



TEXAS EMS FOR CHILDREN STATE PARTNERSHIP

Voluntary Pediatric Readiness Program for
Emergency Departments

PROGRAM DESCRIPTION (PILOT PHASE)

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DEFINITIONS

1 Introduction

1.1 Purpose

The purpose of this document is to provide information on the Texas Voluntary Pediatric Readiness Program (VPRP) and the requirements for your hospital to be “Pediatric Ready”

1.2 Program Overview

The VPRP will prepare EDs to provide higher quality care for infants, children, and adolescents for the evaluation, treatment, and/or stabilization of children with medical and traumatic emergencies. One of the primary goals of pediatric readiness programs for EDs is to bolster pediatric readiness within communities and critical access hospitals such that children and families can benefit from the availability of at least one ED in their own community that is equipped to stabilize and/or manage common emergencies for children.

1.3 Program Description

On a national level in 2005, the federally-funded EMS for Children (EMSC) program established performance measures to assure the existence of a standardized statewide, territorial, or regional system that acknowledges hospitals capable of stabilizing and/or managing pediatric medical emergencies and traumatic injuries. The goal previously set by EMSC was for each state/territory to have a system in place by 2017.

Similar to trauma center designation, a pediatric readiness program aids facilities in self-identifying areas in which they can optimize care. Unlike trauma center designation, however, the purpose of the VPRP is **NOT** to differentiate EDs based on the level of care they can provide for children. Rather, the purpose is to promote basic readiness for **ALL** EDs to be able to provide initial stabilization of children with emergency conditions given that nationally, 30% of ED patients are children. Additionally, greater than 90% of children are seen in general EDs when they have an emergency, not at a children’s hospital. The intent of the VPRP is to equip all EDs with the ability to safely treat and manage children in their own communities when appropriate, not to bypass these facilities.

At its core, pediatric readiness provides the foundation to ensure high quality pediatric emergency care. Successful pediatric readiness programs share many common traits:

- Enhance awareness of pediatric emergency care gaps
- Recognize hospital and EMS infrastructures within the state
- Establish and maintain strong partnerships between hospitals and EMS agencies
- Define minimum criteria to promote pediatric readiness in the following areas:
 - Staff qualifications
 - Quality improvement
 - Policies/procedures
 - Continuing education
 - Equipment/supplies
- Adaptable to refine the process on an ongoing basis

1.4 Justification for Texas

In 2013, 305 of 504 hospitals in Texas participated in the National Pediatric Readiness Project (NPRP) assessment. These 305 hospitals cumulatively treat 1,572,835 children annually in their EDs. Of these children, 799,959 (51%) were treated in a pediatric ED in either a children's hospital or general hospital ED, while the remainder were treated in general EDs without a separate area for pediatric patients. In addition, 75% of these hospitals have the capability to admit a child to an inpatient unit, while 38% have a Neonatal Intensive Care Unit (NICU), and 9% have a pediatric intensive care unit (PICU). While not every hospital may have a pediatric ED or the capability to admit a child, every ED must be equipped for the basic evaluation, management, and/or stabilization of a child with an emergency.

Based on NPRP data from Texas, it is clear that variability exists among EDs in their ability to provide basic care to children. This variability does not necessarily correlate with geography or annual pediatric ED volume. There are some EDs with low pediatric volumes that scored high on the NPRP assessment, while there are some EDs that see more children that scored lower. Also, there are some rural EDs that scored higher on the NPRP assessment than urban EDs.

Some feedback that has been provided to the EMSC State Partnership from some EDs that see a low volume of children is that it is not necessary to invest the resources required to have the components assessed by the NPRP, since these children can be transferred to other EDs that are more equipped, such as children's hospitals. Though children's hospitals play a vital role in providing a higher level of care to children when medically necessary, the unnecessary transfer of children to children's hospitals, which are often located in urban areas, has negative consequences for patients, families, and local hospitals. If not covered by insurance, families must pay for the cost of the inter-facility transport. Also, being far from home can create social hardships for families by interfering with the ability for caregivers to go to work or safely return home after being discharged. Over time, such practices may also weaken the abilities of community EDs to be prepared to stabilize critically ill and/or injured children. Thus, critical access and/or community EDs may glean the greatest benefit from participating in a VPRP.

