June 25, 2009

The Honorable Rusty Crowe, Chair
Senate General Welfare, Health and
Human Resources Committee
321 War Memorial Building
Nashville, TN 37243

Dear Senator Crowe:

As required by Tenn. 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 primarily focuses 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 State of Tennessee and the Department of Health. Our boards help coordinate the major role of Tennessee's medical facilities and emergency medical services in providing appropriate pediatric emergency care.

Respectfully submitted,

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

Jackie W. Wilkerson, Chairman
Emergency Medical Services Board

cc: Susan R. Cooper, MSN, RN, Commissioner
Tennessee Department of Health
June 25, 2009

The Honorable Joe Armstrong, Chairman
House Health and Human Resources Committee
21 Legislative Plaza
Nashville, TN 37243

Dear Representative Armstrong:

As required by Tenn. 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 primarily focuses 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 major role of Tennessee's medical facilities and emergency medical services in providing appropriate pediatric emergency care.

Respectfully submitted,

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

Jackie W. Wilkerson, Chairman
Emergency Medical Services Board

cc: Susan R. Cooper, MSN, RN, Commissioner
Tennessee Department of Health
June 25, 2009

The Honorable Sherry Jones, Chair
Select Committee on Children and Youth
320 Sixth Avenue North
Rachel Jackson Building, 7th Floor
Nashville, TN 37243

Dear Representative Jones:

As required by Tenn. 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 primarily focuses 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 major role of Tennessee’s medical facilities and emergency medical services in providing appropriate pediatric emergency care.

Respectfully submitted,

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

Jackie W. Wilkerson, Chairman
Emergency Medical Services Board

cc: Susan R. Cooper, MSN, RN, Commissioner
Tennessee Department of Health
Joint 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
Select Committee on Children and Youth
on the status of
Emergency Medical Services for Children
July 1, 2009

I. Requirement for Report

Tennessee Code Annotated 68-11-251 requires that the Board for Licensing Health Care Facilities and the Emergency Medical Services Board shall jointly prepare an annual report on the current status of emergency medical services for children and on continuing efforts to improve such services beginning July 1, 1999.

II. Health Resources and Services Administration (HRSA) Chief, Dr. Mary Wakefield, RN presented a National Hero Award to Chattanooga pediatric surgeon Michael G. Carr, MD in Alexandria, VA on June 11, 2009 for his leadership and dedication to improving emergency care for children.

III. National Emergency Medical Services for Children (EMS C) Performance Measures

HRSA has delineated a specific set of measurements that will:

- Provide an ongoing, systematic process for tracking progress towards meeting the goals of the EMS C Program;

- Allow for continuous monitoring of the effectiveness of key EMS C Program activities;

- Identify potential areas of performance improvement among the EMS C State Partnership grantees;

- Determine the extent to which the grantees are meeting established targets and standards; and
Allow the EMS C Program to demonstrate its effectiveness and "tell its story" to HRSA, Congress, and other stakeholders.

Please refer to Appendix A for a comparison of Tennessee to other states regarding specific performance measures. Other measures that are not recorded in Appendix A but achieved include:

- Presence of EMSC advisory committee. Tennessee exceeds this measure by having dual reporting to both the Board for Licensing Health Care Facilities and the Emergency Medical Services (EMS) Board;
- Presence of a pediatric representative on the EMS board;
- Presence of a hospital recognition system for pediatric trauma. Tennessee exceeds this measure by having a system for both trauma and medical conditions;
- The establishment of one full-time equivalent EMS C manager that is dedicated solely to the EMS C program.

IV. Commissioner’s Council on Injury Prevention

The Council continues to have many governmental and non governmental efforts aimed at reducing unintentional and intentional injuries. These laudable efforts of individual agencies and persons are currently being coordinated to build sustainability, maximize activities/costs, and produce a statewide impact.

An outcome of last year’s annual symposium’s topic, Falls, resulted in the creation of Older Adult Safety Instructional Series (OASIS) by the Council coordinator, Rose Boyd. This program will include a fall prevention program called Matter of Balance as well as other topics including fire, poisons, and older driving safety. Many older adults are the primary caregiver for their grandchildren; therefore, childhood injury prevention will also be addressed.

