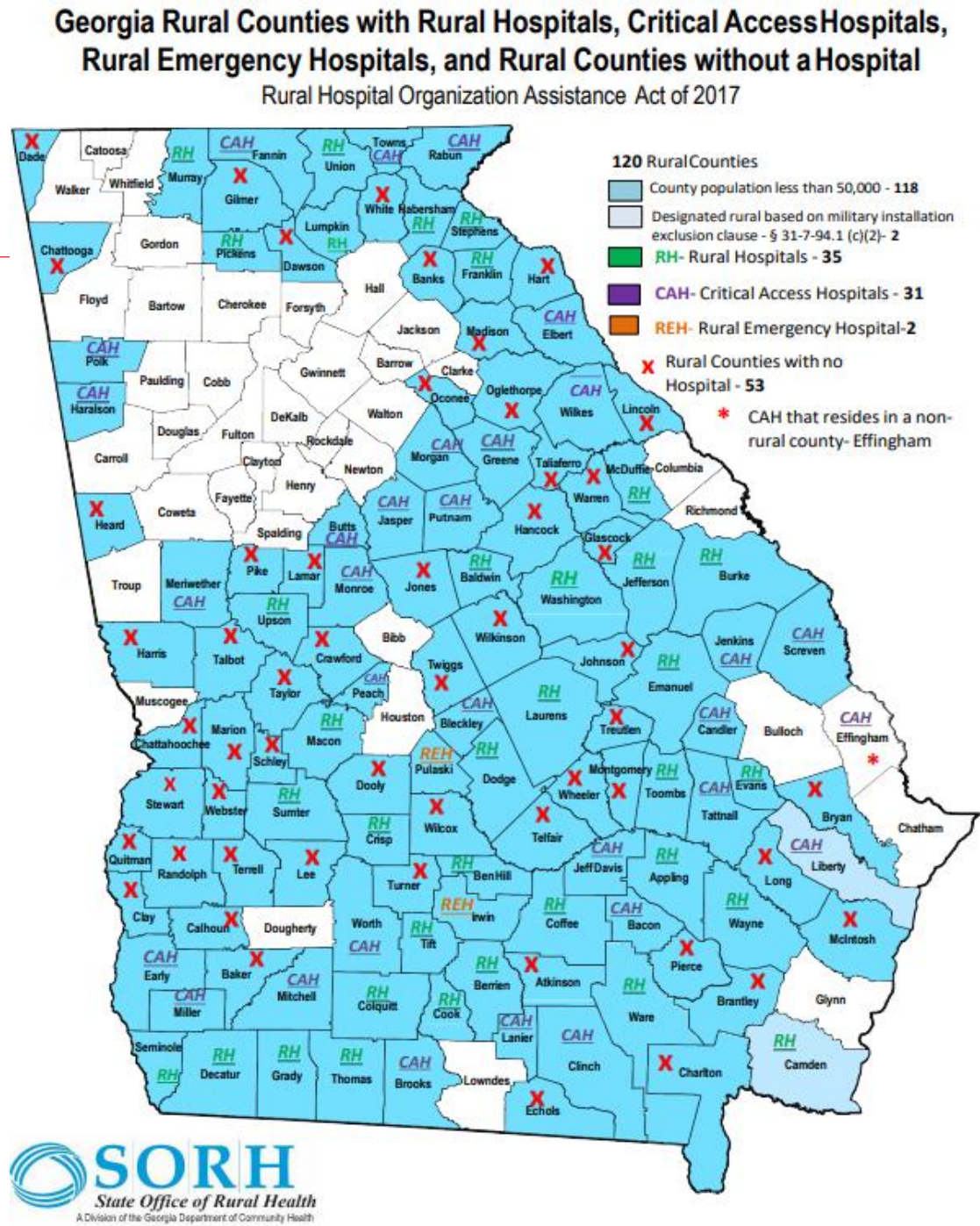
Changes in the landscape of pediatric acute care?

- Visits for pediatric patients to EDs increased from 21- 24 million from 2008-2016
- Increasing transfers to higher levels of care
    - 2008-2016 transfer rates increased by 28%
    - Most prominently noted from rural areas but uniformly true for all non-pediatric hospitals
    - Only 2% of patients seen in non–pediatric hospitals are being admitted to their local hospital (down from 6%)

Michelson, K, et.al., PEDIATRICS Volume 145, number 1, January 2020

Healthcare Access in Georgia

- 159 Counties
- 120 Defined as Rural (Less than 50,000 county population)
- 68 Total Small Rural and Critical Access Hospitals in State
- 35 Rural Hospitals
- 31 Critical Access Hospitals
- 2 Rural Emergency Hospitals
- 53 Rural Counties with no hospital
- 133 Emergency Departments



