Joint Annual Report of
The Board for Licensing Health Care Facilities
And the
Emergency Medical Services Board
To the
Tennessee General Assembly
General Welfare Committee of the Senate
Health and Human Resources Committee of the House of Representatives
On the Status of
Emergency Medical Services for Children

July 1, 2021

I. Requirement of the Report

Tennessee Code Annotated § 68-140-321(c) and 68-11-251 requires that the Board for Licensing Health Care Facilities and the Emergency Medical Services Board in collaboration with the Committee on Pediatric Emergency Care (CoPEC) shall jointly prepare an annual report on the current status of emergency medical services for children (EMSC) and on continuing efforts to improve such services beginning July 1, 1999.

The mission is “to ensure that every child in Tennessee receives the best pediatric emergency care in order to eliminate the effects of severe illness and injury.”

The vision statement is “to be the foremost advocate for children throughout the continuum of care in Tennessee and the nation.”

II. Executive Summary

The Committee on Pediatric Emergency Care (CoPEC) in partnership with the Tennessee Department of Health created access to quality pediatric emergency care through establishing regional networks of care to ill and injured children 24 hours a day, 365 days a year. Emergency medical and trauma care services are defined as the immediate health care services needed as a result of an injury or sudden illness, particularly when there is a threat to life or long-term functional abilities.

Prior to the establishment of CoPEC there were significant barriers to access quality emergency care for children. It is important to understand that the delivery of healthcare to children is much different than adult care. “Children are not small adults,” and these differences place children at a disproportionate risk of harm. Examples include:
- Rescuers and other health care providers may have little experience in treating pediatric patients and may have emotional difficulty dealing with severely ill or injured infants and children.
- Providers not familiar with many of the unique anatomic and physiologic aspects of pediatric trauma, such as unique patterns of chest injury, head injury, cervical spine injury, and abdominal injuries, may make assessment and treatment errors.
- Medication dosing for children is based on weight and/or body surface area whereas with adults there is typically a standard dose for a medication regardless of age or weight. Children are therefore more prone to medication dosing errors by inexperienced health care providers who do not take weight-based dosing into account. They many times do not fully understand the dangers inherent with metric conversion when weight is reported or documented in pounds. Children also require equipment specifically designed to meet their anatomic and physiologic requirements.
- Children can change rapidly from a stable to life-threatening condition because they have less blood and fluid reserves. Assessment of these patients can be challenging to inexperienced providers.
- Children have a smaller circulating blood volume than adults making them more vulnerable to irreversible shock or death. Children are particularly vulnerable to aerosolized biological or chemical agents because their more rapid respiratory rate may lead to increased uptake of an inhaled toxin. Also, some agents (i.e. sarin and chlorine) are heavier than air and accumulate close to the ground – right in the breathing zone of smaller children.

A child’s outcome depends on factors including:

- Access to appropriately trained health care providers including physicians, nurses and EMS professionals
- Access to properly equipped ambulances and hospital facilities
- Location of comprehensive regional pediatric centers and other specialized health care facilities capable of treating critically ill and injured children

CoPEC has spent two decades ensuring access to quality emergency care for all children in our state. This has been achieved through the institutionalization of pediatric specific rules and regulations that govern hospital facilities and EMS services. These rules and regulations now require different size equipment specific for children and personnel training. The rules and regulations for hospitals can be found at [http://share.tn.gov/sos/rules/1200/1200-08/1200-08-30.20150625.pdf](http://share.tn.gov/sos/rules/1200/1200-08/1200-08-30.20150625.pdf) and EMS services at [http://share.tn.gov/sos/rules/1200/1200-12/1200-12-01.20150401.pdf](http://share.tn.gov/sos/rules/1200/1200-12/1200-12-01.20150401.pdf).

Approximately 3 out of 4 children less than 18 years of age were seen in Tennessee’s emergency departments with approximately 23% being seen at one of the four Comprehensive Regional Pediatric Centers (CRPCs). These CRPCs include Le Bonheur Children’s Hospital in Memphis, Monroe Carell Jr. Children’s Hospital at Vanderbilt in Nashville, Children’s Hospital at Erlanger in Chattanooga, and East Tennessee Children’s Hospital in Knoxville.

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Within each CRPC is a coordinator (or coordinators) charged with going out into the community to offer pediatric education opportunities to prehospital and hospital providers. These opportunities can be classified as simulation/mock codes, lectures, courses, hospital site visits and community engagement events. Throughout the last year, thousands of providers from across the state have been directly impacted by the efforts of the CRPC Coordinators. Coordinators play an integral role in ensuring the system of care of children is exceptional. Every child deserves to receive the best care possible, no matter where they live in the state. From May 1, 2020 to April 30, 2021, there were over 155 educational encounters (simulation/mock codes, lectures, courses, and hospital site visits) in Tennessee. Due to COVID-19, majority of the lectures and courses were conducted virtually.

A key role for CoPEC is to support the implementation of clinically appropriate evidence-based care for all children in Tennessee, regardless of what facility, EMS service or physician provider delivers that care. This is accomplished through the standardization of rules and regulations, education to all providers and continuous quality improvement activities. A new national performance measures for EMS were measured in Tennessee for the second time this year. These national performance measures work to improve the care children received across Tennessee and the country.

