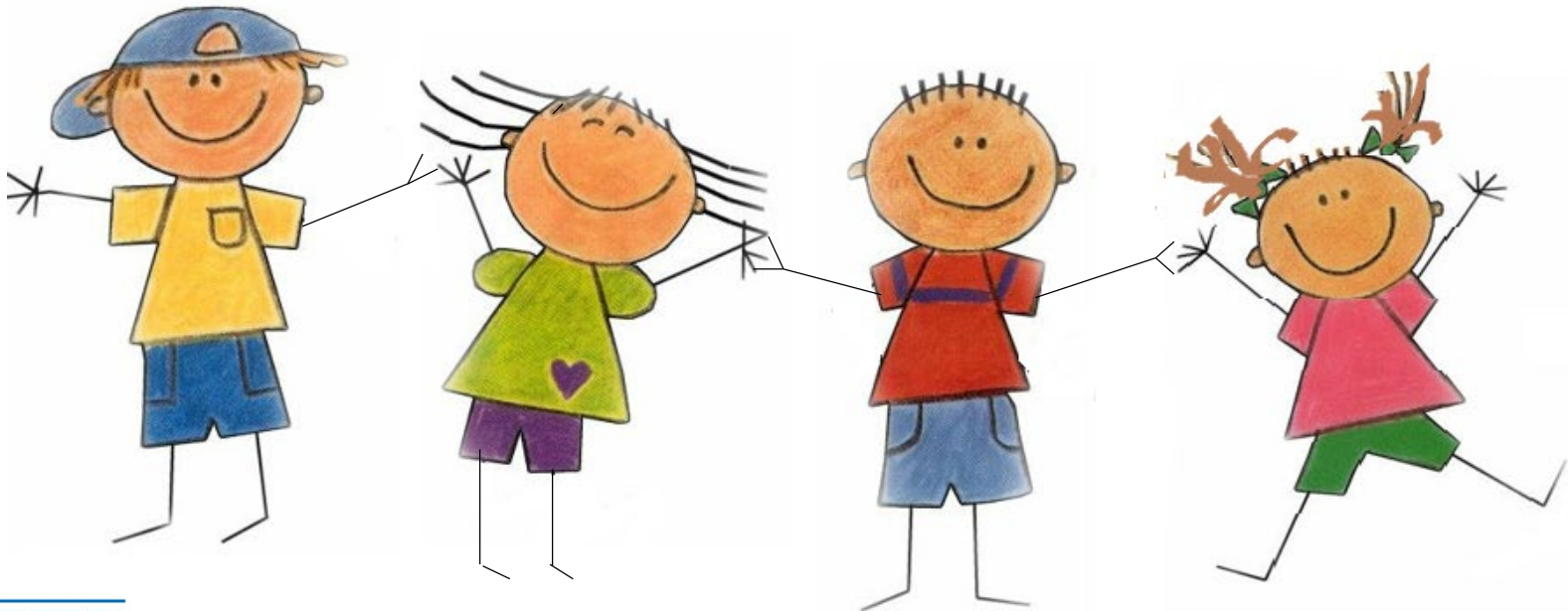


# Pediatric Readiness

## Bridging the Readiness Gaps



# Background

31 Million

- Annual pediatric ED visits nationally

87%

- Seen in community or critical access hospitals

27%


- Of ED visits are pediatric patients

[Ann Emerg Med](#). 2015 Aug 27. pii: S0196-0644(15)01090-2. doi: 10.1016/j.annemergmed.2015.07.500. [Epub ahead of print] **Pediatric Readiness and Facility Verification**. [Remick K<sup>1</sup>](#), [Kaji AH<sup>2</sup>](#), [Olson L<sup>3</sup>](#), [Ely M<sup>3</sup>](#), [Schmuhl P<sup>3</sup>](#), [McGrath N<sup>4</sup>](#), [Edgerton E<sup>5</sup>](#), [Gausche-Hill M<sup>6</sup>](#). [JAMA Pediatr](#). 2015 Jun;169(6):527-34. doi: 10.1001/jamapediatrics.2015.138. **A national assessment of pediatric readiness of emergency departments**. [Gausche-Hill M<sup>1</sup>](#), [Ely M<sup>2</sup>](#), [Schmuhl P<sup>2</sup>](#), [Telford R<sup>2</sup>](#), [Remick KE<sup>3</sup>](#), [Edgerton EA<sup>4</sup>](#), [Olson LM<sup>2</sup>](#)