This year’s symposium subject was poisoning and there were over 175 in attendance. Topics included the age spectrum of pediatric through geriatric. The presentations were abuse of drugs, inhalant, methamphetamine, and prescriptions. Also included was an overview of our Tennessee’s Poison Control Center and the Governor’s Methamphetamine Task Force Trailer provided the audience with an up close experience to the methamphetamine problem.

Assistant Commissioner of Health, Cathy Taylor, and Rose Boyd were presented an award at the Keep Kids Alive National Symposium sponsored by the federal maternal and child health program for the presentation of project outcomes.

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, CoPEC would like to have this position reconsidered.

- Support from the Department of Health to accomplish the goals stated below for the upcoming year.

VI. Plans for next year

CoPEC will work in partnership with the Department of Health to meet the following goals:

- Meeting the national goal of 90% in the National Performance Measures for pediatric equipment, on-line and off-line communication, and continuing education requirement for paramedics and EMTs;
- Expand the inclusion of pediatric components to the state disaster plan;
- Drills and management in rural areas need to be improved and incorporate pediatric patients;
- Development and management of disaster needs for special needs children needs to be improved;
- Continue working with the Tennessee Hospital Association and Children’s Hospital Alliance of Tennessee to complete a statewide template for inter-facility agreements that contain the national performance measure components;
- Continue to increase and standardize communication among providers, facilities, and committee members.

VII. 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.

Tennessee is often quoted “an exemplary model for the nation” by Dan Kavanaugh, Director, MSW, LCSW-C HRSA/MCHB Emergency Medical Services for Children Program in responding to the needs for adequate emergency medical care for children.

We hope to further describe the impact of the rules on pediatric emergency care by utilizing data collected in the Department of Health in our next report due July 1, 2010.

This report was reviewed by the respective boards on June 24, 2009 and approved for presentation to the designated committees of the Tennessee General Assembly.

See Appendix A for Tennessee EMS for Children 2007-2008 Performance Measure Results

Joint Report on the Status of Emergency Medical Services for Children
Emergency Medical Services for Children (EMSC)

2007-08 Performance Measure Data Collection Results
EXECUTIVE SUMMARY

The following is a summary of the 2007-08 Emergency Medical Services for Children (EMSC) data collection results for our state. This report contains the data collected from our state for Basic Life Support (BLS) and Advanced Life Support (ALS) agencies. The data was collected and analyzed using national guidelines from the Federal EMSC Program.

Purpose: The purpose of the data collection was to assess our state’s current status in relationship to National EMSC Performance Measures regarding pediatric emergency care. This report contains results for four of the EMSC Performance Measures that required data collection; the definition of each measure is shown below. Each year the EMSC state grantees are given EMSC Program targets and ultimately must strive to reach the 2011 EMSC Program targets for each measure to improve pediatric emergency care infrastructure.

The Data: The national statistics are derived from performance measure results submitted to the National EMSC Data Analysis Resource Center (NEDARC) from 54 states and territories in July and August 2008, or from available performance measure survey data collected by individual states and territories from EMS agencies and hospitals between November 2007 and March 2008.

Tennessee collected data for performance measures 66A and 66B by surveying EMS agencies and for 66D and 66E by surveying hospitals with an emergency department. We received an 80% response rate from the EMS agencies and a 96% response rate from the hospitals. We will continue to survey the hospitals for more information.

The Performance Measures: the following measures are included in this report:

- 66A—The percentage of pre-hospital provider agencies that have on-line and off-line pediatric medical direction at the scene of an emergency for BLS providers and ALS providers.

- 66B—The percentage BLS and ALS patient care units that have all the essential pediatric equipment and supplies as outlined in national Guidelines for BLS ambulances and ALS ambulances.

- 66D—The percentage of hospitals with an ED that have written pediatric inter-facility transfer guidelines that specify EMSC priorities.

