

MICHIGAN

# 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.

Michigan surveyed 261 EMS agencies and 105 hospitals with an emergency department. We received an 80% response rate from the EMS agencies and a 66% response rate from the hospitals. Note: the National EMSC Program requires at least an 80% response rate in order to have an increased confidence in the results.

**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): MICHIGAN

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.

Michigan received an exemption from data collection from the National EMSC Program for this measure due to the current laws and mandates in place in the State of Michigan. The National EMSC Program also certified Michigan as having "met" this measure; in the report below this is denoted as 100%.

### 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:

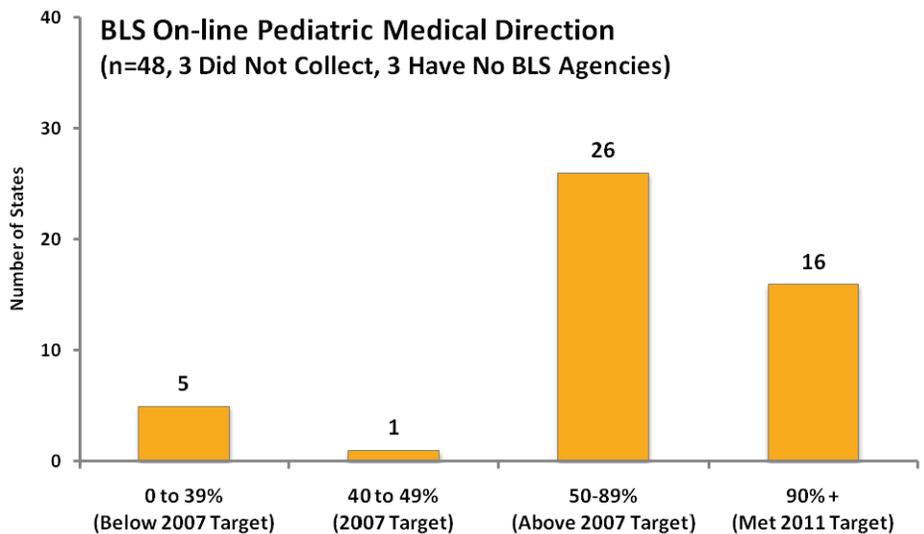
- **MICHIGAN**
  - BLS Agencies: **100%**
  - ALS Agencies: **100%**
- **EMSC Program Targets:**
  - 2007 Target: **40%**
  - 2011 Target: **90%**
- **Percentage of Agencies Nationwide that Meet the EMSC Program 2011 Target:**
  - BLS Agencies: **69%**
  - ALS Agencies: **71%**

#### NATIONAL STATISTICS:

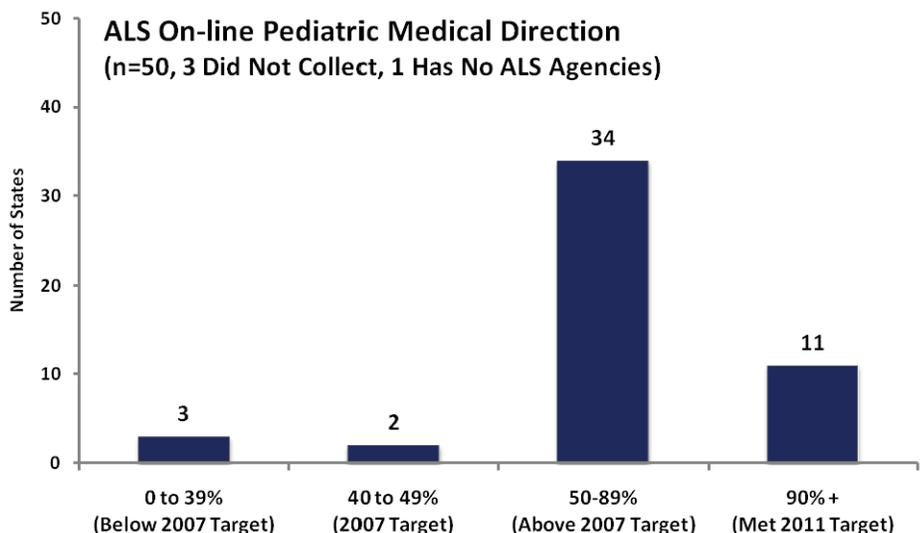
**9.2% of all EMS Incidents involve pediatric patients**

### Number of States Meeting EMSC Targets:

Michigan is one of only sixteen states that have met the 2011 EMSC Program target.



Michigan is one of only sixteen states that have met the 2011 EMSC Program target.



