

Official Title: Placement Success Predictor: Using Site-Customized Machine Learning Models to Predict the Best Level of Care Placement for Each Child's Behavioral Health Needs

NCT number: NCT06834763

Date: March 23, 2026

CHA EFFECTIVENESS STUDY

CHA (matched PSP vs unmatched PSP)

Primary Outcome Measure:

1. Mean difference on **average z-scores across raters** within two weeks on the Clinical Scale of the Treatment Outcome Package (TOP-CS) between a) the beginning of the study (between February and October 2025) and b) approximately 3 months later.

[Time Frame: At baseline and in 3 months]

- **2a. CHA Primary**
- Compare change scores in average z-score between Matched and Unmatched CHA clients for child and adolescent samples using independent samples t-tests with Cohen's d, and lmer with random intercepts for subjects and fixed effects for period, group, and their interaction to test whether the two groups differ in their baseline-to-endpoint change.

Secondary Outcome Measure:

2. Mean difference on average z-scores across raters within two weeks on the TOP-CS between a) the **PREDICTED** [i.e., risk-adjusted] scores at beginning of the study and b) the **ACTUAL** follow up scores approximately 3 months later. [NOW TOTAL SCORE]

[Time Frame: At baseline and in 3 months]

- **2b. CHA Secondary**
- Compare DIFF scores (TOTAL_ACTUAL – TOTAL_PREDICTED) between Matched and Unmatched CHA clients for child and adolescent samples using independent samples t-tests.
- Classify outcomes as Good (follow-up exceeded prediction) or Bad, then test the association between match status and outcome using chi-square tests with Yates' correction, reporting odds ratios.