Missouri Department of Health and Senior Services: Rate Study for Prescribed Pediatric Extended Care Services

April 23, 2025

The State of Missouri (State) Department of Health and Senior Services (DHSS) contracted with Mercer Government Human Services Consulting (Mercer), part of Mercer Health & Benefits LLC, to perform a rate study on the Prescribed Pediatric Extended Care (PPEC) service. PPEC is a new Medicaid service that the State is adding to the Missouri State Plan. The following document provides a summary of the analysis conducted and outlines the results of the rate study.

Background

DHSS and the Missouri Department of Social Services (DSS), MO HealthNet Division (MHD) work closely with the Centers for Medicare & Medicaid Services (CMS) to administer federal programs that provide home and community-based services (HCBS) to seniors, individuals with disabilities, and other Missourians with special healthcare needs. By offering these services, DHSS aims to establish and maintain a community-based system of care and meet each individual's support needs. Within DHSS, the Division of Senior and Disability Services (DSDS) administers the Healthy Children and Youth program, Medicaid State Plan personal care, and six 1915(c) waivers that provide HCBS to seniors and individuals with disabilities.

One of the State's recent goals was to provide children with medical complexities the opportunity to thrive socially, emotionally, and medically by receiving coordinated care through an inclusive day program setting, as opposed to receiving one-on-one nursing in the home[1]. To achieve this goal, the State is implementing a new Medicaid State Plan service, PPEC, that will enable children ages zero to six years old with medical complexities to receive multidisciplinary care through a MO HealthNet-enrolled PPEC center. The PPEC center will obtain dual licensure and be overseen by both DHSS and the Department of Elementary and Secondary Education. The PPEC center will provide various services including skilled nursing services, personal care, physical therapy, speech therapy, and occupational therapy.

[1] PPEC program overview available at: https://health.mo.gov/seniors/pdf/ppec-snapshot.pdf

Effective August 28, 2024, Missouri amended the State statute by adding six new sections (192.2550 – 192.2560) related to PPEC. Missouri then issued three PPEC proposed rules on February 3, 2025 (19 CSR 30-110.010–110.030), which describe the PPEC licensure process and define the minimum requirements for the provision of care in PPEC facilities. PPEC providers must be licensed by August 28, 2025, to continue providing services after that date. MHD also recently filed a State Plan amendment with CMS to add PPEC as a Medicaid service.

Project Overview

Mercer initiated the PPEC rate study in December 2024 and completed the analysis and modeling work in March 2025. The rate study data sources and approach aligned with the broader HCBS rate study that Mercer conducted for DHSS in 2024[2]. Over the course of the PPEC project, Mercer met weekly with DSDS and MHD to ensure alignment of the rate study process with their expectations for service delivery.

DSDS, MHD, and Mercer engaged with stakeholders on PPEC in various ways including:

- DSDS held a PPEC virtual stakeholder meeting on January 30, 2025[3] to provide basic information about the new PPEC service and provider requirements
- Mercer reviewed provider-specific data from a DSS-administered private duty nursing (PDN) survey
- DSDS and MHD conducted outreach to and collected information on PPEC from industry stakeholders
- DSDS and Mercer facilitated a virtual stakeholder meeting on February 18, 2025[4] to explain the rate study process, share market data and cost component assumptions, present draft modeled rate ranges, answer questions, and collect feedback on the information presented
- DSDS collected written feedback after the February 18, 2025 stakeholder meeting and developed a question and answer document in response to the feedback that was submitted

Key Process Steps

The rate study process involved several key steps. First, Mercer obtained and reviewed proposed PPEC regulations, provider qualifications, and staffing requirements. Next, Mercer identified the following key cost components anticipated to be incurred by providers to deliver PPEC services:

- Wages for staff
- Employee related expenses (ERE) (e.g., health insurance, other employee benefits, employer taxes)

