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## “How can I hug someone now [over the phone]?”: Impacts of COVID-19 on peer recovery specialists and clients in substance use treatment

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### ABSTRACT

**Introduction:** The COVID-19 pandemic has disproportionately affected underserved, low-income, ethnoracial minority communities, as well as those with substance use disorders (SUDs). The workforce of peer recovery specialists (PRSs), individuals with lived substance use and recovery experience, has rapidly expanded in response to a shortage of access to substance use treatment, particularly for those from underserved communities. As PRSs are likely serving individuals disproportionately affected by the pandemic, it is important to understand how COVID-19 has affected the PRS role and the individuals with SUD who they are supporting.

**Method:** This study aimed to examine: (1) the impact of COVID-19 on the PRS role and experience, (2) the impact of COVID-19 on clients in or seeking SUD treatment, (3) facilitators for clients engaging in treatment and adapting to new changes, and (4) sustainability of new treatment methods post-pandemic.

**Results:** Findings suggest that PRSs have had to adapt their role and responsibilities to meet changing client needs; however, PRS strengths, such as their shared experience and expertise navigating treatment barriers, make them uniquely suited to assist clients during the pandemic. The study identified various barriers and facilitators to clients seeking treatment or living with SUD, such as the loss of interpersonal connection. PRSs also identified some drawbacks to utilizing telehealth, but identified this as a potentially sustainable approach to delivering care after the pandemic.

**Conclusion:** Future research could explore how challenges to fulfilling the PRS role, as well as adaptations to overcome these challenges, have changed over time.

### 1. Introduction

Increased access to evidence-based treatment for substance use disorder (SUD) has been a longstanding need that has only been exacerbated by the COVID-19 pandemic. For instance, in 2018, 18.9 million people with SUDs did not access care (SAMHSA, 2019). Past epidemics and the current pandemic show that people living with SUD face disproportionate effects, in comparison to non-substance using counterparts, and ethnoracial minority individuals with SUD in particular are disproportionately affected (Wang et al., 2021). Additionally, prior epidemics have been associated with increases in substance use rates. For instance, following the 2003 severe acute respiratory syndrome (SARS) epidemic, greater levels of alcohol use disorder symptoms were reported in individuals with greater exposure to the epidemic (i.e., hospital

workers who had been quarantined or those working in high-risk settings; Wu et al., 2008). Growing evidence indicates that COVID-19 is linked to an increase in SUD (Mallet et al., 2020). Moreover, research has observed a significant increase in rates of opioid overdoses since March 2020 (Ahmad et al., 2021; Alter & Yeager, 2020; Slavova et al., 2020), underscoring the vast treatment needs of people with SUD since the emergence of COVID-19.

Evidence also suggests that people with diagnosed SUD are disproportionately impacted by multiple facets of the COVID-19 pandemic. A retrospective chart review of more than 73 million unique patients indicated that individuals with an SUD diagnosis within the last year were more likely to have contracted COVID-19 than those without a recent history of SUD (Wang et al., 2021). Indeed, it is evident that communities of color have experienced disproportionate, devastating

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effects and risk of COVID-19, including Latinx, Asian American and Pacific Islanders (AAPI), Native American, and Black communities (Centers for Disease Control and Prevention, 2021). Likely due to various risk factors associated with race—such as SUD and general health care access and quality discrepancies—racial disparities in COVID-19 outcomes have also been found among patients with SUD histories (Wang et al., 2021); African American/Black individuals with SUD are more likely to contract COVID-19 than their White counterparts. Additionally, mortality and hospitalization rates were higher among African American/Black individuals with SUD who were positive for the virus compared to White substance users who tested positive (Wang et al., 2021). Thus, COVID-19 has exacerbated disparities among historically marginalized communities, potentially worsening the pre-existing lack of access to adequate SUD treatment and other quality health care services (Shah et al., 2020). These findings highlight a salient need to provide high-quality substance use recovery services during the COVID-19 pandemic and to increase access to care in the future to mitigate these concerns.

