



# Prescribed Pediatric Extended Care (PPEC): A value proposition

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# Children with medical complexities (CMC)

## I. Chronic medical conditions involving multiple subspecialists (ex. diagnosis):

**Table 1.** Chronic Conditions of children with medical complexities (CMC)

Cancer	Neurological Pathologies
Cerebral Palsy	Orthopedic conditions
Chronic Lung diseases	Oxygen Dependence
Congenital Anatomical malformations	Prematurity & complications
Congenital Cardiac anomalies	Perinatal conditions
Cystic Fibrosis	Post-acute Burn treatment
Eating or Metabolic disorders	Respiratory disorders
Enteral Feeding	Sickle Cell disease
Genetic diseases	Short Bowel syndrome
Head Trauma	Spina Bifida
Hemodialysis	Traumatic Brain Injury
HIV/AIDS	Ventilation Assistance

- II. Extreme functional limitations necessitating a high technology dependence
- III. Family identified or targeted case management healthcare service need
- IV. Elevated and disparate healthcare resource and utilization costs. (Cohen et al., 2011)



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(Wikipedia, 2021)

# Background

- ▶ CMC population/Health-related issue is increasing at a rate of 5%/yr. (Gallo et al., 2021).
- ▶ PCMH: every child deserves care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective (Allshouse et al., 2018).
- ▶ Survivorship (LBWB, NAS, medicines, technology)
- ▶ The challenges of complex care, system fragmentation, inadequate insurance coverage, and limits and barriers to access can lead to harmful and costly consequences for the entire health system (Raisanen et al., 2021).
- ▶ Lack of out-of-the-hospital interventions or solutions effects mortality, unmet medical needs, hospitalizations, and emergency department visits (Learner et al., 2017).



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(Wikipedia, 2021)



# Prescribed Pediatric Extended Care

- PPEC is, “a non-residential, child-focused and family-centred, pediatric medical day treatment facility prescribed by primary care provider.”
- PPEC provides an array of therapeutic interventions for children whose complex medical conditions require continuous skilled nursing.
- PPEC is an innovative mode of healthcare delivery for the child that is medically fragile and provides an important link in the continuum of care by providing complex care coordination, day health treatment, developmental interventions, and caregiver training.

(<http://www.lrc.state.KY.us/KAR/902/020/280.htm>)

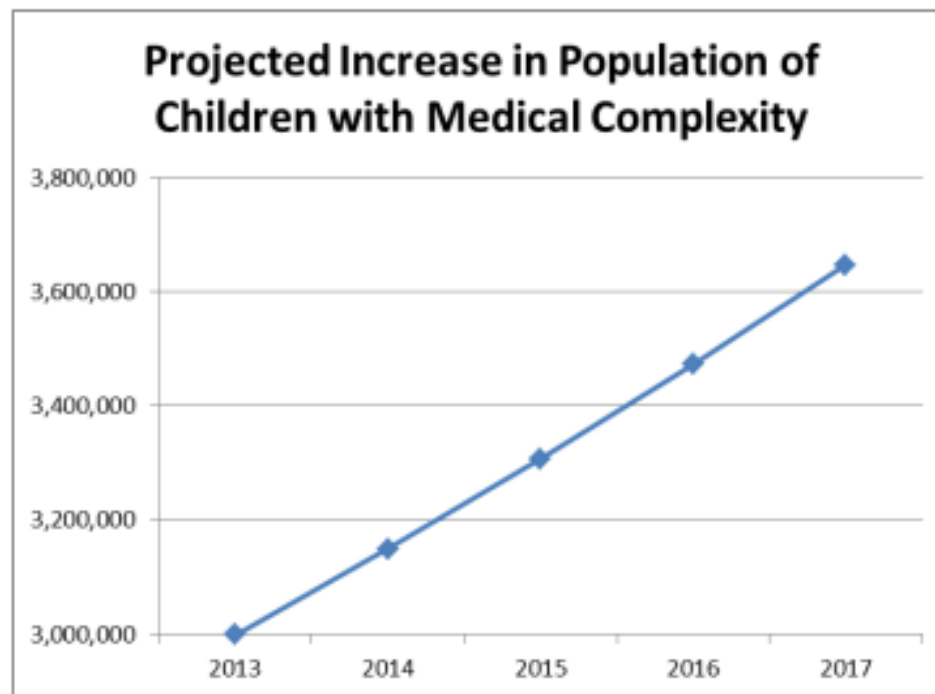


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*A White Paper prepared for  
Centers for Medicare and Medicaid Services*

## Children and Young Adults with Medical Complexity: Serving an Emerging Population



### GAPS IN SERVICES

In addition to the issues outlined in this paper, the Pediatric Complex Care Association has also identified the following gaps in services to this population:

- State by state disparities in home care services and in Early and Periodic Screening, Diagnostic and Treatment (EPSDT) service provision <sup>15</sup>
- Lack of community based programs such as Prescribed Pediatric Extended Care Centers (PPECC)

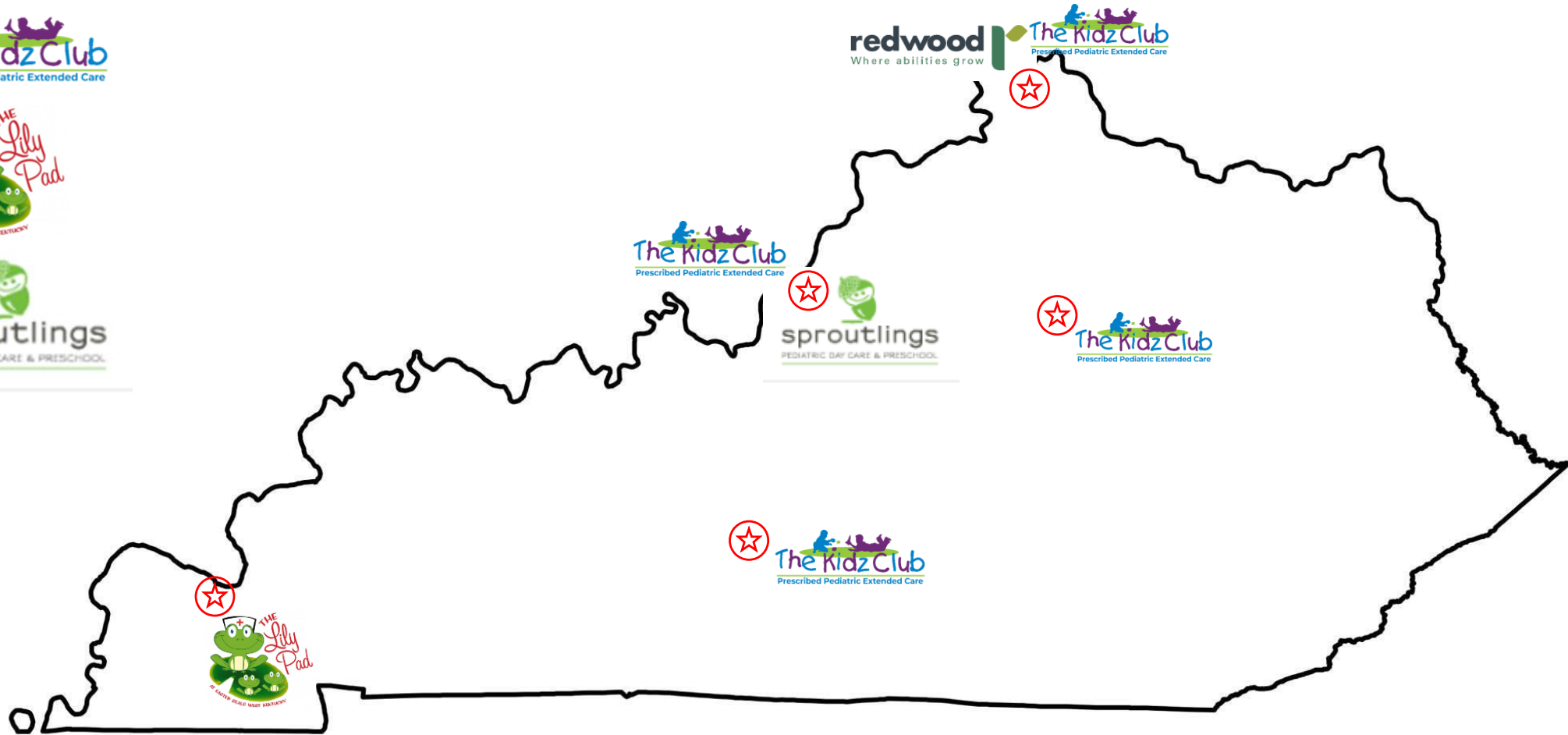
### Recommendations:

- Standard enforcement of EPSDT across the country
- Develop other community based services such as PPECCs nationwide

