Volume IV

Achieving Evidence-Based Practices in Community Corrections to Promote Recovery

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A1 Advancing Justice

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Achieving Evidence-Based Practices in Community Corrections to Promote Recovery

National Association of Drug Court Professionals
Alexandria, Virginia

More information about Advancing Justice is available at allrise.org/advancingjustice. More information about the National Association of Drug Court Professionals is available at allrise.org.

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VOLUME IV

National Association of Drug Court Professionals

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Journal for Advancing Justice

The *Journal for Advancing Justice* provides justice and public health professionals, policy makers and other thought leaders, academics, scholars, and researchers a forum to share evidence-based and promising practices at the intersection of the justice and public health systems.

The journal strives to bridge the gap between what has proven effective and what is often considered business as usual.

Although the *Journal for Advancing Justice* emphasizes scholarship and scientific research, it also provides practitioner-level solutions to many of the issues facing the justice system. To that end, the journal invites scholars and practitioners alike to submit articles on issues of interest impacting global justice systems, particularly where those systems collaborate with public health systems.

Advancing Justice was created by leaders of the treatment court movement at the National Association of Drug Court Professionals (NADCP). Through NADCP, Advancing Justice harnesses more than three decades of credibility, expertise, and leadership responsible for the creation of nearly 4,000 treatment courts throughout the world. With a constituency of thousands of legal and public health professionals spanning every intercept point in the justice system, from entry to reentry, Advancing Justice is positioned to lead a new era of global reform.

National Association of Drug Court Professionals

NADCP is the premier training, membership, and advocacy organization for the treatment court model, which now includes nearly 4,000 programs found in every state and four territories of the United States, and over 20 countries. Since 1994, NADCP and its divisions—the National Drug Court Institute, the National Center for DWI Courts, and Justice For Vets—have trained hundreds of thousands of professionals spanning the legal, clinical, psychosocial, and law enforcement fields.

NADCP regularly publishes cutting-edge, research-based materials—including the groundbreaking Adult Drug Court Best Practice Standards—and the association works tirelessly to improve the response of the American justice system to people with substance use and mental health disorders.

NADCP is a 501(c)(3) organization.

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GUEST EDITOR NOTE

Introduction: Emerging Best Practices in Community Corrections

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This volume of the *Journal for Advancing Justice* centers on the theme of using evidence-based community corrections practices to promote recovery. A long-standing goal of community corrections is balancing public safety with supporting individuals' rehabilitative needs, particularly treatment needs, to address criminogenic risk factors and to support substance use and mental health disorder recovery. Since 1989, treatment courts have been an important avenue of community corrections to promote substance use and mental health disorder recovery for individuals involved in the justice system. More than three decades of research have been synthesized to advance the community corrections and treatment court model (National Association of Drug Court Professionals [NADCP], 2004) and educate the field on best practice standards (NADCP, 2018a, 2018b). Drug courts and other treatment courts, for example, appear to be the most evaluated criminal justice interventions of all time. Rigorous research has consistently demonstrated that treatment courts effectively reduce recidivism rates and substance use, promoting mental health recovery, improving public safety, and facilitating family reunification, to name a few benefits (Center for Children and Family Futures and NADCP, 2019; Mitchell et al., 2012). Treatment courts undoubtedly work; however, as with any program, continued research is necessary to ensure ongoing adherence to evidence-based best practices in this ever-evolving space. This volume of the journal provides an in-depth look into various topics related to justice reform and community corrections in an effort to identify additional strategies to improve outcomes for individuals involved in the justice system, including opioid intervention courts (OICs), peer recovery specialists, housing following incarceration, the use of jail sanctions, and HIV education.

In the first of five research articles, Dr. Shannon Carey and colleagues offer a timely and important discussion on the role of OICs, one of the newest treatment court types, in identifying and assisting people with opioid use disorder in the legal system, the use of medication for opioid use disorder to support recovery, and the 10 essential elements of OICs. The original adult drug court model, established in 1989, has evolved and expanded to include other court types that treat a wide range of issues in specific populations, such as individuals with mental health disorders, veterans with trauma symptoms, people with repeat impaired-driving offenses, and parents with substance use disorders at risk of losing custody of their children. This first article presents findings from a process evaluation of the OIC in Buffalo, New York. Treatment court professionals, policy makers, community members, and other stakeholders could use these findings to develop OICs in their communities, incorporate OIC practices into existing treatment courts that serve individuals with opioid use disorder, and advocate for best practices in treating opioid use disorder to reduce rates of drug overdose and death in their jurisdictions and beyond.

In the second research article, Dr. Nili Gesser and colleagues used qualitative research methods to develop a behind-the-scenes perspective on the use of peer recovery specialists in the drug treatment court in Philadelphia, Pennsylvania. Focus groups and interviews were used to collect data from drug court participants and members of the drug court team, such as case managers, treatment providers, and attorneys. Both drug court participants and members of the drug court team shared favorable views of the use of peer recovery specialists in the program. Specifically, participants felt peer recovery specialists modeled substance

use disorder recovery for them and supported them in pursuing endeavors such as employment. Case managers and other members of the drug court team reported that collaborating with peer recovery specialists helped them develop insights into the lived experiences of people in recovery and in developing comprehensive, individualized treatment plans. A notable challenge, however, was that the role of peer recovery specialists was not clearly defined or differentiated from that of case managers, which led to some confusion among the court team, the participants, and even the peer recovery specialists and case managers themselves. If left unaddressed, this role confusion could lead to inconsistent practices regarding information exchange and the differing roles and responsibilities of peer recovery specialists and case managers. The favorable views toward peer recovery specialists in drug courts is promising, yet more research is needed to identify best practices for their role in these programs and other justice reform efforts.

In the third research article, Dr. Monique Gill and colleagues used quantitative and qualitative methods to assess the impact of an Oregon housing assistance program for individuals with criminal records. Stable and safe housing is clearly important in justice reform policies that aim to promote public safety, reduce criminal recidivism rates, and support substance use and mental health recovery. This study found that flexible funding assistance and case management supported justice-involved individuals in obtaining housing. Of the 113 individuals served, 99 (nearly 88%) were housed. The results of this small program evaluation suggest that relatively low-cost interventions can facilitate housing placement among individuals with criminal records during reentry. Younger individuals and those with higher median monthly incomes were most likely to be housed, and providing at least $1,000 in assistance per person resulted in significantly quicker housing. Furthermore, six individuals who achieved housing participated in phone interviews and emphasized that combining case management with flexible funding assistance helped them improve their physical and mental well-being, abstain from criminal activity, and strengthen relationships with their children by providing a safe and stable space for them and their families.

In the fourth research article, Dr. Lisa Shannon and colleagues examined the effect of jail sanctions on program completion in Kentucky drug courts. According to the NADCP Adult Drug Court Best Practice Standards (NADCP, 2018a, 2018b), jail sanctions are part of the treatment court model, but they must be used consistently, adhering to best practice, and must not be confused with therapeutic adjustments, which respond to drug use through a rehabilitative lens (e.g., increase treatment modality) as compared to a punitive lens (e.g., incarceration). This study found that the timing of jail sanctions predicted program completion among key variables. For instance, receiving the first jail sanction early in the program was associated with an increased hazard of drug court termination; however, the hazard declined as time in the program increased. Other findings include that, in comparison to male participants, female participants were associated with a 22% reduced hazard of drug court termination, and individuals with more than four positive drug tests were associated with a 38% reduced hazard of termination.

In the fifth research article, LaTunja Sockwell and colleagues evaluated the effectiveness of an HIV education program on Arkansas drug court participants' knowledge of HIV, perceptions of stigma and fallacies related to HIV, and sexual and drug-related behaviors related to HIV. Program participants reported that their knowledge of HIV increased and that risky behaviors associated with HIV transmission decreased following participation in the education program. Drug courts should offer HIV education, testing, and other health-related resources to participants, and the findings from this study demonstrate that education supports participants in making informed choices about their health and behavior. Additionally, this study introduces the "Embracing Healthy Love" HIV education program that drug courts and other treatment courts may be able to adopt in their programs.

The five research articles included in this volume of the journal exemplify the next phase of community corrections research. This next phase moves beyond evaluating whether the treatment court and community corrections models work, as research

has consistently demonstrated their effectiveness when adhering to best practice. Future research should focus on expanding the community corrections model to reach additional populations, such as developing OICs, defining the role of peer recovery specialists to best serve participants, and understanding how to use jail sanctions more effectively. Moreover, the next phase of research should broaden our understanding of substance use and mental health disorder recovery. The community corrections model has evolved through the decades, and justice reform is ever-changing based on new science and policy advocacy efforts. As treatment courts and other community corrections models continue at the forefront of justice reform, our understanding of recovery should also evolve. Historically, recovery has commonly been defined by how long an individual has remained abstinent from drugs and alcohol. While abstinence is an important part of the recovery process for many, recovery exists on a spectrum and involves multiple pathways and varied personal goals. Community corrections interventions must be prepared to support participants on their individual journeys to recovery. This may include helping participants find housing and offering HIV education, as discussed in this volume of the journal, as well as any other resource that promotes the four key dimensions of recovery: health, home, purpose, and community (Substance Abuse and Mental Health Services Administration, 2022).

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RESEARCH REPORT

Responding to a State of Emergency: The Creation of a New Triage to Treatment Court Model to Address the Opioid Crisis

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Abstract

In May 2017, the first opioid intervention court (OIC) was launched in Buffalo, New York. The primary goal of the Buffalo OIC was saving lives by providing rapid access to medication for opioid use disorder (MOUD) and supporting stabilization through intensive court supervision, case management, peer support, and drug testing. Although the Buffalo OIC is not a traditional treatment court, decades of research in treatment courts and in the use of MOUD informed the OIC model, defined in the Center for Court Innovation's The 10 Essential Elements of Opioid Intervention Courts*. In this article, the researchers describe the methods and results of a detailed process evaluation of the Buffalo OIC and its implementation of the 10 Essential Elements. The results demonstrated that Buffalo's existing treatment courts provided a strong foundation based on high levels of trust and cooperation that already existed among the agencies and leaders involved in the OIC's development. The program also demonstrated strong adherence to the 10 Essential Elements. Nearly all recommendations from the process evaluation were focused on better documentation of program procedures over time. Overall, the Buffalo OIC demonstrated the utility of following a structure of established, research-based best practices as described in the 10 Essential Elements in developing and implementing a new model that is functional and effective.*

INTRODUCTION

The opioid epidemic has had devastating consequences for the health of individuals and communities in the United States, including increased rates of infectious diseases, neonatal syndromes, and mortality (National Institute on Drug Abuse, 2022). Beyond the individual, the opioid crisis also impacts social and economic welfare. Research has shown that the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement related to prescription opioid misuse combine to create an economic burden of $78.5 billion per year in the United States (Morgan et al., 2018). The opioid epidemic places new pressures on an already overburdened criminal justice system, affecting law enforcement, jails, and courts. Not only have caseloads increased due to new charges, but courts must also grapple with the unique stabilization and treatment needs of opioid users.

Across numerous states, courts have begun to mobilize to build coordinated responses. Modeled on successful drug treatment court programs, these new opioid intervention courts (OICs) aim to prevent overdose deaths by providing individuals with immediate access to medication for opioid use disorder (MOUD), stabilization, peer recovery support, and court supervision.

The first OIC was launched in Buffalo, New York, in May 2017. Unlike traditional drug treatment courts that are longer term and focused on reducing recidivism, the Buffalo OIC is intended as a short-term intervention lasting 90 to 180 days to prevent overdose death and initiate stabilization while the court determines a participant's case disposition. The OIC serves as a medical and behavioral intervention option for courts and criminal justice officials that is initiated immediately after arrest with a distinct primary goal of saving lives. Although the OIC is not a traditional treatment court, it was designed based on research from treatment courts and includes rapid referral and access to evidence-based treatment services (e.g., MOUD, cognitive behavioral therapies for substance use disorder), specialized peer support, intensive case management, and daily court appearances featuring individual conversations with a judge, similar to court appearances in traditional drug treatment courts.

The immediacy and quick pace of the court allow the program partners to swiftly intervene to save lives. While the traditional treatment court system can take as long as 50 days or more from arrest to filing to assessment and entry into the program, given the serious nature of opioid use disorder, the OIC measures intake in terms of hours. Although some of the program features are similar to those of the traditional treatment court model (e.g., assessment, access to evidence-based treatment, judicial contact, case management), the OIC model has a significant difference in the immediacy of the brief screening completed in the jail the day of the arrest. After consultation with their defense attorney, the defendant, if they agree to participate, is brought before the judge for entry into the program within hours of arrest. Within the first 24 hours, they are also evaluated by a nurse and doctor for assessment and administration of MOUD. All three types of medications approved by the U.S. Food and Drug Administration (FDA) are available for clients: methadone, buprenorphine, and naltrexone.

The 10 Essential Elements of the OIC Model

As the OIC model began to take shape in Buffalo and in other communities across the country, the Center for Court Innovation, in partnership with the Office of Policy and Planning of the New York Unified Court System and through funding from the U.S. Department of Justice's Bureau of Justice Assistance (BJA), developed *The 10 Essential Elements of Opioid Intervention Courts* (Center for Court Innovation, 2019). These elements are anchored in the Buffalo OIC experience, as well as in other court-based efforts to address opioid use disorder in various states, such as Tennessee and Arizona. They also reflect decades of research on traditional treatment courts, evidence-based practices in substance use disorder treatment, and the use of medication to treat substance use disorders. Much like the original 10 Key Components of Drug Courts (National Association of Drug Court Professionals, 1997), the 10 Essential Elements are intended as a blueprint or guide for operations. The 10 elements involve ensuring that OIC programs have:

1. Broad legal eligibility
2. Immediate screening for risk of overdose
3. Informed consent from participants after consultation with defense counsel
4. Suspension of prosecution or expedited pleas

5. Rapid clinical assessment and treatment engagement
6. Recovery support services
7. Frequent judicial supervision and compliance monitoring
8. Intensive case management
9. Program completion and continuing care
10. Performance evaluation and program improvement

Evaluating the Buffalo OIC

Much like the original grassroots movement of drug treatment courts, the OIC model and 10 Essential Elements are increasingly seen in practice in courts across the country. To begin to build a research base and understanding of outcomes, NPC Research was contracted to conduct an independent process, outcome, and cost evaluation of the Buffalo OIC. The evaluation was funded by the National Drug Court Institute under a grant from BJA in 2019. The outcome and cost studies provided evidence for the success of this model in terms of rapid treatment engagement and saving the lives of OIC participants. For the outcome study, researchers used a historical comparison group from Erie County, where the city of Buffalo is located, from a 12-month time period immediately prior to the implementation of the Buffalo OIC. The OIC participants and comparison group were selected from data collected by governmental agencies (i.e., participants were not randomly assigned but were selected based on the natural course of program implementations). To reduce selection bias, NPC employed propensity score matching (PSM) to match study participants from the comparison sample that had demographics, diagnoses, treatment histories, and criminal histories similar to those in the OIC population. The comparison group (N = 326) was compared to OIC participants (N = 326) across numerous indicators, including treatment engagement, death rate, rearrests, and convictions.

Findings from the outcome evaluation revealed that OIC participants were one third as likely to die in the first 6 months, and half as likely to die within one year, compared to opioid users who were booked into the jail but experienced business-as-usual criminal case processing. Although these results demonstrated a substantial difference in death rates, they were not statistically significant, most likely due to the relatively small number of deaths during the 12-month period (there were 9 deaths of individuals in the OIC and 20 deaths in the comparison group).[1] Analysis of data related to treatment engagement revealed that nearly half of OIC participants had engaged in some form of treatment (including MOUD) compared to just 12% of the comparison group within 30 days after the arrest and booking event.[2] While reducing recidivism was not the main goal of the OIC, analysis of conviction and incarceration data revealed that OIC participants were significantly less likely to experience a conviction[3] and spent significantly less time incarcerated in city and county jails and in prison 12 months after the arrest and booking than the comparison group.[4]

In addition to these favorable results, analysis of operations showed that the cost for investing in the OIC was low, at just $1,482 per OIC participant. The taxpayer savings (or cost offsets) were high, at over $7,000 per participant, yielding a cost-benefit ratio of 1:5. That is, for every taxpayer dollar invested in the OIC program, there was a savings of $5. Upcoming articles will provide more details on the methods and results of the outcome and cost evaluation. The research report submitted to BJA with the detailed methods and findings is currently available online.[5]

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1. Death rates at 6 months, $t(650) = 1.622$, $p = .105$; death rates at 12 months, $t(592) = 1.563$, $p = .119$. See the full research report appendix for details (https://npcresearch.com/publication/buffalo-oic-process-outcome-and-cost-evaluation-full-study-detailed-report/).

2. Engagement in treatment 30 days from index booking: $X^2(1, N = 652) = 76.74$, $p < .000$.

3. It is possible the conviction rate for the OIC participants could be artificially low due to the short (12-month) follow-up window and the delays that typically occur between arrest and conviction.

4. See the full research report appendix for detailed results and statistics (https://npcresearch.com/publication/buffalo-oic-process-outcome-and-cost-evaluation-full-study-detailed-report/).

