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Viewing then Doing?: Problem-solving Court Coordinators' Perceptions of Medications for Opioid Use Disorders from a Nationally Representative Survey in the United States

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Abstract

Background.—Overdose deaths in the United States (U.S.) surpassed 100,000 in 2021 (Centers for Disease Control and Prevention, 2021). Problem-solving courts (PSCs), which originally began as drug courts, divert people with non-violent felonies and underlying social issues (e.g., opioid use disorders (OUDs)) from the carceral system to a community-based treatment court program. PSCs are operated by a collaborative court staff team including a judge that supervises PSC clients, local court coordinators that manage PSC operations, among other staff. Based on staff recommendations, medications for opioid use disorders (MOUDs) can be integrated into court clients' treatment plans. MOUDs are an evidence-based treatment option. However, MOUDs remain widely underutilized within criminal justice settings partially due to negative perceptions of MOUDs held by staff.

Objective.—PSCs are an understudied justice setting where MOUD usage would be beneficial. This study sought to understand how court coordinators' perceptions and attitudes about MOUDs influenced their uptake and utilization in PSCs.

Methods.—A nationally representative survey of 849 local and 42 state PSC coordinators in the U.S. was conducted to understand how coordinators' perceptions influenced MOUD utilization.

Results.—Generally, court coordinators hold positive views of MOUDs, especially naltrexone. While state and local coordinators' views do not differ greatly, their stronger attitudes align with different aspects of and issues in PSCs such as medication diversion (i.e., misuse).

Declaration of Interest

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The authors would like to disclose drug donations from Alkermes (Vivitrol) and Braeburn (CAM2038) given to Friends Research Institute for other studies.

Conclusions.—This study has implications for PSCs and their staff, treatment providers, and other community supervision staff (e.g., probation/parole officers, court staff) who can promote and encourage the use of MOUDs by clients.

Keywords

perceptions; MOUDs; problem-solving courts; coordinators; substance use

Introduction

Over the last 30 years, problem-solving courts (PSCs) have become a well-known specialty court innovation within the United States (U.S.) that seek to offer rehabilitative programming alongside traditional court requirements for criminal justice-involved individuals. PSCs allow individuals to potentially avoid incarceration by voluntarily participating in a supervised treatment program with intensive case management under the guidance of a court with judicial power (Andraka-Christou, 2016). The drug court is the oldest (established in 1989) and most common type of problem-solving court that specifically facilitates access to substance use therapies for adults charged with non-violent, drug-related crimes (Marlowe, Hardin, & Fox, 2016). PSCs are meant to address various types of illicit behaviors such as substance misuse, but also address underlying social issues such as houselessness or mental health disorders (Berman & Feinblatt, 2001; Marlowe, Hardin, & Fox, 2016). Often referred to as treatment, specialty, or therapeutic courts, PSCs recognize the same 10 best practices developed by the National Association of Drug Court Professionals (NADCP) for drug courts, from which all PSCs were expanded. These ten practices broadly specify the operating characteristics of PSCs which focuses on the court providing specialized treatment programming, frequent check-ins, and use of incentives and/or sanctions to enhance compliance (NADCP, 2013, 2015). However, there are not federal guidelines within the U.S. for which PSCs are required to abide, meaning their procedures are often quite unstandardized across the nation.

Today, more than 3,848 PSCs are reported to exist in the U.S. (National Drug Court Resource Center (NDCRC), 2021). In charge of managing PSCs are court coordinators at the local level that operate a collaborative team of court staff including the supervising judge, defense attorneys, prosecutors, probation officers, case managers, among others that support the client through the program. With one coordinator managing a single court, and sometimes two or three, their duties include holding team meetings on the progress of court clients, applying for grant money to continue operating the program, collaborating with third-party treatment providers to be able to refer clients to, and more. At a state-level, court coordinators oversee all local PSC coordinators and their courts to ensure policy and procedural compliance with state laws, conduct monitoring and evaluation of local courts, apply for grants to sustain the courts across the state, and other coordination and administrative tasks to support the PSCs.

Unlike traditional criminal courts, PSCs are designed to provide court clients with customized treatment services and recurring judicial monitoring of the client's progress within a collaborative court team (Kaiser & Holtfreter, 2016). For example, PSC staff can

allow court clients with alcohol use disorder (AUD) and opioid use disorder (OUD) to be referred to treatment providers that provide medications for substance use disorders, also known as medications for opioid or alcohol use disorders (MOUDs or MAUDs). A PSC may allow PSC clients to take the medications while involved in the PSC. This would require the PSC to specifically refer clients to qualified providers and/or clinics that offer such medications. The courts themselves do not provide treatment but rely on treatment providers to operate treatment groups, case management services, and administer MOUDs and/or MAUDs. A PSC cannot mandate that individuals take MOUDs/MAUDs, but they can encourage them. The PSC can therefore support the use of MOUDs/MAUDs to address substance use disorders given the research findings supporting the effectiveness of the medications in reducing illicit drug use, cravings for drugs and/or alcohol, among other positive outcomes (Amato et al., 2005; Evans et al. 2022; Garcia et al., 2007; Johnson, 2008).