TN EMSC is playing a vital role in offering feedback and input regarding the measures demonstrating that our state’s program is highly regarded for its status as a leader in pediatric emergency care. Data collection as a quality improvement initiative is a key piece of enhancing the emergency medical services for children system in Tennessee. Each child whose care necessitates greater subspecialty pediatric care than their local community can provide, is transferred to one of the four CRPCs. Since 2011, the CRPC coordinators at each of the four locations continues to review patient’s charts and records to identify opportunities for quality improvement. To address the needs of providers across the state, the coordinators use this information to offer educational outreach and trainings that cater to the various needs identified.

One of the most significant strengths of CoPEC is the involvement and participation of various stakeholders from across the state that advises the Tennessee Department of Health. These volunteers include EMS providers, doctors, nurses, parents of children with special needs, and professional organizations (Appendix 1).

**Key Accomplishments in Fiscal Year (May 1, 2020 to April 30, 2021)**

A. 2019-2023 Strategic Plan

Data Goal: TN EMSC will utilize data to assess outcomes of pediatric emergency care, identify gaps in outcomes and/or care delivery processes, plan appropriate improvement interventions and evaluate the effectiveness of TN EMSC programs and services.

\[
\text{EMS agencies were invited to participate in a nationwide assessment to help better understand the utilization of Pediatric Education Care Coordinators are being used along with the utilization of pediatric specific equipment. Below captures the result for the HRSA EMS Guideline measures. Congress has now mandated that this survey will be}
\]

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conducted on an annual basis, verses every 3 years.
The most recent survey was conducted January – March 2021. Tennessee had a response rate of 90.2%. The data results from this survey will be available Fall 2021.

**Findings for 2020 Survey**

<table>
<thead>
<tr>
<th>Pediatric Call Volume by Number and % of Agencies:</th>
<th>Num of Agencies</th>
<th>% of Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH: More than 600 pediatric calls in the last year (more than 50 pediatric calls per month)</td>
<td>13</td>
<td>11.5%</td>
</tr>
<tr>
<td>MEDIUM HIGH: Between 101-600 pediatric calls in the last year (8 - 50 pediatric calls per month)</td>
<td>29</td>
<td>25.7%</td>
</tr>
<tr>
<td>MEDIUM: Between 13-100 pediatric calls in the last year (1 - 8 pediatric calls per month)</td>
<td>55</td>
<td>48.7%</td>
</tr>
<tr>
<td>LOW: Twelve (12) or fewer pediatric calls in the last year (1 or fewer pediatric calls per month)</td>
<td>14</td>
<td>12.4%</td>
</tr>
<tr>
<td>NONE: No Pediatric Calls in the Last Year</td>
<td>2</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>113</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

**PEDIATRIC EMERGENCY CARE COORDINATOR**

**Pediatric Emergency Care Coordinator (EMSC 02):**

31.5%

(35/111)

(Exclusions See Above)

A respondent needed to answer YES to "Having a designated individual who coordinates pediatric emergency care" in the survey to meet this measure.
EMSC 02 Trend Over Time:
Legend:
- EMSC 02 %
- Dropout/r (R Response)

38.2% 31.5%

102 111
2017-18 2020

NATIONAL EMSC 02:
2020 Results
30.3%
(n=2586/8525)

Pediatric Emergency Care Coordinator:
- Has a PECC: 31.9% (n=36)
- Plans to Add a PECC: 4.4% (n=5)
- Interested in a PECC: 23.0% (n=26)
- No PECC: 40.7% (n=46)

Pediatric Emergency Care Coordinator Oversees:
- Oversees Multiple Agencies: 30.6% (n=11)
- Oversees Only Our Agency: 69.4% (n=25)
### Agencies who Have a PECC - Reported PECC Duties:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotes pediatric continuing education opportunities</td>
<td>100.0%</td>
</tr>
<tr>
<td>Oversees pediatric process improvement initiatives</td>
<td>100.0%</td>
</tr>
<tr>
<td>Ensures that fellow providers follow pediatric clinical practice guidelines and/or protocols</td>
<td>97.2%</td>
</tr>
<tr>
<td>Ensures that the pediatric perspective is included in the development of EMS protocols</td>
<td>97.2%</td>
</tr>
<tr>
<td>Promotes agency participation in pediatric prevention programs</td>
<td>88.9%</td>
</tr>
<tr>
<td>Ensures the availability of pediatric medications, equipment, and supplies</td>
<td>83.3%</td>
</tr>
<tr>
<td>Coordinates with the emergency department pediatric emergency care coordinator</td>
<td>77.8%</td>
</tr>
<tr>
<td>Promotes agency participation in pediatric research efforts</td>
<td>52.0%</td>
</tr>
<tr>
<td>Promotes family-centered care</td>
<td>52.8%</td>
</tr>
<tr>
<td>Other Activities</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

### USE OF PEDIATRIC SPECIFIC EQUIPMENT MATRIX

**Use of Pediatric-Specific Equipment (EMSC 03):**

**43.2%**

(48/111)

(Excludes See Above)