5. See https://npcresearch.com/publication/buffalo-oic-process-outcome-and-cost-evaluation-full-study-detailed-report/.

The focus of this article is on the results of the process study and explores the following research questions:

1. What circumstances led to the development of the OIC program, and what were the intended goals?
2. What processes and implementation factors were present for the OIC to accomplish the stated goals? (In other words, how does the program operate, and what are the key activities and interventions?)
3. Was the OIC implemented following the intended model (i.e., the 10 Essential Elements)?

Treatment and Court Outcomes

The OIC model is a distinct program that does not fully follow a traditional treatment court model. Similar to an emergency department, the intention is to keep defendants alive and assist in their stabilization until the final case disposition is determined (which may include enrollment in a traditional treatment court). The OIC model is, however, grounded in evidence from the literature on treatment courts. As the most prominent and institutionalized model, drug treatment courts have been shown to be effective in reducing criminal recidivism (U.S. Governmental Accountability Office, 2005). A meta-review of 154 independent evaluations found that the vast majority of participants in adult treatment courts experienced lower recidivism than nonparticipants, with an average effect analogous to a drop in recidivism from 50% to 38%, and with the effects lasting up to 3 years (Mitchell et al., 2012). Research evidence suggests that in addition to reducing recidivism, treatment courts improve the psychosocial functioning of justice-involved individuals (Kralstein, 2010) and reduce taxpayer costs due to positive outcomes for treatment court participants, which include fewer rearrests and less time in jail and prison. Some treatment courts have been shown to cost less to operate than business-as-usual case processing in the court system (Carey & Finigan, 2004; Carey et al., 2005; Carey & Waller, 2011; Finigan et al., 2007).

Further, research within and outside of treatment courts has found that treatment, and specifically MOUD, is a powerful element in lowering the likelihood of overdose, overdose death, and criminal recidivism, as well as a range of other positive outcomes. A systematic review of 46 opioid-related interventions delivered before, during, and after incarceration found that opioid agonist treatment (OAT)—that is, methadone and buprenorphine—was associated with lower rates of illicit opioid use, higher adherence to opioid use disorder treatment, lower recidivism, and higher rates of employment at 1 year post-incarceration. Individuals who received OAT while incarcerated had fewer nonfatal overdoses and lower mortality (Malta et al., 2019).

A crucial feature of the Buffalo OIC is that it makes all three FDA-approved medications for opioid use disorder (methadone, buprenorphine, and naltrexone) available for clients. These medications have become an essential component of ongoing treatment plans for opioid use disorders, both for patients in acute withdrawal and to support long-term recovery. A recent study by Evans et al. (2022) found that individuals offered buprenorphine while incarcerated were less likely to recidivate and that buprenorphine treatment alone (independent of other factors) reduced the risk of recidivism. Further, the use of opioid reversal drugs (e.g., naloxone) for individuals who have overdosed has been shown to be an effective, as well as cost-effective, way of saving lives. The National Institute on Drug Abuse has argued for the importance of expanding research on medication for substance use disorders and integrating pharmacotherapies more comprehensively into treatment services in specialty care and primary care (*What Is the Federal Government Doing to Combat the Opioid Abuse Epidemic?*, 2015). Other practitioners have also called for policy changes to remove barriers to evidence-based treatment for opioid use disorder, including mandating the provision of MOUD in correctional settings, promoting it in treatment courts, and proactively offering it to individuals at high risk of overdose (Davis & Carr, 2019).

Implementation of Specialized Courts

It is important to recognize that implementation is a distinct step in the formation of a new program or initiative (Bardach, 2001). Over the past several decades, research on treatment courts and other criminal justice intervention programs has documented numerous implementation challenges that derail well-intended efforts and plans, causing program drift or even failure. These challenges have included a lack of understanding of new procedures, insufficient resource allocation, changes in leadership, staff resistance, liability issues, ideological differences, lack of synergy, and the convenience of doing business as usual (rather than doing the work involved in enacting change)

(Latessa et al., 2002; Mears, 2007; Rothman, 2002; Taxman & Belenko, 2012; Taxman & Rudes 2013; Urban, 2008; Viglione et al., 2015; Washington State Institute for Public Policy, 2004).

The research on implementation efforts in treatment courts shows that when a new program is launched, agencies and teams are more likely to achieve their goals and objectives, and hence experience stronger outcomes, when the intended model is followed closely (Shaffer, 2006; van Wormer, 2010). Leadership, open communication, commitment of resources, staff training, and philosophical alignment have all been shown to be critical when building a treatment court program (van Wormer, 2010).

While an OIC is intentionally different from the traditional treatment court model, decades of findings from treatment courts provide an important framework for OICs to draw on for effective implementation. This article presents the methods and results of the process evaluation completed by NPC, drawing from the 10 Essential Elements as a framework to describe the implementation and practices of the Buffalo OIC. We conclude with recommendations for further improvements to strengthen outcomes for participants as well as other OICs in development or in operation.

METHODS

As OICs continue to develop across the country, it is important to conduct comprehensive evaluations that can provide evidence-based support for best practices and guiding standards. Research has demonstrated that treatment court programs that have participated in evaluations, monitored their own data, and made changes based on the results have significantly better outcomes (Carey et al., 2008; Carey et al., 2011; Carey et al., 2012). A process evaluation is an analytical approach that considers a program's policies and procedures and examines whether the program is meeting its goals and objectives. This study is the first to evaluate an OIC in light of the guidelines of the 10 Essential Elements and represents an important step toward developing best practices for evaluating and refining OICs as they emerge across the country.

The information that supported this process evaluation was collected from site visits to the Buffalo OIC in 2019, during which multiple NPC staff members observed and met with the OIC staff and other partner agencies. The site visits included interviews with all critical stakeholders, along with observations of staff meetings and court sessions. Additionally, information for this report was gathered from an online assessment completed by Buffalo OIC staff, stakeholder phone interviews, and program documentation reviews.

Online Assessment

NPC used an online assessment to gather basic objective information on program process, policies, and protocols from the OIC staff. Although NPC originally developed this assessment for traditional treatment courts, many of the assessment questions were relevant to the OIC. Using this assessment allowed NPC to determine where the OIC processes were different from, as well as similar to, those of a traditional treatment court. The assessment allows for a consistent method for collecting structure and process information from court programs and covers a number of areas, including eligibility requirements, specific court program processes (e.g., phases, treatment providers, urinalyses, fee structure, incentives, sanctions), graduation, continuing care, identification of staff members and their roles, and a description of the program participants (e.g., general demographics). The use of this assessment also allowed NPC to begin building an understanding of the program before site visits, as well as to collect information that supported a thorough review of the data collected by the OIC program.

Observations

NPC staff members visited the OIC three times in 2019, during which they observed staff meetings, meetings to prepare the judge for court, and court sessions. These observations provided information about the structure, established procedures, and routines used in the OIC, including interactions between staff members, court responses to participant behavior, and how the judge worked with staff and participants during court sessions.

Key Stakeholder Interviews

Key stakeholder interviews, conducted both in person during site visits and through phone calls over time, were a critical component of the process study. NPC adapted standardized stakeholder interview questions from adult drug treatment court research for use with the OIC. NPC staff conducted detailed interviews with individuals involved in the administration of the OIC, including the judge, the project director, attorneys, treatment and MOUD providers, case managers,

the peer support specialist, mobile van staff, and other service providers.

The interviews clarified and expanded upon information gained from the online assessment and allowed NPC to obtain a deeper and more comprehensive understanding of the implementation process, as well as to identify changes that have occurred in the program over time. The information gathered by the evaluation team focused on understanding the history and implementation of the OIC, as well as the day-to-day operations and unique characteristics of the OIC.

Document Review

The evaluation team reviewed program documents, including the screening form used in the jail, program referral forms, assessment tools, and the management information system (the Unified Court System database) to better understand the operations and practices of the OIC.

FINDINGS

The creation of the Buffalo OIC program was in direct response to the opioid overdoses and deaths of individuals in the Erie County criminal justice system. Court and correctional officials were alarmed by the number of individuals experiencing overdoses and overdose deaths between arraignment and referral to drug treatment court. The presiding judge and the 8th Judicial District project director gathered key stakeholders, including judicial officers, treatment court staff, treatment professionals, the public defender's office and defense bar, law enforcement, public health, hospital systems, and social services to begin a dialogue about a response to the emergency. The decision was made that in order to address overdoses and deaths, defendants had to be approached and engaged immediately after arrest and booking. Through the leadership of the presiding judge and the court project director, ongoing meetings were conducted to assess and negotiate boundaries and the amount of risk that key stakeholders were willing to take on. These meetings also served as a time for the presiding judge and project director to assess institutional resources, staff commitment, and readiness for change. These informal discussions led to formalized procedures, forms, and agreements. Court leadership maintained that the buy-in and commitment process was made easier because of the existence of other operational treatment courts in Buffalo. Over the years, these courts had enabled trust and political capital to be built, and most of the criminal justice stakeholders were used to working in a collaborative environment.

When the OIC launched, court leadership was careful to monitor daily operations by holding brief meetings each day to process challenges, needs, and successes and make swift adaptations when needed. If a change in personnel occurred, the project director was quick to engage the new employee and bring them up to speed on policies, practices, and the philosophy of the program.

As the model matured, it was evident that the Buffalo OIC distinguished itself by focusing on the overarching goal of preventing opioid overdose and saving lives in the timeframe immediately after arrest and booking. While it is natural to compare the OIC to a standard drug treatment court, and indeed, some features of the OIC are similar to those of the traditional treatment court model (e.g., assessment, access to evidence-based treatment, judicial contact, case management), there are key differences in program goals due to the serious nature of opioid use disorder, which necessitates rapid intervention and treatment. Table 1 highlights these areas of difference, with notable focus on the speed with which OIC participants were placed into the program.

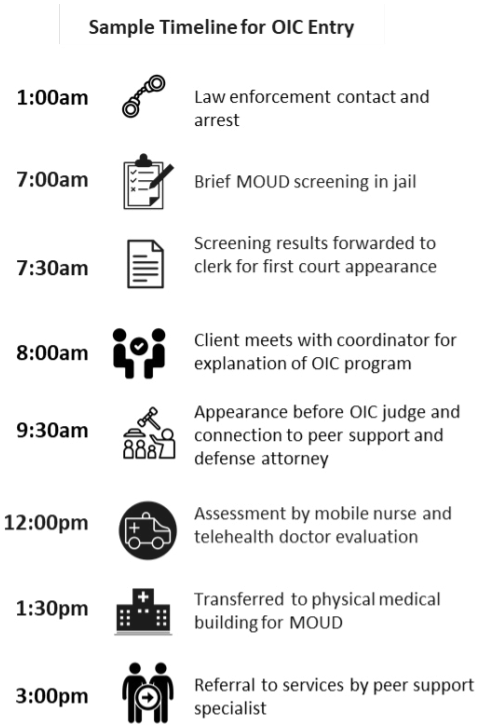
Table 1. Traditional Treatment Court Practices Compared to OIC Practices

Activity	Traditional Treatment Court	Opioid Intervention Court
Referral and entry	Can take 50+ days	Immediate (within 24 hours); focus is on clinical needs rather than legal eligibility of the case.
Screening and assessment	Days to weeks	Within hours of arrest.
Court appearances/ status review hearings	Weekly or biweekly appearances in front of judge	Daily (Monday through Friday) appearances in first 60 days; 3 times weekly after 60 days.
Evidence-based treatment	After assessment, evidence-based treatment may be provided within a few weeks	MOUD is offered or utilized within 24 to 48 hours of arrest (methadone, naltrexone, suboxone). Referral to other evidence-based therapies is provided in addition to MOUD.
Case management	Weekly contact with case manager and/or probation officer	Daily contact with case manager.
Incentives and sanctions	Ongoing use of incentives and sanctions	Extremely limited use of traditional incentives and sanctions (though positive regard from the judge, changes to the treatment plan, the peer support specialist, and case managers are effective in participant engagement).
Curfew	Curfew typically used as sanction	Nightly curfew calls conducted by case manager to monitor status and health.
Drug testing	Best practice is drug testing twice per week	Drug testing for opioids (random while attending court daily).
Community support groups	AA/NA and other sober support	Peer support specialists assigned to all participants within hours of arrest.
Legal status at entry	Pre- and post-disposition model	Suspension of charge via prosecutor agreement.
Eligibility	Specific, targeted charges	Broad range of eligible charges, ranging from misdemeanors to felonies.
Program completion	Graduation if conditions completed	If conditions completed, either transferred to a treatment court program, charges dismissed, favorable disposition, or full prosecution. Each case varies according to legal criteria and participant assessment.
Staffing meetings	Weekly staffing (before court) of cases on the docket among all team members	No formal staffing. Case managers meet daily with judge briefly before court to review each case.

Placement in the OIC was initiated immediately after an individual's arrest and booking. Individuals with an indication of opioid use disorder based on screening results received rapid placement in MOUD treatment, wraparound services, intensive monitoring, and peer support, along with daily court appearances. Cases were held in abeyance until stabilization was initiated, and then the typical judicial process would resume. Once stabilized, some participants were transferred to drug treatment court for ongoing treatment, continued wraparound services, and recovery support. The traditional treatment court system can take 50 days or more from arrest to filing to assessment and entry into the program. Given the serious nature of opioid use disorder, the OIC measures intake in terms of hours. In particular, what is significantly different about this model is the immediacy of the brief screening completed in the jail on the day of the arrest. After consultation with the public defender, if the defendant agreed to participate, they were brought before the judge for entry into the program within hours of booking. Within that first 24 hours, they were also evaluated by a nurse and doctor in a mobile van outside the courthouse for assessment and administration of MOUD.

Figure 1 provides a sample timeline for typical OIC entry. It illustrates the immediacy and quick pace of the court, which allows the stakeholders to intervene quickly to save lives.

Figure 1. Sample Timeline for OIC Entry



Another notable difference in the OIC model compared to traditional treatment court was the initial frequency of judicial contact. Once participants entered the program and completed initial screening, they were expected to attend court daily (at least for the first 4 to 6 weeks of the program), where they had access to a peer support specialist and case manager who would assist them with connections to treatment providers and other services, such as transportation and housing assistance. A defense attorney assigned to the OIC was always present in the courtroom and would stand with the participants while they met with the judge. Some participants also chose to have their own attorney present. A random number of participants were drug tested during each day's court session. During court appearances with the judge, the judge spoke with participants about their current needs, whether they were engaging in the services to which they had been referred, and any drug testing results.

There were no phases in the OIC program. As a participant showed signs of stabilization, the judge had the option to decrease the required frequency of court appearances after being informed by the staff (e.g., case manager, peer support specialist, attorneys) as to how the participant was doing. The OIC also differed from traditional treatment courts by rarely using incentives or sanctions in response to participant behavior. The program was structured and focused on achieving short-term goals (stabilization and the reduction of overdose risk), and incentives and sanctions were rarely deemed appropriate.

Once participants were stabilized and the danger of immediate overdose had passed, and while the participants continued to engage with the supports the program offered, the typical adjudication process resumed. The potential outcome for each case included the full range of potential dispositions according to the facts of the case, including dismissal, diversion, or conviction.

ADHERENCE TO THE 10 ESSENTIAL ELEMENTS

As the inspiration for the development of the 10 Essential Elements, the Buffalo OIC did initially, and over time, integrate the elements into its daily processes. The OIC's practices aligned with each of the essential elements as described below.

Essential Element 1: Broad Legal Eligibility

The vast majority of cases coming through the Erie County court system in which the defendant was using opioids were eligible for participation in the Buffalo OIC. Charges that disqualified an individual from participating in the program included any violent charges, sex offenses, and/or drug-dealing charges. Even when individuals were facing disqualifying charges, the OIC team would discuss their charges on a case-by-case basis to see if there was a way to allow entry. For example, the OIC accepted individuals with drug-dealing charges when it was determined that they were dealing to support or continue their opioid use.

Essential Element 2: Immediate Screening for Risk of Overdose

The Buffalo OIC used two dedicated intake staff to ensure that arrested individuals were offered rapid screening and risk assessment upon being booked into the central jail. The intake staff were drawn from the Court Outreach Unit: Referral and Treatment Services (COURTS) program, where they were working before the OIC was implemented. One had a bachelor's degree in human services with a specialty in mental health, and the other had a master's degree in counseling. The intake staff went into the jail every morning and used a brief screening (the Rapid Opioid Dependence Screen[6]) and an intake form to gather relevant information regarding substance use disorder, mental health issues, veteran status, current charges, warrant status, drug of choice, and most recent substance use. The purpose of the screening was to identify those who might be at high risk of opioid overdose upon release.

If an individual indicated during screening that they use or have used opioids, a separate "blue sheet" was completed and sent to the clerk's office. The blue sheet signals to the clerk that the individual can skip arraignment and should be ordered straight to the OIC courtroom for a first appearance before the OIC judge. For any individual unwilling to participate in the screening, the court staff performed a computer check on their criminal history. If anything indicated past opioid use, the individual could still be referred to the OIC. Using this approach, most OIC participants were assessed and had their first court appearance on the same day they were screened and within 24 hours of arrest.

