Joint Report to the
General Welfare, Health and Human Resources Committee
Of the Senate
Health and Human Resources Committee
of the House of Representatives, and the
Select Committee on Children and Youth

Report On the Status of
Emergency Medical Services for Children

A Report to the 107th Tennessee General Assembly

Tennessee Department of Health
July 2012
The Honorable Rusty Crowe, Chair  
Senate General Welfare, Health and Human Resources Committee  
321 Ware Memorial Building  
Nashville, Tennessee 37243

Dear Senator Crowe:

As required by Tennessee Code Ann. §68-11-251 and §68-140-521, we are pleased to submit the annual report on the Emergency Medical Services for Children (EMS-C) program; the Board for Licensing Health Care Facilities and the Emergency Medical Services Board collaborated with the Committee on Pediatric Emergency Care (CoPEC) in preparation of the report. The EMS-C program focuses primarily on pediatric pre-hospital and hospital care, with consideration for injury prevention, disaster preparedness, and quality improvement. This report reflects activities and accomplishments of the Board for Licensing Health Care Facilities and the Emergency Medical Services Board in meeting national EMS-C objectives.

Improving the availability and quality of children’s health care is a major goal for the State of Tennessee and the Department of Health. Our boards help coordinate the role of Tennessee’s medical facilities and emergency medical services in providing appropriate pediatric emergency care.

Respectfully submitted,

Larry Arnold, M.D., Chair  
Board for Licensing Health Care Facilities

Sullivan K. Smith, MD, Chair  
Emergency Medical Services Board

C: John J. Dreyzehner, MD, MPH, Commissioner  
Tennessee Department of Health
July 1, 2012

The Honorable Glen Casada, Chairman
House Health and Human Resources Committee
21 Legislative Plaza
Nashville, Tennessee 37243

Dear Representative Casada:

As required by Tennessee Code Ann. §68-11-251 and §68-140-521, we are pleased to submit the annual report on the Emergency Medical Services for Children (EMS-C) program; the Board for Licensing Health Care Facilities and the Emergency Medical Services Board collaborated with the Committee on Pediatric Emergency Care (CoPEC) in preparation of the report. The EMS-C program focuses primarily on pediatric pre-hospital and hospital care, with consideration for injury prevention, disaster preparedness, and quality improvement. This report reflects activities and accomplishments of the Board for Licensing Health Care Facilities and the Emergency Medical Services Board in meeting national EMS-C objectives.

Improving the availability and quality of children’s health care is a major goal for the State of Tennessee and the Department of Health. Our boards help coordinate the role of Tennessee’s medical facilities and emergency medical services in providing appropriate pediatric emergency care.

Respectfully submitted,

Larry Arnold, M.D., Chair
Board for Licensing Health Care Facilities

Sullivan K. Smith, MD, Chair
Emergency Medical Services Board

C: John J. Dreyzehner, MD, MPH, Commissioner
Tennessee Department of Health
I. Requirement of the Report

Tennessee Code Annotated 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 shall jointly prepare an annual report on the current status of emergency medical services for children (EMS-C) 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. 2010-2013 Strategic Planning for Committee on Pediatric Emergency Care (CoPEC)

A comprehensive strategic plan was included in the 2010 annual report.

Below is a brief synopsis of the efforts toward reaching the five goals and their respective objectives.

The five goals include:
1. To exceed the national EMSC performance measures. Statement of Direction: EMSC performance measures are part of the foundation for providing quality pediatric emergency care. In order to measure the effectiveness of federal grant programs, the Health Resources and Services Administration (HRSA) requires grantees to report on specific performance measures related to their grant funded activities. The measures are part of the Government Performance Results Act (GPRA). Below are the required performance measures for the Emergency Medical Services for Children program.