Supported by the Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB), Emergency Medical Services for Children (EMSC) State Partnership grant program, Grant No. H33MC06677

# 2009 Joint Policy Statement



## Guidelines for Care of Children in the Emergency Department

This checklist is based on the American Academy of Pediatrics, the American College of Emergency Physicians, and the Emergency Nurses Association 2009 joint policy statement "Guidelines for Care of Children in the Emergency Department," which can be found online at <http://aappolicy.aappublications.org/cgi/reprint/pediatrics;124/4/1233.pdf>. Use the checklist to determine if your emergency department (ED) is prepared to care for children.

- ***Pediatrics and Annals of Emergency Medicine, Oct 2009***
- American Academy of Pediatrics
- American College of Emergency Physicians
- Emergency Nursing Association

- Guidelines for the Administration and Coordination of the ED for the Care of Children
- Physicians, Nurses, and Other Health Care Providers Who Staff the ED
- Guidelines for QI/PI in the ED
- Guidelines for Improving Pediatric Safety in the ED
- Guidelines for Policies, Procedures, and Protocols for the ED
- Guidelines for Disaster Preparedness
- Guidelines for ED Support Services
- Guidelines for Equipment, Supplies, and Medications for the Care of Pediatric Patients in the ED



# NATIONAL PEDIATRIC READINESS PROJECT



Development began in 2013 by National  
EMSC Data Analysis Resource Center  
(NEDARC)

# NPRP Collaborative Partners

**Select Your State/Territory:**

*To start the assessment, select your State/Territory from the dropdown, click "Get Started."*

Alabama ▼

**Get Started >>**

**Supported by:**





American Academy  
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™



American College of  
Emergency Physicians®

ADVANCING EMERGENCY CARE 



# Metric Considerations



**EMSC**  
Emergency Medical  
Services for Children <sup>SM</sup>  
HRSA/MCHB

1

Describe Policy & Practice  
Improvements Advanced by EMSC

2

Measure State and National Stories  
of Impact

3

Can be Collected and Reported

# Components Assessed

- Administration & Coordination
- Physicians, Nurses, and Other ED Staff
- QI/PI in the ED
- Pediatric Patient Safety
- Policies, Procedures, and Protocols,
- Equipment, Supplies, and Medications

## Average Pediatric Readiness Scores

Low Volume (<1800 patients)	Medium Volume (1800-4999 patients)	Medium to High Volume (5000-9999)	High Volume (>=10000)	All Participating Hospitals
<b>62</b>	<b>70</b>	<b>74</b>	<b>84</b>	<b>69</b>
n = 1629	n = 1248	n = 708	n = 561	n = 4146



Source: National EMS for Children Data Analysis Resource Center (2017).

<https://tableau.utahdcc.org/t/nedarc/views/2013->

[14NationalResultsPublic\\_0/NationalPediatricReadinessProject?:embed=y&:display\\_spinner=no&:showShareOptions=true&:loadOrderID=0&:display\\_count=no&:showVizHome=no](https://tableau.utahdcc.org/t/nedarc/views/2013-14NationalResultsPublic_0/NationalPediatricReadinessProject?:embed=y&:display_spinner=no&:showShareOptions=true&:loadOrderID=0&:display_count=no&:showVizHome=no)

[www.fppt.info](http://www.fppt.info)