Essential Element 3: Informed Consent After Consultation With Defense Counsel

When the OIC was in the initial implementation stage, defense counsel did not approve the use of the screen in the jail before the defendant had spoken to an attorney. The initial model required the defense attorney to be available every day to go into the jail and perform screenings in addition to their regular workday. As this was not always feasible due to defense attorney workload, defendants would stay incarcerated until the screen was performed, at which time they could go before the OIC judge and be released. Within a few weeks of operation under this procedure, it was clear that changes were necessary due to the workload issue and delays in participant release. The OIC judge and director met with the Erie County Aid to Indigent Prisoners Office (the public defender), the Assigned Counsel Office of Erie County, and the Private Bar Association. The parties reached an agreement that the OIC intake staff could perform the screen before the defendant spoke to counsel as long as the results of the screen would be used only to determine appropriateness for entry into the OIC program and would not be used against the defendant in any court case. In addition, only the defense attorney would keep a copy of the results, and if a defendant refused to enter the OIC, the court's copy of the results would be destroyed.[7]

After the screening by the intake staff, defendants had the opportunity to speak to defense counsel in the OIC courtroom. Dedicated defense counsel from Buffalo Legal Aid were present at every OIC court session, and if a defendant had a private attorney, that attorney was informed of the date and time of the arraignment in the OIC courtroom. The defense counsel from Legal Aid explained the purpose of the OIC program and that participation was voluntary. Defendants were able to ask questions before they appeared in front of the OIC judge. If the defendant chose not to enter the OIC, or if defense counsel recommended against the defendant entering the program, the results of the assessment were destroyed and the defendant's case was adjudicated through business as usual. Since no records are kept on participants who refused to participate, it was not possible to determine the number of defendants who were screened but refused entry. OIC staff reported that refusing entry was rare, as defendants who chose to participate in the OIC would immediately be released from the jail. Those who refused entry would be taken back to the jail to determine bail and other release conditions through the typical adjudication process.

Aside from immediate release from the jail, the benefit for defendants who chose to enter the OIC was immediate access to treatment, peer support, and other services. No additional benefits were promised, such as leniency at filing or sentencing,

6. https://npcresearch.com/wp-content/uploads/RODS-Validation-INSTRUMENT-JCHC-072513.pdf

7. This agreement between defense counsel and the court was a verbal agreement only. There was no written or signed agreement and there was no consent form for the defendant to sign agreeing to participate in the screening. After feedback from this evaluation, the OIC created a procedures manual where this understanding between the parties is described.

other than a delay in the adjudication process while the participant focused on getting connected to services and becoming stabilized.

Essential Element 4: Suspension of Prosecution or Expedited Plea

The local prosecutor's office agreed to place any potential OIC cases on hold pending entry and participation in the OIC program. The prosecutor's office reported that they believed no other actions were necessary before program entry and therefore did not cause any delays. Once participants entered the program and began services, case processing resumed.

Essential Element 5: Rapid Clinical Assessment and Treatment Engagement

A case manager met with individuals in the OIC courtroom after they spoke with the defense attorney. The case manager provided more information on the OIC program, discussed available treatment options, and sought input from the defendant. Information from that discussion was communicated to the other program staff when the individual appeared in front of the OIC judge.

Staff from a treatment agency were always in attendance for the court sessions and had a mobile treatment van outside the courthouse for assessments after the court session. A peer support specialist was also in attendance at every session. The treatment providers and peer support specialist introduced themselves and talked directly with individuals in the back of the courtroom after they appeared in front of the OIC judge. The peer support specialist or treatment provider walked participants down to the mobile treatment unit, where a provider immediately completed a biopsychosocial assessment and an assessment for MOUD from a physician through a telehealth appointment. If the participant was deemed appropriate for and agreed they wanted MOUD, they were taken directly to a clinic in the van to meet with a doctor and get their prescription. After MOUD was initiated, the mobile nurse was available to continue to see participants in the mobile unit after court sessions and perform medical assessments as needed via telehealth. Participants who refused MOUD were connected to other abstinence-based substance use disorder treatment. Treatment services for each participant were based on assessment and case planning with participant input and included various group and individual outpatient treatment sessions.

The outcome evaluation revealed that half of OIC participants engaged in some form of treatment within 30 days of entry. Before exit, 80% of all participants had engaged in treatment. Over two thirds (70%) received MOUD. Other than MOUD, the most common treatment modality provided was outpatient treatment (60%), and approximately one quarter received some form of inpatient treatment or residential assistance (e.g., halfway houses or sober living).

Essential Element 6: Recovery Support Services

The Buffalo OIC included a peer support specialist who appeared at every court session to make direct contact with new participants. The peer support specialist was a valuable resource due to their ability to communicate and relate to the lived experiences of participants in a way that other stakeholders could not. The peer specialist would orient new participants to the program and meet with participants at every court session to assist with connections to any needed services.

In addition, the OIC collaborated with an organization that provided several support groups for individuals, parents, and families affected by opioid use (among many other services), including transportation to those and other services. This organization's assistance ensured that participants needing inpatient treatment could receive approval within a matter of days.

Essential Element 7: Frequent Judicial Supervision and Compliance Monitoring

The program required new participants to appear in court daily to speak with the judge about their engagement with treatment (including counseling and MOUD) and other services, their substance use since the last court appearance, and any need for assistance in other aspects of their lives. There was no set number of weeks when participants were required to appear daily, nor was there a phase structure, as the OIC had no phases. Most participants attended court daily for at least 3 weeks and then decreased the frequency to twice per week through the remainder of their participation. Reporting requirements were dependent on each participant, their progress on program requirements (including check-in calls to the case manager every evening), and recommendations of the OIC staff, particularly the case managers. Those struggling or needing more assistance or supervision were required to report daily, even if reporting requirements had been

reduced over time. Most conversations with the judge lasted between 3 and 5 minutes, and during court observations, the OIC judge was observed to use Motivational Interviewing (MI) techniques to connect with participants and develop rapport. Neither the first nor the second OIC judge received formal training in MI, although the OIC director spoke to both judges about the importance of using MI techniques and provided some on-the-job training in MI to both judges.

On their first day in the OIC courtroom, all individuals who agreed to participate were required to take a drug test to confirm their use of opioids.[8] If they refused, they were given time to speak to the defense attorney and the case manager so these OIC team members could explain the importance of the test. If the defendant continued to refuse to submit to the drug test, they were not allowed to enter the OIC program and were redirected to the jail and into the business-as-usual court process.

After the first day in court, participants were randomly selected to receive drug testing on weekdays when they appeared for court sessions. Participants were tested for a variety of substances, although the program was focused primarily on opioid use due to the high risk of overdose. Testing positive for substances other than opioids did not typically result in a court response other than a discussion with the judge to express concern about their use. Any active participants who refused to be tested were asked to sit in the courtroom and reconsider. They were reminded of the importance of the testing for the OIC to continue to determine their treatment needs and provide appropriate services. Generally, these participants would eventually agree to be tested. Those who refused to be tested at multiple court sessions could be sanctioned to an overnight jail stay or could eventually be terminated from the OIC program and redirected to the business-as-usual court process. Staff reported that they did not experience participants attempting to tamper with drug test specimens, as observed sample collection was performed in a jail cell (in a private space) open to observation from all sides.

Although the program was originally intended to last 90 days, monitoring of participant progress over time indicated that most participants continued to need services for close to 180 days or more in order to stabilize. For this reason, the OIC adjusted the intended program length to 6 months.

The program staff reported that their primary responses to opioid use or other noncompliant behaviors (such as missing appointments or failing to appear in court) was treatment or therapeutic adjustments. Verbal warnings and assignments to write essays were also occasionally used. It was reported and observed that punitive sanctions (including jail days) were very rarely used as a court response. When clients failed to appear in court, a warrant was issued immediately, and law enforcement working with the OIC actively looked for participants in the community. As would be expected in this population, failure to appear in court was a common occurrence, with 68% of participants failing to appear and receiving a bench warrant at least once during their time in the program, with an average of two warrants per participant. When participants were found, law enforcement would bring them back to court, or to the jail if court was not in session.[9] In addition, some participants would return to court on their own. Participants who returned on their own would not be sanctioned and would be directed back to treatment (if they had stopped attending). Some participants would fail to appear for court but would continue to participate in treatment services, including MOUD appointments. These participants would be asked by their provider to return to court on their own.

Essential Element 8: Intensive Case Management

Two dedicated case managers were in attendance for all OIC court sessions. The case managers were central to all aspects of the program, serving as the point of contact to the many agencies and organizations working with the OIC and connecting participants with those services. This ensured that care was coordinated between the various treatment agencies and the court. The case managers collected treatment updates from providers, tracked when participants called or checked in each night, and updated the judge each morning before court. They demonstrated compassion with the participants and were supportive of the OIC's mission to save lives. Other

8. This requirement was always a part of the program design but became particularly important once more defendants learned about the program and began claiming that they had used opioids in order to be released from jail swiftly.

9. It is interesting to note that rearrest rates after OIC entry were high, with 62% of participants rearrested within 6 months. However, some of these arrests may have been related to the warrants issued by the OIC to bring participants back to the program when they failed to appear for court.

OIC staff reported in interviews that case managers were an invaluable resource and were essential to the success of the program.

Essential Element 9: Program Completion and Continuing Care

Upon participants' entry into the OIC, their attorneys could begin discussions of possible resolutions to the case, but negotiations and agreements typically occurred as the OIC participant neared stabilization. It is at this point that the program stakeholders also had input as to the best option for participants going forward. The Buffalo City Court system had several highly functional treatment court programs (e.g., veterans, DUI, and mental health courts) that were able to serve the needs of various types of participants As a result, OIC participants could be referred to one of these courts to continue with a program. This referral would occur as a part of the traditional court case processing and disposition if the participant met legal and clinical eligibility and was interested in participating. Alternatively, if the case was dismissed, continuing care could involve a referral to ongoing treatment outside the jurisdiction of the court.

Essential Element 10: Performance Evaluation and Program Improvement

The OIC had a case management system used by treatment courts statewide that included the ability to enter data specific to the OIC. The program collected the majority of the data specified within this element in the 10 Essential Elements. Further, the OIC collaborated with multiple researchers and evaluators from universities and private research firms to study program effectiveness and process and to provide recommendations for program improvement. The BJA-funded evaluation described in this article included the creation of a how-to manual based on the evaluation results and on implementation science that could be used by other jurisdictions to implement OICs. Further information on this manual is provided in the discussion section.

DISCUSSION

The circumstances that led to the development of the OIC were dire and immediate. The criminal justice, public health, and social service systems, not to mention community members, were alarmed at the rate of opioid overdoses and death among those involved in the criminal justice system. Individuals were dying before their cases could be adjudicated or diverted to a traditional treatment court. The original leaders of the OIC effort witnessed a need to rapidly engage those with opioid use disorder and connect them with MOUD and treatment, and viewed the point of arrest and initial jail booking as the ideal time for such engagement. The goal as stated by the program was straightforward: to save lives by stabilizing those at immediate risk of overdose death.

While the leaders of the OIC effort did not embrace a specific implementation model or strategic planning process, interestingly, many of the characteristics of a successful treatment court implementation effort were already present in Buffalo. The court system's history of operating varied treatment court models provided a strong foundation for the effort. A high level of trust and cooperation existed between agencies, and the collective concern for saving lives permeated the effort. In addition, staff and leadership recognized the need for change. Staff were selected to participate based on their willingness and interest, there was ongoing coaching and troubleshooting by the program director and presiding judge, data were collected to measure progress, and the program was adapted as needed based on the experience of program staff and the collected data.

New program interventions are never implemented without challenges, however, and the OIC was no different. Many of the procedures were evolving due to the need to accommodate operational realities, and many of the adjustments were not documented or clearly understood by all the stakeholders. For example, when the OIC started, the intended length of the program was 90 days. At some point, it was determined that participants needed more time, and so the length of the program changed to 180 days. There is no written documentation of the reasons for extending the program length or the exact timing of that change. Another example is a decision to move away from the initial intention of engaging participants in both MOUD and therapies for substance use disorder treatment toward focusing almost entirely on connecting participants with MOUD and social services (such as peer support, transportation, and housing).

Nearly all of the recommendations for improved services from the evaluation measures used by researchers were related to the need to better document OIC procedures and their purpose. It was recommended that the OIC create documentation of all parts of the program in order to help OIC staff and related agencies continue to implement the intended processes and provide

essential services as staff members change over time, as well as to allow other jurisdictions to more easily implement similar programs. Findings from the implementation literature, as well as this evaluation, all clearly point to the necessity of ensuring strong documentation of procedures and changes to practices over time.

As described above, the Buffalo OIC demonstrated strong adherence to the 10 Essential Elements of Opioid Intervention Courts. At the time of this process evaluation, the Buffalo OIC had been in operation for three years and had moved from a state of implementation into maintenance and sustainability. The continued strong judicial and project director leadership, along with program success, created a focus on process and on model adherence. Specific areas and practices that stand out in the Buffalo OIC (as aligned with the 10 Essential Elements) include the following:

- Two dedicated court staff screened almost every individual arrested and booked into the Buffalo jail within hours of arrest.
- Potential participants appeared in front of the OIC judge within a day of the arrest (Monday through Friday).
- Assessment for and connection to MOUD occurred within 12 to 24 hours of program entry.
- Participants were given access to counsel before entering the program to ensure due process.
- New program participants had daily court check-ins with the judge.
- Program participants received daily contact with a case manager and peer recovery support specialist.
- The program prioritized rigorous data collection and engagement with evaluation.

While the program closely followed recommended operations, researchers noted several areas for improvement. The documentation of positions, roles, and job duties is necessary for training and buy-in. Documentation that outlines program requirements, including eligibility and the process for referral, how participants are connected with treatment and other services, how they become eligible to advance or complete the program, how they receive a case closure, when incentives and sanctions may occur, and other case procedures is necessary in order to control for program drift and mission creep.

Communities interested in planning and implementing an OIC should consult the how-to manual developed as a part of this BJA-funded evaluation, *How to Implement an Opioid Intervention Court*. The manual documents what steps and actions teams should consider when attempting such an effort.[10]

LIMITATIONS

NPC conducted the process, outcome, and cost-benefit study of the Buffalo OIC after the program had been in operation for nearly three years. This timing was beneficial for the outcome and cost-benefit portion of the study, as the program had good data collection procedures in place, and data were collected in years where the program demonstrated stability. The process evaluation was limited, however, by the lack of documentation of the implementation process. The evaluation gathered process information largely from a review of current documents, interviews with key stakeholders about early processes, and the use of the NPC treatment court self-assessment tool. There were no historical documents available that reflected early planning efforts. There was also a lack of written documentation on key policies and procedures, which limited the ability of researchers to accurately determine detailed OIC processes and review the changes that occurred over time. In addition, while researchers did have access to the answers to NPC's court self-assessment tool, many of the components of a traditional treatment court measured by the tool were not applicable to the OIC model. All materials used in the OIC evaluation had to be adapted for this novel program. As additional OIC courts are established, it is important for these programs to document their implementation and engage with evaluators early on to assist with this documentation.

Further, a common tool often used in process evaluation efforts is focus groups or interviews with program participants. Although the design for this study originally included a plan for focus groups, the project was limited in time and scope, and researchers were not able to interview OIC participants due to schedule and access limitations. The majority of OIC clients appeared briefly for their daily court hearing and left the building before they could be approached by researchers. Access to participants outside the courtroom was severely limited, individual interviews are time-intensive and outside the scope of the budget,

10. The manual can be found at https://npcresearch.com/wp-content/uploads/How_To_Manual-Opioid-Intervention-Court-May-2021-FINAL.pdf.

and attempts to locate common venues where participants could be found and gather for a focus group were unsuccessful.

Finally, as the OIC model expands across the country, and as further outcome data are evaluated and published, it will be beneficial to build and validate a program assessment tool that measures adherence to the 10 Essential Elements of Opioid Intervention Courts.

SUMMARY

The evaluation of Buffalo's implementation of the first OIC demonstrated that the OIC model offers a promising response to the opioid epidemic plaguing many communities. Strong leadership and a willingness among all partners to collaborate and contribute resources to reach a shared goal allowed the development and implementation of the OIC to move forward rapidly. The past success of operational treatment courts in the larger court system had created a foundation of mutual trust and an infrastructure to build upon. The OIC both contributed to the development of and operationalized the 10 Essential Elements. Decades of research on treatment courts has demonstrated the importance of following standards, guidelines, or key program components as a structure to consistently achieve intended positive outcomes. The lessons learned from the evaluation of the Buffalo OIC show that the OIC model is no different. The Buffalo OIC demonstrated the utility of following established, research-based best practices in developing a new model that is functional and effective. As jurisdictions seek to address the opioid emergency in their communities, creating and following a structured strategic planning and implementation process that allows for full integration of the 10 Essential Elements is critical for their success.