<table>
<thead>
<tr>
<th>Performance Measure (PM)</th>
<th>2009</th>
<th>TN Current</th>
<th>National Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM 71: The percent of pre-hospital provider agencies in the State/Territory that have on-line pediatric medical direction available from dispatch through patient transport to a definitive care facility. (Only three BLS services replied to survey and one of the three answered that they did not have online medical control.)</td>
<td>85%</td>
<td>BLS 67%* ALS 89%</td>
<td>90% by 2011</td>
</tr>
<tr>
<td>PM 72: The percent of pre-hospital provider agencies in the State/Territory that have off-line pediatric medical direction available from dispatch through patient transport to a definitive care facility.</td>
<td>85%</td>
<td>BLS 100% ALS 96%</td>
<td>90% by 2011</td>
</tr>
<tr>
<td>PM 73: The percent of patient care units in the State/Territory that have the essential pediatric equipment and supplies as outlined in national guidelines. (Making recommendations for rule making hearing to EMS equipment)</td>
<td>11%/29%</td>
<td>BLS 59.3%* ALS 59.1%*</td>
<td>90% by 2011</td>
</tr>
<tr>
<td>PM 74: The percent of hospitals recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric medical emergencies.</td>
<td>96%</td>
<td>100%</td>
<td>By 2017 25%</td>
</tr>
<tr>
<td>PM 75: The percent of hospitals recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric traumatic emergencies.</td>
<td>96%</td>
<td>100%</td>
<td>By 2017 50%</td>
</tr>
<tr>
<td>PM 76: The percentage of hospitals in the State/Territory that have written inter-facility transfer guidelines that cover pediatric patients and that include the required components of transfer: (two additional components were added since 2009, transfer agreements are being updated with additional components.)</td>
<td>96%</td>
<td>68%*</td>
<td>90% by 2011</td>
</tr>
<tr>
<td>PM 77: The percentage of hospitals in the State/Territory that have written inter-facility transfer agreements that cover pediatric patients.</td>
<td>96%</td>
<td>98%</td>
<td>90% by 2011</td>
</tr>
<tr>
<td>PM 78: The adoption of requirements by the State/Territory for pediatric emergency education for the license/certification renewal of basic life support (BLS) and advanced life support (ALS) providers. (EMS board completed rule making hearings on June 20, 2012 that would require BLS and ALS providers to have 8 hours of pediatric continuing education for recertification.)</td>
<td>No</td>
<td>In process*</td>
<td>Yes</td>
</tr>
<tr>
<td>PM 79: The degree to which Tennessee has established</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
• An Adrenal Insufficiency protocol for treating both pediatric and adult patients was developed and presented to the EMS Board Clinical Issues Committee. The protocol is included with the Tennessee EMS protocol guidelines for use by EMS agencies.

2. To expand membership orientation and leadership capacity to address the various components to TN EMSC including CoPEC.

This task force has given member orientation presentations at each quarterly meeting. The following topics were presented:

   a. Overview of the legislative process on how a bill becomes a law and on how an organization can communicate and advocate for improvements with their government representatives
   b. Organizational history and funding structure
   c. Expectation of members
   d. Robert’s Rules of Order
   e. Member photo directory
   f. Developed a buddy system to match more experienced members of CoPEC with newer members.
   g. Nominations presented and affirmed at spring Board for Licensing Health Care Facilities and EMS Board meetings. (See Appendix A)

3. To develop and integrate a statewide disaster plan for children.

This task force has been challenged with mapping how disaster management in Tennessee is organized with respect to caring for pediatric patients. Unfortunately, this task force’s research to date has discovered that the current disaster organizational and command structures within the state do not adequately address care of the pediatric patient in a disaster. The task force has also been researching how best to address this deficiency and currently there is not a streamlined way to integrate delivery of pediatric disaster care in the state’s system. CoPEC is committed to supporting the agencies that are ultimately responsible for caring for Tennessee’s pediatric population during a disaster. Kenneth Palmer and Michael Warren, MD were recently recruited to assist with efforts to research and implement the integration of pediatric disaster care within the state's current disaster organizational and command structures.

Presentation by Andy Rucks, PhD from University of Alabama on the Southeastern Regional Pediatric Disaster Network (SRPDSRN) of which all four comprehensive regional pediatrics centers are participants. The focus is on developing a regional pediatric disaster surge network for response to disasters affecting children, continuity of operations planning, preparedness exercises and drills, process optimization, and
strategic planning. We have participated in a federal grant application with the following goals and objectives:

Goal 1—Expand the membership of the SRPDSRN focusing on major pediatric-focused stakeholders in the region. Membership is defined as formal execution or signing of the SRPDSRN Memorandum of Understanding (SRPDSRN-MOU). The stakeholders include health care providers—specialty pediatric hospitals, regional hospitals, rural hospitals, pediatric clinicians as represented by the local chapters of the American Academy of Pediatrics, emergency medical service providers, and first responders; health departments; tribal organizations; state hospital associations; and community-based child-health advocacy groups.

Objective 1.1—Build on previous recruiting success to expand the membership of the SRPDSRN.

Objective 1.2—Convene three Town Hall meetings in each of the states in the region for a total of 18 Town Hall meetings. Six meetings, one in each state of the region, will be convened in Year 1 and Year 2, and three meetings in each of Year 3 and Year 4.

Objective 1.3—Convene biannual meetings of the Executive Committee of the SRPDSRN.

Objective 1.4—Establish appropriate multi-media outreach and communication modalities for maintaining connections with the expanding SRPDSRN membership.

Goal 2—Develop an Operations Plan for the SRPDSRN. The Operations Plan will articulate the vision of the SRPDSRN as a regional system of providing surge capacity for pediatric patients during an emergency.