## Emergency Medical Services for Children (EMSC): MICHIGAN

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.

Michigan received an exemption from data collection from the National EMSC Program for this measure due to the current laws and mandates in place in the State of Michigan. The National EMSC Program also certified Michigan as having "met" this measure; in the report below this is denoted as 100%.

### 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:

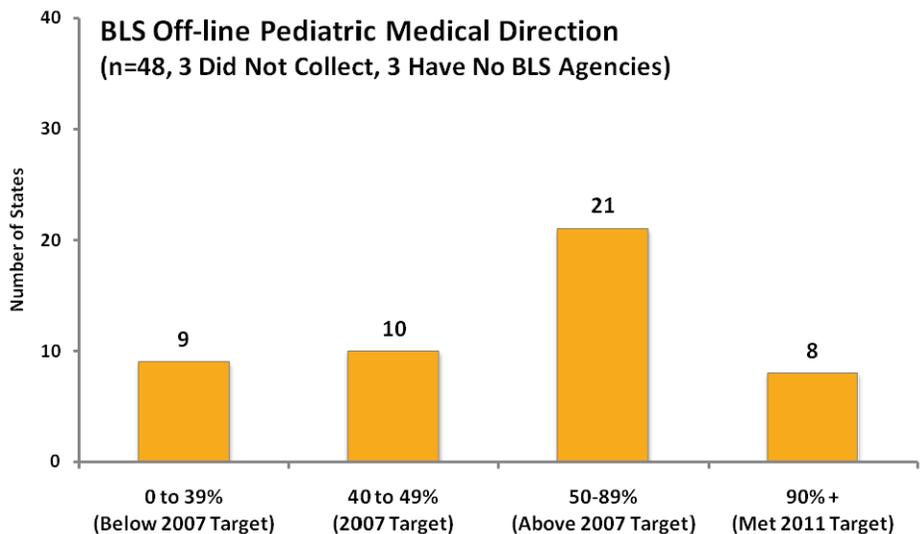
- **MICHIGAN**
  - BLS Agencies: **100%**
  - ALS Agencies: **100%**
- **EMSC Program Targets:**
  - 2007 Target: **40%**
  - 2011 Target: **90%**
- **Percentage of Agencies Nationwide that Meet the EMSC Program 2011 Target:**
  - BLS Agencies: **56%**
  - ALS Agencies: **83%**

#### NATIONAL STATISTICS:

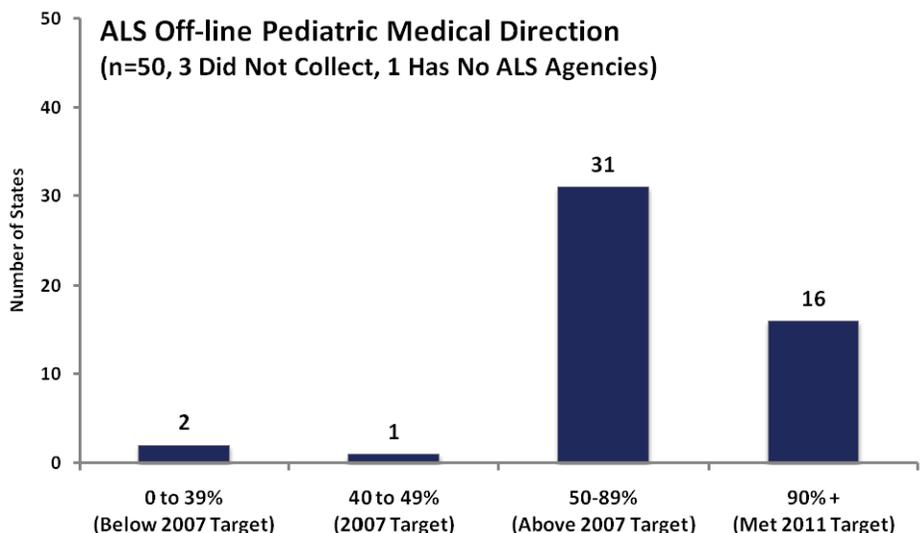
**55% of EMS Agencies Operate Primarily in a Rural Response Area**

### Number of States Meeting EMSC Targets:

Michigan is one of only sixteen states that have met the 2011 EMSC Program target.



Michigan is one of only sixteen states that have met the 2011 EMSC Program target.



# Performance Measure 66B — Essential Pediatric Equipment

## Emergency Medical Services for Children (EMSC): MICHIGAN

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.