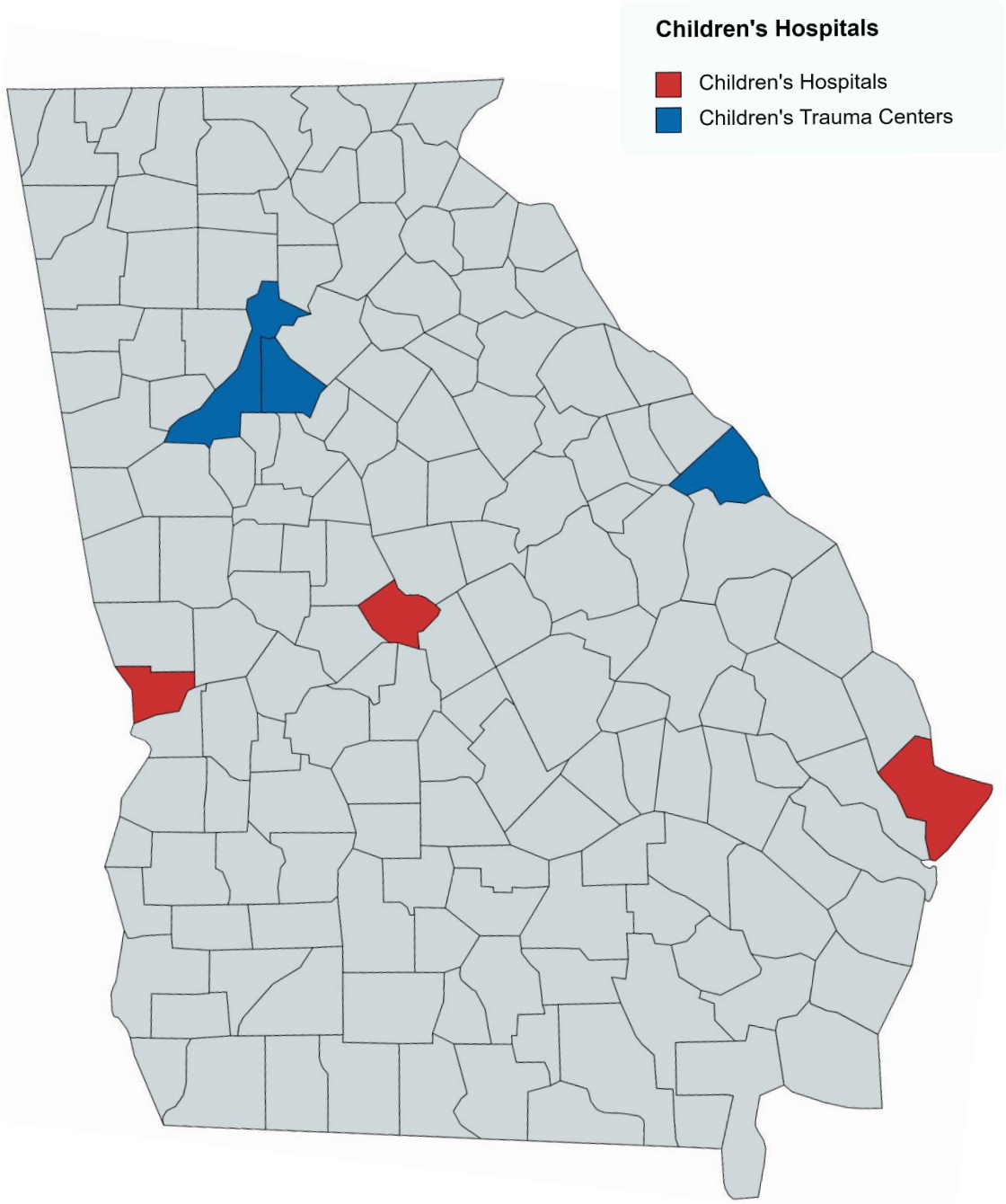
Pediatric Population in Georgia

Population (Age Under 18) for Georgia by County

All Races (includes Hispanic/Latino), Both Sexes, 2017-2021

Pediatric Healthcare in Georgia

- 5 Health Systems and 7 Pediatric Hospitals
  - Atrium Health Navicent Beverly Knight Olson Children's Hospital in Macon
  - Children's Healthcare of Atlanta at Egleston Level I Pediatric Trauma Center
  - Children's Healthcare of Atlanta at Hughes Spalding
  - Children's Healthcare of Atlanta at Scottish Rite Level II Pediatric Trauma Center
  - Children's Hospital at Piedmont Columbus Regional Midtown
  - Children's Hospital of Georgia in Augusta Level II Pediatric Trauma Center
  - Memorial Health Dwaine and Cynthia Willett Children's Hospital of Savannah



What is Pediatric Readiness?

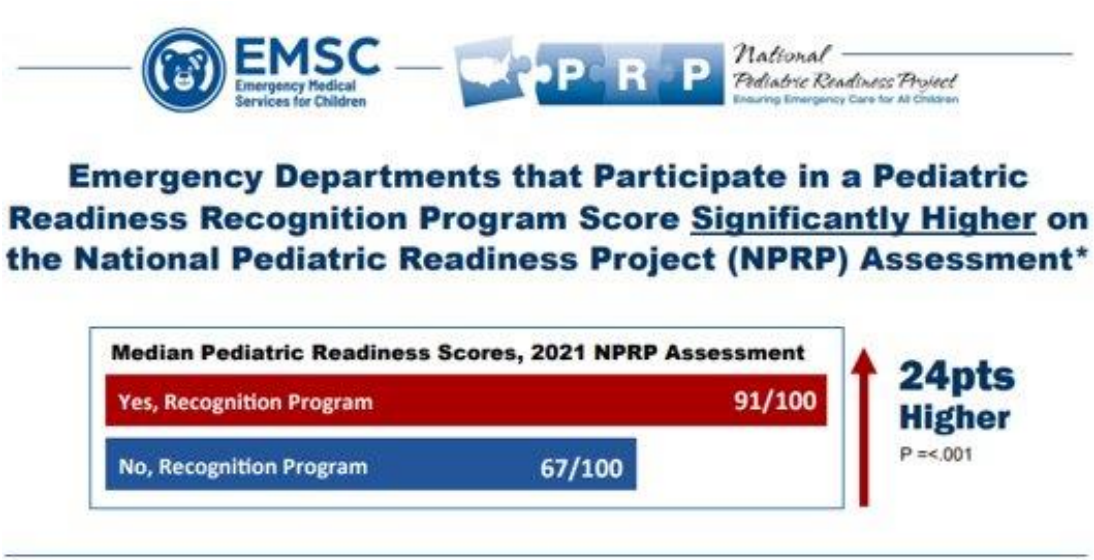
Pediatric Readiness is ensuring that **every emergency department, EMS and fire-rescue agency** has the pediatric-specific champions, competencies, policies, equipment, and other resources needed to provide high-quality emergency care for children.

Why is ED Pediatric Readiness Important?

- Over 80% of pediatric patients seek care in community emergency departments.
- 70% of emergency departments in Georgia see less than 15 pediatric patients daily.

Does ED Pediatric Readiness Make a Difference?

