Service Use Implications of a Peer-Run Respite Program - Preliminary Findings
Human Services Research Institute, November 14, 2013

Peer-run respites may lower system costs through reductions in inpatient and emergency care. This analysis tested that hypothesis, examining whether inpatient and emergency service use differs for individuals who did and did not use the respite. Preliminary results indicate that people who used the respite were significantly less likely than similar non-respite users to use inpatient and emergency services.

Study Sample

141 individuals used the respite between May 2011 and June 2013. We used demographic, assessment, and service use data from the County to construct a comparison group and conduct the service use analysis. In this analysis, inpatient and emergency services include sub-acute, crisis, inpatient and locked services.

Propensity Score Matching

The propensity score matching method is commonly used in cases where a randomized control group is not available. It approximates randomization by generating a comparison group that is similar to the group that received the intervention in terms of characteristics identified as relevant to the analysis. We constructed the comparison group by matching each respite-user with the non-respite-user who is most similar with respect to the following characteristics: substance use diagnosis, axis 2 diagnosis, age, education, sex, and the prior use of employment, homelessness, care coordination, inpatient, jail, locked, low income, medication support, substance use, and sub-acute services. We assigned a match to 114 of the 141 respite users who had data on all of the matching characteristics, so the final analysis included 228 individuals. Although the two groups were comparable along multiple dimensions, those in the respite group were more likely to have voluntary legal status and less likely to be homeless or living in a board and care program during the study period.

Analysis and Results

We compared the likelihood of using inpatient and emergency services over a two-year period for the two groups using logistic regression to take into account individual characteristics such as age, sex, education, mental health functioning and service use. We found that staying at the respite reduces the odds of using inpatient or emergency services by 78%.

Limitations and Plans for Future Analysis

Sample size. These results, although promising, should be regarded as tentative and subject to change for two reasons. First, this analysis involved two years of service use data with a limited number of respite users. At the close of the evaluation, we will have access to five years of data with several hundred respite-users. Analyses will be repeated as numbers grow. Second, we are continuing to refine the models to make optimal use of the currently available data.

Data quality. Important demographic variables, including race and ethnicity, marital status, and employment status, were not included in the models because of a high number of missing values. In June of this year, the County underwent improvements to its data system. Hopefully future datasets will be of higher quality so that these important variables can be included.

Propensity score matching. The propensity score matching method carries significant limitations, chief among them the fact that propensity scores can only account for observed characteristics; unobserved characteristics that might influence decision to use respite services remain unaccounted for.

Alternative analytic approaches. For this early analysis, simple techniques were used to explore the program's impact on total inpatient and emergency service use. Although these analyses are cross-sectional, there is a time dimension to the data. We are currently working on building more complex models that will take timing into account.

Cost and cost-effectiveness. Because of the limitations outlined above, cost was not a focus of this particular analysis. However, future analyses will examine cost data alongside service use. Further, we may take program operating costs into account to gauge cost-effectiveness.

Conclusions

This analysis adds to the limited literature on the cost and service use implications of peer-run crisis service alternatives. The peer-run respite model is understudied. Although the methods used here carry significant limitations, these preliminary examinations provide a much-needed glimpse into the impact of this innovative program model. Findings suggest the peer-run respite model may be an effective alternative to traditional crisis services. Expanding the availability of the peer-run respite model in community mental health systems could lead to reductions in overall service costs, particularly through the decreases in the use of costly inpatient and emergency services. Respites may have the potential to reduce costs while also increasing meaningful choices for recovery and decreasing the mental health system's reliance on more coercive, less person-centered modes of service delivery.