- 66E—The percentage of hospitals with an ED that have written pediatric inter-facility transfer agreements.

For those who participated in the data collection, we appreciate your responses.
Emergency Medical Services for Children (EMSC): TENNESSEE

The following is a summary of the 2007-08 EMSC performance measure data collection for on-line pediatric medical direction. This report contains data collected from Basic Life Support (BLS) and Advanced Life Support (ALS) agencies. Note: the term “state” includes territories.

Tennessee conducted a survey of all EMS agencies and achieved an 80% response rate. As a result our state does not have to collect data until the 2010-11 Grant Year. The EMSC program required agencies to have on-line medical direction available AND to feel the necessary pediatric medical direction was provided, at least 90% of the time, to meet the target.

On-line Pediatric Medical Direction:

The EMSC Program Measure: the percentage of pre-hospital provider agencies that have on-line pediatric medical direction at the scene of an emergency:

- TENNESSEE
  - BLS Agencies: 85%
  - ALS Agencies: 85%
- EMSC Program Targets:
  - 2007 Target: 40%
  - 2011 Target: 90%
- Percentage of Agencies Nationwide that Meet the EMSC Program 2011 Target:
  - BLS Agencies: 69%
  - ALS Agencies: 71%

Number of States Meeting EMSC Targets:

Tennessee is one of only 26 states that met the 2007 EMSC Program target.

| BLS On-line Pediatric Medical Direction | Number of States (
| n=48, 3 Did Not Collect, 3 Have No BLS Agencies) |
|-----------------------------------------|--------------------------------------------------|
| 0 to 39% (Below 2007 Target) | 5 |
| 40 to 49% (2007 Target) | 1 |
| 50-89% (Above 2007 Target) | 26 |
| 90%+ (Met 2011 Target) | 16 |

Tennessee is one of 34 states that exceeded the 2007 EMSC Program target.

<table>
<thead>
<tr>
<th>ALS On-line Pediatric Medical Direction</th>
<th>Number of States (n=50, 3 Did Not Collect, 1 Has No ALS Agencies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 35% (Below 2007 Target)</td>
<td>3</td>
</tr>
<tr>
<td>40 to 49% (2007 Target)</td>
<td>2</td>
</tr>
<tr>
<td>50-89% (Above 2007 Target)</td>
<td>34</td>
</tr>
<tr>
<td>90%+ (Met 2011 Target)</td>
<td>11</td>
</tr>
</tbody>
</table>

NATIONAL STATISTICS:

9.2% of all EMS Incidents involve pediatric patients
Emergency Medical Services for Children (EMSC): TENNESSEE

The following is a summary of the 2007-08 EMSC performance measure data collection for off-line pediatric medical direction. This report contains data collected from Basic Life Support (BLS) and Advanced Life Support (ALS) agencies. Note: the term “state” includes territories.

Tennessee conducted a survey of all EMS agencies and achieved an 80% response rate. As a result our state does not have to collect data until the 2010-11 Grant Year. The EMSC program required agencies to have off-line pediatric protocols AND carry them in the patient care unit or on the provider, at least 90% of the time, to meet the 2011 target.

Off-line Pediatric Medical Direction:

**The EMSC Program Measure:**
the percentage of pre-hospital provider agencies that have off-line pediatric medical direction at the scene of an emergency:

- TENNESSEE
  - BLS Agencies: 85%
  - ALS Agencies: 91%

- EMSC Program Targets:
  - 2007 Target: 40%
  - 2011 Target: 90%

- Percentage of Agencies Nationwide that Meet the EMSC Program 2011 Target:
  - BLS Agencies: 56%
  - ALS Agencies: 83%

Number of States Meeting EMSC Targets:

Tennessee is one of only 21 states that met the 2007 EMSC Program target.