Medications for opioid use disorders (MOUDs) are effective at reducing withdrawal symptoms and cravings associated with substance misuse (Amato et al., 2005; Friedmann et al., 2012; Johnson, 2008). There are three Food and Drug Administration (FDA)-approved MOUDs for treating OUDs—naltrexone, an opioid antagonist (i.e., blocker); buprenorphine, a partial opioid agonist; and methadone, a full opioid agonist (Gold, 1993; Morgan et al., 2018). MOUDs come in several forms: sublingual film strips, pills/tablets, concentrated liquids, and injections (FDA, 2019). However, MOUDs are underutilized as a form of treatment for opioid misuse (Oser et al., 2009; Rich et al., 2005; Nunn et al., 2009), particularly within justice settings (e.g., prisons, probation). For example, it is estimated that only 11% of individuals with an OUD are prescribed one of the three FDA-approved medications for OUD (Oesterle et al., 2019). If MOUDs are not available via communitybased treatment providers, criminal justice agencies have difficulties connecting clients to the care they need (Friedmann et al., 2012). Specifically, only one in twenty justice-involved adults receiving treatment for OUD are prescribed methadone or buprenorphine (Krawczyk et al., 2017). The disconnect between the strong evidence in support of MOUDs and the underutilization of MOUDs is a perplexing issue, particularly within PSCs. As an example, from a prior paper from this study, only 14% of court clients are actually receiving MOUDs (Faragó et al., 2022). This indicates a significant gap between best practice standards and current court practices.

Medications may be underutilized due to court staff's negative perceptions of MOUDs, which may hinder their willingness to refer or allow individuals to use MOUDs as part of their recovery process (Andraka-Christou, 2016; Gallagher et al., 2019; Matusow et al., 2013). Based on prior research, there are a some commonly known sentiments or concerns about MOUDs held by court staff members, such as "clients will divert or misuse the medication," "MOUDs are simply substituting one drug for another," "clients on MOUDs should be tapered off at some point," and so forth (e.g., Andraka-Christou, 2016; Fendrich & LeBel, 2019; Gallagher et al., 2019; Matusow et al., 2013). Moreover, these views may be held by treatment providers and clients (Moore et al., 2022).

Negative perceptions of MOUDs held by court staff may result in discouraging their use by clients with treatment needs for addressing their OUD (Joseph, Stancliff, & Langrod,

2000) and perhaps prohibiting MOUD utilization by clients as part of their treatment regimen (Matusow et al., 2013; Richard et al., 2020). These perspectives are perhaps rooted in misinformation, negative views of people who use drugs, or lack of exposure to certain forms of MOUDs (Moore et al., 2022). While PSC staff often lack knowledge about addictions in general (Mollman & Mehta, 2017), this can also lead to staff lacking the understanding of how MOUDs can be used in treating addiction and the benefits of using MOUDs (Matusow et al., 2013). In a study of staff working in the justice system (e.g., probation officers, psychologists, and court staff), individuals with a higher education level and a belief that addiction is rooted in genetics were more likely to have positive perceptions of MOUDs (Moore et al., 2022). Furthermore, best clinical practice supports MOUDs as lifelong treatments (Comer et al., 2015) to manage OUDs. In this way, policies implemented by court coordinators may be based on misinformed beliefs which are contrary to evidence-based best practices (Joseph, Stancliff, & Langrod, 2000). This has potentially negative implications for clients in PSC programs in need of effective treatment to address their OUD, and risk of opioid overdose (Binswanger et al., 2012).

There is a need to understand how staff perceive the utilization of MOUDs by clients to address the potential effects of misinformation including negative perceptions of MOUDs. Currently, there is limited research that examines the views of court coordinators that oversee and manage different PSCs such as veteran's treatment courts, adult drug courts, mental health courts, among others within the U.S. (Matusow et al., 2013), particularly whether they allow and promote MOUD for appropriate clients as part of their treatment approach (Fendrich & LeBel, 2019). Therefore, this nationally representative study of the U.S. PSC system seeks to examine the perceptions of state and local court coordinators on PSC treatment operations that include the consideration of clients utilizing MOUDs in local PSCs.

