Final IRIS Fellowship Research Project Write Up

Research project title: Examining the Role of Peer Recovery Support Specialists in Supporting Medications for Opioid Use Disorder (MOUD)

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Introduction

The U.S. is in the midst of an ongoing and escalating opioid epidemic, with more than 80,000 opioid-related overdoses occurring in 2021, compared with roughly 47,000 in 2019 and roughly 21,000 in 2010 (National Institute on Drug Abuse, 2023). Use of substances, including opioids, is a leading public health problem that leads to more illnesses, disabilities, and deaths than any other modifiable health condition (Horgan et al., 2001). In addition to the use of various types of psychosocial and behavioral treatments, medication for opioid use disorder (MOUD), is effective and is currently the recommended standard of care for treating opioid use disorder (OUD), yet medications are widely underutilized (Timko, Schultz, Cucciere, Vittorio, & Garrison-Diehn, 2015; Volkow, Jones, Einstein, et al., 2019; Wakeman, Larochelle, Ameli, et al., 2019).

Even for those who initiate MOUD, adherence and retention remain significant problems, with MOUD dropout predicting return to opioid use, overdose, and death (Griener, Shulman, Choo, et al., 2021; Scholl, Seth, Kariisa, Wilson, & Baldwin, 2018). Multiple barriers to MOUD initiation and retention have been identified. Stigma associated with MOUD has been found to deter MOUD initiation and to impede adherence (Cernasev, Hohmeier, Frederick, Jasmin, & Gatwood, 2021; Mackey, Veazie, Anderson, Bourne, & Peterson, 2019). Stigmatized views of MOUD can be found at all levels of the treatment continuum, and over time can be internalized by MOUD patients who experience shame and negative self-perceptions, which can lead individuals to avoid MOUD initiation or to discontinue its use (Cernasev, Hohmeier, Frederick, Jasmin, & Gatwood, 2021; Mackey, Veazie, Anderson, Bourne, & Peterson, 2019; Madras, Ahmad, Wen, & Sharfstein, 2020).

Barriers also exist within community-based treatment options, such as recovery residences (RR), which vary in their acceptance and promotion of MOUD and often employ staff who harbor negative attitudes toward MOUD utilization (Majer, Beasley, Stecker, et al., 2018); thus, some RRs will not accept MOUD patients (Miles, Howell, Sheridan, Braucht, & Mericle, 2020). For some RRs, reluctance to admit individuals who are on MOUD stems from a strict belief in abstinence-based recovery modalities that prohibit the use of any psychoactive substances, including MOUD (Jason, Bobak, O'Brien, & Majer, 2021). Similarly, mutual-support groups, which are the most widely used and accessible OUD treatment options, often hold negative beliefs toward MOUD, with group members looking down upon or excluding those on MOUD from attending (Andraka-Christou, Totarum, & Randall-Kosich, 2021). A significant number of individuals in recovery from OUD report wanting to join support groups that endorse MOUD, yet many also report having left groups that held negative beliefs toward medications (Newman & Banta-Green, 2019). More generally, research has found that attitudes toward MOUD among individuals in recovery are mixed at best, with significant proportions of those

surveyed reporting negative attitudes, which may impede MOUD adoption (Bergman, Ashford, & Kelly, 2020).

Additionally, many patients cite negative past treatment experiences and negative beliefs about medication (for example, that medicine is ineffective or that it does not constitute "true recovery") as reasons they stop taking MOUD (Cernasev, Hohmeier, Frederick, Jasmin, & Gatwood, 2021; Mackey, Veazie, Anderson, Bourne, & Peterson, 2019). Patients' friends and family members may influence these negative beliefs about MOUD (Peterson, Schwartz, Mitchell, et al., 2010). Competing priorities, such as work and family commitments, are also a barrier that can interfere with MOUD retention (Chatterjee, Yu, & Tishberg, 2018; Teruya, Hasson, Thomas, et al., 2014). Finally, lack of knowledge about MOUD and how to access it can hinder retention (Mackey, Veazie, Anderson, Bourne, & Peterson, 2019).

Another pressing issue in the field is to identify treatments for OUD that promote long-term recovery and sobriety within patients' communities (Laudet & Humphreys, 2013; McLellan, 2002; Polcin, Mericle, Callahan, Harvey, & Jason, 2016; Scott, Dennis, Laudet, Funk, & Simeone, 2011). Existing evidence shows that many of the gains achieved in acute treatment are short-lived if there is inadequate long-term care, social support, and access to substance-free environments post-treatment (McLellan, 2002; Polcin, Mericle, Callahan, Harvey, & Jason, 2016). Currently, however, most research focuses on short-term acute treatments (e.g., inpatient treatment) and more studies are needed to identify evidence-based approaches that contribute to long-term recovery in the community (McLellan, 2002; Scott, Dennis, Laudet, Funk, & Simeone, 2011). Recovery support services can potentially fill this gap in the treatment continuum by providing a broad set of strategies to promote healthy outcomes among individuals with substance use disorder (SUD) that are typically separate from standard acute treatment. One of the strategies most utilized is Peer Recovery Support Services (PRSS).

PRSS are a broad set of strategies that include coaching, mentoring, care navigation, education, linkage to resources, and other supports delivered by individuals (i.e., peers) who are uniquely qualified by their lived experience with SUD. PRSS are increasingly utilized in clinical settings and can provide patients with peer support that is based on a unique relationship that includes a shared understanding of addiction through mutual lived experiences (Mead & MacNeil, 2006; O'Connell, Flanagan, Delphin-Rittmon, & Davidson, 2017). While there is heterogeneity in the types of PRSS, a report released by the Substance Abuse and Mental Health Administration (Center for Substance Abuse Treatment, 2009) identified four primary types of PRSS services: 1) Peer mentoring or coaching, in which the peer provides emotional encouragement (e.g., motivational phone calls) and/or practical assistance (e.g., suggestions for identifying sober social activities); 2) Recovery resource connecting, in which the peer aids the patient in linking to needed professional or non-professional services; 3) Participating in peer-based recovery groups; and 4) Building of community, which refers to the creation of a pro-sobriety social network that supports recovery goals.