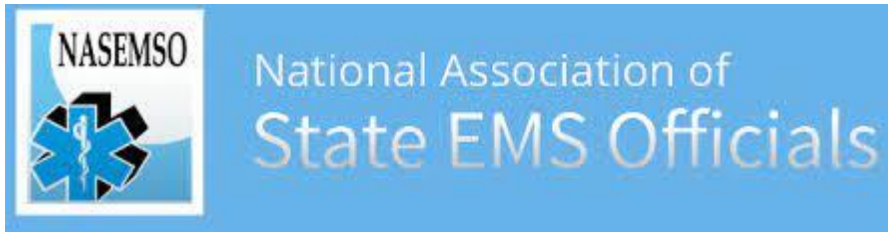
- Better prepared to provide high quality care for pediatric patients.
- Emergency departments with higher pediatric readiness scores demonstrate a lower mortality rate
  - 76% lower for ill children
  - 60% lower for injured children



Pediatric Readiness Nationally

- The National Pediatric Readiness Project or NPRP is an initiative to empower all emergency departments to provide effective emergency care to children.

National Pediatric Readiness Project Steering Committee



National Pediatric Readiness Project Steering Committee

- EMSC Innovation and Improvement Center provides leadership for efforts aimed at improving pediatric emergency care outcomes in the emergency department.
- The NPRP Steering Committee's scope includes
  - Planning
  - Development
  - Evaluation
  - Dissemination
  - Measurement and feedback
  - Coordination of national activities across organizations.

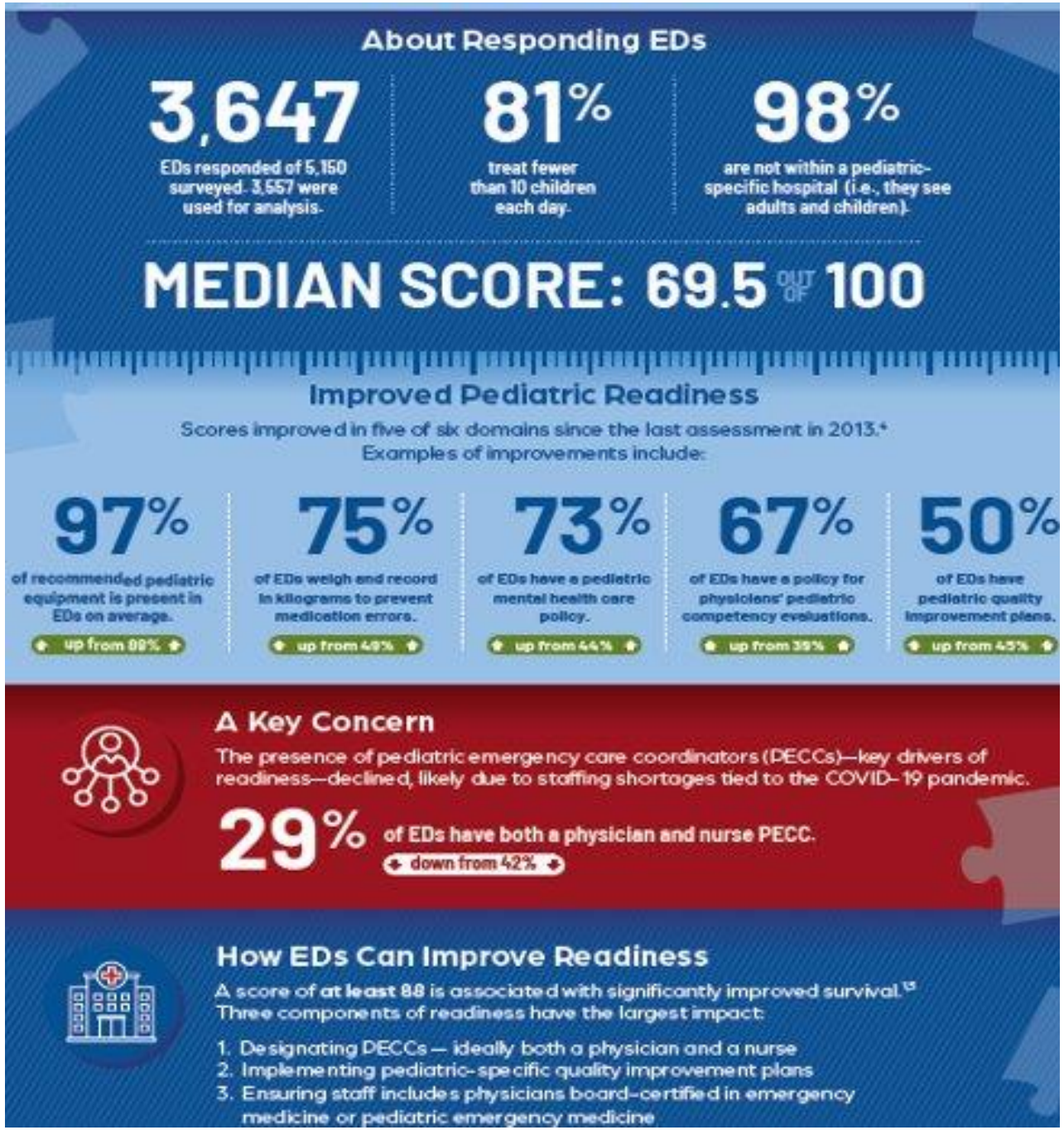
Pediatric Readiness Nationally

History of Pediatric Readiness

- 2003- Assessment of all US hospitals to determine compliance with the pediatric readiness guidelines.
- 2009- “Guidelines for Care of Children in the Emergency Department” was released.
- 2012- NPRP launched.
- 2013- First NPRP assessment launched.
- 2015- National average pediatric readiness score of 69% published in JAMA Pediatrics
- 2018- The 2009 joint statement “Guidelines for Care of Children in the Emergency Department” was updated.
- 2021- Second NPRP assessment is launched.