Methodology

The subset of data analyzed in this paper are derived from a larger study titled *The Nationally Representative Medication-Assisted Treatment (MAT1) Utilization Survey of Problem-Solving Courts (PSCs) survey.* The larger study was conducted in the U.S. using a nationally representative survey of state and local PSC coordinators to identify overall trends in MOUD provisions within PSCs. From March 2019 to August 2020, one survey was first administered to state coordinators and a second survey was administered to local coordinators thereafter. State coordinator and local coordinator surveys were fairly similar; however, state coordinators were asked more questions pertaining to policy and funding whereas local coordinators were asked more questions regarding treatment practices and collaboration with treatment providers. The local coordinator survey was also longer because they were asked specific perceptions questions about each type and form of MOUDs as they have more direct contact with clients receiving such treatment. The surveys' content was informed by existing validated instruments measuring MOUD

^{1.}During the course of this study, the field began using the term medication-assisted treatment (MAT) to a lesser extent since the term medications for opioid use disorders (MOUDs) is more favored due to the emphasis on treatment for opioid use disorder specifically. This paper will only focus on coordinators' perceptions of medications that target opioid use disorders, although coordinators were asked about medications for alcohol use disorder too.

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utilization: (1) National Criminal Justice Treatment Practices Survey (NCJTPS) (Taxman et al., 2007); (2) National Drug Court Survey (NDCS); (3) National Drug Abuse Treatment System Survey (NDATSS) (D'Aunno et al., 2014); (4) National Treatment Center Study (Roman & Johnson, 2004); (5) Juvenile Justice-Translational Research on Interventions for Adolescents in the Legal System (JJ-TRIALS) survey (Knight et al., 2016), and (6) Opinions About MAT survey (OAMAT) (Friedmann et al., 2009; 2012). The surveys were administered via: (1) online web-based survey; (2) computer-assisted telephone interviews (CATI) through George Mason University's Center for Social Science Research, and (3) U.S. Postal Service mailed survey. To encourage participation, the National Association of Drug Court Professionals (NADCP) sent a letter to state coordinators and the survey center included tokens of appreciation (i.e., stress balls and bracelets) in the mailed survey packets. The survey's respondents are based on a sample of U.S. counties stratified by region and estimated opioid disorder rates. An original list of PSCs was compiled from various sources including American University's National Drug Court Resource Center (https://ndcrc.org/), a directory of 3,400 PSCs provided by the National Association of Drug Court Professionals (NADCP), and publicly available information about PSCs through county and other government websites. There is no comprehensive nor accurate directory of PSCs within the United States. Researchers had to create a directory and then confirm that courts were still active. During the confirmation process, not all courts responded, or some courts reported having two types of PSCs ran by the same team. In addition, the universe of PSCs exhibits a high degree of ambiguity and volatility with courts often serving multiple purposes and some being newly created, and others dissolved. This feature was exacerbated further during COVID-19.

The sampling frame identified potential respondents from four target regions and four specific states (i.e., states with the largest justice populations). Within each region and state, one-third of the counties were selected based on the highest opioid disorder rates (i.e., top quartile of all counties), one-third from those with the lowest opioid disorder rates (bottom quartile), and one-third from the counties in the middle range (i.e., rates between the twenty-fifth and seventy-fifth percentiles). Data on OUD rates were extracted from Substance Abuse and Mental Health Services Administration's National Survey on Drug Use and Health (NSDUH) in 2014 (Center for Behavioral Health Statistics and Quality, 2015). The sample of courts included the major types of PSCs: adult PSCs (e.g., adult drug courts, DWI/DUI courts, mental health courts), veteran's treatment courts and reentry courts, and family dependency courts. Native American and juvenile specialty courts were not included in the sample because these courts have distinct treatment operations for their specific populations including that minors are often not prescribed MOUDs and an independent branch of the study conducted interviews with Native American court coordinators. All research protocols were approved by the University's Institutional Review Board prior to data collection.

The final sample included 849 local PSC coordinators from 35 states and 42 state-wide PSC coordinators. Using a conservative response rate (48.6%) assumes that all non-responses were eligible courts, which researchers did not believe was accurate. Therefore, a more liberal response rate (76.8%) reflects those courts that responded to emails, calls, or mail and removes those courts that did not respond at all.

This paper explores state and local court coordinators' perceptions of MOUDs individually as well as clients utilizing MOUDs as a form of treatment in PSCs. This includes the related factors that may impact their uptake by PSC staff and their ultimate usage by court clients. While the survey asked respondents about their perceptions of MOUDs and MAUDs, this paper only examines questions that pertain to coordinators' perceptions of MOUDs including naltrexone, methadone, and buprenorphine.

