

Patient Satisfaction With Medications for Opioid Use Disorder Treatment via Telemedicine: Development of a New Assessment

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INTRODUCTION

- Rural areas of the United States have been disproportionately impacted by the opioid crisis, with higher reported rates of non-medical opioid use and overdose compared to urban areas^{1,2}. From a treatment capacity perspective, rural areas often lack providers who have met the training and registration requirements to prescribe buprenorphine for treatment of opioid use disorder (OUD). This results in a lack of access to medications for opioid use disorder (MOUD), rendering these communities poorly equipped to treat individuals with OUD³.
- With clinical outcomes comparable to in-person encounters, telemedicine offers a viable solution to increase access to MOUD in areas with low provider density.⁴⁻⁶
- With direct impacts on abstinence⁷, retention^{8,9}, and treatment compliance, adherence, and engagement¹⁰, patient satisfaction is a strong determinant of OUD treatment outcomes. Yet little has been done to evaluate patient satisfaction in the frame of telemedicine for MOUD treatment.
- Here we present a novel survey based on an existing framework designed to assess patient satisfaction with telemedicine-based medications for opioid use disorder (tMOUD) and present pilot data acquired from patients engaged in rural tMOUD care.

METHODS

- We developed a 16-item survey with questions organized according to five thematic categories designed to evaluate satisfaction. Using thematic categories interpreted from previous published literature, we created a survey that assessed satisfaction with: (i) communication; (ii) privacy; (iii) patient perceptions; (iv) technology utilization; and (v) treatment access.
- Our anonymous survey was administered via touchscreen tablet and data were electronically recorded into a REDCap database.
- The scoring system utilized Likert scales with responses ranging from 0 to 4, with numbers corresponding to responses of “strongly disagree” (a score of 0) to “strongly agree” (a score of 4).
- Life's Energy Wellness Center, Inc. (LEWC Inc.), with three locations on Maryland's Eastern Shore, was utilized for the study setting to pilot this satisfaction instrument.
- Using a convenience sampling method, new clients enrolling into LEWC Inc.'s outpatient treatment program ($n = 14$) were asked to voluntarily complete the telemedicine satisfaction survey immediately after completing an initial consultation with a University of Maryland telemedicine provider.

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Telemedicine facilitates treatment with medications for opioid use disorder in rural areas; our survey provides a useful assessment of patient satisfaction with this modality.



SCAN ME

Patient Satisfaction Survey

- I could talk comfortably with the telemedicine doctor on the screen. (i)
 - I could see the telemedicine doctor on the screen really well. (iv)
 - I could hear the telemedicine doctor on the screen really well. (iv)
 - I was worried about others hearing me. (ii)
 - It was easy to talk with the telemedicine doctor over the screen. (i)
 - I could talk about my problem easily. (i)
 - I understood the recommendation and know what the telemedicine doctor wants me to do. (i)
 - I feel OK about the doctor's advice. (iii)
 - I think other people would like the telemedicine doctor on the screen. (iii)
 - I am willing to go back to this telemedicine doctor on the screen. (iii)
 - I think that getting help over the screen was as good as getting help in person. (iii)
 - I would not have received opioid treatment were it not for telemedicine doctor. (v)
 - The number of days waiting to see the telemedicine doctor for medication was reasonable. (v)
 - I feel the amount of time spent during my telemedicine doctor visit was appropriate for my treatment needs. (iii)
 - I felt like I was a part of decisions made related to my screen care. (i)
 - Following my initial assessment, I am satisfied with the amount of time it took for me to have an appointment with the telemedicine doctor. (v)
- Key to thematic categories: (i) Communication; (ii) Privacy; (iii) Patient Perceptions; (iv) Technology Utilization; (v) Treatment Access

Table 1: Patient Demographics

Baseline Characteristic (N=65)	N	%
Age at intake (years)		
Mean (+S.E.M.)	35.6 (+1.24)	
Range	19-66	
Gender		
Male	37	56.9
Female	28	43.1
Race		
White	50	76.9
Black	9	13.8
Other	4	6.2
Missing	2	3.1
Insurance Coverage		
Medicaid	61	93.8
Private	2	3.1
Self-Pay	2	3.1
Medication Type		
Buprenorphine	52	80
Naltrexone	13	20

Results

- Demographics of all patients receiving tMOUD at LEWC Inc are presented in Table 1 ($N = 65$). This population is predominantly White (76.9%) and male (56.9%), with a mean age of 35.6 years old (range= 19–66). Patients were more likely to have public insurance coverage (93.8%) and to be prescribed buprenorphine (80%) as compared to naltrexone (20%).
- A total of 14 new intake participants were approached, all of whom agreed to complete the tMOUD patient satisfaction survey.
- Findings:
 - (i) **Communication:** 100% of respondents agreed or strongly agreed with the following statements:
 - I could talk comfortably with the telemedicine doctor on the screen.
 - It was easy to talk with the telemedicine doctor over the screen.
 - I could talk about my problems easily.
 - I understood the recommendations and know what the telemedicine doctor wants me to do.
 - I felt like I was part of decisions made related to my care.
 - (ii) **Privacy:** 64% of respondents disagreed with the statement “I was worried about others hearing me.”
 - (iii) **Patient Perceptions:**
 - 93% of respondents agreed or strongly agreed with the statement “I feel OK about the doctor's advice.”
 - 86% of respondents agreed or strongly agreed with the statement “I think other people would like the telemedicine doctor on the screen.”
 - 100% of respondents agreed or strongly agreed with the statement “I am willing to go back to this telemedicine doctor on the screen.”
 - 93% of respondents agreed or strongly agreed “I think that getting help over the screen was as good as getting help in person.”
 - 100% of respondents agreed or strongly agreed with the statement “I feel the amount of time spent during my telemedicine doctor visit was appropriate for my treatment needs.”
 - (iv) **Technology Utilization:** 100% of respondents agreed or strongly agreed with the following statements:
 - I could see the telemedicine doctor on the screen really well.
 - I could hear the telemedicine doctor on the screen really well.
 - (v) **Treatment Access:**
 - 36% of respondents agreed or strongly agreed with the statement “I would not have received opioid treatment were it not for telemedicine doctor”, while 29% reported a neutral response to this question, and 21% respondents disagreed or strongly disagreed.
 - 71% of respondents agreed or strongly agreed with the statement “The number of days waiting to see the telemedicine doctor for medication was reasonable.”
 - 79% of respondents agreed or strongly agreed with the statement “Following my initial assessment, I am satisfied with the amount of time it took for me to have an appointment with the telemedicine doctor.”

Discussion

- Our survey provides a useful, quick assessment to measure tMOUD satisfaction
- Preliminary findings showed an overall positive experience with tMOUD
- In light of the pressing need for innovative and technology-driven solutions to the opioid epidemic (especially in light of the COVID-19 pandemic), future research should focus on the development and refinement of tools to assess the important implementation goal of patient satisfaction