EMSC’s Pediatric Readiness: Improving the Lives of All Children

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Director, Division of Child, Adolescent and Family Health
Maternal Child Health Bureau
Health Resources and Services Administration
Department of Health and Human Services
Mr. INOUYE. Mr. President, I rise today to speak about the importance of the Emergency Medical Service for Children, or EMSC, Program. Recently, we celebrated National EMSC Day, an annual event raising awareness about the need to improve and expand specialized care for children in the prehospital and acute care settings. The EMSC Program holds great personal importance to me. More than 30 years ago, Senator HATCH and I, on a bipartisan basis, took note of the systematic problems and deficiencies surrounding emergency care for children*. With these deficiencies in mind, we authored legislation to address the gaps in emergency care for children. Through the support of the American Academy of Pediatrics and the Surgeon General the bill became law in 1984 authorizing Federal funding for EMSC.

*American Indian and Alaska Native Children of special focus, but tribal governments not eligible grantees
Emergency Medical Services for Children
Objectives:

- Ensure that all severely injured and ill children can receive timely and optimal care
- Understand the foundation of readiness that exists nationally and among tribal communities
- Identify feasible strategies to improve the emergency care framework for children using quality improvement models
Why Pediatric Readiness

- Children comprise 26% of the U.S. population.
- 31 million children are seen in emergency departments each year.
- 70% seen in EDs that see fewer than 15 pediatric patients /day

- Variability in readiness
- Variability in care
- Variability in outcomes?
Challenge of Being Pediatric Ready

EMS 10%/10%
- Child falls from window.
- Nonresponsive, scalp hematoma

ED 5%
- Critical Access Hospital
- < 5 pediatric patients/day

Trauma Centers 10%
- Level I/II Trauma Center more than one hour away

Changing the focus from a person providing care to a system that delivers care
National Pediatric Readiness Project

- Multi-phase quality improvement initiative
- Based on Joint Policy Statement: *Guidelines for the Care of Children in the Emergency Department*
- Self-assessment with immediate feedback
- Benchmarking in groups by pediatric volume
- Access to QI resources targeted to identified need
Purpose of Initiative:

- Establish a baseline of nation’s capacity to provide pediatric emergency care in the ED
- Create a foundation for QI process
- Includes implementation of Joint Policy Statement “current best practices”
- Develop benchmarks to measure improvement over time
FROM THE AMERICAN ACADEMY OF PEDIATRICS

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

American Academy of Pediatrics, Committee on Pediatric Emergency Medicine, American College of Emergency Physicians, Pediatric Committee, Emergency Nurses Association Pediatric Committee

1. Administration and Coordination
2. Physicians, Nurses, and Other Healthcare Providers
3. Quality Improvement
4. Patient Safety
5. Policies, Procedures, and Protocols
6. Support Services
7. Equipment, Supplies, and Medications

A National Steering Committee was formed to plan and implement this “Quality Improvement” project
Joint Policy Statement

- Equipment, Supplies and Medications
- Policies, Procedures, and Protocols
- Pediatric Patient Safety
- QI / PI in the ED
- Physician, Nurses, and Other ED Staff
- Administration and Coordination
Joint Policy Statement

Administration and Coordination

Physician, Nurses, and Other ED Staff

QI / PI in the ED - 7 points

Pediatric Patient Safety - 14 points

Policies, Procedures, and Protocols - 17 points

Equipment, Supplies and Medications - 33 points

100 total points
The Instrument

• Respondents received immediate feedback:
  • Pediatric Readiness Score
  • Comparison with other like facilities
  • Gap Analysis based on six domains
  • Link to free resources
Hospital Name: [Redacted]

Hospital Volume: Medium to High: 5,000 – 9,999 pediatric patients (average of 14-26 a day)

Report Date: 5/29/2013 2:40:18 PM

We encourage you to print or export this report to pdf as you will not have access to the report after exiting this screen (see the buttons above).

This score represents the essential components needed to establish a foundation for pediatric readiness. Not all of the questions on the assessment are scored. The score is in no way inclusive of all the components recommended for pediatric readiness; it represents a suggested starting point for hospitals. We encourage you to carefully review the Guidelines for Care of Children in the Emergency Department to develop a comprehensive pediatric readiness program for your hospital. The scoring criteria was developed by a group of clinical experts through a modified-delphi process.