A randomized controlled trial (RCT) conducted by Tracey and colleagues (2011) found that treatment as usual (TAU) supplemented by an 8-week PRSS intervention improved outpatient psychosocial and medical treatment retention (Tracy, Burton, & Nich, 2001). Results from a second RCT conducted by O'Connell and colleagues (2017) also supported the use of PRSS to support individuals in SUD treatment programs. Participants received PRSS layered on top of TAU, starting during an inpatient treatment stay and continuing with post-discharge

home visits, peer support groups, and recreational activities. Compared to TAU alone, participants who received the PRSS intervention demonstrated decreased SUD symptoms and substance use and increased engagement in outpatient treatment, which supports the idea that PRSS may be a promising avenue through which to boost treatment retention.

Although peer recovery support services have been found to improve SUD outcomes in general (for research reviews see Bassuk, Hanson, Greene, Richard, & Laudet, 2016; Eddie, Hoffman, Vilsaint, Abry, Bergman, Hoeppner, et al., 2019; Gaiser, Buche, Wayment, Schoebel, Smith, Chapman, et al., 2021; Reif, Braude, Lyman, Dougherty, Daniels, Ghose, et al., 2014), little is known about peers' role in supporting MOUD specifically. Like at RRs, there is considerable diversity in peers' attitudes toward the acceptability of MOUD, ranging from strong advocates to steadfast opponents of this treatment approach. However, peers may be uniquely positioned to provide individualized support for MOUD initiation, adherence, and retention regardless of attitudes, beliefs, and practices that those in recovery experience in other treatment settings.

A small body of work examining PRSS influences on MOUD suggests that peer-delivered interventions focusing on MOUD can positively impact the initiation of medications (e.g., Gertner, Roberts, Bowen, Pearson, & Jordan, 2021; Scott, Dennis, Grella, Kurz, Sumpter, Nicholson, et al., 2020; Winhusen, Wilder, Kropp, Theobald, Lyons, & Lewis, 2020). For example, one study found that a brief, telephone-based intervention provided by peers resulted in significantly more opioid overdose survivors initiating MOUD, compared with individuals who did not receive the peer intervention (Winhusen et al., 2020). Those receiving the peer intervention also reported fewer opioid overdoses in a 12-month follow-up, but no differences were found in rates of opioid use. This study suggests that peers could be effective in enhancing MOUD uptake and reducing negative opioid use outcomes. Thus, combining the widely-utilized and long-standing tradition of peer support with evidence-based pharmacotherapy could have a significant synergistic benefit for individuals with OUD. However, research on links between PRSS and MOUD remains sparse, and no studies have examined the role of PRSS in promoting MOUD adherence or retention, which is a significant missed opportunity. More fundamentally, work is needed to better understand what peers currently do around MOUD as part of their typical work, as little is known about the current state of peer attitudes, beliefs, knowledge, and practices regarding MOUD. The goal of the current study is to fill some of these knowledge gaps by describing peer knowledge, attitudes, and practices related to MOUD, as well as to examine factors that act as barriers to or facilitators of their ability to support to recoverees on MOUD.

The primary aims of this qualitative study are the following:

1. To explore peers' knowledge about MOUD and their levels of comfort and confidence regarding having discussion about it with their recoverees.
2. To examine what peer recovery support specialists currently do with their recoverees in terms of MOUD.
3. To examine barriers to and facilitators of peer activities around MOUD.

Methods

This study utilized a qualitative design, with semi-structured interviews (see Appendix A) conducted with a sample of currently employed peer recovery support specialists in the state of Maryland. Peers were recruited through the researcher's professional network; emails describing the study were sent to individuals in various organizations that employ peer recovery support specialists, and these emails were then shared with individual peers. Those who were interested were directed to email the study investigator to express their interest and were also asked to fill out a brief screening questionnaire to assess eligibility. Anyone over the age of 18 who was currently employed as a peer and who worked with individuals with OUD was eligible to participate. Selected peers had experience working in a variety of different employment settings, including hospitals, primary care facilities, Medication Assisted Treatment (MAT) clinics, community centers, overdose response units, syringe service centers, public schools, recovery residences, homeless shelters, and criminal justice settings.

Semi-structured interviews were conducted over Zoom. All participants completed verbal informed consent prior to the interviews. Audio-recordings of these interviews were uploaded into SpeakAI, an online platform that transcribes and analyzes text. The researcher then went through each transcription and edited it to correct transcription errors made by the software. In addition to the analyses that were performed by the software, the researcher also read through and coded each transcript using thematic analysis to identify themes that emerged across the interviews. Peers who participated in the interviews received a $40 gift card.

Results

Descriptive results

A total of seven peers completed the interviews. Peers ranged in age from 28 to 61, with a mean age of 44.5 years. Four participants were female and three were male. They had an average of 7.58 years of experience working as a peer (with a range of 10 months to 22 years). Five of the seven (71.4%) who were interviewed were in recovery from OUD themselves, and although none reported currently being on MOUD, five of the seven (71.4%) had been on it at some point in the past (see Table 1).

Research Aim 1: To explore peers' knowledge about MOUD and their levels of comfort and confidence regarding having discussion about it with their recoverees.

Peers in this study generally reported being very comfortable and fairly confident in their ability to discuss MOUD with their recoverees, but all identified gaps in their knowledge on the topic. One common gap was not knowing much about each of the different MOUD options that are available (e.g., being familiar with one or two types of MOUD but knowing little about other options). Peers generally felt they were knowledgeable about certain types of

MOUD that they had personal experience with or that they encountered often in their workplace, but that they lacked information on other MOUD options. For example, one peer stated

> "*I don't feel like I'm confident in all types of MOUD. I feel like I know a good bit about methadone. And I feel I know a good bit about Suboxone, but like Sublocade, Vivitrol, naltrexolone* [SIC], *I don't know as much about those*."