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PRACTICE COMMENTARY

"To Be Part of the Fully Functional Team, There Need to Be Clear Roles": Peer Recovery Specialists Provide Benefits to Drug Court Despite Role Challenges

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Abstract

*Peer recovery specialists (PRSs) provide nonclinical, nonprofessional assistance to drug court participants with similar lived experiences and have become common in substance use treatment programs. There is little research, however, on their presence and impact in drug treatment courts. Our research set out to fill this gap through a mixed-methods study that included a randomized controlled trial (RCT) in which half of a group of 76 drug court participants were assigned a PRS, and in-depth interviews and focus groups with PRSs, other key informants, and intervention group participants were conducted before and after the intervention (*N *= 32). This article focuses on the qualitative research findings, which revealed that PRS integration into drug treatment court was successful and that PRSs brought benefits to both drug court participants and case managers. Benefits to participants included practical assistance (e.g., career fairs, job applications, job interviews), mental and emotional support, and a role model. Benefits for case managers included sharing the emotional caseload, devising strategies together to help participants, and learning best practices from the PRSs. However, certain challenges arose. One was related to differing perceptions about the role of PRSs, either as confidants whose trusting relationship with participants should be protected or as advocates who should support their clients. Other challenges included distinguishing the roles of PRSs and case managers, as well as discerning the appropriate timing and matching of PRSs to their clients. These issues should be considered before incorporating PRSs into drug courts.*

Keywords: *peer recovery specialists, peer support, substance use treatment, drug treatment courts, recovery*

LITERATURE REVIEW

Peer recovery specialists (PRSs), also referred to in the recovery literature as peer coaches, peer mentors, peer navigators, and certified peer specialists, offer nonclinical assistance to individuals experiencing problems similar to what they faced in their past (Bassuk et al., 2016). These efforts reflect a greater reliance on recovery-oriented treatment for substance use than traditional medicalized model, emphasizing chronic care management, a continuum of care, and quality of life (Substance Abuse and Mental Health Services Administration [SAMHSA], 2011; White, 2007). PRSs have firsthand, lived experience with substance use disorder (SUD) and have formal, specialized roles and often PRS certifications (White, 2009). In the context of its Recovery Community Support Services projects, SAMHSA's Center for Substance Abuse Treatment (CSAT) uses the general term "peer support workers" to describe people with lived experience who have been successful in recovery and whose role is to help people who are similarly situated in their recovery. The relationship is a one-on-one "service alliance [in which] a peer leader in stable recovery provides social support services to a peer who is seeking help in establishing or maintaining his or her recovery." CSAT uses the terms "recovery (or peer) mentor, guide, or coach" (CSAT, 2009, p. 2). While peer navigators also have lived experience, their role is primarily to help guide their clients through systems of care and services. Portillo et al. (2017) suggest that their roles "extend beyond the client level by influencing the organization and its interaction with the community" (Portillo et al., 2017, p. 318).

Within the criminal legal system, peer support has been less common, despite the fact that peers who have gone through programs such as drug courts may offer useful advice to participants based on their own experiences. The current paper examines the incorporation of PRSs into a drug treatment court in Philadelphia to identify promising practices for positive outcomes in drug courts while avoiding negative impacts.

Peer Support in Treatment Programs

PRS services have been increasingly incorporated into substance use treatment programs to support treatment initiation and retention and positive, long-term recovery (Bassuk et al., 2016; Eddie et al., 2019; Reif et al., 2014; White & Kelly, 2011). The purpose of PRSs is to facilitate client engagement by providing practical and emotional support to clients and helping them transition between levels of care and health and social services (Valentine, 2010; White, 2009; White & Evans, 2013).

PRSs have been found effective in improving substance use recovery-related outcomes such as treatment engagement, initiation, and retention. However, as Bassuk et al. (2016) concluded in their systematic review of PRS interventions, it is sometimes difficult to discern the true effect of PRSs, and many studies in this area lack methodological rigor (Gormley et al., 2021). Still, PRSs can fill critical care gaps in substance use treatment and can play an important role in recovery management for justice-involved individuals with SUD as they reenter the community (Belenko et al., 2021).

Peer Specialist Roles and Training

The roles and responsibilities of peers vary greatly. White (2004) has argued that their role is somewhat similar to that of the addiction counselor or other service roles in the substance use treatment field. Specifically, White describes peers as being a "motivator and cheerleader . . . ; ally and confidant . . . ; truth-teller (provides feedback on recovery progress), role model and mentor . . . ; problem solver . . . ; resource broker . . . ; advocate . . . ; community organizer . . . ; lifestyle consultant (assists individuals/families to develop sobriety-based rituals of daily living); friend . . ." (p. 2). In a review of peer specialists with injection drug use history, Marshall et al. (2015) identified five categories of peer roles in harm reduction programs: harm reduction education; direct harm reduction and health services; support, counseling, and referrals; research assistance; and advisory committee participation. PRS responsibilities may include facilitation of support groups, referrals to screening or health services, counseling, accompanying clients to appointments, and providing social support. As a PRS's role does not

typically involve clinical treatment, we interpret Marshall et al. to mean "counseling" in the broad sense of guidance and emotional support rather than clinical or professional counseling. Other responsibilities may include distributing sterile injection needles, administering naloxone, and providing support to healthcare services. PRSs may serve on government or political committees to lend important perspectives on issues of health and public policy. Masih et al. (2021) reported that peer specialists in a substance use harm reduction program in West Virginia most frequently used evidence-based practices of reflective listening, open-ended questions, Motivational Interviewing, positive affirmations, summarizations and screening, and brief interventions. Peer specialists also used self-disclosure, doing so with female clients more than with male clients.

PRSs emphasize their personal recovery experiences as the basis of support and guidance to clients, but their impact can be affected by what White (2004) calls "knowledge expertise," or the peer's ability to generalize these experiences, and by factors such as diagnosis, demographic characteristics, and the appropriateness of the match between the peer and client (Dennis, 2003; Jack et al., 2018; McCarthy et al., 2019). In a study of veterans with SUD and mental health concerns (McCarthy et al., 2019), two clients in a peer support intervention reported disappointment due to their peer's gender or level of experience. Similarly, Dennis's (2003) study found that demographic similarity and possession of experiential knowledge helped determine peer appropriateness and were necessary for establishing the peer relationship.

Peer-delivered recovery support services are distinct from both mutual aid modalities of peer support, such as Alcoholics Anonymous and Narcotics Anonymous, and the use of case managers (Bassuk et al., 2016). Mutual aid modalities differ from peer support in that they are informal, do not require training, and involve a bidirectional relationship, as the term suggests. Their formalized role is a crucial factor distinguishing PRSs from mutual aid modalities of peer support (Goodson et al., 2019).

According to Davidson and Rowe (2008), little attention has been given to the training peer support workers should receive. The training and certification required of peer recovery coaches differs from state to state, in terms of both curriculum and number of hours. In an effort to standardize training in the field, SAMHSA (2018) has identified 62 core competencies required of peer workers. Many states have applied the Recovery Coach Academy training offered by the Connecticut Community for Addiction Recovery (Gagne et al., 2018). The actual need for training is somewhat debatable. Peers in Barker et al.'s (2019) study thought their training was important but not critical to their success. Their effectiveness hinged mostly on their lived experience, listening skills, and emotional support to the clients.

Peer Support vs. Case Management

While PRSs, like case managers, can help clients navigate different systems, peer specialists and case managers have distinct roles (Jack et al., 2018; Kelly et al., 2019; McCarthy et al., 2019; Tahan et al., 2020). The Case Management Society of America (2016) defines case management as "a collaborative process of assessment, planning, facilitation, care coordination, evaluation and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote patient safety, quality of care, and cost-effective outcomes" (p. 11). Based on this definition, the role of a case manager is more clinical and evaluative than the role of a PRS.

A review of their respective roles observed that peer specialists more often provide emotional and informational support, as opposed to the more clinical care provided by case managers (Kelly et al., 2019). PRSs rely primarily on lived experience to facilitate their relationship with a client and do not require a clinical license. Kelly et al. (2019) noted that case managers were found to be central members of healthcare teams more often than peer specialists were. They identified other key distinguishing factors between the two roles, including the length of relationship with the client, nature of the governing healthcare system, and context of the intervention. McCarthy et al. (2019) found that caseworkers thought their peer specialist colleagues brought helpful and different

perspectives to the care team, and that peers addressed and normalized issues with clients in ways that case managers could not.

In a comparison of the treatment relationships in peer-based and traditional case management interventions, Sells et al. (2006) reported that clients receiving the peer intervention felt more liked, understood, and accepted by their providers 6 months following initiation of treatment. However, these effects disappeared by the 1-year follow-up. Clients who were new to treatment showed an increasing number of provider contacts only over the first 3 months of treatment in the PRS condition. These findings suggest that not only are there differences between peer-based and traditional case management, but that these differences are most apparent early in the treatment process (Felton et al., 1995; Solomon & Draine, 1996).

Peer Support in the Criminal Legal System

Few studies have examined the integration and impact of PRSs in criminal justice settings, such as drug courts. The Texas Access to Recovery (ATR) project involved three groups of participants who were referred from drug courts, non–drug court probation, and Child Protective Services and who received PRSs in individual and group settings (Mangrum, 2008). Within the peer specialist condition, participants referred from drug court and probation were more likely to complete treatment than participants referred from Child Protective Services. This suggests that the impact of PRSs may be further enhanced with criminal legal system supervision. However, exposure to a PRS was not uniform across the ATR program participants, and the effects of peer specialists could not be separated from the other support components of the ATR program.

A more recent study examining PRSs in drug court settings involved MISSION-Criminal Justice (MISSION-CJ) (Shaffer et al., 2022), a wraparound treatment and linkage intervention targeting co-occurring substance use and mental health disorders and combining PRSs with critical time intervention case management. The PRSs delivered a series of recovery-oriented sessions, which emphasized the formation of new routines and avoidance of substance use triggers and underscored the importance of treatment engagement. MISSION-CJ PRS staff were incorporated into precourt meetings and drug court sessions to familiarize themselves with each client's needs. At the 6-month follow-up, there were significant decreases in the number of nights participants were incarcerated compared to the baseline and in the number of arrests. Drug abstinence, full-time employment, and housing also improved significantly for participants with a PRS. As the study lacked a comparison group, however, it is not possible to determine causality.

In a randomized controlled trial (RCT) in Philadelphia's drug treatment court, Belenko et al. (2021) found that clients assigned to a PRS showed a reduction in rearrests and improvement in drug court attendance at the 9-month follow-up compared to the treatment-as-usual group. However, the peers had no impact on substance use or treatment engagement. The study also did not follow participants all the way through graduation and was limited to a 9-month follow-up.

Organizational Barriers to PRS Integration

Organizational-level factors that create barriers for PRSs include exclusionary attitudes and programs, insufficient training and support, failure to address social determinants of health, and a lack of peer specialist credibility among their colleagues. More than half of the PRSs in the injection drug use harm reduction program evaluated by Masih et al. (2021) reported feeling a lack of support from law enforcement officers. Providers in a variety of settings and care teams have reported concerns related to the boundaries, or lack thereof, in PRS-client relationships, though these concerns are often alleviated after they gain experience working alongside PRSs (Asad & Chreim, 2016; Chinman et al., 2010). Previous studies reported by Asad and Chreim (2016) identified boundary issues around confidentiality and sharing of information when the peer-client relationship is perceived as friendship, what they called the "'friend versus client' dilemma" (p. 772). A client may share information as a friend, with the expectation of confidentiality, that the peer may feel professionally obligated to share

with the treatment team. Chinman et al. (2010) noted that it is important for peers to discuss the limits of the relationship with their clients early on and to maintain those limits.

PRSs have experienced frustration in managing systemic barriers and have faced a lack of understanding and skepticism from other providers in terms of the value of their role (Marshall et al., 2015; Scannell, 2021). Systemic barriers to PRS integration may include restrictions on professional certification of individuals with criminal backgrounds, which vary by state and licensing agency. Human resources policies related to criminal background also vary by institution and may pose barriers to hiring PRSs (Kauffman et al., 2022).

In addition to challenges related to integrating PRSs into treatment settings, Jack et al. (2018) found that obstacles of the PRS model included patient discomfort in asking for help, lack of peer role clarity, and tension with treatment providers. Nearly all PRSs reported feeling that their physician colleagues did not welcome their input and were very set in their ways in terms of clinical practice. Additionally, because clients were unclear about the role of the PRSs, the peers reported that clients often asked for services they could not provide. Clients who did not connect well with their peers blamed themselves for their unwillingness to ask for help or cited demographic differences, including the coach's age, gender, or substance use history, as the source of their discomfort.

As to the decision to match the PRSs to their clients' demographics, the evidence is mixed. One study found some significance in relation to a peer's gender (Jack et al., 2018). In contrast, Masih et al. (2021) found that gender was not a statistically significant matching variable between peer workers and their clients. Another pilot study on the impact of peer recovery mentors on overdose prevention in the month following women's release from prison deliberately employed only female peer recovery mentors, as they claimed that "gender match has been found to increase alliance and retainment in services" (Waddell et al., 2020, p. 11).

McCarthy et al. (2019) demonstrated the benefits of overcoming organizational and systemic barriers to integration of PRSs into treatment settings. In a program targeting SUD and mental health problems among homeless veterans, almost half of the case managers mentioned that PRSs were not always well received by treatment staff due to "professional snobbery" and an inability to see the usefulness of PRSs (p. 452). When PRSs felt supported and accepted by the case managers, they indicated that they were very successful in connecting with clients. When peers were able to develop quality relationships with clients, case managers reported improvements in their own ability to meet clients' needs through a reduced workload and increased knowledge of clients' issues. These findings indicate that not only do PRSs have the potential to improve client outcomes, but well-integrated PRSs can improve overall service delivery and boost the performance of non-peer treatment staff.

The current study qualitatively examined the integration and implementation of a PRS intervention in a drug treatment court in Philadelphia. We looked at the roles that PRSs fulfilled, how successful they were, and what barriers they encountered. Interviews with key informants (individuals with various roles in the drug court) and program participants provided information on the impact of PRSs in drug treatment court.

METHODS

Research Design

The qualitative research presented in this article was part of a 2-year mixed-methods feasibility and acceptability study of an intervention to integrate PRSs into a drug treatment court in Philadelphia. The study combined sequential and convergent qualitative approaches with a quantitative pilot RCT. The study began with an exploratory qualitative phase (Phase I) to inform the intervention. This was followed by the pilot RCT, for which the research team collected administrative data on participant substance use (primary diagnosis and recurrence measured by urine drug screen results), adherence to treatment, criminal justice outcomes (recidivism), and progress through drug court.

A detailed description of the full study as well as the treatment court participants can be found elsewhere (Belenko et al., 2021). The focus of the current article is postintervention qualitative data collection and analysis (Phase II), which helped the researchers understand the quantitative findings and the impact of the intervention on participant outcomes and can inform future refinements of the intervention (Plano Clark et al., 2013). The Institutional Review Boards of the Public Health Management Corporation, the Philadelphia Department of Public Health, and Temple University approved this study.

Study Site

The study was conducted in the Philadelphia Treatment Court (PTC). PTC eligibility requirements include substance use, a felony possession with intent to deliver drug charge, no convictions or open cases for violent crimes, and no more than two prior nonviolent convictions, juvenile adjudications, or diversion dispositions. PTC is a post-adjudication program, so participants must tender a no contest plea that the court holds in abeyance pending program completion. The program lasts a minimum of 12 months comprising four phases (each with gradually less intensive supervision requirements). The legal team members are the judge, one representative each from the public defender's office and the district attorney's office, and a court coordinator. At the time of the current study, Public Health Management Corporation (PHMC) conducted the initial SUD assessments and provided PTC with eight to 10 case managers and one case management supervisor. PTC provided case management services to approximately 700 adults per year, with caseloads of approximately 50 participants per case manager.

Case managers are responsible to both their clients and the court. They meet monthly with their clients and facilitate access to social, behavioral, and legal services. They prepare progress reports on their clients and present them to the judge in open court, complete discharge summaries, enter client reports into the court database to reflect compliance and accountability requirements and into the PHMC administrative database for billing purposes, conduct weekly urine drug screens, and follow up on any court-ordered sanctions or requests.

The Intervention

In the larger study, 39 individuals in PTC who consented to participate in the study were randomly assigned a PRS, and 37 participants received treatment as usual. PRSs were then required to establish initial phone contact with their clients within 48 hours and to meet in person within 5 business days of the initial phone contact.

A total of three PRSs were hired as full-time, salaried PHMC employees and trained by PHMC and the Pennsylvania Recovery Organization – Achieving Community Together (PRO-ACT), a recovery support initiative. PRO-ACT provides training to peer leaders based on the 54-hour Certified Recovery Specialist (CRS) curriculum, which is credentialed by the Pennsylvania Certification Board and accredited by the national Council on Accreditation of Peer Recovery Support Services. To qualify for employment, a PRS must have graduated from PTC, be in recovery, and have abstained from substance use for at least 1 year. Initially, two PRSs were hired—one male and one female. When the male PRS left PHMC after 11 months, the remaining PRS took on the entire caseload until a new PRS (female) was hired and trained. As a result, some PTC participants were assigned to all three PRSs during their participation in the study.

