



# Service Utilization in Addiction Treatment across In-Person, Telehealth, and Hybrid Treatment Models

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## Introduction

Telehealth services are increasingly incorporated into addiction treatment, despite little information on how modalities of treatment provision influence service utilization and clinical outcomes. More data is needed in this area.

## Methods

This project compared the demographic and clinical characteristics of patients being admitted/discharged when services were:

- In-person (2019)
- Telehealth (2020)
- Hybrid (2021)

across 4 outpatient substance use clinics in New York State using a retrospective, longitudinal cohort design.

### Statistical Methods:

- Chi-Square and Fischer's Exact Tests
- Wilcoxon Rank Sum tests

## Results

### Admissions

In Person  
N=1021

- Older patients ( $M = 42.6$  years)
- More Black/African American (21%) and Other/Multiracial (20.1%) patients
- More patients with a high school diploma (23.2%) or some college (21.8%)
- More patients receiving medication to treat alcohol and opioid use disorders (16.2%)
- More patients with prior treatment (50.6%)

Telehealth  
N = 576

- Younger patients ( $M = 40.8$  years)
- More White (64.1%) and Asian (4%) patients
- More patients with a Bachelor's Degree (20.8%)
- More unemployed patients (37.5%)
- More patients with co-existing psychiatric disorder (55.4%)

Hybrid  
N = 641

- Younger patients ( $M = 41$  years)
- More Asian (5.2%), Black (19.2%), and White (59.6%) patients
- More patients with post-secondary degrees (35.9%)
- More patients employed full-time (39.5%)
- More patients with a co-existing psychiatric disorder (54.9%)

### Discharges

In Person  
N=949

- More Black/African American (19.6%) and Other/Multiracial (21.9%) patients
- More patients with a high school diploma (21.6%) or some college (21.6%)
- More patients relocated (5.3%)

Telehealth  
N = 501

- More patients with less than a high school diploma (23%)
- More patients lost to contact (45%)

Hybrid  
N = 594

- More White (63.5%) and Asian (4.2%) patients
- Fewer Black (16.5%) and Other/Multiracial patients (15.8%)
- More patients with post-secondary degrees (36%)
- More patients who successfully completed treatment (22.7%) or who completed treatment to maximum benefit (15.3%)
- More patients who left against clinical advice and were referred elsewhere (15.3%)
- Longer length of stay ( $M = 154.5$  days)
- More individual therapy sessions ( $M = 26$ )
- More total treatment visits ( $M = 9$ )

Note: All results presented are statistically significant at  $p < .05$

## Conclusions

- In-Person services attract patients from more disadvantaged social and ethnorracial groups
- Services that incorporate Telehealth options attract patients who are from a higher socioeconomic status, have more psychiatric needs, and who are less likely to have previously received treatment
- Hybrid services are associated with the most clinical benefits and attract the most diverse patient population

## References

1. Cantor J, McBain RK, Kofner A, Hanson R, Stein BD, Yu H. Telehealth adoption by mental health and substance use disorder treatment facilities in the COVID-19 pandemic. *Psychiatr Serv.* 2021;73(3):411-417. doi:https://doi.org/10.1176/appi.ps.202100191
2. Sanders M, Mullaney T, Russell HA, Izzo K, Smith B. Pause, pivot and proceed: A before-after study to examine the impact of the COVID-19 pandemic on a community-based peer-recovery program for substance use disorder. *J Commun Healthc.* 2022;15(1):27-33. doi:10.1080/17538068.2021.2013054

# Resources

- Overall Design Recommendations:
  - <https://biorender.com/blog/top-5-tips-for-designing-a-scientific-poster>
  - <https://guides.nyu.edu/posters>
  - <http://www.personal.psu.edu/drs18/postershow/>
- Specific Design Tools:
  - Icons: <https://thenounproject.com>
  - Free Stock Photos: <https://unsplash.com/>
  - Color Palette Picker (if you don't want to use ASAM's): <https://colors.co/>
  - QR Code Generator: <https://www.qr-code-generator.com/>
- Printing (ASAM has not independently verified the quality of these printers)
  - <https://www.posterpresentations.com/>
  - <https://scientificposterprinting.com/>
  - <https://www.uptime.com/large-format-posters-printing.html>
  - <https://www.makesigns.com/products/scientific-posters>
  - <https://www.megaprint.com/research-posters.php>