### Number of States Meeting EMSC Targets:

#### BLS Off-line Pediatric Medical Direction
(n=48, 3 Did Not Collect, 3 Have No BLS Agencies)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Number of States</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 39% (Below 2007 Target)</td>
<td>9</td>
</tr>
<tr>
<td>40 to 49% (2007 Target)</td>
<td>10</td>
</tr>
<tr>
<td>50-89% (Above 2007 Target)</td>
<td>21</td>
</tr>
<tr>
<td>90%+ (Met 2011 Target)</td>
<td>8</td>
</tr>
</tbody>
</table>

Tennessee is one of 31 states that exceeded the 2007 EMSC Program target.

### Number of States Meeting EMSC Targets:

#### ALS Off-line Pediatric Medical Direction
(n=50, 3 Did Not Collect, 1 Has No ALS Agencies)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Number of States</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 39% (Below 2007 Target)</td>
<td>2</td>
</tr>
<tr>
<td>40 to 49% (2007 Target)</td>
<td>1</td>
</tr>
<tr>
<td>50-89% (Above 2007 Target)</td>
<td>31</td>
</tr>
<tr>
<td>90%+ (Met 2011 Target)</td>
<td>16</td>
</tr>
</tbody>
</table>

NATIONAL STATISTICS:

55% of EMS Agencies Operate Primarily in a Rural Response Area

Content provided by: NEDARC
The National EMS Data Analysis Resource Center
Emergency Medical Services for Children (EMSC): TENNESSEE

The following is a summary of the 2007-08 EMSC performance measure data collection for essential pediatric equipment. This report contains data collected from Basic Life Support (BLS) and Advanced Life Support (ALS) agencies. Note: the term “state” includes territories.

Tennessee conducted a survey of all EMS agencies and achieved an 80% response rate. As a result our state does not have to collect data until the 2010-11 Grant Year.

**Essential Pediatric Equipment:**

The EMSC Program Measure: the percentage of BLS and ALS patient care units* in the State/Territory that have all the essential pediatric equipment and supplies, as outlined in the 1996 American College of Emergency Physicians (ACEP) guidelines:

- Percentage of Patient Care Units in TENNESSEE that Carry All Essential Pediatric Equipment:
  - BLS Patient Care Units: 11%
  - ALS Patient Care Units: 21%

- EMSC Program Targets:
  - 2007 Target: 50%
  - 2011 Target: 90%

- Percentage of Patient Care Units Nationwide that Carry All Essential Pediatric Equipment:
  - BLS Patient Care Units: 16%
  - ALS Patient Care Units: 18%

*Patient Care Unit: A patient care unit is broadly defined as a vehicle staffed with EMS providers (BLS and/or ALS) dispatched in response to a 911 call to provide patient care. Examples include an ambulance, fire truck, hazardous materials (hazmat) vehicle, or a rapid/emergent response vehicle/unit. It EXCLUDES air ambulances, exclusively defined specialty care units, and water ambulances/units.

**Number of States Meeting EMSC Targets:**

Tennessee did not meet the 2007 EMSC Program target.

![BLS Units Chart](image)

![ALS Units Chart](image)
Emergency Medical Services for Children (EMSC):
NATIONAL STATISTICS — Availability of Pediatric Equipment

National Summary Data:
The following is a summary of the 2007-08 EMSC performance measure data collection for pediatric equipment on patient care units (PCUs)*.

The national results on this page are derived from data collected from EMS agencies in 33 states and 6 territories. There were a total of 18,773 patient care units included in the data—6,590 of these were Basic Life Support (BLS) units and 12,183 were Intermediate/Advanced Life Support (hereafter referred to as ALS units).