### Use of Pediatric-Specific Equipment Matrix:

<table>
<thead>
<tr>
<th>% of Agencies</th>
<th>Two or more times per year (4pts)</th>
<th>At least once per year (2pts)</th>
<th>At least once every two years (1pt)</th>
<th>Less frequency than once every two years (0 pts)</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33.6% (n=30)</td>
<td>46.9% (n=53)</td>
<td>5.8% (n=6)</td>
<td>14.2% (n=16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often are your providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required to demonstrate skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>via a SKILL STATION?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24.8% (n=20)</td>
<td>39.8% (n=45)</td>
<td>11.5% (n=15)</td>
<td>0.9% (n=1)</td>
<td>23.0% (n=20)</td>
</tr>
<tr>
<td></td>
<td>How often are your providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required to demonstrate skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>via a SIMULATED EVENT?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.3% (n=15)</td>
<td>12.3% (n=15)</td>
<td>1.8% (n=2)</td>
<td>1.8% (n=2)</td>
<td>69.9% (n=79)</td>
</tr>
<tr>
<td></td>
<td>How often are your providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required to demonstrate skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>via a FIELD ENCOUNTER?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This matrix was used to score the type of skill demonstration/simulation and the frequency of occurrence. A score of 4 pts or higher "meets" the measure. The darker the box the higher the percentage of agencies in that group. See pg 35 in the "EMIS for Children Performance Measures Implementation Manual for State Partnership Grants, Effective March 1st, 2017" for additional information about this matrix.

### Use of Pediatric-Specific Equipment:

- **6 pts or Higher**: 43.4% (n=49)
- **Less than 6 pts**: 56.6% (n=64)

### Percent and Type/Method of Skill Checking Reported:

- **Demonstrate Skill**: 85.8% (n=97)
- **Simulation Observation**: 77.0% (n=87)
- **Field Observation**: 30.1% (n=34)

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Membership Goal: To develop and sustain membership quality and support to achieve optimal organizational mission delivery.

<table>
<thead>
<tr>
<th>Findings</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member participation varies greatly.</td>
<td>- Member attendance tracked.</td>
</tr>
<tr>
<td></td>
<td>- CEOs of hospitals, agencies and organizations updated quarterly on member participation.</td>
</tr>
<tr>
<td></td>
<td>- Review positive outcome cases to emphasize origins of CoPEC.</td>
</tr>
<tr>
<td></td>
<td>- Guest speakers present at CoPEC meetings to share local and state resources with members.</td>
</tr>
</tbody>
</table>

Standardization Goal: Best evidence-based pediatric emergency care for every patient in every location of Tennessee.

<table>
<thead>
<tr>
<th>Findings</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS pediatric transportation addressed based on recent evidence based pediatric practice</td>
<td>- A survey was submitted to EMS agencies to gauge current pediatric transport safety protocols.</td>
</tr>
<tr>
<td></td>
<td>- One Healthcare coalition purchased pediatric transport safety device for EMS agencies in their area.</td>
</tr>
<tr>
<td>Lack of accurate pediatric dosing.</td>
<td>Based on survey results, 2 hospitals received a pediatric scale that locked in kilograms.</td>
</tr>
<tr>
<td>Lack of knowledge regarding pediatric needs</td>
<td>Representatives of CoPEC worked with</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Finding</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>During a disaster</td>
<td>Children’s Emergency Care Alliance (CECA) to write a Pediatric Disaster Annex Template for all eight Healthcare Coalition Regions to reference as a guide when writing their regional pediatric disaster plans.</td>
</tr>
<tr>
<td>Need to exercise the infrastructure of disaster response for the pediatric population.</td>
<td>Pediatric patients included in discussions of each of the eight healthcare coalition disaster drill planning.</td>
</tr>
</tbody>
</table>
| Maintaining the National EMSC Performance Measures including | - Standards for Pediatric Emergency Care Facilities were revised to reflect current evidenced based care, and updated recommendations were submitted through the legislative process. This work involves CoPEC members and pediatric content experts who meet regularly to discuss and collaborate on the proposed updates. This work requires committed and dedicated individuals across our state who devote their time and talent to this important work.  
- CRPC Coordinators have worked with hospitals in their respective regions to prepare for the upcoming National Pediatric Readiness Project Assessment. |

**Funding goal: Increase revenue base**

<table>
<thead>
<tr>
<th>Findings</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congress approved the federal funding of the EMSC program</td>
<td>HRSA grant has been approved for another 5-year duration.</td>
</tr>
</tbody>
</table>
| Funding needed for pediatric transportation safety device | - Secured $24,360 grant from Highland Rim HCC to fund 35 devices for distribution to agencies in Region 5 that have expressed interest in participating in this program.  
- Goal is to outfit every ambulance with a device if currently does not have one available.  
- Working with the EMS Board Ambulance Committee on standardizing requirements based on national evidence-based recommendations. |
B. All TN EMSC stakeholders will recognize the TN EMSC program as a resource and authority for providing the best emergency care information and guidance for caring for critically ill or injured children in Tennessee.

Continuation of the TN EMSC website (www.cecatain.org) which contains content to enhance access to quality pediatric emergency care, has been maintained throughout the year. Available educational opportunities and resources have been updated routinely on the website and distributed via e-mail to TN EMS Consultants, CRPC Coordinators and the state healthcare coalition advisory council for further distribution.

C. National Performance Measures

Tennessee has demonstrated achievement with all previous HRSA/MCHB Performance Measures. These included:

- By 2022, 25 percent of hospitals are recognized as part of a statewide, territorial, or regional standardized program that can stabilize and/or manage pediatric medical emergencies. Tennessee has met this performance measure at 100% as all hospitals go through state designation program.

- By 2022, 50 percent of hospitals are recognized as part of a statewide, territorial, or regional standardized system that recognizes hospitals that can stabilize and/or manage pediatric trauma. Tennessee has met this performance measure at 100% as all hospitals go through state designation program.