Another said:

> "*I feel pretty confident talking about Suboxone and Sublocade. I don't feel quite as confident speaking about methadone or Vivitrol just because I don't have personal experiences with either and I don't know quite as many people who are on [those]… so my knowledge isn't like being refreshed about that*."

Peers felt that they had a general understanding of MOUD but lacked a lot of details regarding things like the mechanisms of action, effectiveness, and how to help recoverees who want to switch medications or taper off their medications. Most peers expressed hesitance in their ability to help recoverees decide between medication types or to discuss things like medication side effects. One peer stated the following:

> "*So I feel like I know how it works. I know what the, the process is to start an induction. I know how beneficial MOUD is. Do I know, like, all the chemical stuff? No. Do I know, you know, specifically if there's a guideline on how long someone should stay on MOUD? No*."

Levels of knowledge varied by employment setting, with peers who worked in medical settings expressing higher levels of knowledge compared with peers in other settings where MOUD is less of a primary focus. One peer who had previously worked in a MAT clinic explained:

> "*Again, I think like I fell into a position where like, I learned all this stuff [about MOUD] and luckily I had like the clinicians teach me and all that. So like, that was such a great experience. But like if I hadn't taken that job, would I have all this knowledge? So that's why, like, in retrospect I'm thinking it should be a mandatory class for everybody because not, not everybody, like had that initial job like I did.*"

All peers who were interviewed had some training related to MOUD, but expressed that it was limited in nature. Most had received only a one-time, brief training when they first became peers, and the training discussed MOUD in general terms but lacked details such as what types of medications are available, the differences in how each type works, and what the side effects are. Some peers indicated that they received some MOUD through the state certification process, but others said that they did not, with one peer stating "*No, ma'am. They do not get into MOUD. They teach us to know, you know, to stay in our lane, to know when to, when to share our story and when not to*."

Peers uniformly felt that the training they received on MOUD was inadequate, particularly because the MOUD options and the available substances of use have changed over time. All of the peers interviewed expressed the desire and need for more training on MOUD and they advocated for regular, ongoing, in-depth training. Some suggested that this should be mandatory for all peers both as part of the initial certification process and as a required component of ongoing certification, with one peer stating "*It's not part of the mandated training to become certified and I think that it should be*." Most peers suggested that MOUD trainings occur at least once a year, with some suggesting that it happen even more frequently, as indicated by the following quote: "*Honestly, as a peer, think it would be good to review, you know, anything every like three to six months? You know, kind of like to refresh things*."

Peers were particularly interested in regular, ongoing trainings that included the most recent information about new forms of MOUD, which they felt they were lacking. One peer stated:

> "*I think we need to be like trained every so often, just updated on the changes in MOUD… I think it would be good if peers were trained once a year, twice a year, updated on the meds, updated on the changes, you know? What's new, what's coming out, so that we're aware of everything to better benefit the patients*."

One peer noted that the last training they received occurred several years earlier and lacked information that is relevant to currently available street drugs, noting "*And now there's Fentanyl, which that was not in the training at all, so it's not really up to date. Does that make sense?*" Together, these things indicate that peers have a desire and need for ongoing training in order to keep up with changes in both MOUD options and the newer substances from which their clients are recovering.

Peers also brought up a number of other topics they want more education on, as indicated by one peer who stated they wanted to learn details about the following:

> "*How's it going to, how's it going to work, you know? How long can I be on it? You know, what are the side effects? What am I? What do I look for if I want to come off of it? You know, you know, the purpose of the MOUD? Like I am completely clueless when it comes to methadone. Completely. And I hear so many stories. Well, isn't that me giving up one high for another high? And you know, I was like, well, I honestly, you know, I have to be honest, I don't know*."

Importantly, peers are resourceful in filling in knowledge gaps, often referring recoverees to medical professionals to answer questions they are unable to address themselves, or by asking for help from others. One peer expressed this in the following way:

> "*I never answer anything that I don't know the answer to, but I will either seek out someone who can answer that question and get the patient more*

information, or I'll reach out to an outpatient provider who could possibly more educate the person on something that you know, I can't answer myself all."

Other peers mentioned that they do their own research to learn about MOUD, with one stating "*I always do my best to look, look, look information up, find out or read what I'm doing*." Thus, peers are able to utilize available resources to fill in knowledge gaps and better support their recoverees.

Research Aim 2: To examine what peer recovery support specialists currently do with their recoverees in terms of MOUD.

All peers who were interviewed reported engaging in some level of activity around MOUD with their recoverees, with all of them reporting having discussions around MOUD and fewer engaging in additional activities like connecting them to providers, helping with transportation, or assisting with medication adherence. All of the peers stated that they had MOUD conversations with recoverees frequently, with most of them discussing it on a daily basis with at least one client. However, they are also careful not to make MOUD the sole focus of their discussions or to bring it up too often, and they do not pressure recoverees to utilize medication. One peer stated:

"*You know… I don't do it all the time but like every couple of times I'll say hey, have you given any thought to, you know, like getting on a medicine you know like MOUD? And I just, I try to not be like you should, you know? I just say how's it going? Have you given any more thought? I don't try to like focus on it, but I do like a quick touch on it just to say see where they're at, you know?*"

Discussions between peers and recoverees about MOUD include topics such as *"…if they're taking their MOUD, if they're taking it the way they're supposed to, if it's working… what's your MOUD dosage right now? You know, how often are you taking it?*" The peers who had been on MOUD themselves all indicated that they shared their personal experiences with their recoverees, and they believe that this was a useful way to support MOUD, with one peer explaining,

"*I think that's way more effective than, than just a doctor walking in and you know, blankly telling them this is ABCD of this. I think it's important for them to know that I've taken it and I know what it's gonna feel like, where they're gonna be with it. So yeah*."

