The Pediatric Practice Enhancement Project (PPEP) increases the capacity and quality of care for children with special healthcare needs (CSHCN). PPEP places trained Family Resource Specialists on-site in pediatric primary and specialty care practices to link families with community resources and specialty services, assist physicians in providing family-centered care, and identify barriers to comprehensive and coordinated care.

PPEP is a medical home initiative — services provided are comprehensive, coordinated, consistent, family centered, compassionate, and culturally sensitive. The Rhode Island Department of Health developed PPEP in 2003 to accomplish the Healthy People 2010’s Maternal & Child Health objective to increase the proportion of CSHCN who have access to a medical home.

Over 4,200 families have been served by PPEP to date. PPEP employs Family Resource Specialists (trained parents of CSHCN) across pediatric primary and specialty care sites in Rhode Island, including private, specialty sites, community health centers, and hospital-based clinics.

The overall goal of PPEP is to improve short and long-term health outcomes of CSHCN. Throughout its course PPEP has been evaluated on several levels with significant positive results.

**PPEP in Action**

Since its inception, PPEP has assured high-quality, culturally-effective, family-centered, community-based services. These services have significantly improved healthcare services for thousands of CSHCN and their families and addressed numerous system barriers. Program enrollment impacted:

**PATIENT PROBLEM RESOLUTION**

In a 2009 PPEP evaluation, 81% of the presenting problems were resolved. Many included long-term educational or behavioral health issues.

**COORDINATED CARE**

When care was coordinated through the PPEP model, CSHCN had fewer health care encounters than before care coordination occurred.

**LOWER INPATIENT UTILIZATION**

Inpatient utilization was 24% lower for PPEP participants compared to pre-PPEP and 34% lower compared to CSHCN in standard care.

**LOWER PATIENT COSTS**

Annual healthcare costs were 39% lower for PPEP participants compared to pre-PPEP and 27% lower compared to CSHCN in standard care.

**SUSTAINABILITY OF PPEP**

All participating sites have chosen to support the PPEP model, utilizing Family Resource Specialists to varying degrees to suit their individual site needs.

![Figure 1. Average Number of Health Care Encounters Per CSHCN](image)

**Figure 1. Average Annual Cost Per CSHCN**

- **Pre-PPEP**
  
  - Total Encounters: 17.08
  - Average Annual Cost: $23,842

- **PPEP**
  
  - Total Encounters: 13.42
  - Average Annual Cost: $14,593

- **Standard Care**
  
  - Total Encounters: 11.58
  - Average Annual Cost: $19,858
Project Highlights

PPEP utilizes a peer-to-peer model to link families with community resources and supports.

PPEP employs parents of CSHCN as Family Resource Specialists who have expertise in navigating complex healthcare systems as gained through their own experience and ongoing comprehensive training.

PPEP offers a cost effective alternative to professional care coordination that increases compliance, satisfaction, and utilization of lower cost healthcare.

Family Impact  
A survey of families that participated in PPEP from 2004-2007 revealed:

**REFERRALS:**
56% of families required referrals to specialty care for their CSHCN.
83% of families experienced minimal problems in getting a referral.

**MEDICAL CARE COORDINATION:**
52% of families reported receiving medical care coordination.
73% of families reported receiving as much help as they required.

**COMMUNICATION:**
80% of families were satisfied with the communication among primary and specialty care providers.
72% of families were satisfied with the communication among primary care and community providers.

**FAMILY PARTNERSHIP IN CARE:**
70% of families reported that their physician spends enough time with them.
80% of families reported that their physician had listened carefully to their concerns.
81% of families reported that their physicians were sensitive to their values and customs.
79% of families felt like a partner with the physician.

**LINKS WITH COMMUNITY:**
73% of families were assisted in accessing community services.
87% of families reported satisfaction with community supports.

Practice Impact

**Evaluation of practices engaged in the PPEP revealed:**

Pediatric practices are providing coordinated and comprehensive care to CSHCN with greater operational efficiency within the practice.

Pediatric practices have increased awareness and communication with available and appropriate community resources for their CSHCN.

Pediatric practices partner with families of CSHCN in decision making resulting in improved health outcomes.

Pediatric practices are participating in medical home initiatives such as developmental screening, mental health consultation, and adolescent transition.

**PROJECT PARTNERS**
Rhode Island Department of Health, Rhode Island Department of Human Services, Family Voices of Rhode Island, Rhode Island Parent Information Network, American Academy of Pediatrics, Neighborhood Health Plan of RI

**FOR MORE INFORMATION ON PPEP, CONTACT:**
Deborah Garneau, Chief, Office of Special Healthcare Needs
Rhode Island Department of Health
3 Capital Hill, Room 302, Providence, RI 02908
Phone: 401-222-5929, Fax: 401-222-1442
Email: Deborah.Garneau@health.ri.gov

**FOR MORE INFORMATION ON THE EVALUATION OF PPEP, CONTACT:**
Alvaro Tinajero, MD, MPH, SCM, Senior Epidemiologist
Rhode Island Department of Health
3 Capital Hill, Room 408, Providence, RI 02908
Phone: 401-222-7638, Fax: 401-222-1442
Email: alvaro.tinajero@health.ri.gov