NPRP Assessment

- Gauges an ED's capability to provide high-quality care for children.
- Conducted by the EMSC Data Center
- The assessment remains open for internal QI purposes.
- All facility scores remain private to the facility.
- Benefits of participating
    - A pediatric readiness score
    - Benchmarking average scores of similar volume EDs
    - A gap report to target efforts for pediatric readiness improvement


About Responding EDs
3,647
EDs responded of 5,150 surveyed. 3,557 were used for analysis.
81%
treat fewer than 10 children each day.
98%
are not within a pediatric-specific hospital (i.e., they see adults and children).
MEDIAN SCORE: 69.5 OUT OF 100
Improved Pediatric Readiness
Scores improved in five of six domains since the last assessment in 2013.*
Examples of improvements include:
97%
of recommended pediatric equipment is present in EDs on average.
up from 88%
75%
of EDs weigh and record in kilograms to prevent medication errors.
up from 48%
73%
of EDs have a pediatric mental health care policy.
up from 44%
67%
of EDs have a policy for physicians' pediatric competency evaluations.
up from 39%
50%
of EDs have pediatric quality improvement plans.
up from 45%
A Key Concern
The presence of pediatric emergency care coordinators (PECCs)—key drivers of readiness—declined, likely due to staffing shortages tied to the COVID-19 pandemic.
29%
of EDs have both a physician and nurse PECC.
down from 42%
How EDs Can Improve Readiness
A score of at least 88 is associated with significantly improved survival.[13]
Three components of readiness have the largest impact:
1. Designating PECCs — ideally both a physician and a nurse
2. Implementing pediatric-specific quality improvement plans
3. Ensuring staff includes physicians board-certified in emergency medicine or pediatric emergency medicine

NPRP Assessment in Georgia

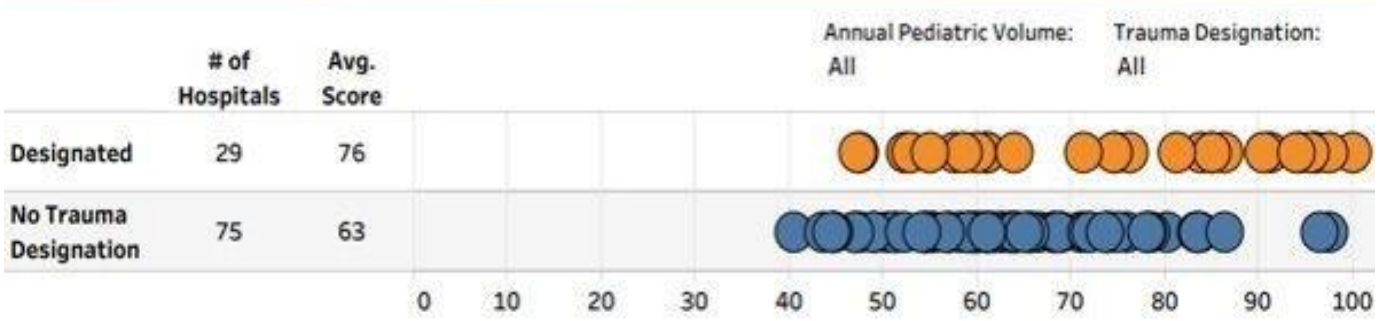
NPRP Assessment in Georgia

Breakdown of Scores by Volume Type: Urbanicity: All

Annual Pediatric Volume	# of Hospitals	Avg. Score	Median Score	Min. Score	Max. Score
Low: <1,800 pediatric patients (average of 5 or fewer a day)	41	61	60	40	85
Medium: 1,800 – 4,999 pediatric patients (average of 6-13 a day)	36	63	62	44	84
Medium to High: 5,000 – 9,999 pediatric patients (average of 14-26 a day)	13	70	64	49	98
High: >=10,000 pediatric patients (average of 27 or more a day)	14	89	94	61	100
Grand Total	**104**	**66**	**63**	**40**	**100**

NOTE: There are 5 records in this dataset that did not have answers to all the scored questions and are not included in the scores shown above.

Breakdown of Scores by Trauma Designation



NPRP Assessment in Georgia

Guidelines for Administration and Coordination of the ED for the Care of Children (19 points)

	KPI	2021 Number of EDs that Have Item	2021 Percent that Have Item	2013-14 Percent that Had Item	Difference Between Assessments
Physcian Coordinator	HELP	28/109 (Missing = 0)	25.7%	49.5%	-23.8% ▼
Nurse Coordinator	HELP	23/109 (Missing = 0)	21.1%	53.2%	-32.1% ▼

Physicians, Nurses, and Other Health Care Providers Who Staff the ED (10 points)

Physician Competency Evaluations	▲	76/109 (Missing = 0)	69.7%	51.4%	18.3% ▲
Physician Maintenance of Board Certification	◆	56/108 (Missing = 1)	51.9%		
Nurse Competency Evaluations	●	102/109 (Missing = 0)	93.6%	73.0%	20.6% ▲
Nurse Maintenance of Specialty Certification	HELP	14/107 (Missing = 2)	13.1%		

Guidelines QI/PI in the ED (7 points)

	KPI	2021 Number of EDs that Have Item	2021 Percent that Have Item	2013-14 Percent that Had Item	Difference Between Assessments
Patient care-review process (chart review)	◆	41/109 (Missing = 0)	37.6%	45.9%	-8.3% ▼
Identification of quality indicators for children	HELP	29/109 (Missing = 0)	26.6%	30.6%	-4.0% ▼
Collection and analysis of pediatric emergency care data	◆	36/108 (Missing = 1)	33.3%	41.4%	-8.1% ▼
Development of a plan for improvement in pediatric emergency care	HELP	29/108 (Missing = 1)	26.9%	39.6%	-12.7% ▼
Re-evaluation of performance using outcomes-based measures	HELP	30/108 (Missing = 1)	27.8%	35.1%	-7.3% ▼