- By 2021, 90 percent of hospitals in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer. As of 2017, Tennessee was at 69% of hospitals with an Interfacility Transfer Guideline and 93.1% of Tennessee hospitals have an Interfacility Transfer Agreement. This is reassessed every 3 years. This will be re-evaluated May-July 2021.

- Goal: To increase the number of states and territories that have established permanence of EMSC in the state or territory EMS system.
  - Each year: All Components Achieved
    - The EMSC Advisory Committee has the required members as per the implementation manual.
    - The EMSC Advisory Committee meets at least four times a year.
    - Pediatric representation incorporated on the state or territory EMS Board.
    - The state or territory requires pediatric representation on the EMS Board.
- One full-time EMSC Manager is dedicated solely to the EMSC Program.

Spring 2017 New HRSA Performance Measures were added and a strategic plan to achieve these four measures has been developed and will be achieved by stated year.

- By 2027, EMSC priorities will be integrated into existing EMS, hospital, or healthcare facility statutes or regulations. This will be met through the proposed pediatric emergency facility standards.

- By 2021, 80 percent of EMS agencies in the state or territory will submit NEMSIS version 3.x-compliant patient-care data to the State EMS Office for all 911-initiated EMS activations.
  - Tennessee Department of Health, Division of EMS awarded a contract to ImageTrend and compliance has been met.

New National Performance Measures for EMS were published in 2020 and a national survey with a 100% response rate from EMS agencies with 911 services. Once again, Tennessee is above the national level.

- By 2026, 90 percent of EMS agencies in the state or territory will have a designated individual who coordinates pediatric emergency care. TN is currently at 31.5% TN and the nation is at 30.3%.

- By 2026, 90 percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric specific equipment, which is equal to a score of 6 or more on a 0-12 scale. TN is currently at 43.2% TN and the nation is at 25.5%.

D. Educational outreach, publications and presentations to promote the goal of deploying the best evidence-based pediatric emergency care for every patient in every location of Tennessee.

1. Education

The 19th Annual Update in Acute and Emergency Care of Pediatrics Conference hosted by Monroe Carell Jr. Children’s Hospital at Vanderbilt was held on September 17-18, 2021 due to COVID-19. This event was held virtually. There were 109 participants in attendance at this conference, registered attendees were broken down between the following credential levels:

- Physicians, PA, APN – 31
- Nurse – 29
- EMS – 22
- Resident/Fellow – 1
- Allied Health – 5

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Non-Licensed Students – 5
Scholarships - 16

20th Annual Update in Acute and Emergency Care of Pediatrics Conference hosted by Children’s Hospital at Erlanger was held on April 15-16, 2021 in Chattanooga, TN. This event was held in a hybrid format, where attendees could choose from attending virtually or in-person. This year there were 83 participants in attendance at this conference, registered attendees were broken down between the following credential levels:

Physicians, PA, APN – 17
Nurse – 47
EMS – 12
Social Work – 1
Respiratory Therapist – 3
Other - 3

See Appendix 2 and 3 for additional conference details on both conferences.

2. TN EMSC Impact to National EMSC program

This past year Tennessee contributed as a leader to the National EMSC Program. TN EMSC program participates on several national EMSC committees. These include the Disaster Domain Steering Committee, EMSC Innovation and Improvement Center’s (EIIC) Metrics Subcommittee, Pediatric Emergency Care Coordinator (PECC) Community of Practice (COP) and the NASEMSO Pediatric Emergency Care (PEC) Council and the PEC Southern States Chapter.

The National EMSC conference has been postponed to November 2021 due to the COVID-19 pandemic.

TN EMSC continued its participation in the EMSC Innovation and Improvement Center’s QI collaborative. This collaborative is to assist state programs in accelerating their progress in improving the pediatric readiness of EDs and to develop a program to recognize EDs in their state that are ready to care for children with medical emergencies. State improvement teams will benefit by interacting with experts in both pediatric readiness and facility recognition, as well as a cadre of QI specialists.

3. Poster Presentations

Hanson, H. "Converging & Diverging Interprofessional Perspectives on Leadership & Teamwork in the Pediatric Trauma Bay: A Qualitative Pilot Study." Annual Meeting for the Society of Medical Decision Making, Virtual Conference, October 2020.


Hanson, H. "Protocolized management of isolated linear skull fractures at a Level 1 pediatric trauma center." Video Abstract Presentation and Panel Discussion. 2020 AANS/CNS Annual Section Meeting on Pediatric Neurosurgery, Virtual Conference, December 2020.


Tran, D., Thompson, C., Gondek, S., Arnold, D., Kidd, R. "Discrepancies in Pre-Hospital Burn Assessments, Over-Utilization of Regional Burn Center Resources, and a Quality Improvement Initiative to Reduce Both.". Virtual poster presentation, SAEM Annual Conference. April 2021.

4. Lecture Presentations


Ferguson, C. Solving the Puzzle: The Collaborative Effort of Law Enforcement and Medicine for a Successful Criminal Prosecution.


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Tran, D. PEDS Burn Assessment and Management. 19th Annual Update in Acute and Emergency Care Pediatrics Conference, Virtual Conference. September 17, 2021.


Williams, M. Pediatric Psychology in a Disaster. 19th Annual Update in Acute and Emergency Care Pediatrics Conference, Virtual Conference. September 17, 2021.