Five survey questions assessing coordinators' perceptions about MOUDs using Likert scale response options (i.e., strongly agree, agree, disagree, and strongly disagree) were used. The "do not know" option was removed from scoring to be able to scale the questions from one to four (i.e., strongly disagree to strongly agree) without an outlying option that would skew the data for analysis purposes. These items were included on both the state and local coordinators surveys: (1) 'If someone misses a scheduled court date, they shouldn't be allowed to continue MOUD'; (2) 'If participants have a history of diverting their medication, participants should not be prescribed MOUD'; (3) 'The frequency of treatment services makes no-shows more likely'; (4) 'MOUD burdens court staff to ensure participants are not diverting their medication'; and (5) 'There is a perception in the courts that MOUD is "just substituting one drug for another." The state coordinator survey had an additional 11 perceptions items that were not asked of local coordinators and the local coordinator survey had an additional 23 perceptions items plus an additional sub-section of questions on perceptions of MOUDs that were not asked of state coordinators. The survey was tailored to the audience and their role. Specifically, the primary role of local court coordinators is to directly manage PSCs including court clients receiving MOUDs as part of the PSC program whereas the state coordinators are removed from daily operations of local PSCs.

The MOUD-specific items included one question and two statements about buprenorphine, methadone, and naltrexone: (1) "How effective are the following medications for treating participants with OUD?"; (2) "The following medications should be available as a lifelong treatment option", and (3) "The following medications reduce addicts' criminal activities". The first question used a one to four Likert scale with response categories of 'ineffective', 'somewhat effective', 'effective', and 'very effective.' The second and third questions used a one to four, 'strongly disagree' to 'strongly agree' Likert scale.

Researchers examined the perception-related questions from the state and local surveys separately using descriptive statistics and bivariate tests. Then, researchers compared the perceptions questions that were answered by both local and state coordinators to explore the congruence between the two court coordinator roles using two sample *t*-tests. Lastly, researchers analyzed local coordinators' MOUD-specific perceptions using repeated measures ANOVAs to test for differences between perceptions of the three MOUDs for each of the three items. In the case of each repeated measures ANOVA, Mauchly's test of sphericity determined that the variances of the differences between all combinations of related groups were unequal. Therefore, degrees of freedom for the within-subjects factors (type of MOUD) were corrected using the Greenhouse-Geisser method. This correction is relatively conservative and tends to underestimate the degrees of freedom (and inflate the *p*-values) compared to the Huynh-Feldt correction or no correction (Verma, 2015). Significant omnibus tests were followed with post-hoc tests of pairwise comparisons by way

of Fisher's least significant difference test. Lastly, Welch's t-tests were conducted due to the differences in sample size of local and state coordinator respondents. Overall, this study extends previous research by contributing to the knowledge base on court staff's perceptions with the potential to impact the avid uptake and effective utilization of MOUDs, particularly within PSC settings.

Results

The results detail the demographics and perceptions of both state and local PSC coordinators who responded to their respective survey. The final sample of local court coordinator coordinators consisted of 849 individual respondents and the state court coordinator consisted of 42 individual respondents. Most respondents² were white (local coordinator: 57% [n = 485]; state coordinator: 72% [n = 31]), middle-aged (i.e., 35 to 54 years old) (local coordinator: 45% [n = 377]; state coordinator: 51% [n = 22]), women (local coordinator: 49% [n = 417]; state coordinator: 63% [n = 27], had a bachelor's degree or higher (local coordinator: 62% [n = 525]; state coordinator: 81% [n = 35]) and occupied the role of coordinator for approximately four or more years (local coordinator: $60\% [n = 509]^3$).

As shown in Table 1, state court coordinators in this study overwhelmingly agree with the perceptions' statements: "Lack of transportation is an issue for engagement with PSCs across the state" and "MOUD is an effective method for reducing illicit opioid use." However, state coordinators did not agree with the statement: "Even when participants use MOUD services as prescribed, they get high from it." State coordinators' perceived barriers to access related to travel and transportation for PSC clients attending court and treatment sessions as well as the importance of utilizing effective and convenient methods of treatment for court clients.

Local coordinators (see Table 2) primarily agreed with the sentiments that referred to the treatment processes used by the court. For instance, as seen in Table 2, local coordinators tended to agree with the statements: "Treatment plans are individualized to address the needs of each participant," "Sanctions match the level of compliance shown by the participants," "Incentives match the level of compliance shown by the participants," and "MOUD is affordable for most participants who have Medicaid coverage." Local coordinators perceived that their treatment practices regarding individualization and incentivization/sanctioning were appropriate, but not that the cost of MOUDs are a barrier to clients even with Medicaid.