Michigan  
Scored  
68%

---

Report Date: 3/5/14  
n=135  
Response Rate: 99.3%



# 9 Measures

## MI EMS Results 2017 (n=370)

### EMSC 01

#### Submission of NEMSIS Compliant v. 3.x Data

---

- Transitioned Jan. 2019
- >97% Transporting agencies compliant 6/12/19

### EMSC 02

#### Pediatric Emergency Care Coordinator (EMS)

---

- 29.4% of EMS agencies have a PECC identified

### EMSC 03

#### Use of Pediatric Specific Equipment

---

- Note: EMSC stopped data collection for EMS agencies on peds medical direction , equipment or education requirements for EMS providers.
- Does tie into EMS Recognition Program



# Importance of EMSC 03 EMS (PECC)/Peds Equipment

- \*Paramedic Average: (Lammers, Byrwa, Fales, Hale, 2009)
  - \*Adult Respiratory Patient q 20 days
  - \*Teen Patient q 625 days
  - \*Children q 958 days
  - \*Infants q 1,087 days
- \*EMS provider knowledge improves significantly after education, then back to baseline 6 months later (Su, Schmidt, Mann, Zechnich, 2000)

Source: Department of Health & Human Resources, Health Resources Services Administration, Maternal and Child Health Bureau. (2017). EMS for Children Performance Measures: Implementation Manual for State Partnership Grantees.

[http://www.nedarc.org/performanceMeasures/documents/EMS%20Perf%20Measures%20Manual%20Web\\_0217.pdf](http://www.nedarc.org/performanceMeasures/documents/EMS%20Perf%20Measures%20Manual%20Web_0217.pdf)

# 9 Measures

## MI EMS Results 2017 (n=370)

### EMSC 08

#### **Permanence of EMSC in State EMS System**

---

- Advisory Committee w/ Required Representation on EMSCC
- Required Members and quarterly meetings
- 1 FTE EMSC Manager

### EMSC 09

#### **Integration of priorities into Statutes or Regulations**

---

- Target date is 2027
- EMSC priorities integrated into existing EMS, hospital or healthcare facility statutes or regulations



## EMSC 04

The % of hospitals with an ED recognized through a statewide...program that are able to stabilize and/or manage pediatric medical emergencies



Goal 04:  
25% of  
hospitals  
recognized  
by 2022

Average Section Scores	State Section Scores	National Section Scores
Guidelines for Administration and Coordination (19 pts)	8.2	10.1
Physicians, Nurses, and Other Health Care Providers Who Staff the ED (10 pts)	5.3	5.3
Guidelines for QI/PI in the ED (7 pts)	2.6	2.9
Guidelines for Improving Pediatric Patient Safety in the ED (14 pts)	11.4	10.8
Guidelines for Policies, Procedures, and Protocols for the ED (17 pts)	10.3	10.5
Guidelines for Equipment, Supplies, and Medications for the Care of Pediatric Patients in the ED (33 pts)	29.8	29.4



**Guidelines for Administration and Coordination of the ED for the Care of Children**

**Scored Items**

	<b>Yes (N)</b>	<b>% Yes</b>	<b>% National Yes</b>	<b>Difference</b>
Nurse Coordinator	65	48.1%	59.3%	-11.1%
Physician Coordinator	51	37.8%	47.4%	-9.6%





## EMSC 05

% of hospitals with an ED recognized through a statewide system that are able to stabilize or manage pediatric trauma





Goal 05:  
50% of  
hospitals  
by 2022



## EMSC 06 & 07

% of hospitals with an ED  
that have written  
interfacility transfer  
guidelines & interfacility  
transfer agreements

## Goals 06 & 07:

90% of hospitals in the state  
have written transfer  
guidelines & interfacility  
transfer agreements that  
include specific  
components by 2021





- Defined process for initiation of transfer
- Process for selecting appropriate facility
- Process for selecting appropriately staffed transport to meet acuity
- Process for transfer including informed consent
- Plan for transfer of medical record and signed transport consent
- Plan for transfer of personal belongings
- Plan for provision of directions and referral institution information to family