PRSs were required to meet with and contact their clients regularly, for a minimum of three in-person meetings and one phone call per month. In addition, as needed, they were to identify and refer their clients to community resources, conduct outreach to their clients at treatment facilities, attend their clients' recovery plan meetings, and accompany clients to their appointments. In contrast to case managers, their role specifically entailed using their lived experience of PTC participation and recovery to inform services, including sharing their personal story, providing additional support to clients who found court and/or treatment adherence challenging, and assisting clients with self-esteem enhancement, conflict resolution, assertiveness, and other recovery skills. The PRSs collaborated with case managers about mutual clients; however, they did not report recurrence of substance use to case managers to avoid mandatory reporting by case managers to

the court, in order not to risk the trust established between PRSs and their clients. PRSs were expected to alert the case management supervisor to any of their clients' current or potential behavioral or health-related problems, including recurrence of substance use, to ensure that clients were linked to appropriate services.

Data Collection Method

The first three authors conducted 11 key informant interviews, 10 drug court participant interviews, five PRS interviews, and two case manager focus groups, each with six case managers (N = 32 individuals). Of these 32 individuals, six key informants, 2 PRSs and 1 case manager participated in data collection both before and after the RCT. Interviews and focus groups were audio-recorded and transcribed by an external transcription service. We use pseudonyms throughout this paper to maintain the confidentiality of interviewees.

Sampling of Interviewees

Key informants and drug court participants for semi-structured interviews were selected using purposive maximum variation sampling (Patton, 1990). All 10 case managers were invited to participate in each of the focus groups; based on their availability on the dates of the focus groups, six participated in each focus group (60% participation rate). The research team conducted semi-structured interviews with the two PRSs hired and trained for the RCT before and after the intervention. An additional PRS hired during the RCT was also interviewed. This represents a 100% participation rate.

The research team worked with PTC leadership to identify 16 key informants representing different roles within the drug court (e.g., legal, case management, substance use treatment, and municipal behavioral health). The team prioritized the resultant list within each role by anticipated knowledge of the drug court program, with the goal of interviewing five to seven key informants and at least one key informant within each role. Of eight potential key informants invited to participate in interviews before the RCT, five participated. Of 10 potential key informants invited to participate in interviews after the RCT, six participated.

The research team also interviewed a convenience sample of 10 drug court participants assigned to the experimental (PRS) intervention with diverse experiences in the drug court program (e.g., sanctions, recurrence of substance use). Potential interviewees were selected from among 30 experimental group participants who had completed the 9-month observation period during the pilot RCT and had current contact information in the system. Of those, three had been suspended from the program and one had graduated. The first recruitment attempts were made by phone. This approach yielded only one participant, so we developed an alternative strategy to recruit and obtain the consent of participants during their monthly supervision hearings. The consent rate in court was 100%. Interviews were conducted in the counsel room next to the courtroom and lasted between 17 and 57 minutes.

Interview Guide

The research team developed semi-structured interview and focus group guides (see Appendices 1 and 2). Interviewees were generally asked about the feasibility and acceptability of integrating PRSs, barriers to accepting PRSs as part of the service team, desirable characteristics and qualifications of a PRS, concerns related to giving PRSs access to client and drug court information, ways that PRSs can support case managers and alleviate their caseload, recommended PRS caseloads, ways to support PRSs and integrate them into the operations and flow of drug court, and the perceived value of the PRS intervention.

The drug court participant interview guide included the following topics: the relationship between the participant and their PRS, ways in which participants received support from their PRS and others while in the drug court program, the participant's main needs and challenges during the program, what the participant liked and disliked about working with the PRS, the amount of contact with the PRS, the impact of the drug court program on the participant's life, and any changes the participant would like to see in the program.

Data Analysis

Three members of the research team analyzed the data through an iterative process using manual coding and NVivo qualitative data analysis software. The team took multiple steps to increase inter-rater reliability (IRR). After the researchers read through most of the transcripts, they independently coded five selected transcripts: one focus group, one key informant interview, one PRS interview, and two drug court participant interviews. The first author developed an initial list of codes, which was revised and refined in collaboration with the second and third authors. Together in multiple iterations, the team developed one codebook, including primary and secondary codes, definitions, and illustrative examples from the text. Next, each of the three researchers coded a pre-segmented transcript in Microsoft Excel using the codebook. A comparison of codes assigned by each of the researchers for 59 segments of text demonstrated an initial IRR (#agreements/#agreements + #disagreements) of 57% (Miles & Huberman, 1994).

Over the course of multiple meetings, the team resolved discrepancies through a process of discussing and refining primary and secondary codes and definitions and identifying illustrative quotes for each code to increase IRR in the remaining transcripts. In the final step of the coding process, the transcripts were divided among the three researchers for individual coding using NVivo. The team met weekly to discuss coding decisions, new codes, unclear code definitions and applications, and emergent themes.

RESULTS

Dispelling Concerns

Prior to the implementation of the pilot RCT, various drug treatment court members expressed concerns about the acceptance of PRSs as staff and the influence of their previous status as treatment court clients. While key informants were generally in favor of integrating PRSs, treatment providers and case managers were uncertain whether PRSs would be accepted and trusted by the legal team. Some case managers were concerned that the public defender might scrutinize PRSs more closely than other members of the legal team would. However, interviews revealed that the public defender was one of the most vocal supporters of the PRSs, and the PRSs did not report any conflicts with the public defender's office, although certain professional disagreements remained, as will be detailed later.

Other concerns related to data access, and questions arose as to the level of access the PRSs should have to the client databases used by the court and case managers. As Bernard, a member of the treatment team, expressed, "There may be questions about confidentiality and should this person be permitted to know this information about other folks." A related concern of a few case managers was whether providing PRSs with access to the case management database would enable them to access their own data from when they participated in PTC. However, the prevailing perception, even before the RCT, was that the PRSs should have equal access to all databases if they were to be viewed as staff members. Before the intervention, the same treatment team member said, "The more barriers you build in about what the peer can say or see, it is keeping them separate from the team. To be part of the fully functional team, there need to be clear roles." Indeed, at the end of the study, not a single interviewee viewed the PRSs' data access as problematic. In the words of one case manager, "I just think the integration of the peer specialists was just a smooth process; it wasn't awkward."

A related concern was whether the PRSs, some of whom had graduated relatively recently from the very program they were now assisting as staff, would be viewed more as former PTC participants than as paid staff members. Here too, concerns were alleviated: Neither the PRSs nor other interviewees reported this as a problem. The PRSs felt like staff members and did not relate any incidents where they felt discriminated against. Case manager Beth described what happened the first time she went to court with Kim, the new PRS who had graduated from PTC a year or two before: "[W]hen we went to court, everybody was very welcoming. The public defender, the DA was hugging her and stuff and walked up to her." Even case managers who previously had the PRSs as clients came to view them as their equals, and the

PRSs did not experience any role confusion related to their recent experience as PTC participants. Cara, Maria's former case manager, reported about her relationship with Maria as a PRS,

> I was Maria's case manager when she was in treatment court. And just to watch the whole transformation, just to see her growth and where she's at in her life, as opposed to where she was when I first met her.

Cara said she felt no discomfort working alongside Maria as her equal; rather, she was happy about her success. Generally, all interviewees felt the PRSs contributed to the treatment court.

Benefits of the PRSs

Members of the treatment court and participants alike pointed to several benefits of having PRSs on staff, including relatability to participants, their availability and flexibility, serving as role models, providing additional resources to treatment court participants, and being an open ear. The PRSs also offered tangible benefits to case managers, including providing them with feedback about the program, insights about the experiences of PTC participants and people in recovery, and more peace of mind with respect to high-risk clients.

Benefits for Clients

Treatment court participants commonly mentioned their ability to relate to their PRSs based on their shared lived experience. Sam explained the relatability of his PRS through their common language: "I think it's just kind of like somebody speaks your language. They just can understand what I'm saying. It's easier. I find they all come from a similar place . . . as me." From his point of view as a case manager, Craig echoed this notion of a common language: "Just the language and being able to really, really—I feel like they're comfortable in their conversations together and I think hold each other accountable that way, more so." Jocelyn pointed to specific experiences she shared with her PRS:

> I feel as though she relates to every aspect of my life as far as being an addict, a parent, and definitely a family member or a significant other. . . . Just speaking about any personal issues. The fact that I trust her as far as a friendship, not only she's my peer specialist, but I feel as though I have to trust the person that's dealing with me . . . in order to open up, so she's been wonderful.

Likewise, Brian appreciated how much his PRS wanted to help from a place of someone who has experienced similar things. He said,

> I felt like he understood. He knew where I was coming from, and I felt like he'd really been in most of the situations that me and him talked about. . . . I'm the type of person you can't tell me about my problems, or you can't say that you know what I'm going through if you never had an addiction in life. I need somebody that's been down that road, that's clean, that know what it feel like to sell your last shirt or sneakers or keep selling your phone, just sell something to get that high. . . . I can relate to their stories, and they can help me not make them steps.

The importance of this shared lived experience was also emphasized by Beth, a case manager:

> I know I've had clients that feel more comfortable—they'll ask the peer specialist to meet them at an intake. If they know they've been relapsing, they'll reach out to them. I guess because they know that they've already been there before, and they're able to talk just from experience and not just from a case management point of view.

The PRSs' availability compared to case managers made it easier for participants to reach out to them. Benjamin described how his PRS's availability and accessibility made it easier for him to ask for practical assistance when he needed it:

> She listens to everything I say, and she gives me advice, too. Like, I was going through the whole thing with the court, she says, "Anything, you call me and let me know." And I take her word on that, and I call her and let her know, and she basically helps me out with what's going on. She breaks it down. If I can't get ahold of my case manager, she'll get ahold

> of him for me and tell him to call me. Or she'll come out to me right away and help me with anything. If I feel like I'm about to smoke some weed, I call her, she gives me advice not to smoke it. She tells me what's going to happen if I smoke and that scares me.

Indeed, Sandra, a case manager, also described the PRSs as more flexible than case managers:

> I think they're more accessible for them because that's their peer specialist role, basically to meet with them weekly. So, they are able to be more flexible as regarding when and where they can meet, different times a day than maybe some case managers. That's been a benefit.

Exhibiting care for participants was another notable benefit of the PRSs. Chris appreciated having someone who cared about him: "That's another thing. I never really had that. So yeah. It's a good feeling. I feel like somebody cares." Joseph, one of the case managers, reported that "Kim did sit through a two-hour intake with one of my participants just to make her feel more comfortable." Participants like Daniel also appreciated how their PRS did not give up on them:

> I'm sure there were times where I made them feel like giving up and just be like, whatever. If he shows up, he shows up. If he doesn't, we'll just write it down and mention it to the judge. But they hammered it into my head: this is why you've got to show up. They never gave up, not on me.

In addition to relatability, care, and understanding, the PRSs offered practical assistance to their clients. Chris described practical advice he received from his PRS: "She actually prepares me so when I do go into an interview . . . the dos and don'ts, how to dress—not to just go in there with a white T-shirt and jeans—basically preparing me for the working field." Andrew described what Kim, his PRS, did to help him get into school: "Basically with applications and then provided me with papers that I needed for [university name], basically because I told them about my background and everything. So she helped me get the papers that I needed." Other participants reported that their PRS tried to get them a job and sent them to job fairs in the area.

Finally, clients and case managers alike emphasized the importance of PRSs serving as role models for clients. Jocelyn, for example, said, "The best thing [about working with her PRS] is just realizing things that I'm capable of as far as potential." Beth added from her perspective as a case manager,

> I did get good feedback from my participants in reference to meeting with [the PRS], having someone that they could see made the process, especially when they first start. It shows them that it can be done, it can be achieved.

Benefits for Case Managers

The PRSs also held benefits for the case managers, including sharing their emotional stress with respect to high-risk clients, providing them with feedback about the program, and suggesting ways to interact with their clients. Beth explained that it was an opportunity for her to receive feedback about herself and the program:

> And I more so looked at it as an opportunity to ask [the PRS] questions about going through the program. I didn't look at them as if they were still participants because they were working alongside of me. I think it was an awesome thing to have because I get to ask them insights—from their perspective of actually going through it, sitting day by day inside IOP [intensive outpatient] and then they stepped into OP [outpatient], and that transition. And it helped me to better understand my participants and what they may be going through, and my approach to participants because of the fact that they went through it.

In addition, knowing that a high-risk client had a PRS helped lighten the load of that client's case manager. As Joseph the case manager explained,

> I think it helps more—kind of my nerves a little bit with certain participants that I know are actively using certain things. So, if I see—okay, if I haven't talked—so they're not talking to me, at least I see them talking to Kim. You're

> not answering my phone calls, but at least I see you are talking to somebody.

Knowing that a participant was in contact with their PRS, if not with their case manager, seemed to lower the risk to the participant in the eyes of the case managers. Similarly, Geoffrey indicated that he does not reach out as frequently to clients whose PRS reports that they are doing well:

> I have participants that I know meet with Kim once a week, and if she says he's doing well, then I know, like, okay, he's cool. I'll call him up and see if he's fine, but I don't have to do that much . . . versus someone that it's just me supervising them, I'd definitely be more hands-on. But I don't want to overwhelm people; if I know you're already meeting with this person once a week, you're doing what you're supposed to do, I'm not going to overwhelm you and keep reaching out, because I know you're fine.

PRS and Case Manager Role Overlap

Despite the advantages that the PRSs brought with them and their relatively seamless integration as part of the drug court team, overlap and lack of clarity about role distinction between the PRSs and case managers remained challenging. A member of the treatment team initially suggested a need for "clear role responsibility and defining who does what and periodically clarifying whose job is whose." Such clarification did not fully take place, and as a result, case managers had a clear idea about what the PRSs were *not* doing (administrative assistance to case managers) but were not as clear on what they *were* doing. Even at the end of the study, the case managers could not clearly describe the distinct role of the PRSs or the type of reporting they were mandated to do. John, a member of the legal team, commented on this issue:

> [T]he biggest drawback to me of the role of the peer specialist in our court was that they became to be identified as the same as a case manager. So I think they were performing sometimes the same functions of a case manager. And were not really treated as sort of separate from the drug court structure . . . which I think they should have been.

The role overlap was manifest in functions performed by both the PRSs and case managers. John further hypothesized that part of this role overlap was because the case managers and the PRSs had the same supervisor. He suggested that having the court coordinator as the supervisor could have helped better distinguish the case managers from the PRSs.

Drug court clients, too, were not always clear on the distinction between case managers and PRSs. Some interviewees said they could not understand why the PRSs and case managers did not always share information they had relayed to one or the other, resulting in their having to repeat themselves. The fact that clients often met with case managers and PRSs in the same office building or in court may have added to this role confusion. Both case managers and PRSs attended court hearings (though for the most part, only case managers spoke at the bar), both documented interactions with clients in the information management systems, and both met with clients and offered them resources. Although the PRSs were not supposed to conduct clients' urine drug screens, it happened occasionally, likely when the case manager was too busy to conduct them. John, a member of the legal team, described how he felt about this practice:

> I was always a little bit taken aback when I read in the system a peer specialist conducted [urine drug] screening. I mean, to me, that's wrong. That's absolutely wrong for every level. But apparently it was done in times of short staffing.

Some differences in everyday functionality between the PRSs and case managers remained. The PRSs escorted clients to treatment appointments, had more frequent contact with clients, were more likely to meet with them at their treatment sites, and provided advice and resources based on their personal experience. Case managers were the only ones who conducted clients' intake meetings and developed their treatment plans, although the PRSs sometimes attended those meetings with clients. Case managers and PRSs both attended monthly

staff meetings led by the case management supervisor, and case managers reported speaking regularly with PRSs about their mutual clients. However, some interviewees felt that having regular meetings with the PRSs and case managers together could have clarified their respective roles.

It should also be noted that not everyone viewed the role overlap between case managers and the PRSs as a problem. Cara, the case manager, for example, emphasized the benefit of added support for some clients:

> With some of the clients that have [a PRS]—like, there are the opioid users, so it's important to be bombarded. It's important for that extra support, with me and with either Kim or Maria [the two PRSs]. It's just very important to just be on them and around them—because a lot of times they don't have anyone.

In other words, even if case managers and PRSs are providing the same services, there are certain participants who need this duplicative support.

PRSs and the Legal Team

In addition to role overlap with case managers, the integration of PRSs with the legal team was another thorny issue, for different reasons than anticipated. According to some members of the legal team, a better introduction of PRSs and a clarification of a particular operation model should have been in place before the intervention. To begin with, the PRSs were never formally introduced to the legal team, which might explain why some participants from the legal team reported that they either did not have a clear understanding of the PRSs' role or did not fully benefit from their presence in drug court. In the words of Mark, a member of the legal team,

> I think the recovery specialists are an excellent idea, I wish we had more of them, but quite honestly, I don't think we were able to utilize them as effectively as we could or should have. We just did not have that much interaction with them and—I don't get the sense that they were really stakeholders in the same way we were. In other words, they weren't part of the sanctions process, they weren't part of a lot of follow-up that I think could've been really helpful, especially for clients who are high-need or high-risk in terms of paying home visits or seeking them out. I think that perhaps we underutilized them.

Indeed, one PRS reported that a participant on her caseload had a bench warrant because he did not show up for his court hearing. She said she was not allowed to search for him, even though she might have had a reasonable idea where he was, because she was instructed that if she talked to an absconding participant she would be "harboring a fugitive." Such legal boundaries imposed on PRSs echo Mark's sentiment that the court was not sufficiently using PRS to make home visits to high-need clients.