One promising approach to expand access to care is the increased utilization of peer recovery specialists (PRSS) in treatment settings. A PRS is an individual with lived substance use experience who brings their lived experience into their work with clients with SUD, and is trained to provide linkage to care and other services (e.g., motivational interviewing). Since the mid-2000s, PRSS' work has rapidly expanded in an effort to increase access to SUD treatment, particularly for low-income, ethnoracial minority individuals (Bassuk et al., 2016). PRSS are particularly well-suited to reach these individuals as PRS-delivered services may be less stigmatizing (Jack et al., 2018) and contribute to lower utilization of costly, preventable health care services (Magidson et al., 2020). Research has shown that individuals who work with PRSS experience significant clinical benefit, including improved relationships with treatment providers, reduced substance use, and increased treatment retention in, and satisfaction with, substance use care (Eddie et al., 2019). Because PRSS often work with low-income, ethnoracial minority individuals who are more likely to be burdened by a lack of access to SUD and COVID-19 treatment and resources, understanding how the pandemic has affected PRSS work with their underserved clients is important. Whereas key stakeholder input has indicated a patient need for treatment flexibility in the past (Satinsky et al., 2020), patients' needs may be evolving during COVID-19 and require innovative techniques to address these changes.

The current qualitative study focused on the experiences of PRSS working in the field of recovery with low-income, predominantly minority individuals during the global COVID-19 pandemic. The goals of this research were to examine: (1) the impact of COVID-19 on the PRS role and experience, (2) the impacts and barriers of COVID-19 on clients in or seeking SUD treatment from the PRS perspective, (3) facilitators for clients engaging in treatment and adapting to new changes, and (4) sustainability of new methods after returning to post-pandemic life.

## 2. Methods

### 2.1. Recruitment

The Michigan State University IRB reviewed and approved all study procedures prior to recruitment. In line with COVID-19-related research restrictions implemented by participating academic institutions, the study completed all research activities, including recruitment and interviews, virtually. The study team circulated recruitment information through partner organizations that employ PRSS in five diverse locations: Detroit, Grand Rapids, Baltimore, Washington DC, and New Jersey. Nineteen interested PRSS contacted researchers via email or phone and we then scheduled them for a qualitative interview to be conducted virtually using Zoom; of these, 15 completed interviews. PRSS self-reported their work role and age to meet inclusion criteria (i.e., working in a PRS role and older than 18 years old). At the conclusion of these

interviews, study staff asked PRSS if they would be interested in sharing information about the study opportunity to others in their PRS network that might want to participate. In addition to certified PRSS, the study recruited non-certified PRSS to reflect the variety of roles that individuals with lived experiences have in organizations focused on substance use recovery services. Participants' roles ranged from certified PRSS, PRS supervisors, and non-certified PRS educators, outreach workers, and resource providers. We present participant demographic data in Table 1. The study team conducted all interviews from April to October 2020. The study conducted interview transcription in real time to be able to assess saturation; as recommended in qualitative research, the study team conducted interviews until it reached theoretical saturation (Pope & Mays, 2006).

### 2.2. Qualitative procedures

The research team developed a semi-structured, qualitative interview guide to solicit feedback on the impact of COVID-19 on PRSS delivering treatment services, including novel barriers and challenges that arose from the sudden switch to telehealth. The study asked all participants the same core 15 questions, unless certain questions did not apply (e.g., asking a PRS who worked in-person throughout the pandemic about their experience using teleservices with clients). The interview guide included optional probes, with instructions for interviewers to ask probing questions if a participant did not provide substantive answers and/or already answered the probing questions in their initial response. For example, the study asked all participants, "How has your work changed during the restrictions that have been put in place during the pandemic?" and one potential probe for this question was: "How are you meeting with clients, if at all?" Interviewers had liberty to ask additional probing questions if a topic related to the study aims, though not covered in the interview guide, arose. Colleagues from partner agencies in Detroit, MI, and Baltimore, MD, provided feedback on the interview guide, and the study asked and adjusted questions to reflect partner input. Following adaptation, the study team piloted the interview guide with a certified PRS from Baltimore to identify further areas for improvement. The research team implemented collaborating with partner agencies and piloting with PRS feedback in line with community-engaged research approaches (Ahmed & Palermo, 2010).