Another peer simply stated: "*If I can use my personal experience, that's my superpower. That's, that's my story*".

The peers who did not have personal experiences with MOUD also shared that background and their thoughts on medication with recoverees; opinions of MOUD were largely positive within this sample of peers, as expressed in the following quote:

> "*They'll ask my opinion, and I'm honest with them, that I tried MOUD in the beginning of my recovery and I found that it wasn't something for me. However, that doesn't mean it won't work for them because everybody's recovery is different. It was just something that I didn't feel was right for me. But it may, you know, help 75 or 80 other people that I talked to, you know, and, and I let them know I'm not judging you. If you want to try this MOUD that's, you know, that's your recovery. It's yours. So, you know, I'm open and honest with them. And I think it saves lives. I tell them that. That I think MOUD helps to save lives and that it helps people and sometimes we need that little bit of help*."

Although having conversations is the most common activity peers reported engaging in, they also do other things to support MOUD. All of the peers indicated being able to connect recoverees with MOUD providers, and many also helped clients to actually schedule appointments. While they were not able to drive recoverees to appointments, many reported setting up transportation for them. Some of the peers also assisted recoverees with obtaining health insurance or documents such as government identification cards. Importantly, most of the peers reported following up with recoverees who are on MOUD regularly to see how they are doing with their medication. As one peer explained:

> "*We will follow up with each patient three to four times to make sure… the MOUD is working. We document all this and we encourage them to discuss any, like, side effects they may think they're feeling or any changes or anything they think or if they feel that it's too much, not enough. We encourage them to discuss this with the doctor, not to try to come off of MOUD themselves, not to try and increase it themselves, to, to be open and honest with the doctor, because that's the only way they're going to find the proper MOUD and the proper dosage that's going to work for them*."

One peer who was interviewed had actually created materials on MOUD to give to recoverees, explaining:

> "*I made-up a MOUD resource packet. Now that basically gives them some, some options for clinics, what medicines, what medications those clinics each offer. It has an information sheet for each one of the types of MOUD in it and I do I review that. I, I get them to review it without me being in the room. I give it to them and say I'll be back in you know, half an hour. Look over this, make sure it's something you're interested in. I also let them know that if tomorrow they decide that wasn't what they really needed to do, that they can call me. I can help them pick out another, another option, another plan, or we can go with the treatment and abstinence program*."

Research Aim 3: To examine barriers to and facilitators of peer activities around MOUD.

Peers in this study identified several barriers that they face when it comes to supporting the use of MOUD among their recoverees. Some peers noted that fear or misperceptions about MOUD is a barrier they encounter, with a lot of their clients avoiding MOUD due to the belief that it causes withdrawal symptoms. Another common barrier is a lack of healthcare, as explained by one peer:

> "*The only time I would say that it could be a barrier is if a patient doesn't have insurance. I don't want to discuss a treatment with a patient who doesn't have insurance if they have no way of participating in that treatment. You know, I don't want to say I have a medication that could possibly, you know, make you feel better and, and help you sustain your recovery. But because you don't have insurance, I can't offer to you. You know, that, that's hard. So I try not to do that*."

The most common barrier that peers identified, however, is stigma about MOUD, with one peer stating "*Unfortunately, you know there is a barrier with MOUD, you know, unfortunately there is a stigma*." Negative views of MOUD, including the belief that one is not in true recovery when on it, is something that is commonly experienced by peers, with one saying, "*You know it's, it's usually the stigma that just comes with MOUD. I, mean just, you know, once a junkie, always a junkie, or you know, they're not really clean, they're not abstinent.*" Another peer explained it this way:

> "*Not as much now, but there is a stigma with some people. They don't wanna hear about it. Or through some 12 step programs, it's more like abstinence only, like it doesn't count as being sober if you're on MAT or MOUD. So, there's like this stigma like but I'm not even, I'm not really clean so it's like, but if you need it, like this, this is a harm reduction pathway, like this is also a pathway to recovery*."

This stigma comes from multiple sources, including the recoverees themselves, family members, friends, other peers, and recovery communities. A common place that several peers witnessed stigma is within recovery support groups or twelve-step programs, as noted by the following:

> *"So like, there's not many support groups, they're all abstinence based… Like I've been in meetings where you know someone is on* [MOUD]*, you know, and they feel like they aren't part of the group, you know? There's not many support groups for people that are on MOUD."*

> *"I mean, I go to a 12-step fellowship that encourages absolute abstinence. Sometimes they* [people on MOUD] *feel that there's a blowback."*

Peers mentioned that eliminating or lessening this stigma is crucial to helping those in recovery initiate and adhere to MOUD. They noted that stigma can induce a level of fear that

affects recoverees' willingness to be on MOUD or to have open conversations about it. One peer stated:

> "*I think a lot of folks are- what's the word I'm looking for? Fearful of the stigma that comes with it. Because here in our community, how do I want to put this? We have a great community, but not everybody's on board about the MOUD helping folks. You, you read a lot on Facebook in our community and I think a lot of the barriers for folks is the stigma that comes with it. Letting people know, you know, I don't want people to know I'm on this MOUD. They're going to treat me different. You know, what's going to happen if I go on it? Do I have to tell my employer? You know, so, so they face those kinds of barriers.*"

One peer poignantly explained described the harm that stigma around MOUD causes:

> "*I can't tell you, I, I have had so many patients that were reluctant to go to treatment. I've gotten them to go to treatment. They've started Suboxone the whole time they're in treatment. It's 12-step based. They get out, they go to a meeting and ask someone to sponsor them and that person's like no, I can't sponsor you, you're on, you're on MOUD or methadone, whatever. There's nothing worse than getting that phone call. I feel terrible because you know, you got them so close to that finish line and that's all it takes to get them to go back out again is that one little rejection. That's all it takes. So- and, and I've been there- I know what that feels like to go up to someone and it takes a lot of courage to go up and ask for a sponsor so then to be rejected, get rejected, and then you'd be like I'm done. This is not worth it.*"

The peers who were interviewed also mentioned several things that can help facilitate their ability to support MOUD. One of these things is having support from their employers and other people they work with, which the peers in this study reported having in their current jobs. Another peer noted that developing a common language and understanding around MOUD can be an important facilitator, saying, "*And we need to speak a language where every human being on the face of the earth can understand MOUD*," which they felt is an important step to *"…destigmatize the taboo of talking about what needs to be done*."