YOUR SCORE AND COMPARATIVE SCORES:

<table>
<thead>
<tr>
<th>Score</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>529</td>
</tr>
<tr>
<td>74</td>
<td>3177</td>
</tr>
</tbody>
</table>

YOUR HOSPITAL SCORE OUT OF 100

AVERAGE SCORE OF SIMILAR PEDIATRIC ED VOLUME HOSPITALS

AVERAGE SCORE OF ALL PARTICIPATING HOSPITALS

ANALYSIS OF YOUR SCORE:

Below are your scores* for each section of the assessment. The scores are based on the weighted assessment items for each section and are displayed on the right-hand side. The weighted assessment items that you indicated were missing from your ED are listed beneath the section header with an explanation as to why the items are important, as well as links to additional resources for improvement.

* The sum of the sectional scores below may vary slightly from your actual overall readiness score above due to rounding.

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

Your score: 19.0 out of 19

You have all the scored elements in this section. For additional improvement ideas see below.

RESOURCES FOR IMPROVEMENT: For additional resources regarding the guidelines for administration and coordination of the ED refer to the Guidelines for Care of Children in the Emergency Department or visit the resources available about this section found at www.pediatricreadiness.org under Readiness Toolkit > Administration and Coordination.

Physicians, Nurses, and Other Health Care Providers Who Staff the ED

Your score: 5.0 out of 10

- You indicated that specific pediatric competency evaluations ARE NOT required of physicians staffing the ED.
Guidelines for Care of Children in the Emergency Department

This checklist is based on the American Academy of Pediatrics (AAP), American College of Emergency Physicians (ACEP), and Emergency Nurses Association (ENA) 2009 joint policy statement "Guidelines for Care of Children in the Emergency Department," which can be found online at http://reapolicy.aapublications.org/doi/abs/10.1542/peds.1244820133.pdf

Use the checklist to determine if your emergency department (ED) is prepared to care for children.

- 189 Items on the assessment
- 82 Items Scored for “Pediatric Readiness”
- Perfect Score = 100

6 Major Sections:
- Coordination (19 pts)
- Staffing (10 pts)
- QI/PI (7 pts)
- Safety (14 pts)
- Policies (17 pts)
- Equipment (33 points)

Benchmarking: “QI Approach”

Average Pediatric Readiness Scores

<table>
<thead>
<tr>
<th>Low Volume (&lt;1800 patients)</th>
<th>Medium Volume (1800-4999 patients)</th>
<th>Medium to High Volume (5000-9999)</th>
<th>High Volume (&gt;=10000)</th>
<th>All Participating Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>70</td>
<td>74</td>
<td>84</td>
<td>69</td>
</tr>
</tbody>
</table>

n = 1629  n = 1248  n = 708  n = 561  n = 4146

Champions
- EMSC-SP
- ACEP
- ENA
- AAP

Web Assessment
- Delphi Process
- ED Guidelines
- Weighted Pediatric Readiness Score WPRS

Incentives
- Pediatric Ready Score
- Benchmarking
- Gap Analysis
- Clinical Tools
- Web-based toolkit

82% 4146 EDs
Snapshot of Pediatric Readiness

NATIONAL RESULTS
The map below shows the percentage of hospitals in participating states/territories that have completed the National Pediatric Readiness Assessment.

The assessment has closed. You can hover over any state/territory for more information.

Rev 3/3/2014 - 17:30 MDT

4,146 EDs
The National Picture

% EDs by Volume

- < 5 children/day: 39%
- 5-14 children/day: 30%
- 15-25 children/day: 17%
- >25 children: 14%

N=4,146 (82.7% of all EDs)
Benchmarking

<table>
<thead>
<tr>
<th>Average Pediatric Readiness Scores</th>
<th>Low Volume (&lt;1800 patients)</th>
<th>Medium Volume (1800-4999 patients)</th>
<th>Medium to High Volume (5000-9999)</th>
<th>High Volume (&gt;=10000)</th>
<th>All Participating Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>62</td>
<td>70</td>
<td>74</td>
<td>84</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>n = 1629</td>
<td>n = 1248</td>
<td>n = 708</td>
<td>n = 561</td>
<td>n = 4146</td>
</tr>
</tbody>
</table>
Improvement is Happening