NPRP Assessment in Georgia

Guidelines for Policies, Procedures, and Protocols for the ED (17 points)	KPI	2021 Number of EDs that Have Item	2021 Percent that Have Item	2013-14 Percent that Had Item	Difference Between Assessments
Involving families and caregivers in medication safety processes	◆	52/109 (Missing = 0)	47.7%		
Family and guardian presence during all aspects of emergency care, including resuscitation	◆	54/109 (Missing = 0)	49.5%		
Education of the patient, family, and caregivers on treatment plan and disposition	◆	57/109 (Missing = 0)	52.3%		
Bereavement counseling	◆	33/109 (Missing = 0)	30.3%		
Disaster plan includes availability of medications, vaccines, equipment, supplies, and appropriately trained providers	◆	34/108 (Missing = 1)	31.5%		
Disaster plan includes decontamination, isolation, and quarantine of families and children	◆	40/108 (Missing = 1)	37.0%		
Disaster plan includes decontamination, isolation, and quarantine of families and children	◆	40/108 (Missing = 1)	37.0%		
Disaster plan includes minimization of parent-child separation and methods for reuniting separated children with their families	◆	38/108 (Missing = 1)	35.2%		
All disaster drills include pediatric patients	HELP	27/108 (Missing = 1)	25.0%		
Disaster plan includes pediatric surge capacity for both injured and non-injured children	HELP	32/108 (Missing = 1)	29.6%		
Disaster plan includes access to behavioral health resources for children	HELP	31/108 (Missing = 1)	28.7%		
Disaster plan includes care of children with special health care needs	◆	33/108 (Missing = 1)	30.6%		
Written inter-facility transfer guidelines	◆	60/109 (Missing = 0)	55.0%	62.2%	-7.2% ▼

Pediatric Readiness Centers

Pediatric Readiness Centers

- Steering committee was founded in 2019 with the goal of establishing a pediatric facility recognition program.
- Multidisciplinary stakeholders from around the state.
- Workgroups created
    - Criteria
    - Marketing
    - Data
    - Permanence
- Criteria developed in conjunction with joint policy statements
    - 2009 "Guidelines for Care of Children in the ED"
    - 2013 "Pediatric Readiness in the Emergency Department"

All Pediatric Readiness Centers will meet the following criteria:

- Designated Nurse or Advanced Practice Provider or Physician champion
- Required pediatric equipment and medications
- An established quality improvement program that includes pediatric-specific indicators
- A disaster plan that includes children's specific needs
- Pediatric specific policies, procedures, and protocols

Requirment	Level I	Level II	Level III
Nurse Peds CHAMP	**X**	**X**	**X**
Physician Peds CHAMP	X	X	
Dedicated Pediatric Emergency Room	X		
Pediatric Intensive Care Unit Available	X		
Pediatric Inpatient Floor Level Care Available	X	X	
Dedicated Operating Room	X		
Pediatric Specific Equipment	X	X	X
Pediatric Specific Safety Measures	X	X	X
Standard Method of Estimating Weight	X	X	X
Weighing Patients in Only Kilograms	X	X	X
Safe Medication Admin Policies and Practices in Place	X	X	X
Supports Family Centred Care	X	X	X
Disaster/ Pediatric Surge Preparedness Plan	X	X	X
Quality Improvement Plan That Includes Pediatric Specific Indicators	X	X	X
Transfer Guidelines	X	X	X
Emergency Medical Staff Trained in Pediatric Resuscitation	X	X	X
All Medical Staff Pediatric Advanced Life Support Requirement	X	X	
Pediatric Nursing Certificate Requirement	X	X	

LEVEL ONE

The highest level of pediatric care available. This center is a comprehensive pediatric care center. Level I serves as a regional referral center for level II and level III Pediatric Readiness Centers. The level I center houses a wide range of pediatric subspecialties.

LEVEL TWO

Capable of initial evaluation and stabilization of critically ill children. This facility can provide either ongoing inpatient care for the most common and some advanced medical emergencies and surgical issues or can provide appropriate, timely transfer of a child to a higher level of care.

LEVEL THREE

Capable of the initial evaluation and stabilization of the critically ill child and can provide appropriate, timely transfer of child to a higher level of care if needed.

Designated Centers

Northeast Georgia Medical Center Gainesville

Northeast Georgia Medical Center Barrow
Northeast Georgia Medical Center Braselton

Application and Site Visit

- Application
  - Is virtual
  - Located on LMS
  - Must be completed for each site applying for designation prior to site visit being scheduled

- Site Visit
  - All levels require site visits
  - Site visit team
  - Will consist of
    - Facility tour of pertinent areas
    - Interviews with Emergency Department, Pediatric Inpatient/ Critical Care units (as applicable), and local EMS
    - Policy review
    - PI process presentation

Pediatric Readiness and Trauma Centers

VRC 2022 Standards: 5.10 Pediatric Readiness

- Definition and Requirements
  - In all trauma centers, the emergency department must evaluate its pediatric readiness and have a plan to address any deficiencies.
- Measures of Compliance
  - Gap analysis with plan to address deficiencies in pediatric readiness.
  - Continually utilize the NPRP to benchmark goals

- Complete the National Pediatric Readiness Assessment
- Create a plan to address deficiencies
  - Appoint Pediatric Champions in your ED
  - Begin reviewing pediatric cases and create a pediatric QI plan.
  - Review and update policies and produces.