Table 3. PPEC standards of care

Alabama	Chapter 58A-13. Prescribed Pediatric Extended Care Centers (PPEC) <a href="https://ahca.myflorida.com/Medicaid/childhealthservices/ppec/index.shtml">https://ahca.myflorida.com/Medicaid/childhealthservices/ppec/index.shtml</a>
Delaware	Administrative Code: Title 16. Department of Health and Social Services. Division of Public Health. 4400 Health Systems Protection (HSP). 4409 Prescribed Pediatric Extended Care Centers (PPECC). <a href="https://regulations.delaware.gov/AdminCode/title16/Department">https://regulations.delaware.gov/AdminCode/title16/Department</a>
Florida	Chapter 58A-13. Prescribed Pediatric Extended Care Centers (PPEC). <a href="https://ahca.myflorida.com/Medicaid/childhealthservices/ppec/index.shtml">https://ahca.myflorida.com/Medicaid/childhealthservices/ppec/index.shtml</a>
Georgia	Chapter 58A-13. Prescribed Pediatric Extended Care Centers (PPEC). <a href="https://ahca.myflorida.com/Medicaid/childhealthservices/ppec/index.shtml">https://ahca.myflorida.com/Medicaid/childhealthservices/ppec/index.shtml</a> <a href="https://dch.georgia.gov/divisionsoffices/healthcare-facility-regulation/hfr-laws-regulations">https://dch.georgia.gov/divisionsoffices/healthcare-facility-regulation/hfr-laws-regulations</a>
Kentucky	902 KAR 20:280. Prescribed pediatric extended care centers. <a href="https://apps.legislature.ky.gov/law/kar/902/020/280.pdf">https://apps.legislature.ky.gov/law/kar/902/020/280.pdf</a>
Louisiana	Louisiana Department of Health and Hospitals, Health Standards Section - Chapter 52. Pediatric Day Health Care Facilities. <a href="https://ldh.la.gov/assets/medicaid/hss/docs/PDHC/Pediatric_Day_Health_Care_Regs.pdf">https://ldh.la.gov/assets/medicaid/hss/docs/PDHC/Pediatric_Day_Health_Care_Regs.pdf</a>
Minnesota	Minnesota Statutes Chapter 144H.01-.20 Prescribed Pediatric Extended Care Centers. <a href="https://www.health.state.mn.us/facilities/regulation/ppec/index.html">https://www.health.state.mn.us/facilities/regulation/ppec/index.html</a>
Mississippi	Mississippi State Department of Health Title 15. Health Facilities Part 16. Health Facilities Licensure and Certification SubPart1. Minimum Standards of Operation of Prescribed Pediatric Extended Care (PPEC) Centers Chapter 2. <a href="https://hhs.texas.gov/doing-business-hhs/provider-portals/long-term-care-providers/prescribed-pediatric-extended-care-centers/how-become-a-ppecc-provider">https://hhs.texas.gov/doing-business-hhs/provider-portals/long-term-care-providers/prescribed-pediatric-extended-care-centers/how-become-a-ppecc-provider</a> Health and Safety Code Title 4. Health Facilities Subtitle B. Licensing of Health Facilities Chapter 248A – Prescribed Pediatric Extended Care Center. <a href="https://statutes.capitol.texas.gov/Docs/HS/htm/HS.248A.htm">https://statutes.capitol.texas.gov/Docs/HS/htm/HS.248A.htm</a>
Pennsylvania	Department of Health. Division of Home Health. Title 35 P.S. Health and Safety, Ch. 1H -Prescribed Pediatric Extended Care Centers Act -449.61-449.77 (Nov. 24, 1999), P.L. 884, No. 54, Sections 1-18. <a href="https://www.health.pa.gov/topics/facilities/Pages/Pediatric.aspx">https://www.health.pa.gov/topics/facilities/Pages/Pediatric.aspx</a>
Tennessee	Bureau of Health Licensure and Regulation. Rules of Tennessee Department of Health Board for Licensing Health Care Facilities. Division of Health Care Facilities. Chapter 1200-08-02.01-.14 Standards for Prescribed Child Care Centers. <a href="https://sharetn.gov.tnsosfiles.com/sos/rules/1200/1200-08/1200-08.htm">https://sharetn.gov.tnsosfiles.com/sos/rules/1200/1200-08/1200-08.htm</a>
Texas	Texas Administrative Code. Title 26 Health and Human Services. Part 1 Health and Human Services Commission. Chapter 550.1-.1409 Licensing standards for Prescribed Pediatric Extended Care Centers. <a href="https://hhs.texas.gov/doing-business-hhs/provider-portals/long-term-care-providers/prescribed-pediatric-extended-care-centers-ppecc">https://hhs.texas.gov/doing-business-hhs/provider-portals/long-term-care-providers/prescribed-pediatric-extended-care-centers-ppecc</a> PPECC@hhsc.state.us.tx. or for licensure ppecc@dads.state.tx.us.
Virginia	HB 1719 passed the House 2/11/20 and the Senate 2/25/20. Commissioner of Social Services formed work group to report plan to the Governor and the Chairman of the House Committee on Health Welfare and Institutions and the Senate Committee on Health and Education by 11/01/2020. <a href="https://lis.virginia.gov/cgi-bin/legp604.exe?201+sum+HB1719">https://lis.virginia.gov/cgi-bin/legp604.exe?201+sum+HB1719</a>