Michigan conducted a survey of 261 EMS agencies and achieved an 80% response rate. Michigan only surveyed for the items of equipment missing from the State Inspection List. The missing items were deemed necessary by the EMSC Program. Due to the results below, the EMSC Program has worked with other national organizations to create a new equipment list that will be effective for the next data collection period (2010-11).

### 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 MICHIGAN that Carry All Essential Pediatric Equipment:**

- BLS Patient Care Units: **27%**
- ALS Patient Care Units: **36%**

- **EMSC Program Targets:**

- 2007 Target: **50%**
- 2011 Target: **90%**

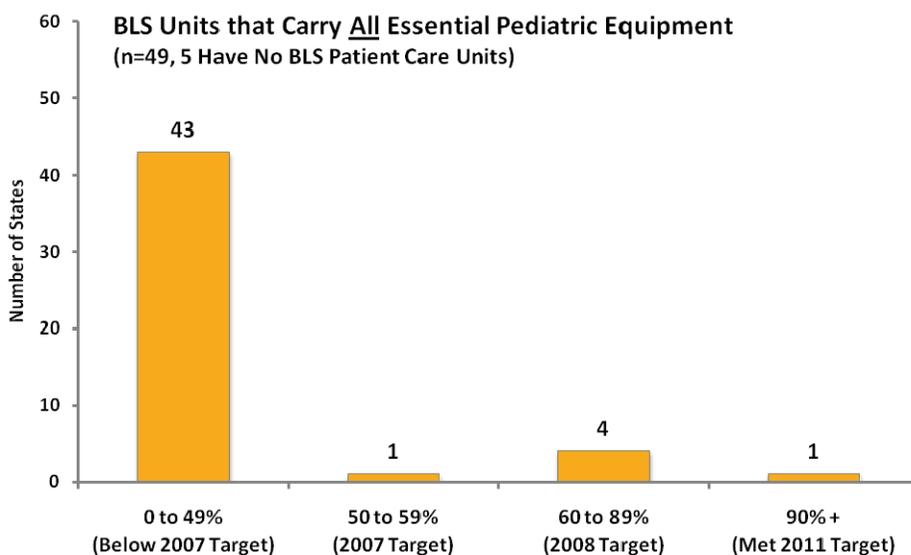
- **Percentage of Patient Care Units Nationwide that Carry All Essential Pediatric Equipment:**

- BLS Patient Care Units: **16%**
- ALS Patient Care Units: **18%**

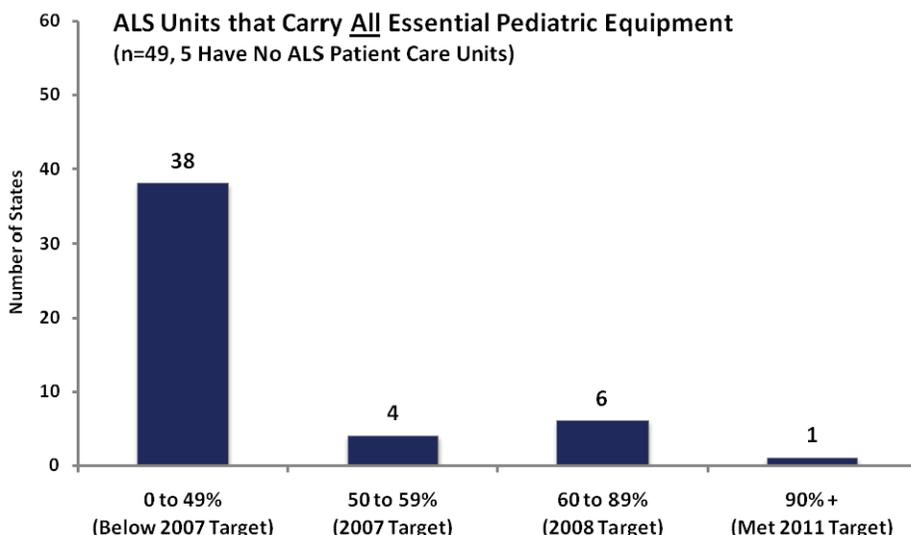
**\*Patient Care Unit:** A patient care unit is broadly defined as a vehicle staffed with EMS providers (BLS and/or ALS) dispatched in response to a 911 call to provide patient care. Examples include an ambulance, fire truck, hazardous materials (hazmat) vehicle, or a rapid/emergent response vehicle/unit.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

### Number of States Meeting EMSC Targets:

Michigan is one of 43 states/territories that **DID NOT** meet the 2007 EMSC Program target for this measure.