**How are we improving? 2003 vs 2013**

**Overall Median Pediatric Readiness Score**

<table>
<thead>
<tr>
<th></th>
<th>Median Score</th>
<th>2003 Median Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>68.9</td>
<td>55.0</td>
</tr>
</tbody>
</table>

**Median Pediatric Readiness Score for Emergency Departments by Patient Volume**

<table>
<thead>
<tr>
<th>Patient Volume</th>
<th>Median Score</th>
<th>Median 2003 Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Volume (&lt;1800 patients)</td>
<td>61.3</td>
<td>47.8</td>
</tr>
<tr>
<td>Medium Volume (1800-4999 patients)</td>
<td>69.3</td>
<td>54.2</td>
</tr>
<tr>
<td>Medium to High Volume (5000-9999)</td>
<td>74.8</td>
<td>58.3</td>
</tr>
<tr>
<td>High Volume (&gt;=10000)</td>
<td>89.8</td>
<td>68.9</td>
</tr>
</tbody>
</table>
Snapshot of Pediatric Readiness

INDIAN HEALTH/TRIBAL RESULTS
PEDIATRIC READINESS IN INDIAN HEALTH SERVICE AND TRIBAL EMERGENCY DEPARTMENTS: RESULTS FROM THE NATIONAL PEDIATRIC READINESS PROJECT

Authors: Juliana Sadovich, PhD, RN, Terry Adirim, MD, MPH, Russell Telford, MAS, Lenora M. Olson, PhD, MA, Marianne Gausche-Hill, MD, and Elizabeth A. Edgerton, MD, MPH, Rockville, MD, Philadelphia, PA, Salt Lake City, UT, and Torrance, CA
IHS Pediatric Readiness Goal

• To assess every 24/7 emergency department (ED) in the IHS/Tribal facilities
• 45 Tribal/IHS facilities across 11 states
• Identified by:
  – The 2009 American Hospital Association Healthcare Dataview
  – EMS for Children State Partnership grantees
IHS/Tribal ED System

- In 2014 treated approximately 650,000 patients
  - 185,000 (28%) <19 years of age
- Wide variation in structure and capabilities
  - 2 are stand alone ED in health centers
  - 5 within critical access hospitals
  - 8 designated trauma centers
    - 6 LIV, 1 LIII, and 1 LII
- No dedicated pediatric ED within the system
IHS Summary

Number of Hospitals Sent Assessment: 45

Number of Hospitals that Responded: 45

Response Rate: 100

IHS/TRIBAL SCORE AND COMPARATIVE SCORES:

61
IHS/TRIBAL AVERAGE
HOSPITAL SCORE
OUT OF 100

60
IHS/TRIBAL MEDIAN
HOSPITAL SCORE
OUT OF 100

69
n = 4,146
NATIONAL MEDIAN OF
PARTICIPATING HOSPITALS
Breakdown of IHS Scores by Hospital Pediatric Volume Type

<table>
<thead>
<tr>
<th>Annual Pediatric Volume</th>
<th># of Hospitals</th>
<th>Avg. Score</th>
<th>Median Score</th>
<th>Min. Score</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (&lt;1800 patients)</td>
<td>11</td>
<td>58.2</td>
<td>58.1</td>
<td>36</td>
<td>86</td>
</tr>
<tr>
<td>Medium (1800-4999 patients)</td>
<td>22</td>
<td>60.9</td>
<td>60.4</td>
<td>40</td>
<td>87</td>
</tr>
<tr>
<td>Medium High (5000-9999 patients)</td>
<td>8</td>
<td>62.9</td>
<td>62.5</td>
<td>36</td>
<td>83</td>
</tr>
<tr>
<td>High (&gt;=10000 patients)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>45</td>
<td>60.9</td>
<td>60.3</td>
<td>36</td>
<td>87</td>
</tr>
</tbody>
</table>

NOTE: Blank indicates fewer than 5 hospitals; score can't be shown.
**Geographic Locations**