Some peers believe that getting positive stories about MOUD out in the public can help facilitate their ability to support MOUD. One peer noted that "*When I find speakers for meetings, I do include people that are on MOUD because I think it's important that we talk about that*." Another stated:

> "*Also maybe using some more success stories from the MOUD community itself, you know what I mean? There's something about experience, strength and hope. Like if you have a success story, make sure that that success story and that person gives some exposure where we could nurture them to break out of the mold of living in anonymity and… this is this is a MOUD success story and this is*

how and then use that as a model for other people. People love an underdog. People love a comeback story. So just some more maybe real-life testimonials from people who are successful with MOUD."

Another peer suggested that having more MOUD-friendly support groups would be an important step to facilitating support for MOUD, saying: "*I think it's really beneficial to, to do that, to have those meetings. So having more groups, like more groups that are MOUD-focused and like making people comfortable to be able to talk about it even publicly.*" Overwhelmingly though, peers believe that better training and education would have the most positive impact on their ability to support MOUD, with one peer saying "*Well, just as peers, I think the biggest thing we need is the training on just how to have those conversations properly among the community.*"

Discussion

The current study expands on the extant literature examining the role of PRSS by focusing specifically on how peers support the use of MOUD for those in recovery from OUD. Although past work has attempted to broadly define the role of peers (Chapman, Blash, Mayer, & Spetz, 2018; University of Michigan Behavioral Health Workforce Research Center, 2019), and has examined peer influence on MOUD initiation (Gertner et al., 2021, Scott et al., 2020; Winhusen et al., 2020), studies have not specifically examined what peers typically do around MOUD or how their role can support MOUD retention and adherence. The current study suggests that peers do regularly discuss MOUD with their recoverees and that they are comfortable doing so. However, peers report having limited training and knowledge about MOUD, and express both a need and desire for additional training. Both the lack of MOUD-specific training and the pervasive stigma around MOUD are the primary barriers that peers faced in their attempts to support MOUD initiation and adherence among recoverees.

These findings reinforce the need to support peers in their attempts to work with recoverees who are on MOUD or who might benefit from starting on medications. In particular, MOUD-specific trainings should be made available to peers, both as part of the certification process and as part of regular, ongoing trainings. Peers in Maryland are required to complete 20 credits of continuing education every two years to maintain their certification; six of those hours must be devoted to a course on ethics (Maryland Addiction & Behavioral-Health Professionals Certification Board, 2022). Peers may choose to dedicate some of those credits to courses focused on MOUD, but doing so is not currently required. It is estimated that approximately 28% of those in need of OUD treatment utilize MOUD (Mauro, Gutkind, & Annunziato, 2022). This suggests that more than 1 in 4 of the recoverees that peers work with will be on MOUD and that therefore, peers are highly likely to encounter this topic in their work. Thus, knowledge of MOUD may help peers better support a significant number of their recoverees. This is evident in the current study, in which all of the peers who were interviewed indicated having regular conversations about MOUD with their clients on a daily or near-daily basis. At the same time, these numbers also indicate that nearly two-thirds of people who

might benefit from MOUD do not receive it. Peers who are knowledgeable about MOUD may be better positioned to help those in need initiate medication when it is indicated. State-level policies requiring MOUD education and training for peers can therefore benefit both peers and those in early recovery from OUD.

Similarly, policies and practices that combat MOUD-related stigma are needed to better assist peers as they work to support recoverees who want or are on MOUD. The peers in this study echoed results from previous research (e.g., Hadland, Park, & Bagley, 2018; Madden, 2019) indicating that there remains a large amount of stigma toward MOUD arising from both within and outside the treatment community, which in turn negatively affects treatment outcomes. Thus, policies and practices that work to reduce stigma around MOUD are warranted. Efforts to reduce stigma could include increased education around MOUD that is aimed at the public, healthcare providers, and OUD clients; adoption of non-stigmatizing language when discussing MOUD both within and outside treatment settings; and media campaigns aimed at providing factual, evidence-based messages about MOUD and related harm reduction strategies (Atisme, Arrington, Yaugher, & Savoie-Roskos, 2019; Hadland et al., 2018; Johns Hopkins Medicine, 2023). As noted by several peers in this study and as recommended by past research (Anvari, Kleinman, Massey, Bradley, Felton, Belcher, et al., 2022), creating and sustaining MOUD-friendly support groups would also help combat stigma and provide a crucial recovery resource that is currently lacking. Importantly, past research suggests that utilization of PRSS itself can work to reduce stigma at multiple levels by normalizing SUD and providing models of successful recovery (Anvari et al., 2022; Chou, Patton, Cooper-Sadlo, Swan, Bennett, McDowell, et al., 2022). This suggests that simply incorporating a peer workforce into multiple treatment environments can lessen stigma and remove barriers to both MOUD and other forms of treatment.

Results from this study also highlight the fact that peers are already engaging in activities aimed at supporting recoverees who are on MOUD. In addition to having regular discussions with them about MOUD, many of the peers who were interviewed also went out of their way to provide recoverees with resources for providers. They were also adept at drawing on existing resources, such as relationships with other peers and/or medical professionals, to help recoverees obtain information about MOUD that peers themselves did not have. Peers were overwhelmingly supportive of MOUD in general, views that mirror those of leading medical professionals and public health officials (e.g., SAMHSA, 2018).