Michigan is one of 43 states/territories that **DID NOT** meet the 2007 EMSC Program target for this measure.

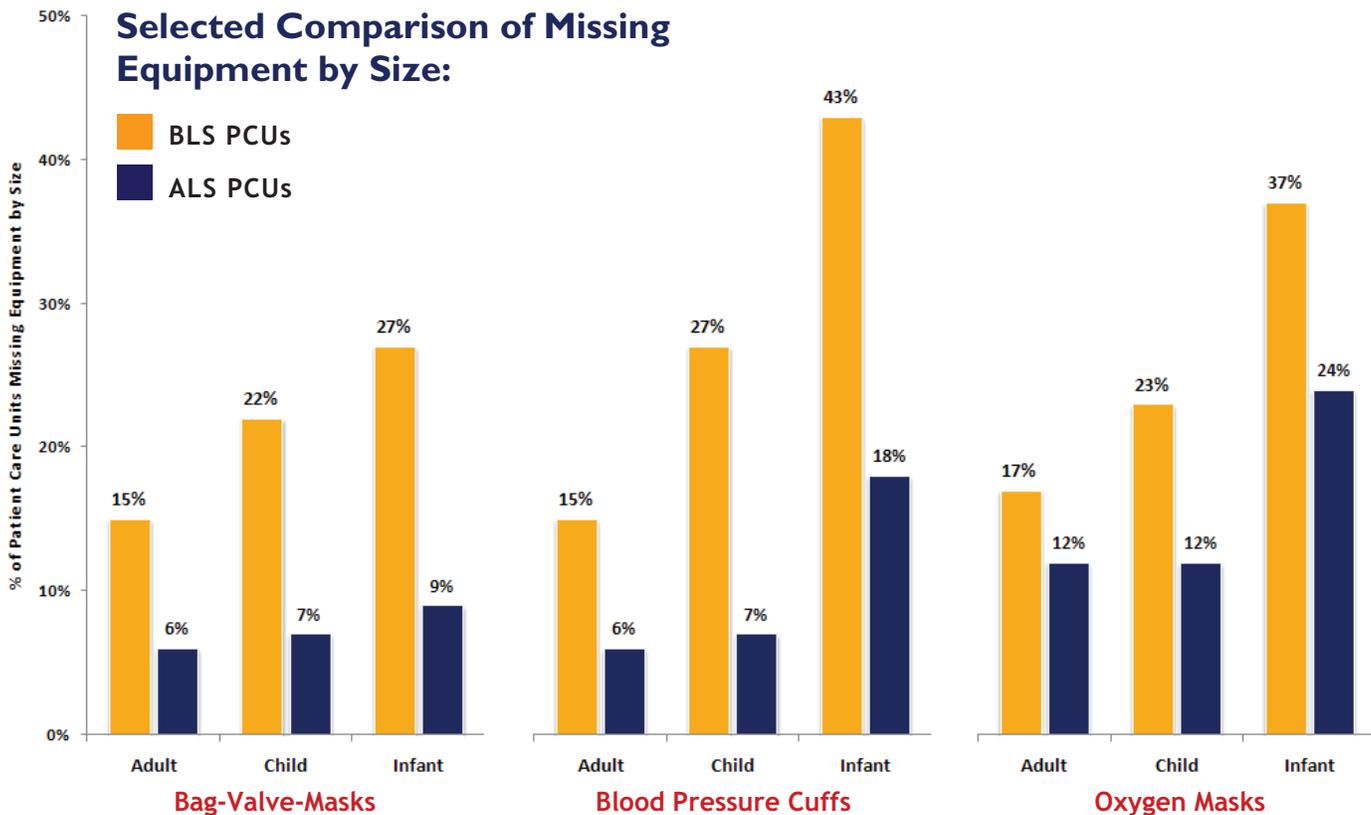


# Emergency Medical Services for Children (EMSC): NATIONAL STATISTICS —Availability of Pediatric Equipment

## 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).



**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.

# Performance Measure 66D — Inter-facility Transfer Guidelines

## Emergency Medical Services for Children (EMSC): MICHIGAN

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.

Michigan conducted a survey of 105 hospitals with an ED and achieved a 66% response rate. The EMSC program requires an 80% response rate in order to have increased confidence in the results below. Due to the national analysis of this data, during the next data collection period (2010-11) the last component listed below (return transfer) will no longer be part of the EMSC components for inter-facility transfer guidelines.