Let's talk more  
about PM 04  
Hospital  
Recognition  
Programs



**EMSC**

Emergency Medical  
Services for Children <sup>SM</sup>

HRSA/MCHB



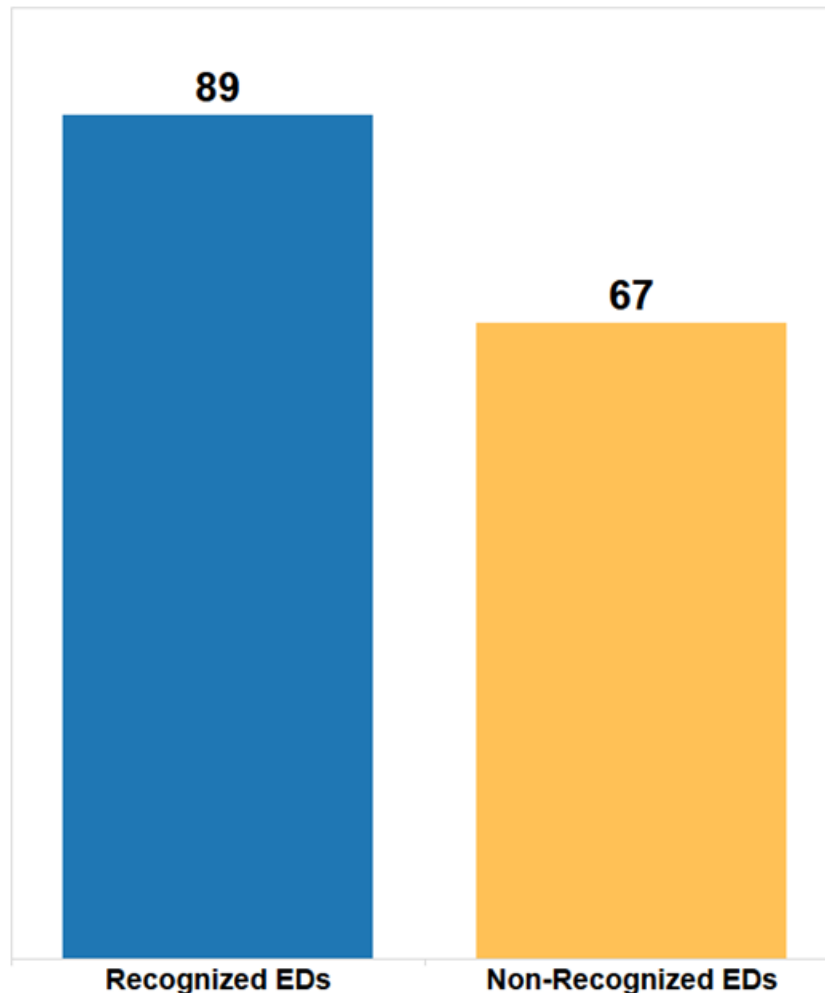
## National QI Initiative to Ensure:

All EDs have essential guidelines and resources in place to provide effective emergency care to children



