RESEARCH BRIEF

The Effectiveness of Telehealth for Substance Use Disorder Treatment

Center for Practice TRANSFORMATION
University of Minnesota

NUWAY®

Leif Anderson, Jennifer Wiseman, MPS, LADC,
Tanya Freedland, MPS, LADC

Abstract

Does online therapy really work as well as in-person treatment? Research supports the effectiveness of telehealth for those seeking and accessing behavioral health services however, we know little about hybrid or mixed-modality delivery of mental health and substance use disorder treatment. The Center for Practice Transformation (CPT) at University of Minnesota and NUWAY® partnered to investigate telehealth as a service delivery model in substance use disorder treatment. Results indicate a blend of in-person and telehealth services may deliver a flexible and ultimately effective experience for people receiving care.

Background

The capacity to deliver services via telehealth has been around since the late 1950s[2], yet the primary modality for substance use disorder (SUD) treatment has been in-person. The COVID-19 pandemic forced many SUD providers to offer telehealth services which were previously underutilized and in Minnesota's case, prohibited. Prior to COVID-19, group services using telehealth were not eligible for reimbursement under Medicaid regulations. The pandemic offered the opportunity for providers to begin using telehealth to treat SUD in group and individual sessions. Research on the effectiveness of telehealth in SUD treatment is mixed. Some research shows that telehealth treatment provides flexibility however, there are studies showing in-person or hybrid treatment may be better than telehealth only[1]. One study[4] pointed out that technical difficulties, problems using or accessing technology, and reduced rapport between clinician and client may impact telehealth SUD treatment. These mixed results highlight the need for further research in this area, especially when it comes to SUD treatment programs.

This study was conducted as part of a larger study of outcomes at NUWAY®, a large non-profit organization in the Midwest serving individuals recovering from co-occurring mental health and substance use disorders. Due to the COVID-19 pandemic causing shifts in the modality used to deliver care from in-person services to telehealth, and a mix of the two, we had the opportunity to investigate telehealth as a treatment modality and its association with outcomes.

Methods

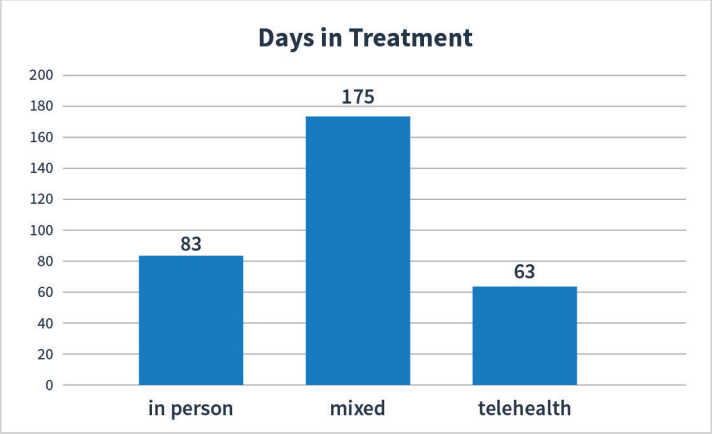
Clients receiving intensive outpatient services at NUWAY® were given the option to enroll in the study at the time of their admission. Electronic surveys completed at admission included demographic questions as well as measures of substance use, recovery capital, depression, and anxiety. At the time of their discharge, participants were invited to complete another survey including additional questions about their care and the above-mentioned measures. Research staff from CPT at the University of Minnesota distributed surveys upon client completion. Intake and discharge dates were used to determine whether a participant received services that were in-person only, telehealth only, or mixed modality, a combination of the two. Identifying information was removed for analysis to protect the privacy of participants.

Results

From August of 2019 to November of 2020, a total of 2,129 participants were enrolled in the project and of those participants, 529 completed surveys at the time of their discharge which were used for analysis comparing the three groups.

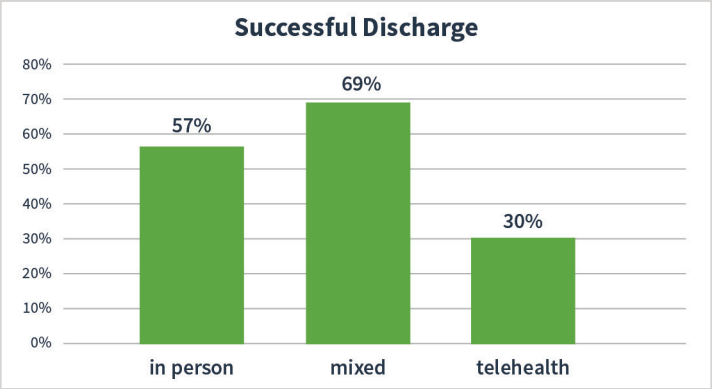
Mixed Modality Shows Promising Results

Analysis indicated participants in the mixed modality group were engaged in treatment for significantly more days than in-person or telehealth-only groups (X^2=203.46, p<.01). The mixed modality group was discharged with staff approval at higher percentages than the in-person and telehealth-only groups (X^2=53.13, p<.01). Participants in the mixed modality group reported a regular income at significantly higher levels than in-person or telehealth-only groups at discharge (X^2=9.66, p=.01). Managing money well was also higher in the mixed modality group at discharge than the other two groups (X^2=8.64, p=.01).