Objective 2.1—Build on the prior work of the SPDSRN Work Group 1 and complete the outline for a functional operations plan for the SRPDSRN.

Objective 2.2—Expand Work Group 1 such that at least one participant from each of the states in the region is assigned to each section of the Operations Plan. Each subset of Work Group 1 will be known as a “Section Team.”

Objective 2.3—Convene a meeting of the Section Teams in each state of the region to develop and edit the content of the Operations Plan.

Objective 2.4—Obtain SRPDSRN Executive Committee approval of the Operations Plan.

Goal 3—Develop an in-depth assessment of the intrastate and interstate pediatric patient transport capacity and capabilities within the region. Pediatric-patient transportation is the focus area of SRPDSRN Work Group 5.
Objective 3.1—Develop the appropriate protocol or protocols for an in-depth inventory of pediatric patient transport resources in each state of the region.

Objective 3.2—Use the protocols developed in Objective 3.1 to inventory the pediatric patient transport resources in each state of the region.

Objective 3.3—Identify and catalog regulatory, licensing, accrediting, and credentialing barriers to interstate deployment of pediatric patient transport resources.

Goal 4—Measure the effectiveness of the SRPDSRN MOU and Operations Plan and develop improvements in the SRPDSRN MOU and Operations Plan.

Objective 4.1—Develop an Exercise Plan for a regional pediatric emergency tabletop exercise.

Objective 4.2—Conduct a regional pediatric emergency tabletop exercise.

Objective 4.3—Revise the SRPDSRN MOU and Operations Plan.

Objective 4.4—Obtain SRPDSRN Executive Committee approval of the revised SRPDSRN MOU and Operations Plan.

4. **Use education (including publications) to support, develop, and disseminate current best practice for emergency medical services for children.**

This task force has successfully garnered support from all four comprehensive regional pediatric centers (LeBonheur Children’s Hospital, Monroe Carell Jr. Children’s Hospital at Vanderbilt, East TN Children’s Hospital and Children’s Hospital at Erlanger (formerly T.C. Thompson) to develop two significant projects; an algorithm wall chart for common pediatric illnesses and injuries and a data collection project. The algorithm wall chart was distributed to every emergency department in the state. The other project is to collect the same data elements for problematic transports to their respective institutions. With a year of data collected, this task force developed case scenarios to educate healthcare providers on common errors made in the care of children during ambulance transport to emergency departments. The case scenarios will then be utilized in the non children’s hospitals and EMS agencies as mock codes. The scenarios include: autism, interfacility transfer, sepsis, Pulseless Electrical Activity, and trauma. Data collection and review followed by education of healthcare providers will then continue on a scheduled basis in order to promote the delivery of high quality pediatric emergency care in Tennessee.

5. **Develop specific communication tools to drive and promote TN EMSC’s mission to our members and communities.**

A marketing firm had been secured in 2010 to provide in kind services to assist in increasing awareness and sustain funding for TN EMSC. However, with the downturn
in the economy, the marketing firm had to eliminate a portion of their in kind services. Attempts to secure a university to assist with this project was unsuccessful but in May 2012 a marketing firm committed to assist us with increasing awareness on the emergency needs of pediatric patients in our state.

III. Star of Life Awards Ceremony and Dinner

This year was the 4th annual awards ceremony held to honor the accomplishments of personnel from all regions of Tennessee who provide exemplary life-saving care to adult and pediatric patients. The ceremony includes the presentation of the actual adult or pediatric patient scenarios and reunites the EMS caregivers with the individuals they treated. Recipients are chosen from each of the eight EMS regions in the state. This is the premier event within the state to recognize and honor our excellent pre-hospital providers.

Overall State Winners – Putnam County EMS and Erlanger Life Force II

EMS Region 1 Award Winners – Eastman Chemical Company EMS

EMS Region 2 Award Winners – Morristown Hamblen EMS

EMS Region 3 Award Winners – Chattanooga Police Department and Erlanger Life Force

EMS Region 4 Award Winners – Putnam County EMS and Erlanger Life Force II

EMS Region 5 Award Winners – Nashville Fire Department and Lifeguard Ambulance Service

EMS Region 6 Award Winners – Lawrence County EMS and Vanderbilt LifeFlight

EMS Region 7 Award Winners – Medical Center EMS and Air Evac Lifeteam 7

EMS Region 8 Award Winners – Memphis Fire Department

IV. Other accomplishments

a. Involvement with National EMSC Meeting in Bethesda Maryland:
   1. Tennessee EMSC was credited in the following poster presentations
      ▪ Pediatric Facility Recognition/Categorization: Models of Best Practice, Implementation and Evaluation
      ▪ Measuring the Value of a Pediatric Emergency Facility Recognition Program in the Care of Injured Children
      ▪ Implementing a Facility Recognition Program based on IL and TN
2. The program manager, Rhonda Phillippi, was requested to present on alternative funding sources for EMSC programs.