5. Journal Publications


Anderson T, Snider M, Barclay C, Kink RJ. The Safety of High Dose Intranasal Fentanyl in the Pediatric Emergency Department Accepted for Publication June 2020 Pediatric Emergency Care


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Truong T, Gruenberg B, Ciener DA, Butchee R. 13-year-old male with hives and fever". Pediatrics in Review - Accepted for publication November 2020


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6. Injury Prevention

Injury prevention is an integral component of the EMS for children continuum of care. A CoPEC representative is an active member on the Commissioner’s Council on Injury Prevention and Tennessee’s Suicide Prevention Task Force.

Each of the four comprehensive regional pediatric centers (CRPC) have robust injury prevention programs. Together, the CRPCs have had hundreds of events in Tennessee to keep children safe.

To develop injury prevention programs each CRPC reviews their local injury data and develops targeted interventions to keep children safe. To highlight one program, the Pediatric Trauma Injury Prevention Program at Monroe Carell Jr. Children’s Hospital at Vanderbilt strives to reduce unintentional injuries among children and promote safe behaviors in their community. The program has several initiatives under it that are all data driven which include Be in the Zone (a teen driver safety program), Kohl’s Stay Seat Smart Program (a child passenger safety initiative and an ATV safety program).

Below are other initiatives that Children’s Emergency Care Alliance and/or CoPEC are involved with:

**Safe Kids Program:** One of the initiatives that each CRPC is actively engaged in is **Safe Kids.** Safe Kids is an international campaign, focusing on preventing the serious injuries-- the leading health risk that children face today. The risk areas the CRPCs address include home safety, firearm, car and road safety, sports and play safety.

There is also a collaboration with **Brain Links,** an organization that provides professional development trainings for those who serve people of all ages who have a brain injury. In addition to family education, their trainings support those who serve young children, such as daycare professionals, educators, school nurses and statewide athletic organizations in schools and the community. They have partnered with TN’s Chapter of the American Academy of Pediatrics regarding Concussion Management and returning to home and school settings following an injury. Their Federal Traumatic Brain Injury Program hosted a 5-part webinar series that featured 5 Grantee Workgroups. Several of these topics included Sustainable Partnerships: Forging Relationships that Last and Maximizing the Effectiveness of Advisory Boards through Full Participation. They also revised their guideline which is considered best practice. The documents are posted on the Human Services Research Institute, Technical Assistance and Resource Center as well as the National Association of State Head Injury Administrators.

**Safe Stars Initiative:** There is also a CoPEC representative involved with the Safe Stars initiative which is a program that recognizes youth sports leagues throughout Tennessee for
providing the highest level of safety for their young athletes. Safe Stars is a collaboration between the Tennessee Department of Health and the Monroe Carell Jr. Children’s Hospital at Vanderbilt. Safe Stars’ goal is to provide resources and opportunities for every youth sports league to enhance their safety standards. The criteria for achieving recognition as a Safe Stars league has been developed by a committee of health professionals dedicated to reducing sports-related injuries among youth.

There is a CoPEC representative that also participates on the CAMTS HIM Program Standard Committee. This committee works to establish standards for Health Integrative Mobile Certification.

**Children in Disaster:** Children’s Emergency Care Alliance actively participates with this task force. The Mid-Cumberland sector hosted a weekend training for early childhood educators that focused on emergency disaster preparedness. Natural disaster readiness and family reunification were the main topics. Emergency radios and other supplies were handed out.

**G. Star of Life Awards Ceremony and Dinner**

The Star of Life Awards ceremony is held to honor the accomplishments of EMS personnel from all regions of Tennessee who provide exemplary life-saving care to adult and pediatric patients. The 12th and 13th combined occurrence of this event was held on May 12, 2021. The emcee for the 2020 ceremony was Kevin Nooncr, the Program Director of LifeFlight’s Air Medical Transportation team and the 2021 ceremony emcee was Greg Miller, the Chief at Sumner County EMS. These ceremonies both included the presentation of the actual adult or pediatric patient scenarios and reunited the EMS caregivers with the individuals they treated. Recipients were chosen from all eight of the EMS regions in the state that provided nominations. This is the premier event within the state to recognize and honor our excellent pre-hospital providers.

**2020 Award Recipients**

**Overall State Winner:** Michael G. Carr State Star of Life Award

*Nashville Fire Department*

**EMS Region 1:** Washington County / Johnson City EMS

**EMS Region 2:** Sevier County EMS, Seymour Volunteer Fire Department, AMR – Knox County, AMR – Blount County

**EMS Region 3:** Bradley County 911, Bradley County Fire Rescue, Bradley County EMS, Bradley County Sheriff

**EMS Region 4:** Warren County EMS and Rescue, Centertown Fire Department, Warren County 911, Erlanger Lifeforce 2

**EMS Region 5:** Williamson Medical Center EMS, Williamson County Emergency Communications, Franklin Fire Department, Franklin Police Department

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EMS Region 6: Lewis County E-911, Lewis County Fire Department, Lewis County First Responders, Maury Regional Medical Center, Lewis County EMS, Maury Regional Medical Center Communication, Vanderbilt LifeFlight 4, Air Methods Air Communications

EMS Region 7: Medical Center EMS, Medical Center EMS Jackson Med-Link, Hospital Wing Air Ambulance, Madison County Fire Department, Madison County Sheriff’s Department

EMS Region 8: Memphis Fire Department (Engine 51C and Unit 15C)