Notably, there were a few differences in perceptions by state and local PSC coordinators. More specifically, most local coordinators agreed with their ability to carry out treatment operations (see Table 2), while most state coordinators agreed on client-level engagement issues and the focused success of MOUDs (see Table 1). Moreover, state coordinators were more outwardly affirmative about clients' receiving treatment and their treatment success,

². There was a significant amount of non-response to demographic questions asked of respondents so demographic percentages may not rise to the level of majority (i.e., > 50%) as the percentages presented are of that of the entire sample (n = 849, n = 42); however, the demographic percentages presented are what a majority of respondents selected. ³ The state coordinator was not asked about tenure in their position.

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despite their history of diversion (i.e., misuse) of MOUDs or facing challenges to accessing treatment. Additionally, local coordinators had more neutral attitudes or were uncertain of their stance relating to client barriers and compliance/adherence to treatment given their high responses of "do not know" to several survey items.

State vs. Local Perceptions

Means and standard deviations of the perception items for state and local coordinators are presented in Table 3. Independent sample *t*-tests were used to compare the local and state coordinators' responses to the same perceptions items. As shown in Table 3, state and local coordinators differed significantly in their responses to the following items: "If participants miss a scheduled court date, they shouldn't be allowed to continue MOUD" [t(42.85) = -4.23, p < 0.001], "If participants have a history of diverting their medication, they should not be prescribed MOUD" [t(37.38) = -3.25, p = 0.002], and "MOUD burdens court staff to ensure participants are not diverting their medication" [t(37.69) = -2.66, p = 0.011]. In each case, local coordinators tended to agree with each of the statements more than state coordinator respondents differed (n = 42 vs. n = 849). This test of unequal variances made one minor difference in that the significance of one survey item, "MOUD burdens court staff to ensure participants are not diverting their medication" shifted from p < .05 to p < .01, as reflected in Table 3.

Local Coordinator Perceptions of MOUDs

Most local PSCs allow clients to utilize MOUDs (67%) and local coordinators' views of each of the MOUDs varies considerably. Of those, naltrexone (92%) is most common, then methadone (59%) and various forms of buprenorphine of which pills (64%) and sublingual film strips (64%) are most common. In line with utilization, local PSC coordinators believed naltrexone was the most effective type of MOUD based on a scale of one to four with four being "strongly agree" (M= 3.36, SD = 0.68), followed by buprenorphine (M= 2.86, SD = 0.79), and methadone (M= 2.60, SD = 0.88). Results of the repeated measures ANOVA revealed a significant within subjects effect of medication type [F(1.61, 484.86) = 113.75, p < 0.01, η^2 = 0.27]. Post hoc analyses showed that the perceived effectiveness of naltrexone was significantly greater than the perceived effectiveness of buprenorphine (*Mean diff.* = 0.51, SE = 0.053, p < 0.01) and methadone (*Mean diff.* = 0.76, SE = 0.060, p < 0.01). The perceived effectiveness of buprenorphine was greater than that of methadone (*Mean diff.* = 0.25, SE = 0.038, p < 0.01).

A similar pattern of results occurred for the belief that each MOUD should be available as a lifelong treatment option. Local coordinators agreed the most with making naltrexone available as a lifelong treatment option (M = 2.75, SD = 1.01), followed by buprenorphine (M = 2.54, SD = 1.03), and methadone (M = 2.41, SD = 1.04). Similar to effectiveness perceptions, there was a significant within subjects effect of medication type [F(1.67, 485.76) = 44.26, p < 0.01, $\eta^2 = 0.13$]. Post hoc analyses showed that the level of agreement with offering naltrexone as a lifelong treatment option was significantly greater than that of offering buprenorphine as a lifelong treatment option (*Mean diff.* = 0.21, SE = 0.034, p < 0.01) and methadone (*Mean diff.* = 0.34, SE = 0.043, p < 0.01) and that the level of

agreement with offering buprenorphine as a lifelong treatment option was greater than that of methadone (*Mean diff.* = 0.13, SE = 0.030, p < 0.01).

Lastly, whether local coordinators believed each type of MOUD reduces criminal activity was examined. Local coordinators were more likely to agree that naltrexone reduces criminal activity (M= 3.08, SD = 0.72), followed by buprenorphine (M= 2.83, SD = 0.84), and methadone (M= 2.73, SD = 0.87). Results of the repeated measures ANOVA revealed that there was a significant within-subjects effect of MOUD type [F(1.75, 398.82) = 37.32, p < 0.01, $\eta^2 = 0.14$]. Probing the omnibus test revealed that agreement with the idea that naltrexone reduces criminal activity was greater than agreement with the idea that buprenorphine (*Mean diff.* = 0.25, SE = 0.042, p < 0.01) or methadone (*Mean diff.* = 0.35, SE = 0.048, p < 0.01) reduce criminal activity. Finally, the level of agreement with the belief that buprenorphine reduces criminal activity was greater than that of methadone (*Mean diff.* = 0.10, SE = 0.034, p = 0.004). Overall, local coordinators view naltrexone more positively than buprenorphine or methadone.