3. The Erik Jackson family was invited to be a part of the opening plenary for the National EMSC meeting. Erik was an 18 month old toddler that fell into a well, had 90 minutes of CPR, was comatose and regained 100% neurological function. His father, Bruce, described the incident and the level of team work that was needed to save his child.

b. Funding obtained from the Baptist Healing Trust to provide EZ IO drills that enable the fast delivery of medications to pediatric patients. The middle Tennessee counties include:
   1. Clay County EMS
   2. Warren County EMS
   3. Jackson County EMS
   4. Lawrence County EMS
   5. Lewis County EMS
   6. Stewart County EMS
   7. VanBuren County EMS

c. Additions to the Strategic Plan

**Pediatric Emergency Preparedness Project**

This project will be a national undertaking, culminating with the distribution of a pediatric E.D. readiness survey to most U. S. hospital emergency departments to assess their ability to care for children in an emergency. The Tennessee Hospital Association will play a pivotal role in the success of this project.

d. Publications

- Barry Gilmore, MD, MBA author of two chapters in the newly published *5 Minute Emergency Medicine*

- Emergency Nurses Pediatric Course by ENA
  - Angie Bowen, RN, BSN, NREMT-P
    - Serving on the revision task force and authored the Vascular Access chapter.
  - Christy Cooper, RN authored the Common Procedures chapter.

- Pediatric Education for Prehospital Professionals, (PEPP) and is an AAP course. Angie Bowen, RN, BSN< NREMT-P was author for both the Assessment and the Disaster chapters for the new edition.
V. The Needs of the State Committee on Pediatric Emergency Care

- Since 1994, CoPEC members have provided their own travel and per diem expenses. In light of the current fiscal environment, the members are willing to continue to provide travel and per diem as in-kind support. If in the future funding is more available, then CoPEC would like to have this position reconsidered.

- Continued support from the Department of Health to accomplish the strategic plan.

- Further support from the Department of Health for pediatric disaster planning for Tennessee: 1- to improve local disaster supplies for pediatric patients, 2- to improve the triage and stabilization of pediatric disaster patients at all pediatric emergency care facility levels, 3- to improve the communication between different levels of pediatric emergency care facilities during a disaster, 4- to continue to maintain and update standards for the transport of pediatric patients by EMS services, and 5- to organize the pediatric emergency care facility surge capacity planning for pediatric disaster patients. Support from the Department of Health to streamline disaster response for pediatric patients.

- Participation on the Tennessee Child Fatality Review Team. The mission of the Committee on Pediatric Emergency Care (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. Working with both the Emergency Medical Services Board and the Board for Licensing Health Care Facilities, CoPEC has helped develop in Tennessee an integrated delivery system for pediatric emergency care involving all hospitals and pre-hospital emergency medical services agencies. This is accompanied by a similarly integrated system for providing pediatric emergency care education for both hospital and pre-hospital health care providers. The goals of the Tennessee Child Fatality Review Team to both obtain a greater understanding of the events causing child fatalities and to investigate possible preventive measures are in alignment with the mission of CoPEC. By participating on the Tennessee Child Fatality Review Team, CoPEC can provide both further expertise in discussions regarding the events surrounding child fatalities and can help promote the institution of evidence based injury prevention strategies throughout Tennessee’s integrated system of pediatric emergency care. CoPEC understands the confidential nature of the Child Fatality Review Team and the TCA code establishing the Committee on Pediatric Emergency Care states, “regarding current trends the committee shall have access to the department of health’s existing raw and analyzed data regarding pediatric emergency care health issues.”
• Participation on CoPEC by a Department of Health data expert to assist in defining outcomes of emergency care for pediatrics.

• Support from the Department of Health, Division of Health Care Facilities to publish the online inspection results for the health care facility survey - Pediatric Emergency Care Facilities. Currently, to comply with federal requirements, the division has made available the health care facility survey inspection results for nursing homes with plans to expand this online reporting to include hospital and other types of facility surveys the division inspects.

• Support from the Department of Health to define the schedule for surveying Pediatric Emergency Care Facilities. In order to focus the efforts of CoPEC to help facilities improve the level of pediatric emergency care delivered, the top 10 Pediatric Emergency Care Facility rules that facilities are not in compliance with should be reported annually to the Board for Licensing Health Care Facilities prior to October 1st. This report will then serve as a guide for CoPEC for strategic planning for facility education and support each year.

VI. Conclusion

The Board for Licensing Health Care Facilities and the Emergency Medical Services Board work cooperatively with other programs of the 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, 2013.

This report was reviewed by the respective boards on ______________ and ______________ and approved for presentation to the designated committees of the Tennessee General Assembly.