Texas Summary: In Texas, there are 504 emergency departments (EDs) that met the inclusion criteria for the pediatric readiness assessment (see Appendix C). Of the 504 EDs, 305 responded to the assessment, which is 60.5% of all EDs in the state. On a national level, Texas represents 7% of the national data. Overall, Texas performed similar to other states. Data shown in Appendix C are also summarized below.

Overall Readiness Scores: As the pediatric volume of an ED increases, its average pediatric readiness score is also higher.

Texas Emergency Department Demographics: Only 7% of the hospitals in Texas have a pediatric ED. In Texas, most EDs are general EDs. Only 4% of EDs are based in children's hospitals whereas another 3% of EDs have a separate pediatric section in a general hospital ED.

Every ED should be equipped to care for children at a basic level. When children require a higher level of care, it is helpful for EMS agencies and other hospitals to know the capabilities of other facilities, so that transfers to the appropriate facility can occur. In the event of a disaster or mass casualty incident, it is also important for hospitals and EMS agencies to know the EDs in their area that have the resources available to meet the needs of children.

Texas Emergency Department Age Cut-Off: Most hospitals in Texas use an age cut-off of 17-18 years to distinguish between a child and adult, both for medical and traumatic conditions. This varies from region to region and between hospitals within a region. For the purposes of the VPRP, the intent is to focus on ages 0-17 years, since this is the age range used by most hospitals to define a “pediatric” patient. The American College of Surgeons Committee on Trauma defines a child as under 15 years old.

Texas Pediatric Inpatient Capabilities: Of the hospitals in Texas, 36% have an inpatient unit, and 28% have a Neonatal Intensive Care Unit (NICU); only 9% of hospitals in Texas have a Pediatric Intensive Care Unit (PICU). Though inpatient pediatric services are not available in all hospitals in Texas, every ED must be equipped to stabilize children and be able to identify the hospitals that can provide a higher level of care, if required.

Presence of a Physician or Nurse Coordinator in the Emergency Department: Another factor that was assessed from each ED was the presence of a nurse or physician coordinator to focus on pediatric emergency care. Having at least one pediatric emergency care coordinator (PECC) ensures that someone is tasked with identifying and meeting the needs of children in the ED. The PECC may be a full or part-time position and it may be part of the job description of an existing ED role, such as a trauma coordinator, ED director, or a quality improvement coordinator, to name a few examples. The PECC can focus on some or all of the following: ongoing education and skills competencies in pediatric ED care, ensuring that policies and procedures are in place for children, creating a quality improvement plan for pediatric patients, ensuring that appropriate medications and supplies are stocked, and that pediatric care is included in staff orientation. National data from the NPRP shows that having a PECC is associated with having a higher pediatric readiness score

Physician Staffing: Physician staffing was also assessed. Emergency medicine (EM) and pediatric emergency medicine (PEM) training equips physicians to care for children in emergencies. General pediatrics and family medicine training may do this as well, if the skills are maintained. Specific training in handling pediatric emergencies is often lacking for other specialties.

Physician Board Certification: In Texas, 36% of hospital emergency departments have all of their physicians board-certified in either emergency medicine or pediatric emergency medicine. Of the EDs in Texas, 16% require neither board certification in EM or PEM for the entire medical staff.

Pediatric Patient Care Review Process: In Texas, 47% of EDs have a pediatric patient care review process in place. Having a patient care review process is also essential to identify system issues that may impact safety and quality of care.

Weighing and Recording in Kilograms: In Texas EDs, only 51% of pediatric patients have their weight both measured and recorded in kilograms. Weighing a pediatric patient in kilograms is important to ensure pediatric patient safety with respect to medication dosing. Since pediatric medication doses are calculated based on weight in kilograms, this is one of the most important areas for improvement in pediatric care.

Hospital Pediatric Disaster Plan: Only 41% of the hospitals in Texas include pediatrics in their disaster planning process. On a regional level, there is a variation in the presence of a disaster plan that addresses the needs of children. Planning for pediatric needs in disasters requires

coordination between EMS and hospitals and it requires coordination between hospitals. This can often be overlooked.