Part of this underutilization of PRSs may be due to the debated issue of the legal model applied to the function of PRSs in court. One of the legal team members was adamant that PRSs did not belong in court and should not even attend court hearings, as it would appear to clients to be a breach of confidentiality. In other words, if a client told the PRS they had a recurrence of substance use, the PRS should keep this information private and not provide it to the legal team, in court or elsewhere. In the words of John from the legal team,

> [The PRSs] didn't come and report to us directly. Everything was always reported through the case managers, which I actually thought was fine because to me nothing really should be reported from the peer specialists, in my opinion. It should be a totally separate relationship. Unless there was dangerous behavior or behavior that was threatening to themselves or others that had to be reported, in my opinion, it should have all been simply private and not reported to anybody.

This approach promoted a view of PRSs as confidants of participants and argued that participants' trust in the PRSs would be compromised if the PRSs attended court hearings, and even more so if they attended the hold

meetings.[1] While this view did not seem common among most interview participants, one treatment court participant expressed strong feelings against his first PRS, because he felt the PRS had betrayed his trust:

> He was telling my PO [probation officer] the stuff I was telling him. He was telling my case manager the confidential stuff I was telling him. Like, "Listen, I'm on the streets right now. I'm not getting high, but I'm smoking weed." And I wasn't telling my case manager; I was just telling him on a personal level and he was running back and telling her, and then she would book me, and I'd be like, "What the f***, bro?" But anyway, I told him off, like, "Look, man, you're just fake, for real. You're not trying to help nobody. You're just trying to move up the ladder, bro."

It should be noted, however, that this view came from a single participant, and even he expressed gratitude for his second PRS. Most participants did not express any confidentiality-related issues with their PRS. In fact, as described earlier, some did not understand why their case manager and PRS could not share information, so they would not have to repeat the same thing twice. Most participants viewed meeting their PRS in court as a natural part of the program. For some, it was also a matter of convenience, as they could meet with their PRS at a place they were already required to be and would not need to schedule a separate meeting.

Another approach supported by some key informants promoted the PRSs' presence in court, at the bar, and even at hold meetings in order to advocate for their clients, viewing the PRSs as an integral part of the team similar to case managers. Most of the case managers agreed with Sandra when she said, "I think they should be a part of [the hold meetings], definitely." Beth explained, "Because they are referenced sometimes, during holds or when we're discussing the case." At the same time, Beth admitted she had mixed feelings about it, expressing concerns similar to those of the legal team member quoted above: "I kind of feel like it may mess up their relationships with the participants a little." On the other hand, the case managers recognized the benefit of having a PRS advocate directly and personally for a particular participant. The solution Sandra suggested was specific training:

> I just think that with the right training, the peer specialist can go back there [in the judge's chamber] and be able to give an update without—They may not even say what the participant told them. But they might say, "Based on my work with them, I'm recommending X, Y, and Z," without even telling certain things. I think that would be a benefit.

While the PRSs were not sure they *wanted* to attend the hold meetings, they still saw the value they could bring to the clients by attending, as Kim explained:

> I believe, to a certain extent, it might be necessary. Like, if maybe [the clients] talk to us more. They see us more. We see them more, so I do believe that if it comes up and they need further assistance, like a case manager needs further assistance explaining something, or the judge wants to specifically talk to us, then I believe that I'd be open to going in holds and talking to them . . . as an advocate to let [the legal team] know that this person is really trying, and that this person is really struggling in addiction . . . just so they don't get sent to jail. Because I really don't believe that jail helps anybody at all.

For the PRSs, then, being true advocates for their clients necessitated attending the hold meeting.

An intermediate approach suggested that the PRSs attend the oversight committee meetings, during which all stakeholders meet to discuss PTC policy as opposed to individual clients. While the reason this did not happen is not fully clear; it is likely that no

1. Hold meetings are held in the judge's chamber with the district attorney, public defender, case managers, and sometimes treatment providers. Attendees discuss the progress of specific treatment court clients and possible courses of treatment and/or sanctions as needed. These meetings are private and confidential, in contrast to open-court hearings, where a case manager or service provider may speak out about one of the participants in order to provide information to the judge in open court, where it is heard by all present, including any other participants in the audience.

one promoted the idea or followed it through. Alex, a member of the legal team, said in this respect,

> Oversight [meeting] is really policy driven. So we're talking about decision making regarding policies that affect participant progress through the program, policies that affect eligibility . . . more organizational structural, systemic issues with either case management or the legal team, providers. So it almost seems like that might be more appropriate [for PRSs to attend] just because it's at a higher-level view. . . . Probably some process-related updates would have been helpful. Not even regularly. Maybe just a couple times a year.

Criteria for Matching PRSs with Participants

An important issue raised in the preintervention interviews with key informants related to the assignment of PRSs to PTC participants, specifically, which participants should be assigned a PRS and when should they start interacting with the PRS.

Assigning High-Need Participants to PRSs

Because this study randomly assigned clients to a PRS, some participants who really needed a PRS could not get one, whereas some participants who could do well without one were assigned a PRS. Some participants attested to this mismatch. Andrew, for example, when asked directly if he thought he needed a PRS, responded honestly, "Not really, I don't think I did. But when it came to me needing a paper, I didn't know who to ask, so I asked Kim [his PRS], and she helped me because I wasn't going to my group no more." Case managers desired a more flexible system whereby they could identify participants with high need or at high risk and match them with a PRS. For example, Beth, a case manager, argued, "The study could have been more lenient, with asking us who we feel as though could benefit from it. Because we can still tell you more accurately from the people we feel as though really need it."

PRSs indicated that some clients can be classified as high risk as soon as they join the program. For example, some interviewees indicated that participants engaged in opioid use are high-risk, high-need clients. These clients also seemed to benefit from the PRSs more than those engaged primarily in marijuana use. As Kim, one of the PRSs, explained,

> We're human; we're not dumb. You can tell if somebody is a heroin addict or they are doing a lot of drugs. So it's like if you feel like they need extra support, then I feel like you can recommend it anytime you feel as necessary. So as a case manager, if you're like, "I can't do this alone. I need somebody to be on them."

Sandra suggested even greater flexibility by taking someone off the PRSs' caseload once their risk level decreases: "Once a participant has stabilized, they can say, 'Okay, well, we can remove that [client].' Because we don't want to inundate the peer specialist with all these participants, because I don't think they would be able to handle it."

Timing of PRS Assignment

Another question that troubled the key informants was when participants should begin their interaction with their PRS. Part of the inflexibility of the RCT resulted in strict timing of the initiation of PRS contact with their clients. Randomizations took place shortly after the participant joined the PTC, and PRSs were required to contact their clients within 48 hours of assignment. Case managers warned that matching participants with a PRS right as they were starting the program was bound to result in participant dissatisfaction. Participants may be overwhelmed by the many requirements they face as they begin the program, and what is presented as extra support offered by a PRS may instead be perceived as a burden. Indeed, recruitment for the study may have been challenging because it required a willingness to receive a PRS (Belenko et al., 2021).

Case managers and PRSs alike felt that assignment to a PRS should take place about a month or two after a participant began the program, long enough to identify difficulties but not so long that participants would start getting severe jail sanctions before being linked to extra support. Beth, a case manager, suggested specifically waiting for the second sanction to assign a PRS. As she explained,

> Maybe after one—maybe after two sanctions, we can assess to see, okay, this person may be more of a higher-need participant, who may need the help of our peer specialist. Because coming out, you don't know who's going to be a rock star and just fly through the program and who's going to have trouble. But by that second sanction, you kind of get a snapshot of who may need a peer specialist. So by the time we [have hold meetings] for the next month, they can engage with them.

Echoing the flexible model suggested by Sandra above, one of the PRSs felt they were needed mostly in the beginning of the program and less so as participants were making positive progress. As Kim explained,

> When [clients] progress in their recovery, a lot of things come back. So the things that you lost when you were out there, like family, friends, people that used to be able to talk to you and you used to be able to talk to them. They come back, the girlfriend or the wife or the husband. So I don't want to say that they don't need me anymore, but when you get to that point in recovery, there's only so much more that I can do for you as a person because now you might have your mom back, you might have your dad back, you have your husband back, you can talk to these people now. They know everything about you, so it's like if all your stuff is out there, and you can tell the truth to them because you talked to me about it first, then we made progress.

On the other hand, some case managers suggested that perhaps another good time to assign a PRS to a participant was when they were no longer in treatment (the "case management only" phase) and did not interact with many service providers apart from the court and their case manager. In general, everyone wished there was flexibility to assign a PRS in the middle of a program if a participant was struggling for some reason.

Matching Client and PRS Demographics

Based on the literature, we anticipated that matching clients with PRS based on demographics such as race/ethnicity, age, gender, or language may be important. Two of these, age and race/ethnicity, hardly came up in the interviews. Despite the fact that the three PRSs (two women and one man) were of different races/ethnicities and the participants were primarily Black, participants did not mention the race of their PRS. Age, while mentioned, was not described as a barrier. Two PRSs were in their early 20s, whereas the average age of study participants in the PRS group was 28.2 years (ranging from 18 to 58). Kim, the PRS, explained why she thought age was not an issue:

> My approach, if you're an addict and I'm an addict, it doesn't really matter about age or race or—because addiction doesn't have any choices, and it attacks anybody, and anything it can get [its] hands on, it eats. So, if I'm a 23-year-old addict, then you're a 53-year-old alcoholic, we have the same problems. Like, we struggle with the same issues.

In contrast to age and race/ethnicity, a few participants expressed a gender preference. One of the few women participants who had both a male and a female PRS[2] said, "I felt more comfortable with Maria. I relate more to her than I do with Gerald because she's a woman. She understands what I was going through and stuff like that. Gerald was all right, but I like Maria better." Similarly, a few case managers noted the importance of a having a male PRS for their male clients. As Beth explained, "It hasn't come up. But I have seen the need for it with a lot of these young guys that are coming through the program and really need someone they can relate to." However, such a stated gender preference did not manifest frequently.

Finally, having a Spanish-speaking PRS was greatly advantageous for some of the participants for whom English was not their native language. As Sandra, a case manager, advocated, "I don't think so much for me that race or background, stuff like that, or man or woman—I just think for me, [the importance] was the Spanish speaking. That's the only thing that I can think of." In fact, once the only Spanish-speaking PRS left the program, the research team had to turn down one participant who could not communicate in English.

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2. The male PRS left in the middle of the study and was replaced by another female PRS, who took over his caseload.

In sum, the vast majority of participants did not express a preference for a PRS with particular demographics. Kim, a PRS, summarized what she thought was the most important characteristic of a PRS for her clients:

> I'm an addict. I'm in recovery. So I immediately like to let [clients] know that I'm not just blowing smoke up your butt. I understand. So because some people come in and they immediately judge you because you're young. You couldn't possibly know what I've gone through; who are you to tell me? You know? . . . So, I like to always let them know.

In other words, her lived experience allowed her to better connect with her clients, regardless of age, race, or gender.

DISCUSSION

Qualitative data gathered from PRSs, PTC participants, and key informants yielded the general conclusion that PRSs were a positive addition to drug court. Four key themes emerged from the analysis that support this understanding and may inform future approaches to integrating PRSs into drug courts and other treatment court models, including the benefits of PRSs, legal models for PRSs, role confusion, and PRS characteristics.

PRS Benefits

It is noteworthy that all interviewees—case managers, PRSs, PTC participants, legal team members, and treatment providers—felt that PRSs made an important contribution to the drug court by the end of the study. Only one participant had some reservations about his first PRS, but not about his second one. Case managers also reported that one participant initially wanted to drop his PRS but after a conversation with her decided to retain her. The main drawback to having a PRS, according to some PTC participants, was the need for dual reporting to their PRS and case manager, but the advantages outweighed this inconvenience.

PRSs offered their clients support in multiple ways: practical assistance (e.g., career fairs, job applications, job interviews), mental and emotional support, and a source of inspiration (Marshall et al., 2015). These benefits fall into three of the five categories identified by Marshall et al. (2015): harm reduction education, direct harm reduction, and support, counseling, and referrals. As previously stated, "counseling" refers to guidance and emotional support rather than professional or clinical counseling. Case managers also mentioned several cases where PRSs advocated for their clients and their progress. On an emotional level, participants perceived their PRS as someone to talk to who was available and more flexible to meet with them than their case managers; they sensed an understanding from someone who has walked in their shoes and who would not give up on them even if they were doing poorly in the program (Kelly et al., 2019; Sells et al., 2006). Finally, several participants and case managers described the importance of PRSs serving as role models whom participants could relate to and who motivated them to achieve a similar status.

Similar to other studies (Asad & Chreim, 2016; Chinman et al., 2010; McCarthy et al., 2019), the PRSs were beneficial not only for the drug court participants but also for the case managers. Several case managers indicated that they experienced a certain comfort if they knew they were sharing a challenging client with a PRS. It seems that it was beneficial for them to share their caseload, not only at a practical level but also at an emotional level: Knowing that another professional was following the participant, talking to them, and trying to assist them alleviated a mental load of concern for the case managers. They were also able to converse with the PRSs and share some support strategies. Although the presence of a PRS was not supposed to impact the case managers' connection with their clients, case managers with a heavy caseload did seem to have fewer contacts with some participants if they knew those participants had a close relationship with their PRS. In addition, similar to McCarthy et al.'s (2019) findings, several case managers mentioned that they were also learning from the PRSs' lived experience through the program about what was working and what was not, what had motivated them to graduate and what was less helpful. In essence, it was their chance to learn lessons from a successful case in drug court.

The PRSs' small caseload compared to that of the case managers enabled them to maintain more regular

contact with their clients. The PRSs in this study each had a caseload of 15 participants, as opposed to at least 50 clients per case manager. The PRSs thought a caseload of 20 clients would still be manageable, especially since they often had at least one or two absconding clients whom they were not contacting.

Legal Model Conflict

The study revealed several potential models for the PRS role. The majority of interviewees felt that PRSs should be advocates for their clients and attend all team meetings, including the hold meetings where the progress of specific participants is discussed by the team in the judge's chamber. This view prioritized the advocacy benefits for participants over confidentiality issues and their potential consequences for the relationship between PRSs and their clients. For example, the PRS, as someone who has personal experience with both addiction and the drug court, may be best positioned to argue against sending a participant to jail based on their awareness of the client's experiences and circumstances. This view suggests that it is critical for the legal team to hear the PRS's perspective about a particular participant; according to this view, the PRS's perspective is more convincing when coming directly from the PRS rather than through a secondhand report from case managers, for instance.

In contrast, two of the legal team members argued that PRSs are first and foremost the clients' confidants, and this relationship should not be compromised by broken trust as a result of the PRSs being viewed as part of "the authorities." If a PRS is seen talking to the judge, or if a participant learns that the PRS discussed their case in the judge's chamber, the participant may feel betrayed by the PRS. According to this view, PRSs should not come to their clients' court hearings and should not attend any hold meetings. Maintaining a participant's trust is more important than advocating for the participant, which can be accomplished by PRSs conveying information through case managers. A few case managers indirectly supported this view when they expressed a sentiment of "us vs. them" that they received from some participants who have been in the program for a long time, but other case managers rejected this viewpoint. Most participants saw a benefit in meeting their PRS in court, though one interviewee felt that his PRS exposed him after sharing personal information.

It is critical to recall that in drug courts, unlike treatment programs, a repeated recurrence of substance use can be sanctioned with jail time following repeated noncompliance (Gesser & Shdaimah, 2021). Disclosing that they engaged in substance use can be risky for the participant. However, this very risk is perhaps what made PRSs claim that they should attend the hold meetings to argue against incarceration of participants. As a middle ground, some key informants suggested that when PRSs talk with the legal team about substance use recurrence, they speak in abstract terms rather than address a particular participant's behavior. Another suggestion along the same lines advocated for the PRSs' presence at oversight committee meetings, where policy issues rather than individual participants are discussed. In this way, they will be able to contribute their knowledge and influence drug court policy without exposing individual clients. While no one in this study objected to this idea, it did not happen, likely because no single stakeholder took the initiative to invite PRSs to these meetings.

Overall, based on the current findings, we cannot determine whether one legal model for the PRS role is better than the other, and more research is needed in this respect. Rather, each model has distinct advantages and disadvantages. It is important to be aware of these elements and potential conflicts and decide ahead of time which is the better model for the drug court implementing a PRS intervention.

Role Confusion

Another theme that emerged was role confusion between the PRSs and case managers. This confusion was the result of a lack of specification and distinction between the two roles from the start, the fact that the two entities occasionally fulfilled similar roles (such as conducting urine drug screens), the lack of separation between them as they occupied the same physical spaces (in office and in court), and the fact that they reported to the same supervisor. Some key informants, especially on the legal team, viewed this role overlap as problematic, while others, including the PRSs and most of the case managers, thought

that surrounding at least the higher-need/higher-risk participants with support served a clear purpose in their recovery. Not only did they think it was not problematic that the PRSs and case managers were fulfilling the same role, but they also thought it benefited the clients who needed an enhanced level of support. PTC participants expressed both views. Some appreciated the extra support, especially if they lacked other sources of support; others did not understand why they had to repeat the same information twice, to their PRS and then to their case manager. Some case managers stated that there should be better coordination between PRSs and case managers, especially with respect to meetings with clients. They recommended that if a client is coming to the office to meet with their case manager, the visit should be coordinated so that the client could also meet with their PRS at the same time.

