RESEARCH BRIEF

Center for Human Services Research
University at Albany State University of New York

FAMILY OUTCOMES & MEDICAID RESEARCH BRIEF:

High Fidelity Wraparound Participation Significantly Reduces Residential Treatment Facility Spending

High Fidelity Wraparound (HFW) is a care coordination practice model designed for youth with complex mental health needs and their families. In part, HFW aims to provide effective services in children's homes and communities. Participation in HFW should thus reduce the need for intensive behavioral health services and out-of-home or institutional placements, which would result in decreased Medicaid claims and spending for residential treatment facility (RTF)[1] stays. **This Research Brief uses data from the New York State pilot implementation of HFW to examine differences in Medicaid utilization before versus after HFW enrollment, in comparison to a group of clients only enrolled in Health Homes Serving Children (HHSC), allowing for determination of outcomes specific to HFW participation.**

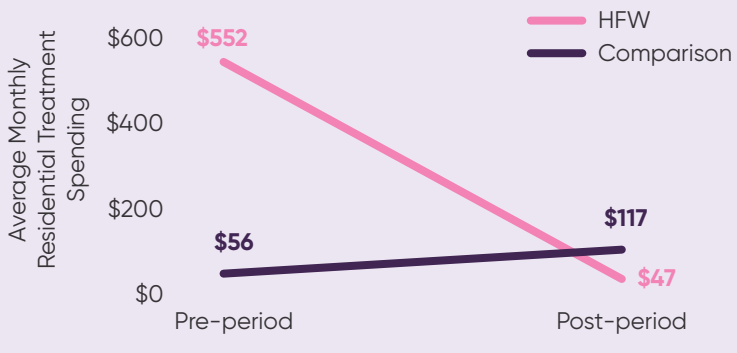
RESEARCH APPROACH

A total of 114 eligible HFW clients were identified. A Comparison group of 114 youth who enrolled in HHSC, but not HFW, in a similar time period was created by the OMH Office of Performance Measurement and Evaluation from Medicaid data using Propensity Score Matching. All clients had a six-month pre-period (either the six months prior to enrollment in HFW, or the first six months of HHSC enrollment) and at least a six-month post-period. Medicaid claims were analyzed on a per-person, per-month basis.

RESULTS

Generally, both groups showed decreased Medicaid spending over time, and HFW clients showed greater spending than the Comparison group. However, behavioral health-related residential treatment spending had a different pattern: HFW clients showed high pre-period but low post-period spending, whereas Comparison clients showed low pre-period spending and slightly elevated post-period spending[2] (see Figure 1). **As such, HFW clients showed a significant and specific spending decrease for behavioral health-related residential treatment spending.**

Figure 1. Behavioral health-related residential treatment spending decreased over time for HFW clients, but increased for the Comparison group.

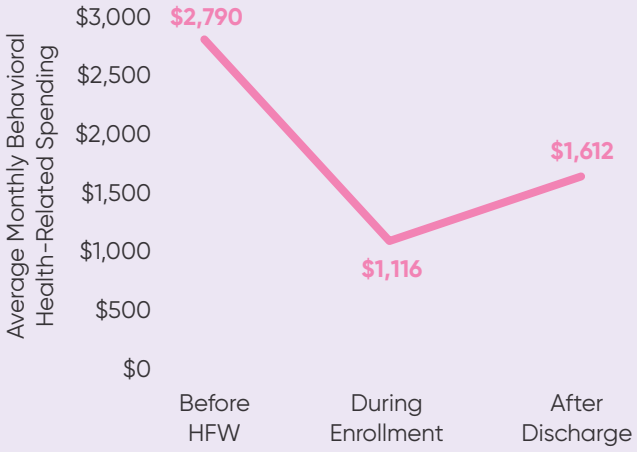


[1] Residential Treatment Facilities are here defined as OMH Community Residences, OMH Residential Treatment Facilities, OASAS Residential Redesign Part 820, and OASAS Residential Rehab for Youth services.
[2] 2x2 Repeated Measures ANOVA, main effect *ps*>0.1, interaction $F(1,226)=4.625$, $p=0.033$.

On an individual level, the number of HFW clients with post-period residential treatment spending decreased (from 7 to 3), but the number of Comparison clients increased (from 1 to 2). **The reduction in the number of youth with residential treatment spending is thus specific to HFW.** For these clients, monthly residential treatment costs averaged around $11,000; **this decreased usage thus represents substantial cost savings.**

Spending was also compared before HFW, during enrollment, and after discharge to determine the longer-term impact of participation. **Behavioral health-related spending declined significantly from Before HFW to During Enrollment and remained lower After Discharge** for the HFW clients with after discharge months available.[3] In particular, behavioral health-related outpatient, prescription, and emergency department spending showed significant decreases.

Figure 2. Behavioral health-related spending decreased during HFW enrollment, and remained lower after discharge than before enrollment.



SUMMARY AND CONCLUSIONS

Among other outcomes, HFW is hoped to decrease clients' need for high-intensity behavioral health services. These data support this goal, with only HFW clients demonstrating a significant decrease in monthly residential treatment spending and the number of clients with such spend, while the Comparison group showed increases. Though this result is based on a small number of clients, such a change still represents a meaningful decrease in overall Medicaid spending due to the high cost of such placements. Additionally, HFW clients' general behavioral health-related spending decreased from pre-period levels during HFW participation, and remained lower than pre-period averages even after discharge. **These results thus demonstrate a positive, specific effect of HFW on behavioral health-related spending and utilization after enrollment, and even after discharge, indicating immediate and longer-term benefits of participation in HFW.**

For more information on this work, please see the *New York State System of Care Year Four Report* (November 2020).

[3] N=59; 1x3 Repeated Measures ANOVA $F(2,116)=4.748$, $p=0.010$. Post-hoc paired-samples t-tests Before to During: $t(1,58)=3.166$, $p=0.002$; Before to After: $t(1,58)=1.747$, $p=0.086$.

About the Center for Human Services Research

The Center for Human Services Research (CHSR) is a research department at the University at Albany. CHSR has nearly 30 years of experience conducting evaluation research, designing information systems, and informing program and policy development for a broad range of agencies serving vulnerable populations. For more information about CHSR, please visit www.albany.edu/chsr

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