This is the first study to conduct in-depth, qualitative interviews with peer recovery specialists to learn specifically about their role in supporting the use of MOUD for those in recovery from OUD. Future research on the role of peers in supporting the use of MOUD would benefit from using a larger sample size that better represents the heterogeneity of the peer community. Future work should also examine whether MOUD-focused training can improve peers' ability to support MOUD adherence and retention and whether that in turn results in better treatment outcomes for individuals in recovery from OUD.

In conclusion, this study sheds important light on the role that peer recovery support specialists currently play in supporting the use of MOUD for individuals in recovery from OUD. Results both show existing strengths of peer work in this area and highlight extant needs. Peers are already engaged in regular conversations with their recoverees about MOUD, but they want more training on this topic and often run into barriers that impede their work, especially stigma around MOUD. Policies and practices that support MOUD-focused education for peers and that aim to reduce stigma are needed to better support both peers and those in recovery from OUD.

I. Tables and figures

Table 1. Sample descriptives

Participant gender	
Female	n= 4 (57.14%)
Male	n= 3 (42.29%)
Age in years	M= 44.4 Range= 28 – 61
Years employed as a peer	M= 7.58 Range= 10 months – 22 years
In recovery from OUD	n= 5 (71.4%)
Personal history of MOUD use	n= 5 (71.4%)
Currently on MOUD	n= 0 (0.00%)
County of current employment[1]	
Allegany	n= 2 (28.57%)
Anne Arundel	n= 1 (14.29%)
Hartford	n= 1 (14.29%)
Howard	n= 4 (57.14%)
Past and current employment settings (examples)	Hospitals Primary care settings MAT clinics Criminal justice settings Community centers Overdose response units Syringe service centers Public schools Recovery residences Homeless shelters

[1] *One participant reported working in more than one county*

Figure 1. Word Cloud

References

Andraka-Christou, B., Totaram, R., & Randall-Kosich, O. (2021). Stigmatization of medications for opioid use disorder in 12-step support groups and participant responses. *Substance Abuse, 43*(1), 415-424. doi: 10.1080/08897077.2021.1944957

Anvari, M. S., Kleinman, M. B., Massey, E. C., Bradley, V. D., Felton, J. W., Belcher, A. M., et al. (2022). "In their mind, they always felt less than": The role of peers in shifting stigma as a barrier to opioid use disorder treatment retention. *Journal of Substance Abuse Treatment, 138*, 108721. doi: 10.1016/j.jsat.2022.108721.

Atisme, K., Arrington, R., Yaugher, A., & Savoie-Roskos, M. (2019). Substance use disorder stigma: What it is and how you can prevent it. *All Current Publications.* Paper 1969. Available at https://digitalcommons.usu.edu/extension_curall/1969.

Bassuk, E. L., Hanson, J., Greene, R. N., Richard, M., &Laudet, A. (2016). Peer-delivered recovery support services for addictions in the United States: A systematic review. *Journal of Substance Abuse Treatment*, *63*, 1–9. https://doi.org/10.1016/j.jsat.2016.01.003

Bergman, B. G., Ashford, R. D., & Kelly, J. F. (2020). Attitudes toward opioid use disorder medications: Results from a U.S. national study of individuals who resolved a substance use problem.*Experimental and Clinical Psychopharmacology, 28*(4), 449-461. doi:10.1037/pha0000325.

Center for Substance Abuse Treatment. (2009). *What are peer recovery support services*? HHS Publication No. (SMA) 09-4454. Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

Cernasev, A., Hohmeier, K. C., Frederick, K., Jasmin, H., & Gatwood, J. (2021). A systematic literature review of patient perspectives of barriers and facilitators to access, adherence, stigma, and persistence to treatment for substance use disorder. *Exploratory Research in Clinical and Social Pharmacy, 2*, 2667-2776.

Chapman, S. A., Blash, L. K., Mayer, K., & Spetz, J. (2018). Emerging roles for peer providers in mental health and substance use disorders. *American Journal of Preventive Medicine, 54*(6), S267-S274. https://doi.org/10.1016/j.amepre.2018.02.019.

Chatterjee A, Yu, E.J., &Tishberg, L. (2018). Exploring opioid use disorder, its impact, and treatment among individuals experiencing homelessness as part of a family. *Drug& Alcohol Dependence, 188*, 161–168.

Chou, J. L., Patton, R., Cooper-Sadlo, S., Swan, C., Bennett, D. S., McDowell, D., et al. (2022). Stigma and medication for opioid use disorder (MOUD) among women. *International*

Journal of Mental Health and Addiction, 20, 3262-3273. https://doi.orgg/169-022-00768-3.

Eddie, D., Hoffman, L., Vilsaint, C., Abry, A., Bergman, B., Hoeppner, B., et al. (2019). Lived experience in new models of care for substance use disorder: A systematic review of peer recovery support services and recovery coaching. *Frontiers in psychology*, *13*, 1052.

Gaiser, M. G., Buche, J. L., Wayment, C. C., Schoebel, V., Smith, J. E., Chapman, S. A., & Beck, A. J.. (2021). A systematic review of the roles and contributions of peer providers in the behavioral health workforce. *American Journal of Preventive Medicine, 61(4)*, e203-e210. https://doi.org/10.1016/j.amepre.2021.03.025

Gertner, A. K., Roberts, K. E., Bowen, G., Pearson, B. L., & Jordan, R. (2021). Universal screening for substance use by Peer Support Specialists in the emergency department is a pathway to buprenorphine treatment. *Addictive Behaviors Reports, 14*, 100378. https://doi.org/10.1016/j.abrep.2021.100378

Greiner, M.G., Shulman, M., Choo, T.H., et al. (2021). Naturalistic follow-up after a trial of medications for opioid use disorder: Medication status, opioid use, and relapse. *Journal of Substance Abuse Treatment,* 131, 108447.

Hadland, S. E., Park, T. W., & Bagley, S. M. (2018). Stigma associated with medication treatment for young adults with opioid use disorder: A case series. *Addiction Science & Clinical Practice, 13*, 15. https://doi.org/10.1186/s13722-018-0116-2

Horgan, C, Skwara, K.C., Strickler, G. et al. (2001). *Substance abuse: The nation's number one health problem*. Princeton, NJ: Robert Wood Johnson Foundation.