While having the same supervisor may have blurred the boundaries between case managers and PRSs, this structure offered better supervision for the clients, since the supervisor was the only person who heard about the clients from both the case managers and PRSs. For example, if a PRS found out that one of the clients engaged in substance use, they were allowed to report this only to the supervisor. A supervisor such as the court coordinator, as suggested by a member of the legal team, could have offered a clearer distinction between PRSs and case managers but would not have the same advantage for participants nor for the PRSs.

The issue of supervision of PRSs also touches on other elements, including the professional identity of the PRS and that of the supervisor. Given that PRSs are not therapists, there is a risk that if their supervisor is a therapist, the PRS would think and react like a therapist over time. If the supervisor is a legal professional, the PRS might be prone to react like a legal professional over time. To maintain their professional identity as peer recovery specialists over time, the supervision structure should be weighed carefully. Including a more experienced PRS as part of this supervision structure could help maintain the PRSs' identity as peers.

Similar concerns may apply to the training of peers. As some researchers have noted, providing peers with professional training risks turning them into professionals and moving them away from their authentic lived experience (Laval & Gardien, 2019) or creating a power differential between them and their clients (Mead et al., 2001). One way to avoid such professionalization is to provide training and supervision led by peers (Repper & Carter, 2011). Dennis (2003) recommends minimizing professional training while focusing on orienting peers to program goals so as not to detract from their "peerness" (p. 326).

Similar to the different legal models with respect to PRSs, our data did not indicate a clear advantage to either a distinction or overlap between PRSs and case managers. Each model has its advantages and disadvantages. In order to better separate PRSs and case managers, if that is the goal, some physical separation could distinguish the roles better. Additionally, it is important to explain to clients what they can share with PRSs as opposed to case managers, and what information can and cannot be transmitted between the PRSs and the drug court team. It would also be important to educate the entire staff on the specific roles of PRSs and case managers.

PRS Characteristics

In contrast with some of the literature (Dennis, 2003; Jack et al., 2018; McCarthy et al., 2019), most of our study participants did not express a strong preference for demographic matching with their PRS. One female participant said she felt better with her second PRS, who was a female, but she still got along with and received assistance from her male PRS. Race, too, did not manifest as a preferential factor. Not a single interviewee brought up any racial issues related to the PRSs, despite the fact that the PTC participants were mostly Black and the PRSs were Black, White, and Hispanic. PTC participants spoke mostly about a shared lived experience with their PRSs, which contributed to a sense that the PRS could better understand them.

From the perspective of staff, although some case managers saw a need for a young Hispanic male PRS to serve as a role model for the primarily male PTC participant population, they admitted that this need did not come from the participants themselves. Further, the PRSs did not report any

problems working with clients of all genders, races, and ages, even though two of them were younger. This is due, perhaps, to the explanation one PRS gave: The common factor among all the PRSs and the participants is addiction, which overshadows everything else. Thus, the only meaningful characteristic for PRSs to relate to participants was their lived experience, which is what they drew on in their relationship with clients.

LIMITATIONS

Although interviewers specifically explained that they were not part of the drug court, a few PTC participants manifested a social desirability bias (Chung & Monroe, 2003) and had difficulty expressing criticism against drug court staff, including the PRSs. This was despite the guarantee of confidentiality and encouragement to express any criticism they may have so the program could learn from it. Conducting interviews in the court counsel chambers while participants were waiting to be called before the judge may have contributed to this bias. Interviewing a larger sample of PTC participants may have mitigated this limitation; however, the PTC participant sample represents one quarter of the experimental group. Additionally, as most of the participants were very familiar with the 12-step curriculum from their drug treatment groups, they may have taken personal responsibility over program issues and refrained from criticizing the system. In contrast with PTC participants, other key informants did not seem to have difficulty expressing critical opinions and areas for improvement.

CONCLUSION

The current study clearly demonstrated the feasibility of including PRSs as paid staff members in a legal setting such as PTC. While the best legal model for integrating PRSs still needs to be determined, drug court staff, PRSs, and participants view PRSs as making a positive difference for both clients and other staff members. When introducing a new entity such as the PRS role into a drug court, it is important to bring everyone on board with respect to the specific roles of the PRSs. While buy-in of all stakeholders clearly existed in this study, education related to the PRS role was somewhat lacking, especially for the legal team. It could be beneficial to list the specific responsibilities of the PRSs ahead of time, as well as tasks that are outside their scope. This would allow treatment courts to determine whether there is any overlap between the PRS role and that of the case managers and, if desired, address such overlap.

Ultimately, the PRSs were embraced by everyone on the team, including legal members, treatment providers, and case managers. All interviewed PTC participants reported a beneficial relationship with at least one of their PRSs, and case managers also reported positive feedback they received from their clients about their PRSs. While additional studies are required, the current study demonstrated that lived experience is the single most important characteristic of the PRS role, which benefited both participants and case managers.

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APPENDICES

Appendix 1. Case Management Focus Group Guide

Introduction

Thank you for taking the time to take part in this focus group today. My name is [author] and this is [author]. We are part of the Research & Evaluation Group at PHMC, and Steve is from Temple University's Department of Criminal Justice. Before we start, I'd like to take a few minutes to tell you about the project.

As you may remember, PHMC, in collaboration with Dr. Belenko, of Temple University's Department of Criminal Justice, was awarded funding for a two-year grant, which started in August of 2016, to support a feasibility and acceptability study of the integration of trained peer recovery specialists into the Philadelphia Treatment Court. The goal of the study was to answer questions about the role of peer recovery specialists in improving clients' substance use and criminal justice outcomes. In Phase One of the study, we conducted interviews with people who serve drug court clients and the peer recovery specialists who were hired for this project, and we conducted a focus group similar to the one we're having today. The information we collected helped inform Phase Two of the study. One goal of Phase Two is to look at preliminary outcomes of the program related to relapse, treatment, re-arrests, and drug court participation. Another goal of Phase Two was to see whether the program model is appropriate for effectiveness testing through a full-scale RCT.

We conducted a focus group about a year and a half ago, and will be completing the second one today. This focus group will take about 90 minutes. We will be recording this focus group so that we can transcribe it and make sure that we don't miss any of the information you provide. Taking part in this focus group is voluntary. At any point, if a question is not something you are comfortable answering, just let us know. As mentioned in the consent form, there are few or no risks to you as a result of taking part in this interview. We will not ask you any personal or sensitive information about yourself. After all the interviews and focus groups are done, we will summarize the information gathered into a summary report. Your name and any information that can directly identify you or anyone else will not be included in my notes or reports. In addition, your name and the information I used to contact you will be kept separate from my notes and report. At any point, you have the right to end your participation in the focus group. Also, if you have any questions at any time, feel free to ask.

Do you have any questions or concerns based on this information?

A. Case manager background information

First, we'd like to go around the room and ask you to briefly introduce yourselves and tell us how long you've been a treatment court case manager and how long you've been in this line of work. If you have any specialization that you could mention, that would be helpful, too.

B. Peer recovery specialist integration into the Philadelphia Treatment Court

This study tested the feasibility and acceptability of linking drug clients to peer recovery specialists, who are themselves drug court graduates. The peer recovery specialists provide one-to-one support to drug court clients upon enrollment in drug court, expanding and complementing, rather than duplicating or replacing your role as case managers. Peer specialists provided support for participants including emotional (e.g., showing empathy, caring, and concern through recovery coaching), informational (e.g., educational and employment assistance), instructional (e.g., accompaniment to appointments), and things like helping to establish positive social connections with others in recovery.

1. From your perspective, how beneficial to drug courts and/or drug court staff have peer recovery specialists been, and in what ways?
    a. To what extent had any of you worked with peer recovery specialists before this study began (in or out of the drug court system)?
    b. How prepared were drug court staff, including case managers, to add peer recovery specialists onto the team?
    c. How much, if any, education should be provided ahead of time to drug courts/drug court staff about the role of peer recovery specialists? What would be the best format for this education?

2. How well did peer recovery specialists fit in to the drug court system?
    a. …on a day-to-day basis?
    b. …with service to drug court clients?
    c. …with other drug court staff?
    d. Were there any problems that arose?

3. What were the responsibilities of the peer recovery specialists?

4. How, if at all, was duplication of effort of **peer recovery specialists and case managers and other staff within the drug court system** avoided?

5. How, if at all, was duplication of effort of **peer recovery specialists and substance use treatment counselors** avoided?

6. What, if any, barriers to peer recovery specialists being accepted as part of the service team did you observe?

    Probe for:

    a. Role confusion/Being seen as volunteers or clients rather than paid staff
    b. Not inviting peer specialists to team meetings
    c. Undue scrutiny (e.g., suspicion of sick days)
    d. Being relegated to "grunt work"
    e. Expectation that peer recovery specialists will relapse, cause drug court client to relapse
    f. Belief that peer recovery specialists are unprepared for professional duties/environment

7. In some programs, peer recovery specialists do not have access to client records, but for this project, peer recovery specialists had access to drug court client information and program records and entered their client notes in the CRS and PAJCIS. What were the benefits to peer recovery specialists having access to client records? What, if anything, were the benefits to you as a result? What were some of the challenges or concerns, if any?

C. Impact of peer recovery specialists on drug court clients

1. What are some reasons that some drug court clients struggle to comply with drug court requirements (other than treatment)?

2. To what extent did you observe any differences in treatment court engagement and progress among drug court clients who had a peer recovery specialist compared to those who didn't have a peer recovery specialist?
    a. Probe for some examples, specific cases
    b. Ask about fewer sanctions, more incentives, relapse, new offenses

3. At what point in the program do you think the peer recovery specialists are most helpful for the clients? When are they most needed?

4. Is there anything you think the peer recovery specialists can offer clients that case managers have a harder time offering them? OR: What, if anything, is the added value of having both a peer recovery specialist and a case manager?

D. Resource needs to integrate the trained peer recovery specialists into Philadelphia Treatment Court

I would like to get your feedback about the resources and supports needed to integrate peer recovery specialists into Philadelphia Treatment Court.

1. To what extent did peer recovery specialists have access to enough support from the Case Management team? From the drug court system?

2. What level and types of support did case managers provide to peer recovery specialists?

3. What support do case managers need to integrate peer recovery specialists into their work?

Recommendations

1. What went well in the integration of peer recovery specialists into drug court?

2. What do you think could have gone better in the integration of peer recovery specialists into drug court?

3. What do you see as the ideal role of the peer recovery specialist in a drug court setting?

Those were all the questions we have for you today. Do you have any thoughts you'd like to share before we end, or are there any questions we didn't ask that you'd like to talk about?

Thank you for your time!

Appendix 2. Client Interview Guide

Thank you for taking the time to talk with me today. As you know, you took part in a research study where you have been linked with a peer recovery specialist to give you support as you go through the drug court program. You were randomly picked to take part in this interview, which will take about 60 minutes of your time. The information you give us today will only be shared with the study team, and not with your peer recovery specialists or any other treatment court staff. It will help us better understand how successful the peer recovery specialist program has been. You will not have to answer any questions that you are unable or unwilling to answer.

The information that you share will also be summarized into a report along with information from everyone else we interview. Your name and any information that identifies you will remain confidential and private and will not be in the report or any written materials. If you do not feel comfortable answering any questions, let me know and I will move on to the next question. Do you have any questions before we begin?

1. How well do you feel that your peer recovery specialist related to you and understood the problems you face?

2. What are the main ways you have gotten support from your peer recovery specialist during your time in the program?

3. What are the main ways that you have gotten support from your case manager during your time in the program? What about other drug court staff (other than the peer recovery specialist)?

4. Who else have you gotten support from while you've been in the drug court program?

5. What have been your main needs been while you have been in the drug court program?

6. What challenges have you faced as a result of taking part in drug court?

7. In what ways has the peer recovery specialist helped you overcome challenges you've faced taking part in drug court?

8. What do you think would have helped you overcome those challenges that you didn't have available to you?

9. Are there other things the peer recovery specialist could have done to help you succeed in the drug court program?

10. What are the things you liked the best about working with your peer recovery specialist?

11. What are the things you liked the least?

12. Was the amount of contact you had with your peer recovery specialist sufficient to give you the help you needed?

13. Thinking about your time in drug court, what do you think are the best things about your experience?

14. What do you think you would change about your experience in drug court?

15. How has the drug court program impacted your life?

Probe:

a. Substance use
b. Criminal justice involvement
c. Mental health
d. Employment and education
e. Family and relationships
f. Self-efficacy or personal growth

Is there anything else you would like to add?

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Steven Belenko, PhD, is a professor in the Temple University Department of Criminal Justice. With funding from the National Institute on Drug Abuse (NIDA), U.S. Department of Justice, and various foundations, Dr. Belenko's research focuses on the integration of behavioral health interventions in the adult and juvenile correctional systems and drug treatment courts; the impact of substance use, HIV, and other health problems on adult and juvenile justice participants; and developing and testing organizational change strategies to improve implementation of evidence-based drug treatment and HIV health services in correctional and other settings. He has published more than 100 journal articles and book chapters and is the author of four books, including one on the implementation of drug treatment in community corrections. He is also an Academy of Experimental Criminology Fellow. Dr. Belenko received his PhD in experimental psychology from Columbia University.

Doris Weiland, MA, is a senior research associate in the Department of Criminal Justice at Temple University. She has over 30 years of experience in implementing and evaluating justice system interventions to address the substance use treatment needs of persons involved in the justice system, including the Miami-Dade County Drug Court and the Philadelphia Treatment Court. She is currently working on two multisite implementation studies, funded by NIDA, to improve services to justice-involved adults and youth with substance use and mental health treatment needs. Ms. Weiland is also the project coordinator for Temple University's NIDA-funded Justice Community Opioid Innovation Network initiative and a Pennsylvania Department of Health–funded study to address opioid use disorder among formerly incarcerated persons returning to the community.

Lauren Perron, MA, is a fourth-year PhD student in Temple University's Department of Criminal Justice. She received her MA in criminal justice from Temple University in 2020 and her BA in psychology and criminology from Villanova University in 2018. Her primary research interests focus on implementation science, substance use, and community supervision. Ms. Perron is currently working on a research grant sponsored by NIDA as a part of the Justice Community Opioid Innovation Network, which seeks to improve linkage to medication for opioid use disorder among community supervision client populations.

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RESEARCH REPORT

Housing and Reentry: A Mixed-Method Evaluation of a Low-Cost Community-Based Intervention for Increasing Access to Housing Post-Incarceration

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Abstract

Background: Housing assistance programs for the formerly incarcerated typically provide housing vouchers that cannot be used to pay court fees, fines, or debts. We evaluated whether flexible spending and case-management assistance would facilitate housing placement for individuals with criminal records.

Method: A community foundation provided funds to four housing programs in Oregon that removed financial barriers to housing for individuals with criminal records. A subset of these individuals was interviewed for qualitative program assessment.

Results: A total of $243,401 was spent serving 113 individuals, 99 of whom were housed. Successfully housed individuals tended to be younger than those not housed by the end of the program period (median age 38 vs. 43, respectively, p *= 0.0556) and had higher median monthly incomes ($900 vs. $169, respectively,* p *= 0.0462). Providing at least $1,000 in assistance per person was associated with quicker placement vs. providing less than $1,000 (*p *= 0.012). Median move-in time for those with $1,000 or more in funding was 1 month vs. 3 months for those with less than $1,000 (*p *= 0.0112). Participants reported satisfaction with case-management and housing assistance, which they felt helped them avoid recidivism.*

Conclusion: Providing flexible financial assistance for housing and case management can facilitate successful, efficient housing and help individuals with criminal records achieve stability after reentry.

Keywords: *incarceration, rehousing, reentry, recidivism, case management, flexible funding, community programs*

INTRODUCTION

For the approximately 650,000 individuals released from United States prisons each year (U.S. Department of Justice, n.d.) and their families, unpayable debts are a massive burden with long-lasting consequences (Harper et al., 2020). Costs of incarceration are vast, both for government agencies and for the individuals themselves, who incur fines, legal fees, and similar costs. While incarcerated individuals are serving their sentences, their families shoulder approximately $2.9 billion annually in incarceration costs not covered by prison facilities (Wagner & Rabuy, 2017).

Upon release, the amount of debt they have accrued during incarceration may prevent formerly incarcerated individuals from finding stable housing. A lack of stable housing, in turn, is associated with a lack of stable employment (Desmond & Gershenson, 2016) and increased recidivism (Levenson et al., 2007). Thus, the additive burdens of criminal history, debt, unemployment, and housing instability create a cycle of poverty from which it is difficult to escape. This cycle of housing insecurity and unemployment disproportionally entraps Black and Hispanic/Latinx individuals and women, such that formerly incarcerated Black women have the greatest risk of homelessness upon release compared with all other groups (Couloute, 2018).