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Indian Health Service hospital weighted pediatric readiness score and location by pediatric patient volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pediatric patient volume category</td>
</tr>
<tr>
<td></td>
<td>Low (N = 11)</td>
</tr>
<tr>
<td>Average WPRS</td>
<td>58.2</td>
</tr>
<tr>
<td>Hospital geographic location</td>
<td></td>
</tr>
<tr>
<td>Urban/suburban (%)</td>
<td>3 (27.3)</td>
</tr>
<tr>
<td>Rural/remote (%)</td>
<td>8 (72.7)</td>
</tr>
</tbody>
</table>

WPRS, Weighted pediatric readiness score.
# Impact of a Pediatric Emergency Care Coordinator

## TABLE 2
Average points earned per domain by pediatric emergency care coordinator presence

<table>
<thead>
<tr>
<th>Domain</th>
<th>PECC presence</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No coordinator (N = 24)</td>
<td>At least one coordinator (N = 21)</td>
</tr>
<tr>
<td>Administration and coordination (19 points)</td>
<td>0.0</td>
<td>13.1</td>
</tr>
<tr>
<td>Physicians, nurses, and other ED staff (10 points)</td>
<td>4.2</td>
<td>5.5</td>
</tr>
<tr>
<td>QI/PI in the emergency department (7 points)</td>
<td>1.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Pediatric patient safety (14 points)</td>
<td>9.2</td>
<td>10.2</td>
</tr>
<tr>
<td>Policies, procedures, and protocols (17 points)</td>
<td>8.5</td>
<td>9.8</td>
</tr>
<tr>
<td>Equipment, supplies, and medications (33 points)</td>
<td>28.3</td>
<td>30.4</td>
</tr>
</tbody>
</table>

PECC, Pediatric emergency care coordinator; QI/PI, quality improvement/performance improvement.
Administration and Coordination

GOAL - 19 points

National Avg: 10.1

Indian Health Services Avg: 6.1
Indian Health Compared with Nation

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

<table>
<thead>
<tr>
<th>Scored Items</th>
<th>Yes (N)</th>
<th>% Yes</th>
<th>% National Yes</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Coordinator</td>
<td>19</td>
<td>42.2%</td>
<td>59.3%</td>
<td>-17.1%</td>
</tr>
<tr>
<td>Physician Coordinator</td>
<td>10</td>
<td>22.2%</td>
<td>47.4%</td>
<td>-25.2%</td>
</tr>
</tbody>
</table>
Benefits of having a PECC

• Ongoing education and skills in Pediatric ED care
• Polices and procedures are in place for children
• Quality Improvement Plan is in place for Pediatric Patients
• Appropriate medication is stocked
• Pediatric care is included in staff orientation
Require Competencies of Health Care Providers Who Staff the ED

GOAL - 10 points

National Avg: 5.3
Indian Health Services Avg: 4.8
Pediatric Competency

Pediatric competency evaluations ensure:

- ED staff have the knowledge and skills to provide optimal clinical care for children

Note: May be required by accreditation organizations such as the Joint Commission or required by local hospital credentialing.
Physicians, Nurses, and Other Health Care Providers Who Staff the ED

<table>
<thead>
<tr>
<th>Scored Items</th>
<th>Yes (N)</th>
<th>% Yes</th>
<th>% National Yes</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Competency Evaluations</td>
<td>30</td>
<td>66.7%</td>
<td>66.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Physician Competency Evaluations</td>
<td>13</td>
<td>28.9%</td>
<td>38.6%</td>
<td>-9.7%</td>
</tr>
</tbody>
</table>
Pediatric Specific CE

- Pediatric Advanced Life Support
  - 86% for physicians, 93% nurses, 78% mid-level practitioners
- Basic Pediatric Life Support
  - 33% for nurses
- Emergency Nursing Pediatric Course
  - 31% for nurses
Quality and Process Improvement helps to ensure:

• Processes are in place to review clinical cases
• Data is gathered to measure deviation from best practices or errors in care
Quality and Process Improvement (Cont.)