EMS Pediatric Readiness Nationally

- Goal: Ensure emergency care for all children
- EIIC EMS Checklist: https://emscimprovement.center/domains/prehospital-care/prehospital-pediatric-readiness/checklist/
- Vision: That all EMS agencies have the appropriate resources, including:
  - Physician oversight
  - Appropriately Trained Staff
  - Education
  - Policies that Include Pediatrics
  - Medications
  - Equipment
  - Quality Improvement

Timeline

- Nationwide rollout of prehospital pediatric readiness checklist- complete
- Publish pediatric readiness toolkit- complete
- Disseminate national prehospital pediatric readiness assessment- 2024
- Assess the impact of pediatric readiness within EMS systems- 2024

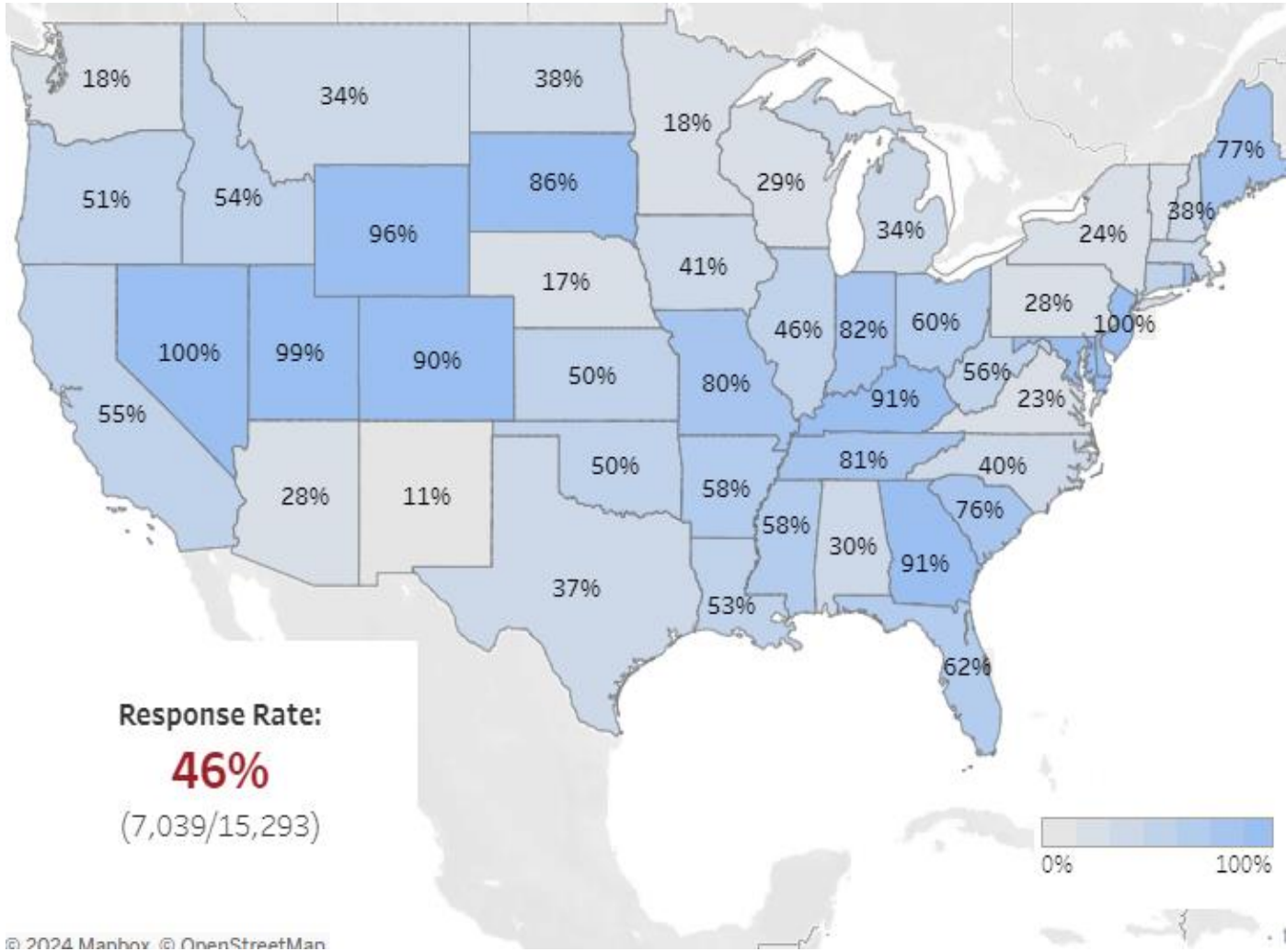
National PRP

Prehospital Pediatric Readiness Project

Ensuring Emergency Care for All Children

Prehospital Pediatric Readiness Assessment

- Open May 1, 2024- July 31,2024
- 91% Response Rate
- Open to all agencies that respond to 911 calls
- Upon completion of the assessment
  - Your agency will receive a gap report
  - Your agency's overall score
  - Benchmarking against agencies nationally with the same pediatric volumes as your agency



EMS Pediatric Readiness in Georgia

- A steering committee is being created to work towards developing criteria for an EMS pediatric recognition program based on the 2020 joint policy statement "Pediatric Readiness in Emergency Medical Services Systems" and the Prehospital Pediatric Readiness EMS Agency Checklist.

Becoming Pediatric Ready

- Pediatric champions
- Pediatric QI
- Pediatric policies
- Family centered care practices
- Pediatric education
- Pediatric simulated events and skills checks
- Pediatric disaster planning

Pediatric Champions

What is a Pediatric Champion?

- Called Pediatric Emergency Care Coordinator at the national level
- An individual or individuals responsible for coordinating pediatric specific activities at EMS agencies and emergency departments
- The intent of designating and developing the role of a PECC is to ensure that there is a dedicated individual(s) identified at the local EMS agency or emergency department that represents pediatric interest.

Pediatric Champion Responsibilities

Some responsibilities of the individual(s) who might fulfill the PECC role include, but are not limited to:

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

Pediatric Champions in Georgia

Pediatric Champion(s) at each institution

- Georgia's approach allows for nurse only champion in Critical Access Hospitals
- Designation process may encourage compliance and support
- Flyers shared by Georgia EMSC to better educate description of champion
- EIIC Pediatric Champion Training

Pediatric Quality Improvement

Quality Improvement

- EIIC website resource for understanding the science
- Start small
  - Review deaths
  - Review high risk complaints
  - Review appropriate triage
  - Review outcomes of interventions
  - Incorporate into QI initiatives already started in the general ED department
  - Review all transfers