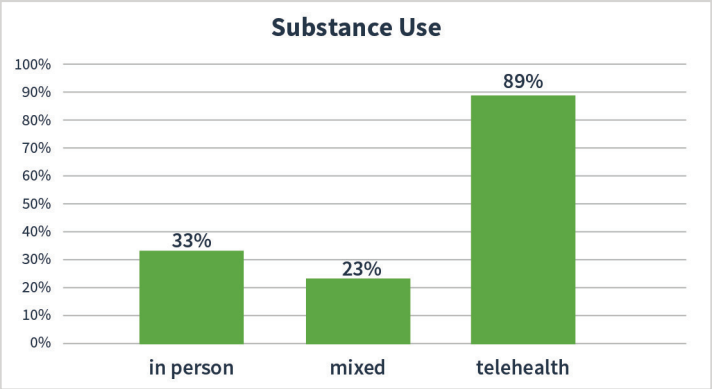
University of Minnesota – Twin Cities Campus
School of Social Work • College of Education and Human Development

612.626.9042 • PracticeTransformation@umn.edu
1404 Gortner Avenue, 170 Peters Hall, St. Paul, MN 55108



Telehealth Only May Be Less Effective

Participants who received only telehealth services had higher rates of substance use than the mixed modality or in-person groups (X^2=24.82, p<.01). Participants in the telehealth-only group were predicted to be 2.5 times more likely to engage in substance use compared to the in-person group (exp (0.915) = 2.489, p<.01).



Telehealth-only participants reported lower levels of self-care compared to those receiving in-person and mixed modality services (X^2=6.76, p=.03). Participants in the telehealth-only group reported fewer coping behaviors compared to only in-person or mixed modality groups (X^2=16.44, p<.01). The telehealth-only group rated recovery factors as less important to them than in-person and mixed modality groups (X^2=6.38, p=.04).

Participants in the only telehealth-only group tended to report higher levels of anxiety compared to the mixed modality group (X^2=4.73, p=.09). Telehealth only treatment participants also tended to report higher levels of depression compared to the mixed modality group (X^2=5.02, p=.08).

Areas with no Findings

There were no differences found between groups for positive relationships, material resources, and positive outlook on life outcomes.

Discussion

This study generates further clarity in our understanding of the benefits and drawbacks of telehealth. Poorer outcomes associated with providing services only via telehealth suggest that the absence of engaging with others in-person takes its toll on the well-being of people in intensive outpatient treatment. Treatment that doesn't involve some element of being physically present with counselors and peers may contribute to higher levels of substance use and symptoms. Positive outcomes observed among the mixed-modality group participants may be a result of the increased flexibility mixed-modality care affords people in intensive outpatient treatment. People who engage in programming remotely may have added time in their schedules to engage in activities needed to manage their lives outside of treatment. This added time may allow them to remain in care and complete the program successfully, rather than rushing through or leaving treatment early. Outcomes associated with managing money well and maintaining stable income perhaps add to the premise that the flexibility of the combination of in-person and telehealth services contribute to a person's ability to become or remain employed while also receiving care for their SUD. The drawbacks highlighted by poorer outcomes associated with receiving services only via telehealth and the benefits of mixed-modality suggest that providing multiple service delivery options is a viable and perhaps more effective approach. Intensive outpatient programs may consider adopting a mixed modality service model for SUD treatment moving forward.

Limitations

This study evaluating the association between outcomes and telehealth was possible because the COVID-19 pandemic required NUWAY to switch from in-person treatment to telehealth. Individuals in the in-person only group all received care prior to the COVID-19 response making it possible that a potentially detrimental effect of COVID-19 (e.g. increased anxiety, depression, outlook on life, etc.) on outcomes that had an impact on the other two groups that it did not have on the in-person group. However, the differences comparing in-person and mixed-modality groups were not statistically significant, which suggests that if there was a COVID-19 effect, mixed-modality treatment may be even more beneficial than what was observed in this study. This was not a randomized controlled trial and therefore we cannot say that the service delivery model caused outcome effects, only that there is a statistically significant association between them.

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SUGGESTED CITATION

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