Quality and Process Improvement helps to ensure:

• Use of appropriate metrics to evaluate and improve health outcomes of children

• Integration with other QI committees for the coordination of care throughout the medical continuum
Quality/Process Improvement in the ED

GOAL - 7 points

National Avg: 2.9
Indian Health Services Avg: 1.9
## Emergency Departments with Pediatric Patient Care Review Process

<table>
<thead>
<tr>
<th>Review Process</th>
<th>IHS % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have Process</td>
<td>31% (14)</td>
</tr>
<tr>
<td>Collect &amp; Analyze Care Data</td>
<td>71% (10)</td>
</tr>
<tr>
<td>Children QI and PI Indicators</td>
<td>36% (5)</td>
</tr>
</tbody>
</table>
### Scored Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes (N)</th>
<th>% Yes</th>
<th>% National Yes</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your ED have a pediatric patient care-review process?</td>
<td>14</td>
<td>31.1%</td>
<td>45.1%</td>
<td>-14.0%</td>
</tr>
<tr>
<td>Collection and analysis of pediatric emergency care data</td>
<td>10</td>
<td>71.4%</td>
<td>88.1%</td>
<td>-16.6%</td>
</tr>
<tr>
<td>Identification of quality indicators for children</td>
<td>5</td>
<td>35.7%</td>
<td>58.3%</td>
<td>-22.6%</td>
</tr>
<tr>
<td>Development of a plan for improvement in pediatric emergency care</td>
<td>8</td>
<td>57.1%</td>
<td>78.9%</td>
<td>-21.7%</td>
</tr>
<tr>
<td>Re-evaluation of performance using outcomes-based measures</td>
<td>8</td>
<td>57.1%</td>
<td>73.4%</td>
<td>-16.3%</td>
</tr>
</tbody>
</table>

*The following results are a breakdown of those who said “Yes” to having a pediatric patient care-review process...*
Guidelines for Improving Pediatric Patient Safety in the ED help to ensure:

• Polices and practices are in place to address unique pediatric patient safety concerns

*Note:* The delivery of pediatric care reflects an awareness of the unique needs to improve health outcomes of children.
Pediatric Patient Safety in the ED

GOAL - 14 points

National Avg: 10.8
Indian Health Services Avg: 9.7
## Guidelines for Improving Pediatric Patient Safety

### Guidelines for Improving Pediatric Patient Safety in the ED

<table>
<thead>
<tr>
<th>Scored Items</th>
<th>Yes (N)</th>
<th>% Yes</th>
<th>% National Yes</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weigh in Kilograms</td>
<td>29</td>
<td>64.4%</td>
<td>67.7%</td>
<td>-3.2%</td>
</tr>
<tr>
<td>If Weigh in Kilograms, also Record in Kilograms</td>
<td>20</td>
<td>69.0%</td>
<td>75.3%</td>
<td>-6.3%</td>
</tr>
<tr>
<td>Temperature, heart rate, and respiratory rate recorded</td>
<td>45</td>
<td>100.0%</td>
<td>98.6%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>
How many EDs Weigh and Record Pediatric Patients in Kilograms?

- Out of 45 Tribal/IHS hospitals
  - 64% (29) weight in kilograms
  - 44% (20) weigh and record patient weight in kilograms

(9 hospitals do not record in kilograms)
### Guidelines for Improving Pediatric Patient Safety in the ED con’t

<table>
<thead>
<tr>
<th>Blood pressure monitoring available based on severity of illness</th>
<th>43</th>
<th>95.6%</th>
<th>98.1%</th>
<th>-2.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse oximetry monitoring available based on severity of illness</td>
<td>45</td>
<td>100.0%</td>
<td>99.7%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Written procedure in place for notification of physicians when abnormal vital signs</td>
<td>26</td>
<td>57.8%</td>
<td>70.1%</td>
<td>-12.4%</td>
</tr>
</tbody>
</table>
### Guidelines for Improving Pediatric Patient Safety in the ED con’t

<table>
<thead>
<tr>
<th>Process in place for the use of pre-calculated drug dosing</th>
<th>30</th>
<th>66.7%</th>
<th>78.9%</th>
<th>-12.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process in place that allows for 24/7 access to interpreter services in the ED</td>
<td>28</td>
<td>62.2%</td>
<td>95.4%</td>
<td>-33.2%</td>
</tr>
</tbody>
</table>
Pediatric Policies, Procedures, and Protocols for the ED helps ensure:

- Special needs of children and their families are met
- Pediatric specific assessment, reassessment, treatment, evaluation and documentation are adopted to reduce/eliminate errors and unnecessary risk to children
- Children are protected
Policies, Procedures, and Protocols for the ED

GOAL - 17 points

- National Avg: 10.5
- Indian Health Service Avg: 9.1
**Guidelines for Policies, Procedures, and Protocols for the ED**

| Triage policy that specifically addresses ill and injured children | 23 | 51.1% | 57.6% | -6.5% |
| Policy for pediatric patient assessment and reassessment | 30 | 66.7% | 73.4% | -6.8% |
| Policy for immunization assessment and management of the under-immunized child | 23 | 51.1% | 51.7% | -0.6% |
| Policy for child maltreatment | 43 | 95.6% | 89.6% | 6.0% |
| Policy for death of the child in the ED | 20 | 44.4% | 58.0% | -13.5% |
### Guidelines for Policies, Procedures, and Protocols for the ED (Cont.)

<table>
<thead>
<tr>
<th>Policy Description</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
<th>Value 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy for reduced-dose radiation for CT and x-ray imaging based on pediatric age or weight</td>
<td>12</td>
<td>26.7%</td>
<td>52.6%</td>
<td>-25.9%</td>
</tr>
<tr>
<td>Policy for promoting family-centered care</td>
<td>25</td>
<td>55.6%</td>
<td>59.6%</td>
<td>-4.1%</td>
</tr>
<tr>
<td>Hospital disaster plan addresses issues specific to the care of children</td>
<td>13</td>
<td>28.9%</td>
<td>46.8%</td>
<td>-17.9%</td>
</tr>
<tr>
<td>Inter-facility transfer guidelines</td>
<td>30</td>
<td>66.7%</td>
<td>70.5%</td>
<td>-3.9%</td>
</tr>
</tbody>
</table>
Ensuring the Safe Movement of Children

The following are the Tribal/IHS results:

- **66%** of EDs have Inter-facility Transfer Guidelines and the 8 essential EMSC components

- **53%** of EDs have Inter-facility Transfer Agreements
Guidelines for Equipment

Guidelines for Equipment, Supplies, and Medication for the care of Pediatric Patients helps ensure:

- Availability and accessible for all ages and sizes
- Equipment, supplies, and medication are logically and safely organized
Guidelines for Equipment (Cont.)

Guidelines for Equipment, Supplies, and Medication for the care of Pediatric Patients helps ensure:

• Staff are educated on location and function of all equipment and supplies

• Daily verification/check list process is in place for all equipment and supplies
Equipment, Supplies, and Medications

GOAL - 33 points

National Avg: 29.4
Indian Health Services Avg: 29.3
Limitations

• The assessment is a self-reported tool with no onsite verification
• Guidelines based on expert consensus
• Weighted Pediatric Readiness Score is based on expert consensus and has not been linked to outcomes
Next Steps:
Building upon our strengths and filling our gaps
Pediatric Emergency Care Coordinator

• Appointed champion within facility
  • Nurse or physician

• Associated with a higher pediatric readiness score

• Does not have to be a full-time position

• Build upon other pediatric liaison positions/collaborations
Pediatric Quality Improvement Process

• Integrate pediatric cases into current practices
• Available QI plans for pediatric care
• Available metrics to benchmark or integrate with local initiatives
• Can’t improve upon what you don’t know is happening
Patient Safety

- 9 facilities don’t weigh in kilograms
  - Existing models to implement change
  - System change that has continued downstream impact
- Pre-calculated drug dosages
- Notification of abnormal vital signs
  - Existing policies
  - Eliminates variation of care by provider
The MOST IMPORTANT SAFETY INITIATIVE for CHILDREN

Hospitals should

WEIGH & RECORD children in KILOGRAMS

only 1 in 2 Hospitals Weigh and Record in Kilograms*

Not Weighing and Recording in KG can lead to Drug Dosing ERRORS

Having a PEDIATRIC Emergency Care Coordinator is the single most important item that hospitals can implement to ensure pediatric readiness including patient safety.*

www.pediatricreadiness.org

Top 3 Policies Reported as Adopted by Tribal/IHS EDs

- Child Maltreatment
- Care for Children with Social and Mental Health Issues
- Pediatric Patent Assessment and Reassessment