Two post-baccalaureate research assistants (RAs) conducted semi-structured interviews over Zoom with PRSS in Michigan and the Mid-Atlantic region (Maryland, New Jersey, and Washington, DC). Participants provided verbal consent before interviews began. Interviews lasted approximately 1 h, and participants received \$25 gift cards for their

**Table 1**  
Demographic data.

	n (%)
Race	
Black or African American	10 (66.67%)
White	5 (33.33%)
Hispanic or Latinx	1 (6.67%)
Gender	
Cisgender male	8 (53.33%)
Cisgender female	5 (33.33%)
Transgender female	2 (13.33%)
Mean age (SD)	49.85 (12.42)
Occupation setting	
Hospital	3 (20%)
Inpatient/residential	3 (20%)
Community/OTP organization	5 (33.33%)
PRS supervisor	1 (6.67%)
Other <sup>a</sup>	3 (20%)
Mean years working as PRS (SD) <sup>b</sup>	4.30 (3.30)

<sup>a</sup> Non-certified PRS educators, outreach workers and resource providers.

<sup>b</sup> Did not have data for two participants.

time. During interviews, the interviewer turned off video to decrease nonverbal communication. The study recorded all interviews and a research assistant transcribed them.

### 2.3. Analysis

The current rapid qualitative analysis approach followed the work of Gale et al. (2019), who found that qualitative results from a rapid analysis, specifically themes identified, were consistent with those obtained from an in-depth analysis. Rapid coding, in this case, also has the advantage of allowing us to disseminate our methods in a timely way to yield greater, real-world, clinical impacts regarding the needs of peer recovery coaches during the pandemic. Whereas in-depth coding requires line-by-line coding of each interview, the current rapid qualitative analysis methods aimed to identify main themes and higher-level takeaways from each participant speaking turn. Prior to interview coding, the coding team iteratively developed a master codebook; the team consisted of a doctorate-level clinical psychologist and three RAs (two post-baccalaureate, one undergraduate), who used Excel based on themes and subthemes that arose in interviews, as perceived by interviewers and transcribers, following an inductive approach. The group discussed new themes and subthemes and added them to the codebook as needed as new concepts arose throughout the coding process (Boyatzis, 1998). One of two RAs each coded all interviews in individual Excel documents following this codebook format, and a third RA reviewed all coded interviews, making additional codes and changes to existing codes as needed. Thus, all interviews were coded by one RA and reviewed by a different RA. The coding team met weekly to discuss findings and address any questions or discrepancies, by consensus with group discussion, with a specific focus on addressing any potential biases.

## 3. Results

Participants identified primarily as male (53.33%), Black or African American (66.67%), and had a mean age of 49.85 (SD = 12.42). The research team identified four themes related to the study's primary aims; related to Aim 1, participants identified various changes in their roles and responsibilities, such as an increase in helping clients fulfill their basic necessities. Additionally, related to Aim 2, participants identified challenges to fulfilling the PRS role and for clients in or seeking SUD treatment, such as a loss of interpersonal connection and technological issues. However, related to Aim 3, participants also identified ways in which PRSs training, as well as qualities unique to the PRS role, prepared them to help clients during this time. Last, related to Aim 4, participants discussed the sustainability of COVID-19 procedures and resources.

### 3.1. Changes to PRS role/responsibilities

To address the needs of their clients, PRSs noted that they have adapted their roles and responsibilities. Multiple PRSs expressed that this has caused them to go out into the community more often, whereas their clients typically came to them prior to the pandemic:

*"I would say it's changed—it's actually caused me to be in the field more. All because most people are not coming out. [I] want to make sure that they have the necessary needs or the necessary essentials. And so, I've been doing a lot of grocery drop offs. I've been doing a lot of pick up. I'm still picking people up, getting them to appointments. Like this morning, I took a young guy to get tested for the COVID-19. So, it's causing me to be out more than usual. Usually, I'd be in the office, and they would come to me. But now, I'm going to them."*

[Certified PRS, community/OTP organization]

Other PRSs noted that in response to a change in their clients' needs,

they have found themselves connecting their clients with more resources for basic necessities (e.g., food banks, applying for SSI services, etc.). For example, one PRS [Certified PRS, community/OTP organization] stated: *"I tried to implement a little bit more of things that are necessities right now. Trying to make sure that we have them set up with all the necessary outreaches that they may need. Programs if they need assistance, you know, that they may be lacking and not have. Trying to get them implemented ... if their insurance was about to lapse or things such as that."*