### Written Pediatric Inter-facility Transfer Guidelines:

*The 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\*:

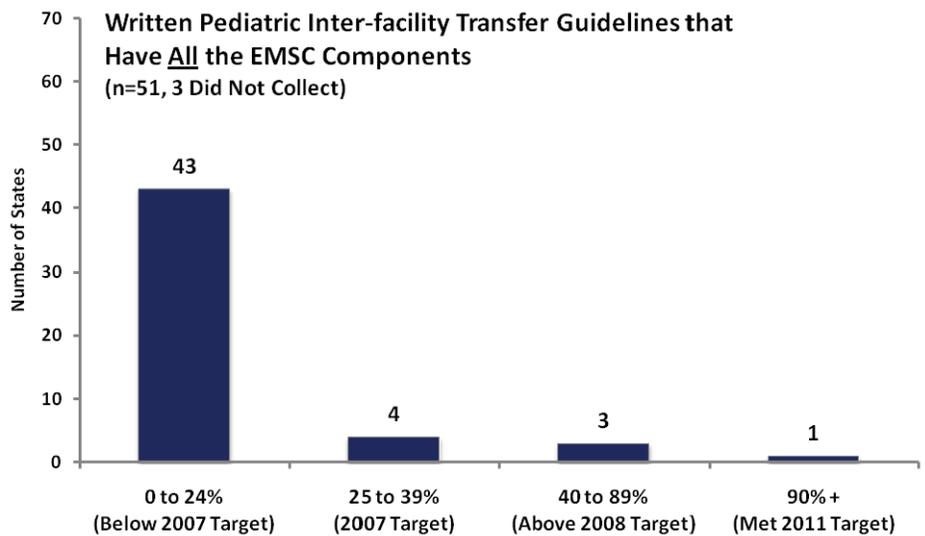
- MICHIGAN
  - Hospitals: **16%**
- EMSC Program Targets:
  - 2007 Target: **25%**
  - 2011 Target: **90%**
- Percentage of Hospitals with an ED Nationwide that Have All the EMSC Components:
  - Hospitals: **14%**

#### NATIONAL STATISTICS:

**2/3<sup>rds</sup> of hospitals are located in a rural setting**

### Number of States Meeting EMSC Targets:

Michigan is one of 43 states/territories that DID NOT meet the 2007 EMSC Program target for this measure.



#### \*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

# Performance Measure 66E — Inter-facility Transfer Agreements

## Emergency Medical Services for Children (EMSC): MICHIGAN

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.

Michigan conducted a survey of 105 hospitals with an ED and achieved a 66% response rate. The EMSC program requires an 80% response rate in order to have increased confidence in the results below.

### Written Pediatric Inter-facility Transfer Agreements:

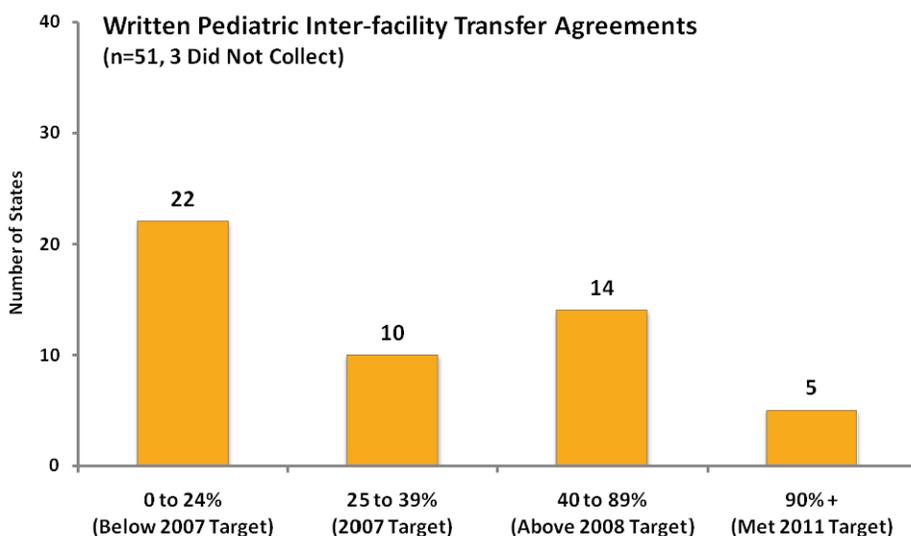
**The EMSC Program Measure:** the percentage of hospitals with an ED in the State/Territory that have written pediatric inter-facility transfer agreements:

- **MICHIGAN**
  - Hospitals: **31%**
- **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:

Michigan is one of ten states/territories that met the 2007 EMSC Program target for this measure.



#### 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**