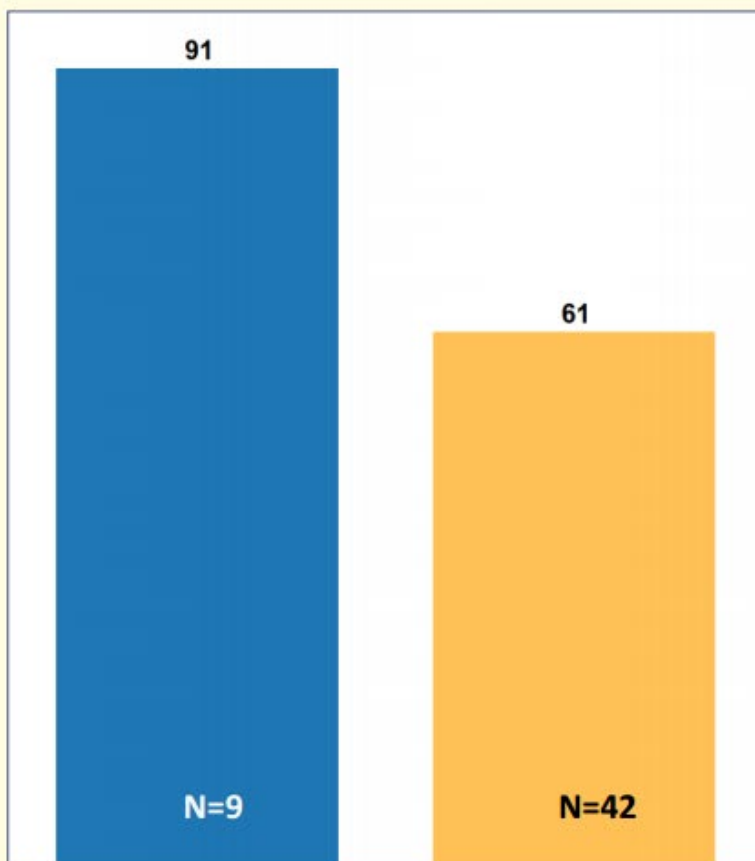
# Effectiveness of Hospital Pediatric Recognition Programs

Median Score for Recognized vs Not Recognized EDs for all Hospitals (nationally)



**22 POINT  
DIFFERENCE!**





**West Virginia  
2013-14 Pediatric  
Readiness Median  
Scores**

***Recognized  
Emergency  
Departments  
scored 30 points  
higher!***

■ Recognized EDs  
■ Non-Recognized EDs



**EMSC**

Emergency Medical  
Services for Children SM

# July 2016 Update



**Justin Allen, EMT-P**

---

**Program Coordinator**

Michigan EMSC, Michigan Department  
of Health and Human Services



**Theresa Jenkins, RN, BSN**

---

**Regional Trauma Coordinator**

Michigan Department of Health and  
Human Services



**Lauren Korte, RRT**

---

**Medical Surge Planner**

Division of Emergency Preparedness  
and Response, Michigan Department  
of Health and Human Services

## Specific Aim:

By September 2017, MI will develop definitions for a tiered-level pediatric recognition system.

## Enablers:

Pediatric champions at every hospital; implementing a trauma verification process

## Barriers:

Large rural area in northern MI; development of survey teams

## First test for change:

Validating pediatric readiness data

## Next steps:

- Continue to encourage ED's to resubmit Pediatric Readiness Assessment.
- Continue to meet with stakeholders to increase buy-in to the program.
- Create template of criteria for a 3 tiered system based on the 2009 Joint Policy Statement "Guidelines for Care of Children in the Emergency Department".

# September 2016 Update

## Aim Statement:

By September 2017, Michigan will develop definitions for a tiered-level pediatric recognition system. We will staff a task force to create a process to acknowledge facilities as pediatric capable through proof of staff, education, equipment and transfer process.

## Describe Last Test for Change (Improvement Effort):

Reached out to pediatric champions within the hospitals to request their pediatric readiness assessment resubmissions. Went from approximately 25% to a 62% completion rate.

## Plan/Objective for next cycle/month:

- Continue to recruit interested stakeholders into our steering committee and hold regular meetings
- Continue to reach out to hospitals to complete the Ped's readiness assessment so we can reach 75% completion
- Develop state-specific slides and other materials to educate stakeholders and groups
- Review and analyze NPRA data for common gaps and errors made by hospitals

## Anticipated Enablers and/or Barriers:

Enablers: pediatric champions, state trauma designation system in place, buy-in from Children's Hospitals, Michigan Center for Rural Health

Barriers:



**Justin Allen, EMT-P**

**Program Coordinator**

Michigan EMSC, Michigan Department of Health and Human Services



**Theresa Jenkins, RN, BSN**

**Regional Trauma Coordinator**

Michigan Department of Health and Human Services



**Lauren Korte, RRT**

**Medical Surge Planner**

Division of Emergency Preparedness and Response, Michigan Department of Health and Human Services