Additionally, multiple PRSs noted that they made themselves more available to their clients in response to a perceived increase in substance use and negative substance use outcomes within their communities during the pandemic. One PRS supervisor noted a policy change that they enacted in response to this observation: *"and my PRSs are doing a lot more follow up with patients, I've extended the length of the follow up and the frequency of follow up."* Another PRS [Certified PRS, community/OTP organization] described the great lengths that they had gone to make sure their clients felt supported during this time:

*"We know at this time relapse has skyrocketed. Due to this pandemic, I think liquor stores are probably selling more liquor than they ever sold. So, you want to keep in contact by phone. I'm constantly checking in on them, seeing if everything is okay. I'm just reminding them if they find themselves in a tough spot, you can reach out and call me. All my participants have my phone number, they have permission to call me 24 hours a day, whenever, whatever time they need."*

### 3.2. Loss of interpersonal connection

With the transition to primarily virtual services, a majority of participants noted that they had experienced and witnessed a decrease in interpersonal connection between themselves and their clients, as well as their clients and their recovery networks. PRSs described that in-person treatment and/or meetings included more than the intervention itself, such as time spent talking before or after treatment meetings, hugs and physical touch, and other forms of support that bred invaluable interpersonal connection. Exemplifying the importance of in-person support, one PRS explained:

*"How can I hug a person now [over the phone]? One of the greatest things about recovery support services is the support. And most of the time, support is just giving a person a hug, or giving them a shoulder to lean on, being able to go out and take them to appointments and talk with them while they're out. So, you're giving them a sense of norm. And so that's been taken from them, so it makes it hard, makes it hard to hear it."*

[Certified PRS, community/OTP organization]

Other participants echoed the sentiment that support communicated via physical touch was lost over the phone/video conference, stating that *"even if it's just putting your hand on your shoulder, or something, a lot of people, more people in early recovery, need that human touch, I think they need that hug"* [Certified PRS, hospital]. Multiple participants highlighted that this loss was particularly harmful for those in early recovery.

PRSs also pointed out that building interpersonal connections with a support network in early recovery is vital, though not easy to replicate virtually: *"the sudden and complete shutting down of all the various recovery fellowship, physical meetings. That was a huge impact. Many people in early recovery rely on that networking as their lifeline"* [Certified PRS, community/OTP organization]. Another PRS noted that building an in-person recovery network was vital in their own early recovery and expressed concern about what treatment/recovery will look like for those without this opportunity:

*"Around the time that I got clean, 18 years ago, I come through Narcotics Anonymous and Alcohol Anonymous. And that time, it helped build my foundation, it was very important to come in and fellowship with these people and receive handshakes and hugs and be a part of that network."*

*Now, because of the pandemic, they doing all of this online. So, I don't know how effective that is. If somebody can't walk into a building and get the support that they need, I don't, you know, I mean, it's a different kind of counseling session, it's a different kind of therapy."*

[Certified PRS, hospital]

The importance of a recovery network, encompassing interpersonal connection, was similarly described by another PRS [Certified PRS, hospital], who noted the existence of "meetings before the meeting" and "meetings after the meeting" in Narcotics Anonymous, in which attendees would have the ability to talk one-on-one and make themselves available to support others through hardships. This PRS went on to explain how this was lost after transitioning to video conference:

*"I talked to someone yesterday and we were talking about just, you know, 70% of what we get out of the meeting, or that's just an average, maybe 60 to 70% can be done through zoom. But the other 40% that's very pertinent and very important, is just a human interaction, one person and another. Those conversations and things of that nature, just a hug sometimes, you know, and we're not able to do that."*

One PRS [Certified PRS, hospital] noted that in addition to not being able to offer clients the same support and foster interpersonal connection over the phone, they had lost their ability to gauge their clients' intentions and readiness for change: "so, it's been really, really difficult to try to judge somebody's intention or their stage of change. So that has been really difficult. I can't really tell through their facial expressions through the phone, where I can't read them through the phone."