Celebrate Success of Pediatric Focus
3 Policies Least Likely to be Reported as Adopted in Tribal/IHS EDs

- Death of a child in the Emergency Department
- Reduced Dose Radiation for Imaging
- Hospital Disaster Plans Specifically Addressing Pediatrics

Resources and initiatives already exist for these topics
Strategic Resource: Disaster Checklist

Benefits

• Universal gap
• Brings together diverse stakeholders
  • Respondent Preparedness Program in ASPR/HHS
  • ACEP-Peds and Disaster Committees
  • AAP Disaster Committee
  • NGOs, families
• Builds upon previous work of others
Equipment, Supplies, and Medication

- All 45 ED length-based tape, and system to ensure proper sizing of resuscitation equipment and dosing of medication
- 36 (80%) have method to verify location and function daily
- 17 (37%) EDs have all 54 required equipment items
  - 78% with at least 80% of equipment
A 5-year-old child chokes on a small rubber ball, and is rushed to their local emergency department (ED) in respiratory arrest. If the child arrived at your ED or the ED in your community, would it be ready to provide appropriate pediatric care?

DID YOU KNOW? One in four ED visits involve children. For just 18 cents per visit, your facility can ensure that their ED is pediatric ready.
State Partnership Regionalization of Care (SPROC) Grants

- Improve access to pediatric specialty services by getting the patient to the resources or bringing the resources to the patient
- Provide innovative approaches to improving pediatric care in rural, tribal and territorial communities
- First grantees are AK, AZ, CA, MT, NM, and PA
- Regionalization a priority of 2006 Institute of Medicine Report on state of emergency care
EMS for Children Resources

- State Partnership Managers (58)

- National Pediatric Readiness Project
  - www.pediatricreadiness.org

- EMSC Data Center (NEDARC)
  - www.nedarc.org

- EMSC Innovation and Improvement Center
  - “coming soon”
Indian Health-EMSC/HRSA Collaboration

- Build upon current QI initiatives
- Dissemination of EMSC Resources
- Fostering of collaboration

- Joint Leadership Support
- **IHS**: Celissa Stephens, Carolyn Aoyama
- **EMSC**: Beth Edgerton, Theresa Morrison-Quinata, Diane Pilkey
Opportunity for Reassessment

www.pedsready.org
Steps to Success

• Engagement
  • Benchmarking
  • Tool to start discussion

• Analyses
  • Strengths and weaknesses

• Strategic Interventions
  • QI Model
    • Plan, Do, Study, Act
Acknowledgements

- EMS for Children Program (HRSA-MCHB)
  - State Partnership Managers
  - EMSC NRC and NEDARC
- Indian Health Services (IHS)
- American Academy of Pediatrics (AAP)
- American College of Emergency Physicians (ACEP)
- Emergency Nurses Association (ENA)
100% of Tribal/IHS EDs are willing to become Peds Ready
Improvement is a Journey

“Do not judge me by my successes. Judge me by how many times I fell down and got back up again.”

— Nelson Mandela 1918-2013
Contact Information

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Consider…

A 5-year-old child chokes on a small rubber ball and is rushed to their local emergency department (ED) in respiratory arrest.

If the child arrived at your ED or any ED in your community, would that ED be ready to provide appropriate pediatric care?
### Process/Policy Related Barriers

- Lack of a QI/PI plan for children: 48.4%
- Lack of policies for pediatric emergency care: 47.4%
- Unaware/Unfamiliar with national guidelines: 46.1%
- Lack of a disaster plan for children: 41.6%
- Lack of interest in meeting the guidelines: 12.4%

### Resource Related Barriers

- Lack of educational resources: 49.0%
- Lack of appropriately trained nurses: 41.2%
- Lack of appropriately trained physicians: 40.0%

### Staffing Related Barriers

- Cost of training personnel: 54.4%
- Cost of personnel: 40.0%
- Lack of administrative support: 20.5%

### Other

- Other: 3.9%
The ambulance will never be a helicopter, but can we ensure that the ambulance can get to the helicopter?