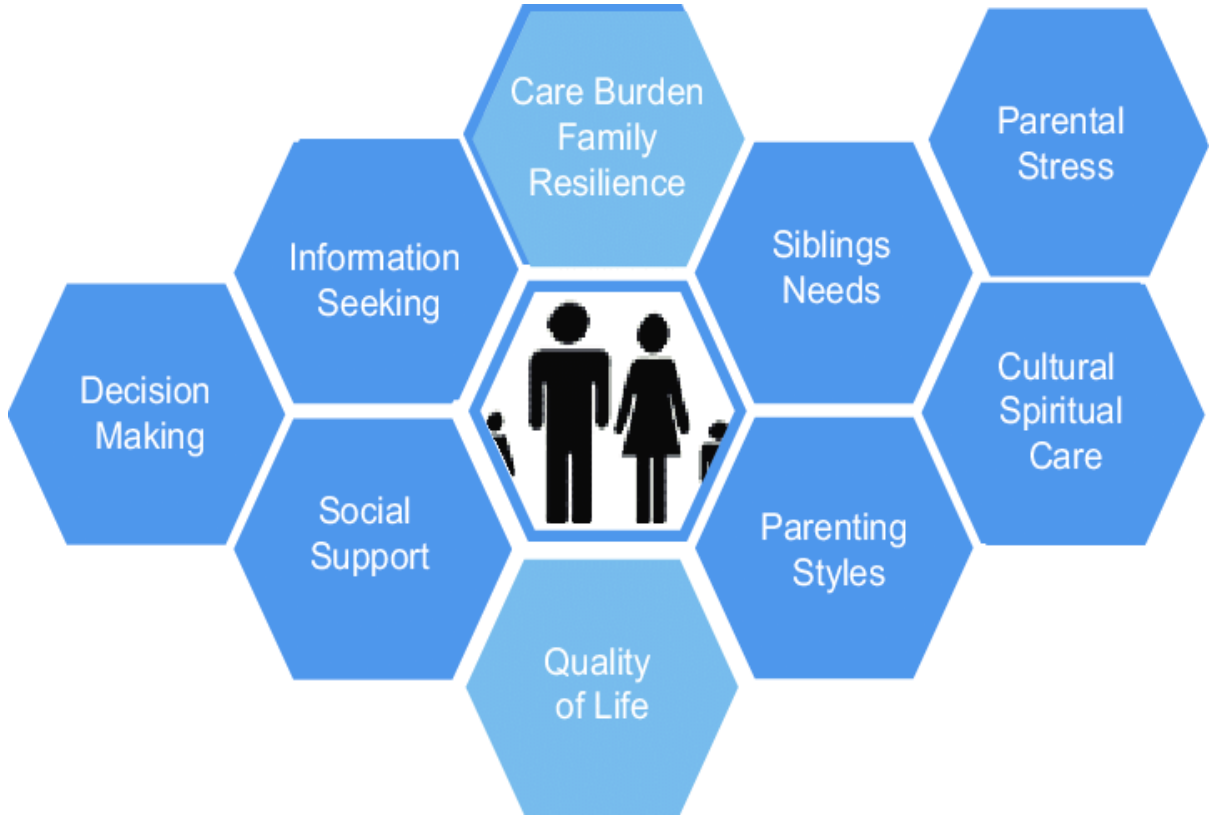
- Designation will require development of QI initiatives

Pediatric Policies

- May be stand alone policy or included in already existing policies.
- EIIC website has wealth of information related to specific pediatric specific policies https://emscimprovement.center/education-and-resources/toolkits/search/?p=125&q=policies&domain=307

Family Centered Care

- Family-centered care is a way of providing services that assures the health and well-being of children and their families through respectful family/professional partnerships
- Both EMS agencies and hospitals are encouraged to practice family centered care.



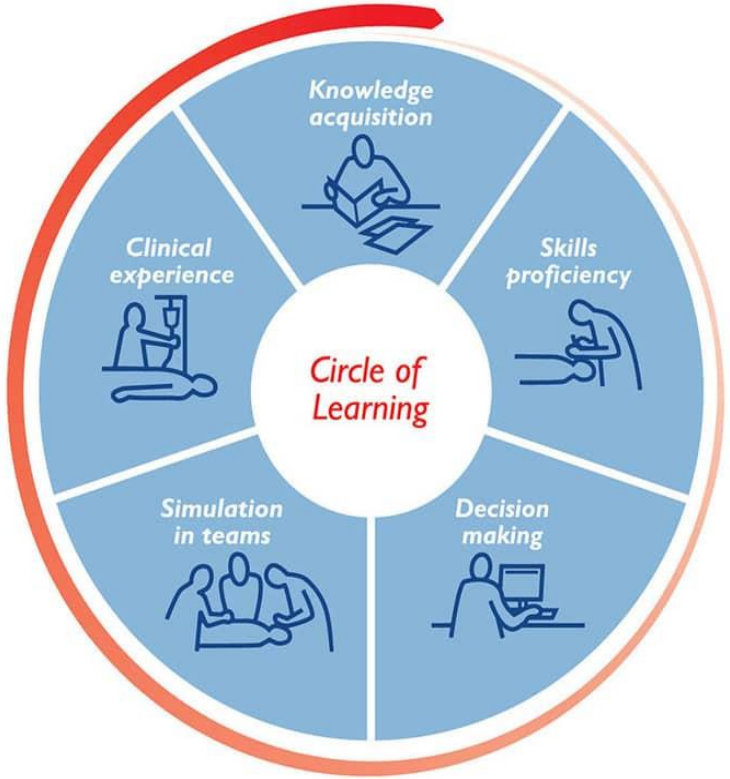
Pediatric Emergency Care Education

- Options in Pediatric Certifications/ Courses
  - PALS- Pediatric Advanced Life Support
  - CPN- Certified Pediatric Nurse
  - CPEN- Certified Pediatric Emergency Nurse
  - ENPC- Emergency Nursing Pediatric Course
  - PEARS- Pediatric Emergency Assessment, Recognition and Stabilization
  - EPC- Emergency Pediatric Care
  - PEPP- Pediatric Education for Prehospital Professionals
  - ITLS Pediatric- International Trauma Life Support