**Selected Comparison of Missing Equipment by Size:**

**Bag-Valve-Masks**

<table>
<thead>
<tr>
<th>Size</th>
<th>BLS PCUs</th>
<th>ALS PCUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>15%</td>
<td>6%</td>
</tr>
<tr>
<td>Child</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Infant</td>
<td>9%</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Blood Pressure Cuffs**

<table>
<thead>
<tr>
<th>Size</th>
<th>BLS PCUs</th>
<th>ALS PCUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>15%</td>
<td>6%</td>
</tr>
<tr>
<td>Child</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Infant</td>
<td>7%</td>
<td>42%</td>
</tr>
</tbody>
</table>

**Oxygen Masks**

<table>
<thead>
<tr>
<th>Size</th>
<th>BLS PCUs</th>
<th>ALS PCUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>15%</td>
<td>6%</td>
</tr>
<tr>
<td>Child</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Infant</td>
<td>7%</td>
<td>12%</td>
</tr>
</tbody>
</table>

1 out of 2 BLS patient care units is missing a pediatric backboard compared to 1 in 3 ALS units

**Missing Advanced Level Equipment:**

- 1 out of 5 ALS units does not carry pediatric electrodes / patches
- 1 out of 8 ALS units does not carry:
  - Intraosseous needles
  - Portable suction unit with a regulator
  - Length/weight-based drug dose chart or tape

*Patient Care Unit: A patient care unit is broadly defined as a vehicle staffed with EMS providers (BLS and/or ALS) dispatched in response to a 911 call to provide patient care. Examples include an ambulance, fire truck, hazardous materials (hazmat) vehicle, or a rapid/emergent response vehicle/unit. It EXCLUDES air ambulances, exclusively defined specialty care units, and water ambulances/units.
Emergency Medical Services for Children (EMSC): TENNESSEE

The following is a summary of the 2007-08 EMSC performance measure data collection for written pediatric inter-facility transfer guidelines. Note: the term “state” includes territories.

Tennessee conducted a survey of 130 hospitals with an ED and achieved a 97% response rate.

Written Pediatric Inter-facility Transfer Guidelines:

*EMSC Program Measure*: the percentage of hospitals with an ED in the State/Territory that have written pediatric inter-facility transfer guidelines that include all the EMSC pediatric components*:

- TENNESSEE  
  - Hospitals: 0%
- EMSC Program Targets:  
  - 2007 Target: 25%  
  - 2011 Target: 90%
- Percentage of Hospitals with an ED Nationwide that Have All the EMSC Components:  
  - Hospitals: 14%

Number of States Meeting EMSC Targets:  
Tennessee did not exceed the 2007 EMSC Program target, but as of 2009, has met the target.

*EMSC Components of Inter-facility Transfer Guidelines*

- Defined process for initiation of transfer, including the roles and responsibilities of the referring facility and referral center (including responsibilities for requesting transfer and communication)
- Process for selecting the appropriate care facility
- Process for selecting the appropriately staffed transport service to match the patient’s acuity level (level of care required by patient, equipment needed in transport, etc.)
- Process for patient transfer (including obtaining informed consent)
- Plan for transfer of patient information (e.g. medical record, copy of signed transport consent), personal belongings of the patient, and provision of directions and referral institution information to family
- Process for return transfer of the pediatric patient to the referring facility as appropriate

NATIONAL STATISTICS:  
2/3rd of hospitals are located in a rural setting
Emergency Medical Services for Children (EMSC): TENNESSEE

The following is a summary of the 2007-08 EMSC performance measure data collection for written pediatric inter-facility transfer agreements. Note: the term “state” includes territories.

Tennessee conducted a survey of 130 hospitals with an ED and achieved a 97% response rate.

Written Pediatric Inter-facility Transfer Agreements:

The EMSC Program Measure: the percentage of hospitals with an ED in the State/Territory that have written pediatric inter-facility transfer agreements:

- TENNESSEE
  - Hospitals: 96%

- EMSC Program Targets:
  - 2007 Target: 25%
  - 2011 Target: 90%

- Percentage of Hospitals with an ED Nationwide that Have Written Pediatric Inter-facility Agreements:
  - Hospitals: 38%

Number of States Meeting EMSC Targets:

Tennessee exceeded the 2007 EMSC Program target, and was only 1 of 5 states that has already met the target for 2011.

NATIONAL STATISTICS:

Fifty-eight percent (58%) of hospitals with an ED participate in a designation system. Of these:

- 10% are part of a national system
- 25% are part of a local system
- 65% are part of a state system

Over 7 million (25%) of annual ED patients are pediatric patients