2021 Award Recipients

Overall State Winner: Michael G. Carr State Star of Life Award

Byrd Clinic, Fort Campbell Emergency Communications Center, Fort Campbell EMS, Vanderbilt LifeFlight

EMS Region 1: Washington County / Johnson City EMS

EMS Region 2: Morristown-Hamblen EMS, Morristown Fire Department, Hamblen County 911

EMS Region 3: Hamilton County EMS, City of Red Bank Fire Department, City of Red Bank Police Department, Chattanooga Fire Department

EMS Region 4: Edgar Evins State Park, Dekalb County EMS, Vanderbilt LifeFlight

EMS Region 5: The Metropolitan Nashville Airport Authority – Department of Public Safety, Nashville Fire EMS

EMS Region 6: Air Methods Corporation Air Communications, Maury Regional Medical Center EMS, Maury e911, Maury County Fire Department, Vanderbilt LifeFlight 4

EMS Region 7: Jackson Fire Department, Jackson Police Department, Medical Center Dispatch, Medical Center EMS, Vanderbilt LifeFlight 8

EMS Region 8: Atoka Fire Department, Atoka Police Department, Hospital Wing Air, Medic One Tipton County, Tipton County 911

H. Awards

The TN EMSC Joseph Weinberg, MD, Leadership Award is bestowed upon an individual who displays the attributes of a leader that can bring together diverse stakeholders and organizations to improve the care of critically ill and injured children. This award is presented in conjunction with the Annual Update in Emergency Care Pediatrics Conference and was presented on April 15, 2021. This year’s award was given to Rudy Kink, MD for his dedication to Tennessee’s children and moving forward the system of pediatric care. Dr. Kink consistently demonstrates the leadership skills of Dr. Weinberg including pediatric expertise, advocacy, and civic duty. He demonstrates this in a multitude of ways, as he actively participates in leadership roles on the

CoPEC Annual Report 2021
Committee of Pediatric Emergency Care, Children’s Emergency Care Alliance as well as implementing an educational program at Le Bonheur Children’s Hospital for children with special needs equipment, bringing their families and emergency personnel together.

The TN EMSC Advocate for Children Award is given to an individual(s) who has made an outstanding contribution of major significance to the Tennessee Emergency Medical Services for Children program. This award is presented in conjunction with the Annual Update in Emergency Care Pediatrics Conference and was presented on April 15, 2021. This year’s award recipient is Amber Greeno for her exemplary dedication to the well-being of children. Ms. Greeno was nominated due to her participation on the Trauma Care Advisory Council, the Society of Trauma Nurses, the Pediatric Trauma Society and the Committee on Pediatric Emergency Care.

III. The Needs of the State Committee on Pediatric Emergency Care met by the Tennessee Department of Health since last year’s annual report.

- Participation and input from Tennessee Department of Health staff implementing the strategic plan.

IV. The Needs of the State Committee on Pediatric Emergency Care

- Ongoing support to achieve the goals of the 2019-2023 Strategic Plan to meet the needs of ill and injured children.
- Ongoing statistical support to assist in defining outcomes of emergency care for pediatrics.
- Ongoing input, questions or ideas on pediatric emergency care gaps identified during normal business operations brought to CoPEC for review and recommendation development.

V. Conclusion

The mission of CoPEC is to ensure that every child in Tennessee receives the best pediatric emergency care in order to eliminate the effects of severe illness and injury. That mission draws people together and has brought out the very best in our healthcare system.

The Board for Licensing Health Care Facilities and the Emergency Medical Services Board work cooperatively with other programs of the Tennessee Department of Health to improve the quality of health care and medical services available to the citizens of Tennessee.

We will further describe the impact of the rules on pediatric emergency care by utilizing data collected in our next report on July 1, 2022.

This report was reviewed by the respective boards on June 2, 2021 and June 16, 2021 and approved for presentation to the designated committees of the Tennessee General Assembly.

CoPEC Annual Report 2021
Appendix 1

Baptist Memorial Hospital for Women
Children's Hospital at Erlanger
Children’s Hospital at TriStar Centennial
East Tennessee Children’s Hospital
Family Voices of Tennessee
Hospital Corporation of America (HCA)
Jackson-Madison County General Hospital
Le Bonheur Children’s Hospital
Monroe Carell, Jr. Children’s Hospital at Vanderbilt

Project B.R.A.I.N.
Niswonger Children's Hospital
Rural Health Association of Tennessee
Sumner Regional Medical Center
TN Academy of Family Physicians
Tennessee Ambulance Service Association
Tennessee Association of School Nurses
TN Chapter of the American Academy of Pediatrics
TN Chapter of the American College of Emergency Physicians
TN Chapter of the American College of Surgeons
TN Congress of Parents and Teachers

Tennessee Department of Health
TN Disability Coalition
Tennessee Emergency Nurses Association
Tennessee Emergency Services Education Association
TN Hospital Association
Tennova Healthcare-Cleveland
UT Medical Center
TN EMS Directors Association

CoPEC Annual Report 2021
Using interdisciplinary approaches throughout a series of plenary and breakout sessions, learners will be able to develop skills surrounding pre-hospital care of the medically complex child, as well as skills for the pediatric trauma patient.
<table>
<thead>
<tr>
<th>Thursday, September 17, 2020</th>
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<tbody>
<tr>
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<td>12:05 p.m. - 1:20 p.m.</td>
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<td>1:20 p.m. - 2:05 p.m.</td>
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<td>2:05 p.m. - 2:25 p.m.</td>
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<td>2:25 p.m. - 3:15 p.m.</td>
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<td>3:25 p.m. - 4:25 p.m.</td>
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<tr>
<td>12:35 p.m. - 1:40 p.m.</td>
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</tbody>
</table>

The 19th Annual Update in Acute and Emergency Care Pediatrics is a result of collaboration between Monroe Carell Jr. Children's Hospital at Vanderbilt, Children's Hospital at Erlanger, Le Bonheur Children's Hospital; East Tennessee Children's Hospital, Children's Emergency Care Alliance (CECA), and the East Tennessee State University Quillen College of Medicine Office of Continuing Medical Education.