### 3.3. Technological challenges and resistance to technology

Beyond a loss of interpersonal connection, PRSs described a variety of challenges that they had encountered with engaging clients virtually. A number of PRSs noted that some of their clients lacked regular access to technology and that the switch to only delivering services and holding Narcotics Anonymous (NA)/Alcoholics Anonymous (AA) meetings online was excluding this group from receiving treatment. One PRS stated:

*"This sudden, instantaneous, overnight transition to Zoom presents technology issues for many of our lower financial echelon clients that literally are walking around with the TracFone that isn't paid- that only has access, you know, to voice and text when they're on Wi-Fi, you know, or whatever the case might be. And those people are not necessarily able to jump right on to Zoom meetings, whereas they might be able to wander into an AA or NA clubhouse or a church for a meeting. So, the lack of that was a huge thing—recovery support meetings being shut down."*

[Certified PRS, community/OTP organization]

While a lack of access to technology may widen the pre-existing treatment gap for clients with limited resources, PRSs emphasized a resistance to transitioning to virtual meetings/telehealth from clients who did have the necessary technology. One PRS [Certified PRS, community/OTP organization] explained that some clients resisted using the technology because they "[are] frustrated and don't want to know, some struggle with it trying to learn; they may have a few barriers that they face in trying to learn it."

Another PRS attributed a decrease in participation to web conferencing being less engaging than in-person meetings:

*"We will hold meetings on Zoom for the recoverees in the house so they can get some meeting attendance, and it's almost like they didn't want to do it. They would like [to] be on their phones and stuff and weren't really motivated. You lose a lot of motivation and get discouraged because, one, you're stuck in the house all day and night. That's what really hurts, is being stuck in the house."*

[Certified PRS, inpatient setting]

Therefore, PRS participants perceived that operating virtually is not engaging or working well for a variety of clients, regardless of whether clients have access to technology or are technologically literate.

### 3.4. Other challenges to the PRS role

In addition to technological challenges, PRSs reported experiencing several other novel challenges amid the pandemic, including a decrease in their ability to connect their clients with resources that they had once commonly used (e.g., food banks, clothing drives, etc.) due to resource center closures. PRSs also emphasized that it was difficult to enroll clients in treatment programs for an array of reasons, including, but not limited to: full facility closure, a halt in accepting new patients, selectivity in acceptance due to COVID-19, and an influx in admittance requirements. Multiple PRSs explained that while treatment facilities had enacted COVID-19 safety precautions, such as requiring individuals to get tested, their clients found it uniquely difficult to meet these requirements due to limited access to health care and homelessness. Another PRS noted that these requirements often prevented them from connecting their clients to treatment centers when they were ready and willing to enter treatment:

*"... Because the window of opportunity to get somebody in treatment sometime[s] can be so small ... And by the time all the situations are, a phone call, the interview, the person, you got to call, which is regular, but there have been instances where they're like, 'well they need to do something for the next 14 days and then they can call back.' We've not had the person, or unable to locate the persons."*

[Certified PRS, PRS supervisor]

### 3.5. PRS training and qualities that made PRSs a unique source of support for clients during the COVID-19 pandemic

While PRSs encountered new logistical challenges as a result of the pandemic that could not have been predicted during their training, they also noted that their training had prepared them to be flexible, how to best support their clients (e.g., be their cheerleader, decrease barriers to treatment), and about common therapeutic factors (e.g., empathy, understanding, being nonjudgmental). According to participants, these skills allowed them to continue to adapt and assist their clients, as they had an understanding of "the importance of embracing all pathways to recovery and meeting the client where they are at" [Certified PRS, community/OTP organization]. PRSs emphasized that their training, in particular, allowed them to meet their clients' unique needs during the pandemic:

*"So those trainings for me, and I, again, I as a PRS, taking the trainings has helped a lot because it shows that one of the things that you learn in CCAR<sup>1</sup> is just being a motivator, to empower your participant, to be a cheerleader. Also to be a resource broker is one of the tools that we use, one of the skills that we learn, being a resource broker, and just removing or penetrating barrier. So, advocacy is a big thing with PRSs. So those skills that we ... learned in training and been able to perfect as we do the work has been very essential in this whole pandemic."*

[Certified PRS, hospital]

While a majority of PRSs noted that their training did indeed teach them skills they could apply to the pandemic, one PRS [Certified PRS, inpatient setting] disagreed and said that their depth of experience in the field trumped any training they had received and allowed them to remain flexible during this time. Another PRS [Certified PRS, hospital] noted that their training focused heavily on "human to human contact,"

<sup>1</sup> Connecticut Community for Addiction Recovery training program.

which did not prepare them for a situation like the pandemic, where all contact was virtual.