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[2] Broader DHSS HCBS rate study available at: https://health.mo.gov/seniors/hcbs/info-docs/rate-study-for-1915c.pdf

[3] PPEC slide deck available at: https://health.mo.gov/seniors/pdf/ppec-presentation.pdf

[4] Slide deck available at: https://health.mo.gov/seniors/hcbs/info-docs/ppec-february-18-rate-study-stakeholder-meeting.pdf

- Productivity (i.e., paid time off [PTO] and staff training time)
- Other service-related costs (e.g., square footage for program space, service-related supplies and equipment maintenance, costs for staff training sessions)
- Administration/overhead

To inform the pricing assumptions for each cost component, Mercer obtained and analyzed various data sources. These data sources included publicly available market data to align with CMS rate study expectations and Missouri provider-specific data including:

- Bureau of Labor Statistics (BLS) market data on wages and ERE
- Internal Revenue Service (IRS) data related to employer tax rates
- Missouri Department of Labor (DOL) and Department of Insurance (DOI) information on unemployment taxes and worker's compensation insurance
- DSS PDN survey data on licensed practical nurse (LPN) and registered nurse (RN) wages
- Feedback from industry stakeholders

Mercer projected a modeled rate range specific to the state fiscal year (SFY) 2026 rate study period (July 1, 2025 through June 30, 2026) to align with the time period of the broader DHSS HCBS rate study. The modeled rate ranges consist of a lower bound and upper bound rate, which provide a range of reasonable rates based on market conditions and stakeholder input.

Cost Component Assumptions

The assumptions used to generate the rate study modeled rate ranges are described below for each key cost component.

Wages

To develop the modeled wage ranges for PPEC staff, Mercer reviewed the job categories available in the most recent Missouri-specific BLS wage data publication (released in April 2024). Job positions were compared to the service definitions, provider qualifications, licensing requirements, and staffing requirements for PPEC staff. For most job positions, the 50th percentile BLS wage data was used to model the lower bound of the wage range and the 75th percentile BLS wage data was used to model the upper bound of the wage range. For the LPN and RN job positions, Mercer blended BLS LPN and RN wage data together with LPN and RN provider-specific wage data from a DSS PDN provider survey. Mercer applied an inflationary factor based on BLS wage trends to project the wage data to the SFY 2026 time period. The resulting SFY 2026 modeled wage ranges by job position are summarized in Table 1.

Table 1: Modeled Wage Ranges

Job Position	Projected SFY 2026 Wage Range (per hour)	
	Lower Bound	Upper Bound
Center Director	$24.18	$30.25
Certified Nursing Assistant/Certified Medical Technician	$19.35	$20.50
LPN	$32.47	$34.97
RN	$39.08	$42.93
Director of Nursing (DoN)	$51.01	$55.81
Speech Therapist	$42.84	$52.02
Occupational Therapist	$46.48	$53.15
Physical Therapist	$49.18	$55.75

Staffing Considerations

19 CSR 30-110.030 outlines various staffing requirements that PPEC centers need to meet. For example, the center must maintain at least minimum staffing ratios as outlined in 19 CSR 30-110.030(7), must provide access to multi-disciplinary services (e.g., therapy), and cannot staff the Center Director and DoN positions with the same person. After considering the requirements and discussing with DSDS and MHD, Mercer assumed the following when developing the modeled rate ranges:

- Assumed PPEC centers would be open and staffed 50 hours per week (i.e., 10 hours per day, Monday through Friday)
- Assumed the DoN would be on-site during all facility open hours (i.e., 50 hours per week)
- Assumed the facility would maintain at least the minimum staffing ratios outlined in the regulation
- Assumed each child receives one hour of therapy per day (could be physical therapy, occupational therapy, speech therapy, or some combination of these)
- Assumed the Center Director would have shared administrative duties (i.e., they would support facility operations for both PPEC and non-PPEC operations)

Note that the above assumptions were simply used for rate study purposes; each provider will need to determine how they will meet the State PPEC requirements, and these business decisions may differ from the assumptions above.