Using interdisciplinary approaches throughout a series of plenary and breakout sessions, learners will be able to develop skills surrounding pre-hospital care of the medically complex child, as well as skills for the pediatric trauma patient. This program is designed for providers involved in the diagnosis, treatment, transportation, and management of pediatric trauma patients in Tennessee, Virginia, and Georgia Level 1 Pediatric Trauma Units.
Activity Target Audience

This conference is designed for pediatricians, nurses, emergency physicians, family practitioners, intensivists, nurse practitioners, physician assistants, respiratory care practitioners, EMS professionals, fellows, residents, health care students and others involved in the care of pediatric emergencies.

Activity Conflicts of Interest

<table>
<thead>
<tr>
<th>Activity Director</th>
<th>Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cristina Estrada</td>
<td>None</td>
</tr>
<tr>
<td>Planning Committee</td>
<td>None</td>
</tr>
<tr>
<td>Lee Blair</td>
<td>None</td>
</tr>
<tr>
<td>Oseana Bratton</td>
<td>None</td>
</tr>
<tr>
<td>Kate Copeland</td>
<td>None</td>
</tr>
<tr>
<td>Jennifer Dindo</td>
<td>None</td>
</tr>
<tr>
<td>Donna Dougherty</td>
<td>None</td>
</tr>
<tr>
<td>Amber Greeno</td>
<td>None</td>
</tr>
<tr>
<td>Patricia Hamols-Church</td>
<td>None</td>
</tr>
<tr>
<td>Rudy Kink</td>
<td>None</td>
</tr>
<tr>
<td>Natasha Kurth</td>
<td>None</td>
</tr>
<tr>
<td>Marisa Moyers</td>
<td>None</td>
</tr>
<tr>
<td>Maureen O'Connor</td>
<td>None</td>
</tr>
</tbody>
</table>

Activity Accommodations

Drury Plaza Hotel Nashville Franklin
1874 West McEwen Drive
Franklin, TN 37067
Guest Reservations: 866-238-4218

When making reservations reference Group Number 2367133 to receive the group rate of $129.00. All rooms are subject to applicable taxes. Reservations must be received before 5:00 pm local time on March 5, 2020. After that date, reservations will be taken on a space available basis and may revert to a higher rate.

Fees:

<table>
<thead>
<tr>
<th>Registrant Type</th>
<th>Fee</th>
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<tbody>
<tr>
<td>Physicians, PAs, &amp; APNs</td>
<td>$250</td>
</tr>
<tr>
<td>Nurses</td>
<td>$105</td>
</tr>
<tr>
<td>Fellows/Residents</td>
<td>$150</td>
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<tr>
<td>Allied Health</td>
<td>$100</td>
</tr>
<tr>
<td>EMS Providers</td>
<td>$125</td>
</tr>
<tr>
<td>Non-Licensed Students**</td>
<td>$100</td>
</tr>
</tbody>
</table>

* Examples include RRT, MHA, PT, CT, etc. If you are unsure of your registration type, please contact 323-430-6097 for assistance.

** Student fee includes medical, nursing, APN, PA, and EMS students from any University/College with no prior certification.
Activity Accreditation

ACCME Accreditation: This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the Quillen College of Medicine, East Tennessee State University and the Children’s Emergency Care Alliance (CECA), Children’s Hospital at Erlanger, East Tennessee Children’s Hospital, Le Bonheur Children’s Hospital, and Monroe Carell Jr. Children’s Hospital. The Quillen College of Medicine, East Tennessee State University is accredited by the ACCME to provide continuing medical education for physicians.

CME Credit: Quillen College of Medicine, East Tennessee State University designates this live activity for a maximum of 10.25 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

6.75 continuing nursing education contact hours (CNE) have been approved for Thursday, April 2 and 4.25 CNE hours have been approved for Friday, April 3 with a maximum time for both days of 11.0 CNE hours for this conference. East Tennessee State University College of Nursing is an approved provider of continuing nursing education by the Tennessee Nurses Association, an accredited approver by the American Nurses Credentialing Center’s Commission on Accreditation. This event is presented by the College of Nursing Office at East Tennessee State University and the Quillen College of Medicine Office of Continuing Medical Education.

EMS Credit: Day One Only: Approved by the TN Office of EMS for Continuing Education Hours in the following category: 5.5 hours in Pediatric.

Day Two Only: Approved the TN Office of EMS for Continuing Education Hours in the category: 4.3 hours in Pediatric.

CoPEC Annual Report 2021
Appendix 3

The 20th Annual Update in Acute and Emergency Care Pediatrics Conference is a result of collaboration among Children's Hospital at Erlanger, Le Bonheur Children's Hospital, Monroe Carell Jr. Children's Hospital at Vanderbilt, East Tennessee Children's Hospital, Children's Emergency Care Alliance of Tennessee (CECA), and East Tennessee State University's Quillen College of Medicine, Office of Continuing Medical Education.