Discussion

Overall, state and local court coordinators' attitudes towards the utilization of MOUDs by clients varied. The differences between state coordinators and local coordinators were subtle but important. State coordinators tended to have stronger and more favorable perceptions of MOUDs including their effectiveness. State coordinators also perceived clients' barriers to accessing treatment, such as lack of transportation or treatment inconvenience due to frequency of appointments. Local coordinators had more neutral perceptions as revealed in the high responses of "do not know" to several survey items. Interestingly, local coordinators had stronger perceptions about operational issues of the court such as individualized treatment plans, incentivizing/sanctioning, and testing/screening protocols. State coordinators were more favorable towards allowing court clients to continue using MOUDs regardless of their compliance or adherence, whereas local coordinators tended to express concern that the staff are burdened in trying to ensure MOUDs are not misused by clients. This difference reflects the different roles of the state and local coordinators, with local coordinators having direct contact with clients in the PSC program unlike state coordinators. Lastly, while both coordinators disagreed with the perception in the court that MOUD is "just substituting one drug for another," the level of disagreement suggests that there may be some awareness that this sentiment exists in some capacity amongst PSC staff.

Since negative perceptions held by court staff may be linked to the court's MOUD utilization, as evidenced by this study and a similar study (Andraka-Christou & Atkins, 2020b), this requires consideration of the role of policy to influence the uptake of MOUD in PSCs. State-level policy supporting various treatment options is influential in how local courts and treatment providers implement MOUDs. State policies can guide the uptake of MOUDs in PSCs, as has occurred in other treatment efforts such as in-prison residential treatment (see Henderson et al., 2009 for a discussion of the importance of state initiatives). Given that there are close to 4,000 PSCs today which primarily serve individuals with substance use disorders, evidence-based messaging about MOUDs may be essential to persuade local court coordinators and other PSC staff that MOUDs are effective. With

increased support for MOUDs as treatment options in PSCs, courts can influence clients' access to highly effective MOUDs and address concerns of poor implementation, barriers to care, overburdened staff, lack of knowledge about certain types of MOUDs, and reluctance to serve clients with histories of non-compliance, among other issues. Given that MOUDs are evidence-based, it is important to educate PSC staff about their effectiveness to address some misbeliefs about MOUDs. The attitudes and beliefs of PSC staff about MOUDs affect which treatment providers the courts end up referring clients to, and this implicitly and explicitly has an impact on clients, and potentially their success in the PSC program. Collaborating with treatment providers that exist within or around the local communities is important for PSCs but also the clients they serve.

Medications for Opioid Use Disorder

Local coordinators' perceptions of specific MOUDs were not as clear as their general views of clients' access to and utilization of MOUDs. Regarding whether MOUDs should be available as lifelong treatment options for court clients with OUDs, respondents did not fully agree nor disagree. Studies show that MOUDs are more effective as a long-term form of treatment because discontinuing the use of a MOUD has negative effects including the potential for relapse and overdose (Clark et al., 2011; Fiellin et al., 2008; Joseph, Stancliff, & Langrod, 2000; Parran et al., 2010). Naltrexone was viewed more positively than methadone and buprenorphine as a long-term treatment option. This finding is similar to conclusions from Fendrich and LeBel's (2019) study indicating that the most commonly accessed form of MOUD by clients is naltrexone and is also the most preferred MOUD by PSC staff. The tendency to view naltrexone more favorably than buprenorphine or methadone may be due to the marketing strategies of companies that sell naltrexone. These companies marketed this MOUD heavily to PSCs across the United States, which can serve to increase the knowledge and acceptance of court staff to this medication. The marketing strategy often included low-cost access to naltrexone which also might increase favorable responses to it. However, the marketing of this medication to the courts does not acknowledge that naltrexone is not as effective as methadone and buprenorphine (Larochelle et al., 2018).