ERE

ERE assumptions were based on BLS market data for Missouri private sector employers in comparable industries, as well as information from the IRS, Missouri DOL, and Missouri DOI. Table 2 summarizes the assumptions for each ERE component that was considered in the rate study.

Table 2: ERE Assumptions

ERE Component	Assumption
Health Insurance	Roughly $7,000 per employee per year
Retirement Benefit	3% add-on to wages
Short-Term Disability /Long-Term Disability/Life Insurance	0.5% add-on to wages
Federal Insurance Contributions Act	7.65% add-on to wages
Federal Unemployment Tax Act and State Unemployment Tax Act	Roughly $280 per employee per year
Worker's Compensation Insurance	3% add-on to wages

Productivity

As part of a PPEC staff person's job, there are certain tasks that are considered non-billable (i.e., the employee is being paid by the provider but is not delivering services that can be billed as a Medicaid unit of service). The first component of productivity that was considered was PTO. This includes consideration for holidays, vacation, and sick time, and an assumption of 27 annual days of PTO was included. The second component of productivity is annual staff training time. Training time assumptions were based on the requirements outlined in 19 CSR 30-110.030(8). The rate study assumed that new PPEC staff received a minimum of 31 hours of training during their first year and 24 hours of training annually, thereafter.

Other Service-Related Costs and Administration/Overhead Expenses

Mercer considered other service-related costs that providers may incur to deliver PPEC such as program space square footage, service-related supplies and equipment maintenance, costs for staff training sessions, and other service-related costs necessary for service delivery. This cost component was assumed to be 8%.

Mercer also considered administration/overhead costs such as wages/salaries and ERE for administrative staff, payroll and claims processing functions, administrative building space costs (e.g., rent/mortgage, utilities, maintenance), costs for administrative staff travel not related to service delivery, office equipment and supplies, information technology, professional/liability insurance, State-required reporting, and other administrative costs necessary for program operations. This cost component was assumed to be 15%.

Modeled Rate Ranges

Mercer compiled the rate study assumptions described in this document to generate the SFY 2026 PPEC modeled rate ranges displayed in Table 3. Rate ranges were developed on both a per day (more than four hours) and per half-day (four hours or less) basis.

Table 3: SFY 2026 PPEC Modeled Rate Ranges

Procedure Code/Modifier	Unit Definition	SFY 2026 Modeled Rate Range	
		Lower Bound	Upper Bound
T1025	Full Day (more than four hours)	$403.06	$443.27
T1025 52	Half Day (four hours or less)	$201.53	$221.64

Limitations and Caveats

It is important to note that each provider's actual costs may differ from the individual assumptions utilized in the rate study; however, Mercer and the State believe the overall modeled rate ranges are reasonable based on service delivery requirements and current market conditions.

In preparing the assumptions and modeled rate ranges summarized in this document, Mercer considered publicly available market information, stakeholder data and feedback, and other information provided by DSDS and MHD. Mercer reviewed the data and information for consistency and reasonableness, but did not audit them. If the data or information are incomplete or inaccurate, the modeled rate ranges may need to be revised accordingly. Assumptions were developed based upon information available as of March 2025. Should additional information become available, the assumptions and modeled rate ranges may need to be updated accordingly.

All projection estimates are subject to unforeseen and random events. Therefore, any projection must be interpreted as having a likely range of variability from the estimates. Any estimate or projection may not be used or relied upon by any other party or for any other purpose than for which it was issued by Mercer. Mercer is not responsible for the consequences of any unauthorized use.

Assumptions and rates developed by Mercer are projections of future contingent events. Actual provider costs may differ from these projections. Mercer has developed these ranges on behalf of the State for purposes of the SFY 2026 rate study. Use of this information for any purpose beyond that stated may not be appropriate. This document should only be reviewed in its entirety.