Participants regarded the qualities and strengths of their unique PRS role as vital assets that they utilized to support clients during the pandemic. PRSs were able to “bridge the gap” across barriers that clients commonly faced, and were resilient and flexible. Participants identified these qualities as being a product of their shared, lived experience, with one participant [Non-certified PRS, community organization] stating that they “*understand barriers that someone else wouldn't understand,*” which enabled them to get ahead of any potential issues their clients may face and solve them. Another participant described the resilience they had acquired throughout their history with substance use as being a strong asset for them during the pandemic:

*“I think resilience, showing that resilience: no matter what, we can get through this. We've gotten through worse, you know? In this [pandemic], at least we have some guidelines here. And if we got this far, we can do it and never give up. I think that the fact that you're not alone.”*

[Certified PRS, PRS supervisor]

### 3.6. Sustainability of COVID-19-related procedures and resources

While participants identified a clear loss of interpersonal connection by meeting virtually, many participants also noted that having the option to join meetings virtually and engage in telehealth decreased barriers to treatment for some clients. Specifically, PRSs noted that not having to arrange transportation or take extra time out of one's day to commute were reasons to continue the use of telehealth. Multiple participants recalled observing a sharp increase in the number of available meetings to join virtually after the transition to telehealth:

*“I know in Baltimore, there are I believe like 400+ something meetings a week just for Narcotics Anonymous. Most of those home groups, or most of those meetings, are on Zoom now, so people are able to access them when they don't drive. I don't have to drive across town to this meeting or to this meeting. I can just sit right in my living room and get on two of them. I can get on one after another without having to drive from one meeting to another, so I think I would love to see that continue. Although the in-person meetings are so important too—it's just another avenue that we can utilize.”*

[Certified PRS, hospital]

## 4. Discussion

The overall aim of this study was to understand the impact of the COVID-19 pandemic on the PRS role and experience, identify barriers and facilitators for clients engaging in treatment during the pandemic from the PRS perspective, and receive feedback on the sustainability of new methods post-pandemic. Results suggest that PRSs have experienced a variety of changes in their responsibilities and roles, have dealt with the loss of interpersonal connection with their clients, and have encountered technological challenges and resistance to using technology. The loss of interpersonal connection was regarded as a barrier to fulfilling the PRS role and potentially detrimental to clients' recovery. Nonetheless, participants emphasized that qualities unique to being a PRS—shared experience, empathy, and ability to overcome barriers—make them ideally suited to continue to support clients in and seeking recovery amid the pandemic. Moreover, while PRSs described the switch to telehealth services as a key factor leading to this loss of interpersonal connection, they also regarded the abundance of available mutual aid meetings and ease of accessing treatment from home as facilitators to receiving services and that may be sustainable post-pandemic.

A massive shift from in-person treatment to telehealth-based practices has occurred since the onset of the COVID-19 pandemic, leaving

clinical sites across the United States scrambling to quickly adopt new technologies and training for their providers (Kopelovich et al., 2020). Unfortunately, the integration of tele-services into a clinical setting requires a vast amount of planning, support, and evaluation (Kopelovich et al., 2020), which the rapid onset of COVID-19-related limitations made nearly impossible. Similarly, participants in the current study described that their PRS training did not directly prepare them for a pandemic and that they had to swiftly make adaptations to their role with little-to-no preparation. Nonetheless, participants felt that through their shared substance use experience and aspects of PRS training focused on assisting clients to navigate barriers, they possessed unique qualities and skills that allowed them to continue to effectively support their clients. Moreover, a key strength of the PRS workforce is their flexibility in their approach to working with clients with varying needs, which similarly allowed PRSs to effectively support their clients during the COVID-19 pandemic.