Jason, L.A., Bobak, T.J., O'Brien, J. & Majer, J.M. (2021). Recovery homes coping with Covid-19. *Journal of Prevention & Intervention in the Community, 50*(2),*1-12.* DOI: 10.1080/10852352.2021.1934941

Johns Hopkins Medicine. (2023). *Reducing the stigma of addiction*. Available at https://www.hopkinsmedicine.org/stigma-of-addiction/.

Laudet, A. B., & Humphreys, K. (2013). Promoting recovery in an evolving policy context: What do we know and what do we need to know about recovery support services? *Journal of Substance Abuse Treatment, 45*(1), 126-133.

Mackey, K., Veazie, S., Anderson, J., Bourne, D., & Peterson, K. (2019). *Evidence brief: Barriers and facilitators to use of medications for opioid use disorder*. Washington, DC: U.S. Department of Veterans Affairs.

Madden, E. F. (2019). Intervention stigma: How medication-assisted treatment marginalizes patients and providers. *Social Science & Medicine, 232*, 324-331. https://doi.org/10.1016/j.socscimed.2019.05.027

Madras, B.K., Ahmad, N.J., Wen, J. & Sharfstein, J. (2020). Improving access to evidence-based medical treatment for opioid use disorder: strategies to address key barriers within the treatment system. *NAM Perspectives*. Discussion Paper, Washington, DC. https://doi.org/10.31478/202004b.

Majer, J.M., Beasley, C., Stecker E., et al. (2018). Oxford House residents' attitudes toward medication assisted treatment use in fellow residents. *Community Mental Health Journal, 54*(5), 571–77.

Maryland Addiction & Behavioral-Health Professionals Certification Board. (2022). *Certified Peer Recovery Specialist (CPRS)*. Available at https://www.mabpcb.com/certified-peer-recovery-specialist-cprs.

Mauro, P. M., Gutkind, S., & Annunziato, E. M. (2022). Use of medication for opioid use disorder among US adolescents and adults with need for opioid treatment. *JAMA Network Open, 5*(3), e223821. doi: 10.1001/jamanetworkopen.2022.3821.

McLellan, A. T. (2002). Have we evaluated addiction treatment correctly? Implications from a chronic care perspective [Editorial]. *Addiction, 97,* 249-252.

Mead, S., & MacNeil, C. (2006). Peer support: What makes it unique. *International Journal of Psychosocial Rehabilitation, 10*(2), 29-37.

Miles, J., Howell, J., Sheridan, D., Braucht, G., & Mericle, A. (2020). Supporting individuals using medications for opioid use disorder in recovery residences: Challenges and opportunities for addressing the opioid epidemic. *The American Journal of Drug and Alcohol Abuse, 46*(3), 266-272.

National Institute on Drug Abuse. (2023). *Drug overdose death rates*. https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates. Published February 9, 2023.

Newman, A., &Banta-Green, C. (2019). *Peer support groups and medications for opioid use disorder: Perspectives from individuals and care providers*. Alcohol & Drug Abuse Institute, University of Washington. Available at http://adai.uw.edu/pubs/pdf/2019recoverysupportforoud.pdf

O'Connell, M. J., Flanagan, E. H., Delphin-Rittmon, M. E., & Davidson, L. (2017). Enhancing outcomes for persons with co-occurring disorders through skills training and peer recovery support. *Journal of Mental Health, 10,* 1–6.

Peterson, J.A., Schwartz, R.P., Mitchell, S.G., et al. (2010). Why don't out-of-treatment individuals enter methadone treatment programmes? *International Journal of Drug Policy, 21*(1), 36–42.

Polcin, D. L., Mericle, A. A., Callahan, S., Harvey, R., & Jason, L. A. (2016). Challenges and rewards of conducting research on recovery residences for alcohol and drug disorders. *Journal of Drug Issues, 46*(1), 51-63.

Reif, S., Braude, L., Lyman, D. R., Dougherty, R. H., Daniels, A. S., Ghose, S. S., Salim, O., & Delphin-Rittmon, M. E. (2014). Peer recovery support for individuals with Substance Use Disorders: Assessing the evidence. *Psychiatric Services*, *65*(7), 853–861. https://doi.org/10.1176/appi.ps.201400047

Scholl, L., Seth, P., Kariisa, M., Wilson, N., & Baldwin, G. (2019). Drug and opioid-involved overdose deaths - United States, 2013-2017. *MMWR. Morbidity and mortality weekly report*, *67*(5152), 1419–1427.

Scott, C. K., Dennis, M. L., Laudet, A., Funk, R. R., & Simeone, R. S. (2011). Surviving drug addiction: The effect of treatment and abstinence on mortality. *American Journal of Public Health*, *101*, 737-744.

Scott, C. K., Dennis, M. L., Grella, C. E., Kurz, R., Sumpter, J., Nicholson, L., et al. (2020). A community outreach intervention to link individuals with opioid use disorders to medication-assisted treatment. *Journal of Substance Use Treatment, 108*, 75-81. https://doi.org/10.1016/j.jsat.2019.07.001

Substance Abuse and Mental Health Services Administration, Office of the Surgeon General (2018). *Facing addiction in America: The Surgeon General's spotlight on opioids*. Washington (DC): US Department of Health and Human Services. Available from: https://www.ncbi.nlm.nih.gov/books/NBK538436/.

Teruya, C., Hasson A.L., Thomas, C., et al. (2014). Patient perspectives on buprenorphine/naloxone: a qualitative study of retention during the starting treatment with agonist replacement therapies (START) study. *Journal of Psychoactive Drugs, 46,*(5), 412–426.