# Pediatric Readiness Improvement Team

- Justin Allen – EMSC
- Lauren Korte – HPP
- Theresa Jenkins – Trauma
- Dr. Stu Bradin – C.S. Mott Children's Hospital
- Dr. Lee Benjamin – ACEP
- Dr. Prashant Mahajan – AAP
- Chris Baker – ENA
- Amy Koestner – Trauma
- Val Canary – Pediatric Trauma
- Crystal Barter – Rural Health Network
- Dr. Steve Krug – Collaborative Coach

1<sup>st</sup>  
Meeting:  
February  
2017

# Draft of Designation Levels

Pediatric Level 1

Pediatric Level 2

Pediatric Level 3

# Level 1: Comprehensive Pediatric Center



Comprehensive specialized pediatric medical, trauma and surgical care to all acutely ill and injured children

- ❖ Pediatric Inpatient Services
- ❖ Pediatric ICU
- ❖ Pediatric Sub-Specialty physicians
- ❖ Serves as a Regional Referral Center

**DRAFT**



# Level II: Pediatric Medical Center



Capable of stabilization of critically ill or injured pediatric patients including airway, breathing, circulation and disability, and arranges transfer to Level 1 as appropriate.

- ❖ Defined pediatric inpatient service
- ❖ Department/Division of Pediatrics within Medical Staff Structure

**DRAFT**

# Level III: ED Approved for Pediatrics



Capable of stabilization including management of airway, breathing and circulation, and provides appropriate transfer to definitive care

- ❖ Limited pediatric inpatient admission capability

**DRAFT**



## Next Steps: EMSC & HPP

- ❖ Reconvene Steering Committee
- ❖ Develop Additional Workgroups
- ❖ Reaffirm or Revise Draft Pediatric Facility Readiness Model
- ❖ Refine criteria
- ❖ Develop the Process
- ❖ Stakeholder engagement and education
- ❖ Pediatric Medical Surge Plan (Draft by 6/30/19)



A photograph of three young boys participating in a tug-of-war competition on a grassy field. They are wearing blue t-shirts and shorts. The boy in the center is wearing a grey baseball cap and has his mouth open in an effort. The boy to his right is also pulling hard. In the background, other people and a stroller are visible on the grass.

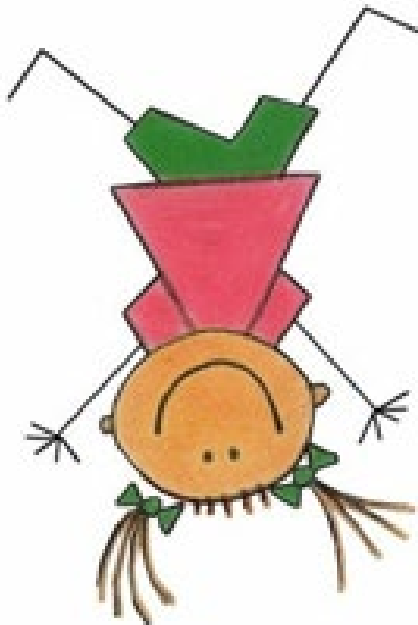
# Tying it All Together

- ❖ CoPEM
- ❖ Website Toolkit
- ❖ MI MEDIC Project
- ❖ Pediatric Burn Surge
- ❖ Education
- ❖ Continue Engagement of Hospital Pediatric Champions
- ❖ EMS Pediatric Champions
- ❖ Pediatric Page-EMResource
- ❖ Facility Recognition Program (Hospitals)
- ❖ EMS Agency Recognition Program
- ❖ Family Reunification Recommendations for Hospitals
- ❖ Finalize Pediatric Medical Surge Plan
- ❖ Pediatric Exercises

# Ideas, Suggestions...

Michelle Ash, EMSC Coordinator

[ashm2@michigan.gov](mailto:ashm2@michigan.gov)



# Thank You for Your Dedication to Caring for Kids!