## Prescribed Pediatric Extended Care



### Family Stability

- Poor Functioning (Family HRQoL)
- Stress/Burnout

### Cost

- ED Visits
- Family Strain

### Care Coordination

- Care burden
- Caregiver QoL



**Table 4.** Dependent Samples T-Tests Results

Dimension	Mean Admission Score	Mean Post PPEC Score	Mean Difference	Std. Deviation	t-value	Degrees of Freedom	Significance 2-sided p
Family Impact (FIM total)	55.05	73.08	18.04	19.16	-4.612	23	<.001
Parent Health Related Quality of Life	57.35	72.50	15.15	23.13	-3.21	23	.004
Family Functioning (FFS)	49.83	76.42	26.60	16.89	-7.72	23	<.001
Communication (CS)	59.03	70.14	11.11	28.94	-1.88	23	.073
Worry (WS)	52.29	71.67	19.38	24.60	-3.90	23	<.001

Summative FIM scores after PPEC intervention were significantly improved over those obtained prior to PPEC ( $p<.001$ ). The findings of this program evaluation project showed that total FIM scores positively increased from before receiving PPEC services ( $M=55.05$ ,  $SD=10.89$ ) to after >60 days of PPEC ( $M=73.08$ ,  $SD=16.29$ ).

## Stakeholders

- ▶ The Board/Shareholders
- ▶ Families/Parents/Caregivers, Future CMC
- ▶ Community (upstream solution), Healthcare
- ▶ MMCOs



# PPEC Funding

## Medicaid

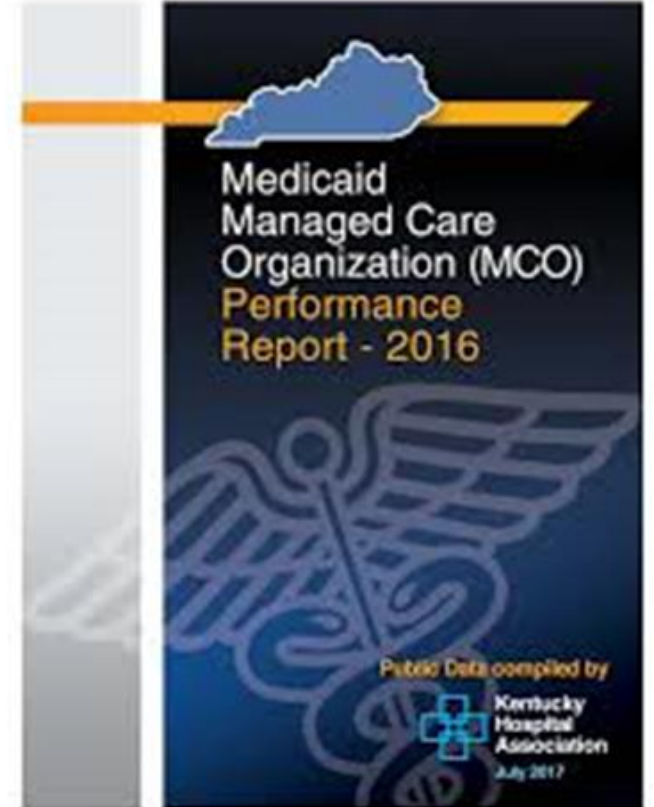


MEDICAID  
MANAGED CARE  
ORGANIZATIONS



### CHFS

Cabinet for Health and  
Family Services





## Key Recommendations:

**Problem:** Gap in Community-based programs or infrastructure for CMC such as PPEC in Commonwealth.

**Solution:** PPEC is an innovative, community-based, family-focused, patient-centered, non-residential, and cost-effective approach (12). Kentucky Medicaid's benefit package for children, Early and Periodic Screening Diagnostic and Treatment (EPSDT) supports PPEC services for all Kentucky children.

**Recommendation 1:** Implement PPEC as the infrastructure intervention for CMC to help control magnitude of healthcare expenditure and provide needed access to care.

**Recommendation 2:** Create system to ID and stratify the population through targeted Case Management. Use existing classification system: Pediatric Medical Complexity Algorithm (PMCA) from Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN).

**Recommendation 3:** Require PPEC admission for complex care coordination upon discharge from hospital care prior to ordering Private Duty Nursing (PDN) or Home Health (HH).





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