Timko, C., Schultz, N.R., Cucciare, M.A., Vittorio, L., & Garrison-Diehn, C. (2015). Retention in medication-assisted treatment for opiate dependence: A systematic review. *Journal of Addictive Diseases, 35*(1), 22-35.

Tracy, K., Burton, M., Nich, C., & Rounsaville, B. (2001). Utilizing peer mentorship to engage high recidivism substance-abusing patients in treatment. *American Journal of Drug &Alcohol Abuse, 37,* 525–531.

University of Michigan Behavioral Health Workforce Research Center. (2019). *National analysis of peer support providers: Practice settings, requirements, roles, and reimbursement*. Ann Arbor, MI: UMSPH.

Volkow, N.D., Jones, E.B., Einstein, E. B., et al. (2019). Prevention and treatment of opioid misuse and addiction: A review. *JAMA Psychiatry,* 76(2), 208-216.

Wakeman, S.E., Larochelle, M.R., Ameli, O. et al. (2020). Comparative effectiveness of different treatment pathways for opioid use disorder. *JAMA Network Open, 3*(2), e1920622. doi:10.1001/jamanetworkopen.2019.20622

Winhusen, T., Wilder, C., Kropp, F., Theobald, J., Lyons, M. S., & Lewis, D. (2020). A brief telephone-delivered peer intervention to encourage enrollment in medication for opioid use disorder in individuals surviving an opioid overdose: Results from a randomized pilot trial. *Drug and Alcohol Dependence, 216*, 108270. https://doi.org/10.1016/j.drugalcdep.2020.108270

Appendix A

INTERVIEW GUIDE

INTRODUCTION

1. *Welcome*: "My name is Jennifer Carrano and I'm a researcher here at Mountain Manor Treatment Center, where we do a lot of work to try to find better ways to treat people with opioid addiction. We are especially interested in learning how to help people who want to be on relapse prevention medications for opioid use disorder stay on their medications. When I talk about MOUD, I'm referring to medications including methadone, buprenorphine such as suboxone or Sublocade, and extended-release naltrexone, or Vivitrol.

2. Additionally, we are trying to learn more about peer recovery support specialists' role in helping recoverees with their MOUD adherence, which is the goal of today's interview. I asked you to participate in this interview because I believe that your role as a peer recovery support specialist gives you expertise on this issue. Today I will be asking you to answer questions based on *your* opinions or experiences. You can share as much or as little as you want and there are no right or wrong answers."

3. Before we start, can you let us know what county you work in? (*add to demo log*).

4. *Consent*: "Before we get into the questions, I need to read to you a research consent form." *Read the IRB consent form and record verbal consent. If the participant consents, then proceed. If not, then terminate interview.*

5. *Start recording*.

INTERVIEW QUESTIONS

QUESTIONS ABOUT PEER KNOWLEDGE/COMFORT/CONFIDENCE DISCUSSING MOUD

1. **What kind of training, if any, have you had in terms of discussing MOUD with your recoverees?**

Prompts:

a. What specifically did they cover regarding medications? Do they talk about how the different types medications actually work, their side effects, their effectiveness, how long people should people stay on them, and what to do if they want to switch or stop medications?
b. How often do you get training?
c. Who provides the training?
d. Are there things you would like more training on? Such as? How often would you like training?

2. **How confident are you in your knowledge about MOUD?**

Prompts:

a. Are there certain things you feel really confident about or things that you wish you knew more about? For example, do you feel like you know enough about

how the different types of medications work, about the effectiveness of these medications, their side effects, or how long people should stay on them?

3. **How comfortable do you feel in terms of discussing MOUD with your recoverees?**

Prompts:

a. Are there certain things that make you feel more or less comfortable having these conversations?
b. Are there certain aspects of the medications that you feel really comfortable talking about? Any details about the medications that you're not comfortable talking about?
c. Do you feel prepared to help recoverees who have challenges with their medication? For example, if they are having side effects, trouble with adherence, or if they want to switch medication types or stop taking their meds?

QUESTIONS ABOUT WHAT THE PEER CURRENTLY DOES AROUND MOUD

1. **In your work as a peer specialist, how often do you discuss medications like suboxone, methadone, Vivitrol, and Sublocade with your recoverees?**

Prompts:

a. Would you say you discuss it every time you meet, most of the time, some of the time, rarely, never?
b. Who typically initiates such conversations, is it you, the recoveree, or someone else?
c. Do you have these conversations with all of your recoverees or just with those who are already on MOUD or who express an interest in MOUD?
d. *Does this vary based on what type of setting you're working in?*

2. **When you do have these conversations, what do you typically talk about?**

Prompts:

a. Do you share personal experiences with MOUD, (either your own experience or experiences of other people you know)?
b. Do you give advice about MOUD?
c. If yes, what specifically do you say?
d. If no, why not?
e. Can you give some examples?
f. *Does this vary based on what type of setting you're working in?*

3. **Besides having conversations with your recoverees, are there any other things you do with your recoverees around MOUD, such as connecting them to providers, driving them to appointments, or helping to make sure they are taking their medications as directed?**

Prompts:

a. If so, can you tell me about this?
b. If no, is there a reason why not?

c. *Does this vary based on what type of setting you're working in?*

QUESTIONS ABOUT BARRIERS TO AND FACILITATORS OF MOUD DISCUSSIONS

1. **Are there any barriers that peers face in terms of discussing MOUD with recoverees?**

   Prompts:
   a. How does your employer feel about you having these conversations? *Does this vary based on what type of setting you're working in?*
   b. What about other people in your organization? Are they encouraging of you talking about this? *Does this vary based on what type of setting you're working in?*
   c. If no, do you know of other peers who face challenges or barriers in terms of talking about medications?

2. **Is there anything you think peers need to help them better talk about MOUD and encourage MOUD adherence with their recoverees?**

   Prompts:
   a. For example, more training, support from employers or colleagues, etc.?

WRAP UP

1. *Ask people if there is anything else that they would like to say.*
2. *Thank the participant and give them the CT Payer Gift Card*