Local PSC coordinators reported differing perceptions of MOUDs as a tool to reduce engagement in criminal activities by individuals with OUDs. Respondents agreed that naltrexone decreases criminal involvement, which is consistent with findings on PSC staff in Florida (Andraka-Christou & Atkins, 2020a). The respondents in this study viewed buprenorphine and methadone somewhat similarly to Andraka-Christou and Atkins' (2020a) respondents. However, the coordinators in Andraka-Christou and Atkin's (2020a) study viewed buprenorphine (45%) and methadone (45%) as more successful in reducing crime than did this study's respondents who did not fully agree that they reduce crime buprenorphine (34%) and methadone (27%)—which may be due to comparing nationally representative trends with the state of Florida alone. Nationally, perceptions of MOUDs may not be as positive towards methadone, an agonist, and buprenorphine, a partial agonist. This could be due to the fact that methadone is the most strictly regulated MOUD including limited distribution by accredited treatment programs and requirements for behavioral counseling (Kresina et al., 2009). Buprenorphine is less strictly regulated. Regulations

that do exist allow for access through qualified providers including physicians, nurse practitioners, and others in office-based settings or at a local pharmacy for private use (Kresina et al., 2009), but it may not be marketed to justice agencies as much as naltrexone.

Lastly, local court coordinators held mixed views of specific types of MOUDs in terms of the effectiveness of methadone and buprenorphine, but they agreed naltrexone was effective. There was also a high percentage of coordinators responding "do not know" about the outcomes that each medication produces perhaps from lack of education about MOUDs or lack of exposure to MOUDs, which may have contributed to an increased willingness to report not knowing or even skip all perceptions survey items entirely (208 court coordinators did so). Based on the number of missing responses and coordinators selecting "do not know" for numerous survey items regarding MOUDs, it is clear that there is a need for increased training on MOUDs to inform all court personnel about the purpose of MOUDs in treating substance use disorders, their effectiveness, and how to integrate their use alongside behavioral therapies. There is also a need to education court staff on the techniques of medication distribution and management procedures used by treatment providers which would benefit court staff in addressing concerns and myths about use of the MOUDs by clients.

Limitations

This study offers important context on court coordinators' perceptions of authorizing MOUDs in PSCs but there are many limitations to consider that limit the generalizability of the results to PSCs in the U.S. and beyond. The data used in the results comes from self-reported survey data provided by state and local court coordinators overseeing and managing local level PSCs which only presents one perspective about the PSC experience. This means that other staff members' perceptions, as well as the perceptions of clients, are not examined. This study is also cross-sectional in nature in that results only represent the information provided at the time the survey was completed. Furthermore, given that a meaningful proportion of respondents indicated that they "do not know" or skipped several survey questions about their perceptions which were located close to the end of the survey, there is reason to believe that survey fatigue was perhaps an issue among respondents. However, attitudes of court coordinators could have changed since taking the survey. While the results of this study provide insight into the perceptions of court coordinators allowing the utilization of MOUDs by clients within PSCs, there is still ample room for further research on how to successfully implement this evidence-based treatment and other treatments within PSCs across the United States.

Future Directions

Future research about the uptake of MOUDs in PSCs would benefit from exploring the perceptions of both treatment staff and other providers along with other court staff (e.g., probation officers, case managers, treatment coordinators). These individuals may have unique insights into the treatment provision process, but their perspectives would also aid in obtaining a greater understanding of their particular roles in the PSC setting, particularly as it relates to the implementation and administration of MOUDs. Future research should examine the experiences of court clients themselves, not only in their perceptions about

using MOUDs but also their perceptions about the recovery process situated within the PSC space. Exploring the perceptions of other PSC staff, collaborating providers, and clients will provide a broader perspective about the important factors impacting MOUD utilization by clients in the PSC system.

Furthermore, studies should also employ an experimental design to help determine the causal factors, attitudes or otherwise, that impact MOUD utilization within PSCs. Furthermore, qualitative research capturing the perceptions of all the individuals working and participating in PSCs is also suggested because each singular court context is often vastly different from others given that PSCs are not standardized across the U.S., especially since they serve a variety of target populations and target different social issues. Moreover, exploring the variations of courts in future research is crucial for a deeper understanding of how those may influence the PSC environment and process, but also the treatment approach for serving their clients.

Conclusion

While state and local coordinators' views on the utilization of MOUDs by court clients varied, there was also not a consensus among local coordinators regarding specific MOUDs. Local coordinators did not fully agree or disagree about MOUDs' effectiveness, use for reducing criminal activity, and potential to be a lifelong treatment option. To improve the uptake of MOUDs in PSCs for clients' utilization, public health campaigns and policy initiatives spearheaded by each state coordinator are needed to increase receptivity to the use of MOUDs as part of treatment regimens in PSCs. It is important to address these perceptions to increase the use of MOUDs, and to quell concerns related to misinformation.

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Table 1.