As a result of participating in this activity, the attendee should be able to:
- Understand emergency areas and new considerations in acute and pediatric care.
- Be better prepared for the complications that caring for pediatric populations present in the acute setting.

TARGET AUDIENCE

This conference is designed for pediatricians, nurses, emergency physicians, family practitioners, intensivists, nurse practitioners, physician assistants, respiratory care practitioners, EMS professionals, fellows, residents, health care students, and many others involved in the care of pediatric emergencies.

FACULTY DISCLOSURE

East Tennessee State University's Quillen College of Medicine, Office of Continuing Medical Education (OCME) holds the standard that its continuing medical education programs should be free of commercial bias and conflict of interest. It is the policy of the OCME that each presenter and planning committee member of any CME activity must disclose any financial interest/arrangement or affiliation with corporate organizations whose products or services are being discussed in a presentation. All commercial support of an educational activity must also be disclosed to the learners prior to the start of the activity.

Each individual with influence over content has completed a disclosure form indicating that they or members of their immediate family do or do not have a financial interest/arrangement or affiliation that could be perceived as a real or apparent conflict of interest related to the content or supporters involved with this activity. If an individual disclosed a financial interest/arrangement or affiliation that could be perceived as a real or apparent conflict of interest related to the content or supporters involved with this activity, their presentation has been peer reviewed, any potential conflicts of interest resolved, and their presentation was found to be balanced, evidence-based, and free of commercial bias.
<table>
<thead>
<tr>
<th>Thursday - April 15, 2021</th>
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<tbody>
<tr>
<td><strong>7:00 a.m. - 7:30 a.m.</strong> Breakfast and Registration</td>
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<tr>
<td><strong>7:30 a.m. - 7:40 a.m.</strong> Welcome and Opening Remarks</td>
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<tr>
<td><strong>7:40 a.m. - 8:40 a.m.</strong> General Session</td>
</tr>
<tr>
<td><strong>8:40 a.m. - 9:40 a.m.</strong> Smoky Mountain Wildfires Disaster Response Greg Miller, EMT/P (A)</td>
</tr>
<tr>
<td><strong>9:40 a.m. - 10:00 a.m.</strong> Break</td>
</tr>
<tr>
<td><strong>10:05 a.m. - 10:50 a.m.</strong> Breakout Session #1</td>
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<tr>
<td><strong>10:55 a.m. - 12:05 p.m.</strong> General Session</td>
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<tr>
<td><strong>12:05 p.m. - 1:20 p.m.</strong> Lunch</td>
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<tr>
<td><strong>1:20 p.m. - 2:05 p.m.</strong> Breakout Session #2</td>
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<tr>
<td><strong>2:10 p.m. - 3:25 p.m.</strong> General Session</td>
</tr>
<tr>
<td><strong>3:25 p.m. - 4:25 p.m.</strong> Beyond Picture Perfect Diversity: How to Create a Sense of Inclusion Dima Ghawi, MBA (A)</td>
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<td><strong>8:50 a.m. - 9:55 a.m.</strong> Breakout Session #3</td>
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<td><strong>9:55 a.m. - 10:25 a.m.</strong> General Session</td>
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<td><strong>10:30 a.m. - 11:15 a.m.</strong> Breakout Session #4</td>
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<td><strong>11:15 a.m. - 11:55 a.m.</strong> Break</td>
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<td><strong>11:55 a.m. - 12:35 p.m.</strong> Multisystem Inflammatory Syndrome in Children (MIS-C): One year later Dr. Sophie Kaiz (A)</td>
</tr>
<tr>
<td><strong>12:35 p.m. - 12:40 p.m.</strong> Closing Remarks</td>
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</tbody>
</table>
Activity Director
Lonnie King
Planning Committee Members
Kate Copeland
Lee Blair
Jennifer Dindo
Todd Haines
Seth Smith
John Wright
Oseana Bratton
Mollie Triplett
Jennifer Durham
Natasha Kurth
Shannon Morphis

HOTEL ACCOMMODATIONS
The Westin Chattanooga
801 Pine St.
Chattanooga, TN 37402

FEES

<table>
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*Examples include: RRT, MHA, PT, OT, etc. If you are unsure of your registration type, please contact 423-639-8627 for assistance.
**Student fee includes medical, nursing, APRN, PA, and EMS students from any University/College with no prior certification.
ACCREDITATION AND DESIGNATION

Office of Continuing Medical Education:
This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint provideship of ETSU’s Quillen College of Medicine, East Tennessee State University and the Children’s Emergency Care Alliance (CECA), Children’s Hospital at Erlanger, Monroe Carell Jr. Children’s Hospital, East Tennessee Children’s Hospital, Le Bonheur Children’s Hospital. ETSU’s Quillen College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Office of Continuing Medical Education:
CME Credit: ETSU’s Quillen College of Medicine designates this live activity for a maximum of 10.75 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

College of Nursing:
East Tennessee State University College of Nursing is approved as a provider of nursing continuing professional development by the North Carolina Nurses Association, an accredited approver by the American Nurses Credentialing Center’s Commission on Accreditation. Up to 5.75 continuing nursing education contact hours (CNE) have been approved for Thursday, April 15 and 4.25 CNE hours have been approved for Friday, April 16 with a maximum time for both days of 11.0 CNE hours.

CoPEC Annual Report 2021