- Our 5 Children's Hospitals are stakeholders in designation process and can serve as resource for ongoing educational initiatives
- GCEP Rural Health conference has pediatric specific topics for physicians
- TRAIN Georgia system houses pediatric specific content
- Regional RTAC committees provide pediatric emergency education

Pediatric Simulated Events and Skills Checks

- Simulation provides a safe environment for healthcare learners to acquire and refine their skills without any risk to patients or staff. This is especially crucial for practicing high-risk, low-frequency procedures that might be rare in real clinical settings
- https://www.emergencysimbox.com/emstelesimbox



Pediatric Disaster Planning

Georgia Pediatric Health Improvement Emergency Preparedness Committee is a 5- hospital clinician and emergency managers monthly platform to discuss areas of concern and implementation of program

Planned Initiatives

- Neonatal evacuation focus
- Engagement of health care coalitions to determine hazard vulnerability as it relates to children
- Regional Healthcare Coalition engagement

Regional Healthcare Coalitions

CHOA is our state's regional coordinating hospital

- Provision of pediatric decontamination course
- G-7 coordinating site
- Engaging in statewide reunification table top exercise

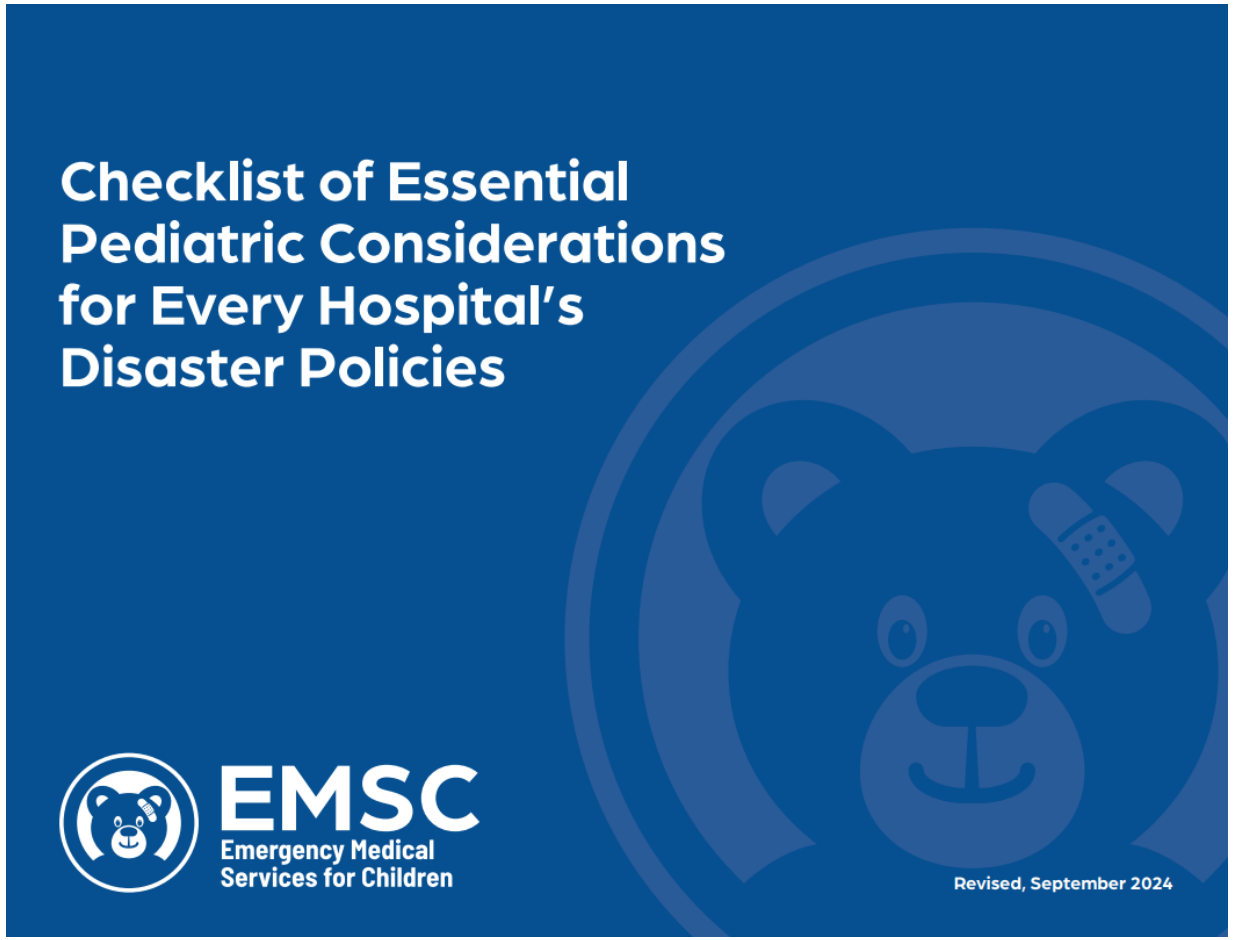
Health Care Coalition Pediatric Champion

Role of the HCC Pediatric Champion

- National initiative from the Pediatric Pandemic Network
- Preparing the health care community involves engagement with regional health care coalitions and to consider vulnerable populations: children are different
- Enhance relationship between hospital and HCC Pediatric Champions

https://pedspandemicnetwork.org/

EIIC Hospital Disaster Checklist



https://media.emscimprovement.center/documents/ED_Disaster_Checklist.pdf

Gulf 7 Pediatric Disaster

- Gulf 7 Pediatric Disaster Care Center of Excellence (COE)
- The network includes Texas Children's Hospital as the main site, along with Children's Hospital of New Orleans, Children's of Mississippi, Children's of Alabama (UAB), Emory/ Children's Healthcare of Atlanta, University of Miami, and University of Puerto Rico as sub sites
- Preparedness Packets with focus on reunification, burns, HID, MCI, Decontamination

Contact Information

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https://dph.georgia.gov/EMS/emergency-medical-services-children-emsc

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