Of note, participants expressed concerns about losing the ability to forge an interpersonal connection with their clients when utilizing telehealth services, on top of perceiving a loss between their clients and their clients' recovery networks (e.g., people they see at recovery meetings, support groups, etc.). Similarly, other research has found that care-providers perceive in-person treatment to be more effective (Cole et al., 2019) and that it is difficult to establish interpersonal connections via telehealth (Uscher-Pines et al., 2020). COVID-19 has transformed the way in which providers offer services; our results indicate that concerns exist that these remote options lack the wherewithal to effectively treat individuals with SUD. In contrast, however, results also indicated that due to the ease of going online (in comparison to traveling to appointments/group sessions), teleservices increased accessibility to treatment services and should remain available once in-person services are reopened. Nonetheless, while virtual meetings have increased accessibility for some, clients who do not have access to technology may be excluded. Flexibility in service delivery remains vital in serving clients with SUD, as each individual has various needs and must be met where they are at in terms of readiness to change and the barriers they face.

The lack of interpersonal connection when using telecommunication and stressors from the pandemic, coupled with the struggle to engage clients virtually, may prove detrimental to clients' recovery. Opioid overdose rates increased significantly in 2020 compared to prior years (Soares et al., 2021), underscoring the need to continue gathering new information regarding barriers PRS' clients may be facing to treatment and recovery, to adapt existing models to appropriately support clients. As the pandemic is ever-evolving, services that support clients must also evolve. Nevertheless, PRSs demonstrated their ability to rise to the challenges that the pandemic presented, by shifting their role, such as by increasing their communication with clients, providing basic needs, and working around new barriers to treatment.

We conducted these interviews near the beginning of COVID-19. Future research may explore how these findings have changed throughout the course of the pandemic. Additional work may also aim to understand how PRSs have adapted to challenges described in the current study, such as the loss in interpersonal connection. Moreover, PRSs described the unique ways in which they were equipped to support their clients during the pandemic, a time that significantly increased barriers to treatment. The pandemic and resultant barriers to treatment indicate the importance of continuing to support and incorporate PRSs into SUD treatment. Sadly, barriers to treatment in underserved communities will likely persist. Last, PRSs mentioned that, for some, virtual services (e.g., meetings) increased accessibility; future research may aim to understand for whom these services work best, and who these services leave out/fail to reach. The loss in interpersonal connection, yet increase in accessibility (i.e., for those with technology access) from the use of teleservices has important implications for future SUD treatment. Specifically, our findings suggest a need to meet the relative balance between in-person connection and ease of availability.

#### 4.1. Limitations

Several limitations merit attention. Though we recruited PRSs from various cities, results cannot be widely generalized due to the small sample size (we also note the purpose of qualitative work is not to generalize to wide populations). Although our sample size allowed us to reach theoretical saturation on our main study aims, a larger sample may have allowed for additional themes of interest, unrelated to our main study aims, to emerge inductively. Moreover, results cannot be generalized beyond the geographical areas from which we recruited. Our coders did not have any disclosed lived experience or come from the communities served by the PRS participants in the study, which may have impacted our results. While this study captured PRSs' perspectives throughout a seven-month period of the pandemic, the COVID-19 pandemic has brought ever-evolving rules and regulations and, thus, PRSs may have experienced new, unique challenges since the study conducted interviews. Additionally, PRSs may have described a skewed perception of barriers that clients are facing; since many PRSs described a switch to communicating with clients virtually, they may not have been communicating with clients who do not have access to technology, and thus this study may not reflect the challenges that those clients face.

#### 5. Conclusions

COVID-19 has widely changed the landscape of recovery services, impacting both PRS work and clients seeking SUD treatment. The current study highlights the many challenges that the PRS workforce faced and the potential ways SUD services can be improved following the pandemic. Future research should explore how challenges to fulfilling the PRS role, as well as adaptations to overcome these challenges, have changed throughout the course of the COVID-19 pandemic. Findings indicate that a need exists for ongoing support to assist PRSs in their work and self-care during this incredibly challenging time.

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#### CRedit authorship contribution statement

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#### Declaration of competing interest

None.

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