State PSC Coordinators' Perceptions of Treatment Issues

Perception Statements	Respondents who Strongly Agree/Agree n (%)	Respondents who Disagree/Strongly Disagree n (%)	Respondents who Do not know n (%)
Treatment			
MOUD is an effective method for reducing illicit opioid use	39 (91%)	1 (2%)	1 (2%)
Statewide policy focuses more on access to treatment than punishment for opioid use	31 (72%)	5 (12%)	6 (14%)
MOUD providers are not careful in monitoring the participants, and may not recognize when they abuse it	14 (32%)	22 (51%)	5 (12%)
Our state's PSCs favor drug-free treatment over the use of MOUD services	12 (28%)	24 (56%)	5 (12%)
Only certain types of MOUD services should be used for participants in our PSCs	11 (26%)	25 (58%)	5 (12%)
Even when participants use MOUD services as prescribed, they get high from it	5 (12%)	30 (70%)	6 (14%)
Barriers			
Lack of transportation is an issue for engagement with PSCs across the state	40 (93%)	0 (0%)	1 (2%)
The distance to travel to services affects how often participants attend treatment	34 (79%)	5 (12%)	2 (5%)
The frequency of treatment services makes holding a steady job difficult for participants	22 (51%)	18 (42%)	1 (2%)
MOUD treatment appointments are not convenient for participants' schedules	22 (51%)	8 (19%)	11 (26%)
State funding is adequate to operate all PSCs	8 (19%)	31 (72%)	1 (2%)

Table 2.

Local PSC Coordinators' Perceptions of Court Operations and Treatment Issues

Perception Statements	Respondents who Agree/Strongly Agree n (%)	Respondents who Disagree/Strongly Disagree n (%)	Respondents who Do not know n (%)
Treatment			
Treatment plans are individualized to address the needs of each participant	620 (73%)	11 (1%)	9 (1%)
Detoxification should be required before a participant can enter the program	254 (30%)	303 (36%)	76 (9%)
Most participants in our court are not interested in MOUD services	221 (26%)	268 (32%)	133 (16%)
Participants tend to decline intramuscular (IM) MOUD service	132 (15%)	185 (22%)	305 (36%)
OUD is an uncommon problem in our PSC	105 (12%)	465 (55%)	54 (6%)
Staffing			
Court staff and treatment staff periodically meet and talk about what is working well and what is not working to improve our performance	579 (68%)	44 (5%)	14 (2%)
Attending training and development programs is a priority for our staff	531 (63%)	67 (8%)	36 (4%)
We have enough staff to meet the needs of this PSC	431 (51%)	182 (21%)	23 (3%)
Defense attorney and prosecutor work together on addressing MOUD adherence	296 (35%)	106 (13%)	226 (27%)
Our staff frequently say that they are overworked	197 (23%)	400 (47%)	35 (4%)
We have trouble retaining highly competent staff in our court	63 (7%)	542 (64%)	29 (3%)
Court staff and treatment staff have a difficult time communicating with each other	43 (5%)	579 (68%)	14 (2%)
Barriers			
MOUD is affordable for most participants who have Medicaid coverage	395 (47%)	49 (6%)	182 (21%)
MOUD is too expensive for most participants to pay for out of pocket	346 (41%)	124 (15%)	157 (19%)
MOUD is affordable for most participants who have private health insurance	287 (34%)	103 (12%)	237 (28%)
Participants who start a job during the PSC process often face lapses in a health insurance coverage	277 (33%)	135 (16%)	214 (25%)
Compliance			
Sanctions match the level of compliance shown by the participants	607 (72%)	16 (2%)	15 (2%)
Incentives match the level of compliance shown by the participants	602 (71%)	18 (2%)	18 (2%)
Participants who miss MOUD dosages should be referred to other services for their substance use disorder	251 (30%)	190 (22%)	188 (22%)
Participants with a history of medication diversion should be referred to residential services	207 (24%)	202 (24%)	216 (25%)
It is often difficult to recognize when participants are diverting	185 (22%)	260 (31%)	177 (21%)

Table 3.

Means Comparison of Perceptions on Treatment Issues of State PSC Coordinators and Local PSC Coordinators

Perception Statements (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree)	State Coordinators (n = 42) M (SD)	Local Coordinators (n = 849) M (SD)
If participants miss a scheduled court date, they shouldn't be allowed to continue MOUD ***	1.37 (0.63)	1.82 (0.64)
If participants have a history of diverting their medication, they should not be prescribed MOUD ***	1.68 (0.77)	2.12 (0.72)
The frequency of treatment services makes no-shows more likely	2.18 (0.76)	2.09 (0.64)
MOUD burdens court staff to ensure participants are not diverting their medication **	1.91 (0.89)	2.32 (0.74)
There is a perception in the courts that MOUD is "just substituting one drug for another"	2.38 (0.91)	2.22 (0.83)

p < 0.01**

p < 0.001***

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