Equipment Availability: Greater than 90% of the emergency departments in Texas have the recommended pediatric equipment available. For a list of items that are present less than 90% of the time, please refer to Appendix C (C12 – Equipment Availability).

2.0 General Costs to Hospital

Depending on the readiness level, there will essentially be two survey options for hospitals to choose from in order to participate in the VPRP program: a) virtual/paper survey and b) on-site survey. Some additional considerations are:

- a) Time/labor costs of possibly more than one ED and administration staff member to coordinate the survey with the EMSC program.
- b) QI Multidisciplinary committee - each hospital will probably require a committee/process to discuss ED pediatric QI issues which require staff time and commitment. Some hospitals meet monthly, some meet quarterly however, there is no mandated number of meetings per year.
- c) Equipment/supply costs (cost varies by hospital based on their level of readiness prior to being a pediatric ready facility).
- d) Required certifications – depending upon the readiness level, this ranges from all staff being required to have specialized certifications/competencies, to only one staff member on duty.
- e) Pediatric-specific continuing education (some hospitals cover this cost, others do not reimburse for CE).

3.0 Performance Monitoring

In an effort to evaluate the effectiveness of the VPRP, data will be requested from each facility and for the data to be reported directly to the EMSC program office on a periodic basis. The method of gathering the data will be determined at a later date and the frequency of reporting will also be determined through consultation with participating facilities. We intend to ensure that data is seamlessly shared between EMSC and each participating facility. At a minimum, the metrics described and listed in Appendix C are being suggested as starting points in terms of the type of data that will need to be captured and reported.

4.0 Appeals Process

Every effort will be made by the survey team to assist a facility/hospital meet the requirement of the readiness program both prior to the actual survey and after. Every survey will be different and therefore each issue can be addressed on a case by case basis. If a facility/hospital has any question or concerns regarding an unfavorable result of their survey, hospitals are welcomed to submit a written explanation of why they disagree with the decision and to request for a new panel of surveyors to conduct a second survey. The overall aim of the VPRP is to help every emergency department in the state be better prepared to treat and manage pediatric trauma/medical emergencies within their communities and so every effort will be made by the program to help each facility reach that goal.

APPLICATION FORM

Thank for your interest in participating in the Texas EMS for Children Voluntary Pediatric Readiness Program. In order to process your application, please complete the following form and forward this application to the [Texas EMS for Children State Partnership](#) office via one of the following methods:

Mail: 6621 Fannin Street, Suite A2210
Houston, TX 77030
Fax: 832-824-1182
Email: joseph.santos@bcm.edu

| | |
|----------------------------------|--|
| Name of Facility/Organization: | |
| Address: | |
| Texas License Number: | |
| Primary Contact Official: | |
| Email address for Official: | |
| Telephone/Fax: | |
| Level of Readiness Applying For: | <input type="checkbox"/> PEDIATRIC READY |
| | <input type="checkbox"/> PEDIATRIC CHAMPION |
| | <input type="checkbox"/> PEDIATRIC INNOVATOR |

PROGRAM LEVELS

PEDIATRIC READY

To meet the “Pediatric Ready” level of readiness, the facility **MUST** meet all the requirements under the “Pediatric Ready” list of items detailed in the checklist under the following headings:

1. Participation in the National Pediatric Readiness Project
2. Physicians, Nurses and Other Healthcare Providers Who Staff the ED
3. Guidelines for Improving Pediatric Patient Safety
4. Guidelines for Equipment, Supplies, and Medications for the Care of Pediatric Patients in the ED

PEDIATRIC CHAMPION

To meet the “Pediatric Champion” level of readiness, the facility **MUST** meet all the requirements under the “Pediatric Ready” check list AND the items under the following headings for “Pediatric Champion”:

1. Guidelines for Equipment, Supplies, and Medications for the Care of Pediatric Patients in the ED
2. Quality Improvement Initiatives

PEDIATRIC INNOVATOR

To meet the “Pediatric Innovator” level of readiness, the facility **MUST** meet all the requirements under the “Pediatric Ready” and “Pediatric Champion” checklists plus the items under the following headings for Pediatric Innovator:

1. Physicians, Nurses and Other Healthcare Providers Who Staff the ED
2. Guidelines for QI/PI in the ED