LITERATURE REVIEW

Having a criminal record, however minor, presents numerous barriers to successful reentry across multiple domains of life, including employment, public assistance, education, family reunification, and housing (Vallas & Dietrich, 2014). Collectively, these obstacles contribute to the rearrest of approximately two thirds of formerly incarcerated community members within three years of release (U.S. Department of Justice, n.d.). Connections between housing and recidivism are complex and nuanced; however, research indicates that individuals with safe, stable housing are less frequently involved in crimes, not only as perpetrators but also as victims or witnesses (Fischer et al., 2008). Attaining housing during reentry is viewed as a critical first step toward addressing subsequent commonly experienced challenges and barriers, such as securing a job (Petersilia, 2005).

The importance of housing during reentry and the challenges of attaining it are well documented in the research literature. Previous research has demonstrated that housing support is associated with decreased recidivism, reduced costs associated with the carceral system, and less time spent in jail or prison (Clifasefi et al., 2013; Hamilton et al., 2015). While a lack of available and affordable housing is a widespread concern that affects many communities across the United States, the challenge of attaining housing is compounded for those with a criminal record, as landlords often use background checks to narrow applicant pools in the context of a shortage of available units and a surplus of demand. Moreover, many individuals with criminal records are deemed ineligible for public or supportive housing (Reentry and Housing Coalition, n.d.).

While not directly focused on the formerly incarcerated, studies exist of similarly vulnerable populations and interventions to facilitate housing for them, most notably the Housing First program. Housing First advocates finding housing for vulnerable populations without the prerequisite of treating all medical issues (e.g., receipt of mental health services or abstaining from substance use), the rationale being that unstable housing itself is a major risk factor for negative health, financial, and legal outcomes (Tsemberis & Eisenberg, 2000).

In a recent randomized controlled trial of Housing First, the program showed strong benefits related to stable housing, prison time, and services use for 2,039 participants with mental illness experiencing homelessness studied over 24 months (Kerman et al., 2018). Housing First participants showed a greater percentage of sustained stable housing relative to those in standard care (75% vs. 47%), and reduced time in prison. Sustained stably housed Housing First participants averaged less than one day in prison, while sustained unstably housed study participants averaged more than 20 days in prison over a 3-month period. Additionally, stably housed participants showed decreased use of psychiatric hospitals and homeless shelters.

As in the described study, most research on housing during reentry focuses on placing individuals in specific housing programs, whether project-based

Housing First programs or supportive and transitional housing (Clifasefi et al., 2013). Few studies have explored the potential effectiveness of supporting individuals during reentry in accessing private-market housing or independently seeking housing outside of a specific program (Walter et al., 2021).

In the current study, we hypothesized that providing flexible financial assistance in this vulnerable reentry stage may promote stability among formerly incarcerated individuals. Such financial assistance, coupled with guidance and advocacy, may improve the chances of achieving housing, shorten the time needed to find housing, and in turn reduce recidivism among individuals with criminal records. Consequently, a community partnership was developed to provide flexible cash assistance and housing assistance during the reentry period.

METHODS

Ethics Approval

The Providence St. Joseph Health Institutional Review Board approved this analysis of the housing support program. The board waived the requirement for informed consent for quantitative program data, and verbal consent was obtained for phone interviews.

Intervention

The Re-Entry Housing Collaborative was launched to provide financial support to individuals with criminal histories who experience barriers to housing. Meyer Memorial Trust (Meyer) funded four organizations that in turn provided financial support to participants, with a particular focus on debt removal and flexible financial support as a strategy for removing barriers to accessing private-market housing. Due to the COVID-19 pandemic, the organizations pivoted away from the exclusive focus on private-market housing in order to expand available housing options for participants during this public health emergency. The flexible funding from Meyer was designed to act as a supplement to existing local and state government resources received by the organizations (e.g., an organization already receiving state funding for short-term rent assistance frequently used the Meyer funding to support the higher security deposits required by landlords for individuals with criminal histories). Each organization designed its own model for distributing funds that fit the needs of the population it served, and all organizations were allowed to hold some funding in a discretionary "flex fund."

Participants either were existing clients of these organizations or were referred to the organizations through resources provided by jails, prisons, parole and probation departments, justice resource centers, or word of mouth. Advocates working within the housing programs matched participants with housing opportunities and helped with appeals for those who were denied. They also connected participants to other social services such as food assistance and workforce help.

Retrospective Analysis and Statistics

Staff at the four organizations collected information from participants on demographics, chronic health conditions, criminal background, housing history, and program-related outcomes. They collected data from 113 unique participants between January 2019 and January 2021; we summarized these data using basic summary statistics. We then explored the relationship between financial interventions (total amount and amount by various funding areas) and time to housing using Kaplan-Meier survival analysis with the Wilcoxon test of equality between strata. We assessed differences between the housed and not-housed groups using chi-square or Fisher's exact tests. We tested differences between continuous outcomes using Mann-Whitney U tests. Significance was set at $p < 0.05$. We used SAS Enterprise Guide version 7.15 for all statistical calculations.

Due to the sensitivity of the data analyzed in this project, and the possibility of identifying vulnerable individuals in small groups and thus violating their privacy, we suppressed counts less than 10 and did not report them (Wasserman & Ossiander, 2018). Thus, some of the tables are combined or truncated to protect sensitive information.

Interviews

In addition to quantitative data collected by the organizations, we interviewed a sample of successfully housed clients to explore key impacts of the program on their lives. Six in-depth, semistructured interviews were conducted during the fall of 2020. We recruited participants based on their interest in being interviewed. All interviews were conducted in English and over the phone. We did not interview individuals who did not respond after at least three attempts at contact. Interviews were audio recorded and transcribed verbatim by a transcription service. We then coded the transcripts using codes developed from the interview guide, summarized the codes, and analyzed the summaries to identify key themes that described the effects of the program. All analysis was completed in ATLAS.ti.

RESULTS

Participants

Of the 113 unique clients served by the cohort organizations, 38% identified as female, 20% as Black, 56% as White, and 24% as other race or ethnicity (Table 1). Approximately a quarter of households included at least one child, and two thirds of clients reported a chronic health condition, with nearly half reporting a substance use disorder. All clients had some level of criminal history, as this was a criterion for program eligibility. The majority of participants had a felony conviction on their criminal record, and approximately two thirds had been to prison or to both jail and prison. Most participants had been out of custody for less than a year when they entered the program. Having a

Table 1. Housing Reentry Program Participant Characteristics

	Total (*n* = 113)
Age (years)	39 [34–51]
Time since release (months)	0 [0–2]
Monthly household income	$801.55 [$0–$1,560]
Household size	1 [1–2]
Sentence length (months)	15 [7–28]
Race	
Black	23 (20.4%)
Other	27 (23.9%)
White	63 (55.8%)
Gender	
Female	43 (38.1%)
Male	70 (61.9%)
Education level	
High school or equivalent	59 (52.2%)
Less than high school	20 (17.7%)
More than high school	31 (27.4%)
Employment	
Full-time	32 (28.3%)
Not employed	62 (54.9%)
Part-time	19 (16.8%)
Landlord debt	23 (20.4%)
Utility debt	25 (22.1%)
Court fines	20 (17.7%)
Prior evictions	
0	74 (65.5%)
1+	37 (32.7%)
Substance use disorder	56 (49.6%)
Mental health condition	21 (18.6%)
Physical health condition and/or developmental disability	13 (11.5%)
Any chronic health condition	75 (66.4%)
Criminal background	
Both felony and misdemeanor	12 (10.6%)
Felony or misdemeanor	101 (89.4%)
Drug crime	43 (38.1%)
Property crime	46 (40.7%)
Person crime	62 (54.9%)
Incarceration history	
Both jail and prison	15 (13.3%)
Jail	13 (11.5%)
Prison	57 (50.4%)
Housing type	
Private or market rate	37 (32.7%)
Supportive, affordable, or agency-operated	55 (48.7%)

Legend. Characteristics of individuals who participated in the housing reentry assistance program. Due to the non-normal distribution of the data, results are presented as medians [quartiles] or frequencies (percentages).

history of housing issues was not uncommon, with participants reporting landlord debt (20.4%), utility debt (22.1%), court fines (17.7%), and/or one or more evictions (32.7%) prior to engaging with the program.

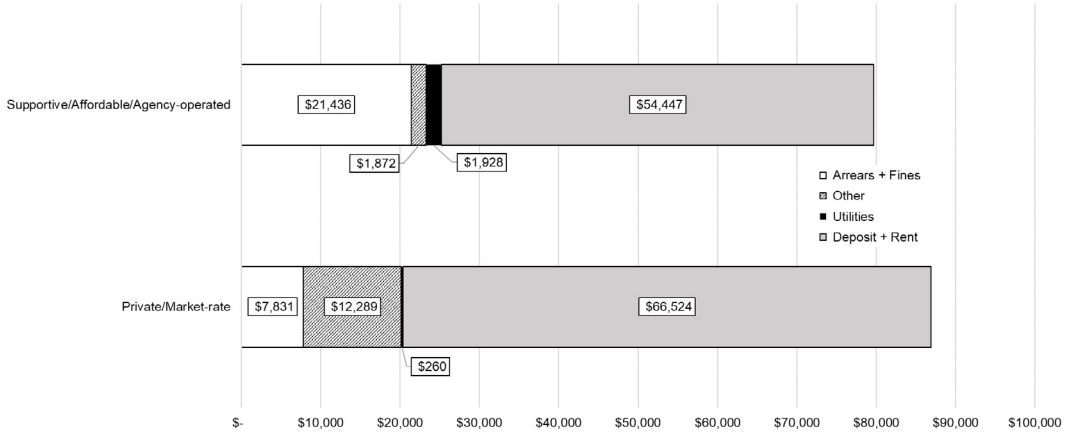
Housing Placement

A total of 99 unique participants were housed by the end of the program period. Successfully housed individuals tended to be younger than those not successfully housed (median age 38 vs. 43, p = 0.0556) and earned significantly higher monthly incomes (median monthly income $900 vs. $169, p = 0.0462). Housing placement was lower among individuals with court fines (15 out of 20, or 75%, were placed) compared to those without court fines (83 out of 91, or 91%, were placed; p = 0.0412).

Use of Funds

A total of $243,401 in financial support was distributed over the course of the program. Funds were distributed in six different categories: arrears, fines, deposits, rent, utilities, and other (e.g., moving expenses), and distribution of funding varied by housing type (Figure 1). Clients who

Figure 1. Program Spending by Type of Housing



Legend. Program support by category of spending for individuals who were placed in supportive, affordable, or agency-operated housing compared to those who were placed in private or market-rate housing.

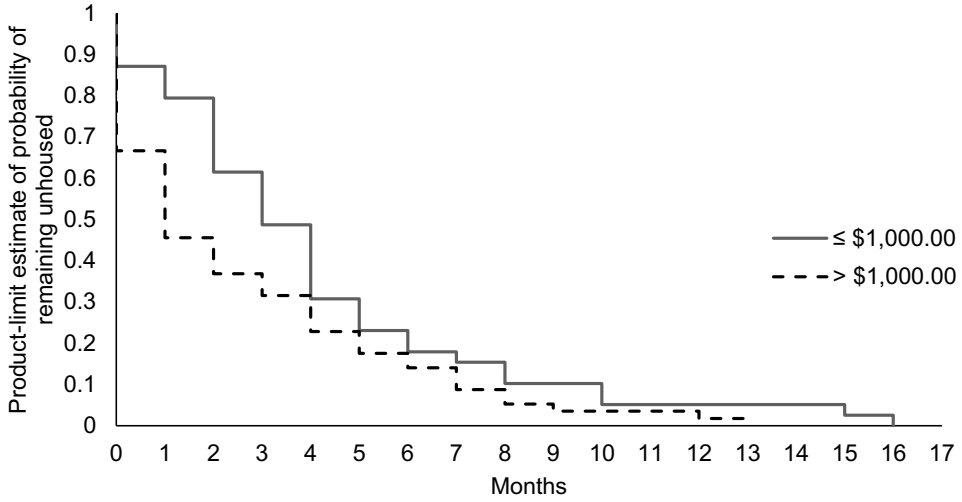
Note. Funds were distributed in six different categories: arrears, fines, deposits, rent, utilities, and other. Similar categories were collapsed for analysis (arrears and fines, and deposits and rent), creating the four categories shown here.

received more than $1,000 ($n$ = 57) were placed in housing more quickly compared to those who received less than $1,000 ($n$ = 39, p = 0.012, Kaplan-Meier survival analysis; Figure 2). Specific testing of median time to obtain housing showed that those with more than $1,000 in funding had a median placement time of 1 month (interquartile 0–4), while those with less than $1,000 in funding had a median placement time of 3 months (interquartile 2–5; p = 0.0112 by the Mann-Whitney U test). Use of funds differed between individuals who were housed and not housed, with those housed requiring higher median spending on rent and deposit, while those not housed required higher median spending on debt (Table 2).

Participant Perspectives on the Housing Program

Our analysis of the interview data revealed several key themes. Participants highlighted the hands-on advocacy as critical, above and beyond the financial support provided by the program. Case managers

Figure 2. Effect of Assistance Funding Level on Time to Housing



Legend. Time course of housing placement grouped by the amount of funding received (less than or equal to $1,000 or more than $1,000). Kaplan-Meier analysis showed that clients who received more than $1,000 ($n$ = 57) were housed faster compared to those who received less than $1,000 ($n$ = 39, p = 0.012).

Table 2. Per-Person Spending in the Reentry Financial Assistance Program by Final Housing Status

	Total (n = 113)	Housed (n = 99)	Not housed (n = 14)
Total spent	$1,256	$1,256	$832.5
Spending category			
Deposit and rent*	$595	$627	$0
Debt*	$0	$0	$678.5
Utilities	$0	$0	$0
Other	$0	$0	$0

Legend. Due to the non-normal distribution of the data, results are presented as medians. *Significantly different between the housed and not-housed groups.

helped participants secure accommodations suited to their unique needs and served as active partners in the process:

"[My case manager and housing specialist] are . . . really some of the main reasons I got [housing]. They fought so hard for me to get it. . . . She helped me fill out all the paperwork I needed to fill out, where all I needed to do was sign it. . . . It was just amazing how she worked with me."

"Obviously, the financial part was huge, but . . . being willing to sit down and . . . think about what my possible barriers to getting a place are . . . putting together like a portfolio of who I am and what I've done . . . really helped [be]cause I had like letters of reference and then like all the programs I did while I was in prison."

Participants felt the program provided an opportunity to be independent, get their lives back in order, and feel better physically and mentally. Without the program's support, participants worried about relapsing into their earlier lifestyle and interacting with the criminal justice system. Interviews revealed the relationship between housing instability and recidivism:

"If I hadn't gotten [a] home, I would have had to go to a [expensive] motel, or I would've had to go [to] somebody renting a room, and that has always ended up not being a very good situation. So I would have eventually gotten back into the . . . whole criminal lifestyle, I'm very sure of it."

"If it wasn't for [the program] coming up with the money, then I would've just been done. . . . I was just at the level of just giving up on it. . . . I was contemplating just buying another car and just going, just get out of here because it would have been better than where I was at in my life. And then I would add another felony if I would have got pulled over."

Participants also stated that achieving stable housing was a pivotal point in their reentry and facilitated relationships and childcare:

"[My kids] get to have their own space now at home with their mom. . . . So they're transitioning well. They like having their own space, and they like the neighborhood, and they're happy, too."

"I've just been focused on getting my life together. Getting my kid back. I think that was a huge thing for me to do. I went from living in a cell for four years by myself to, I got my own place, I got a job, I got my car, I got my kid back."

DISCUSSION

The community-based Re-Entry Housing Collaborative distributed a total of $243,301 to successfully house 99 of 113 participants (88%). Providing more than $1,000 in assistance influenced whether clients were able to move into a housing placement quickly. The results of this small program evaluation suggest that relatively low-cost interventions can facilitate housing placement among individuals with criminal records during reentry.

Participant interviews revealed that the transition from institutionalized living is challenging and was considerably assisted by advocacy and funding assistance. Recipients took pride in having their own home and reported that housing also helped their children and families. The program advocates were particularly helpful with completing forms and paperwork, often navigating complex housing situations. This may reflect the vulnerability of the reentry period, during which individuals may not have access to the internet or smartphones, and may need to renew or obtain identification documents, open bank accounts, and complete other common prerequisites to housing. Program advocates worked to ensure that housing was suitable for unique needs, such as individuals with disabilities and special needs or with children, and several participants specifically indicated that the assistance they received in the housing placement prevented them from returning to crime.

A notable result of this study is that the threshold of financial investment that facilitated efficient housing placements for this population was low ($1,000). Individuals who received $1,000 or more were housed significantly faster (Figure 2). The majority of participants who received $1,000 or more were housed within roughly 1 month, while those who received less than $1,000 took roughly 3 months to achieve similar levels of housing. While this is a relatively small difference in time to housing,

feedback from participants suggests that housing was a turning point in terms of stability versus recidivism, and thus earlier housing, even by a small margin, impacted their future. This agrees with previous research suggesting that a lack of stable housing may have serious negative consequences on successful reentry (McKernan, 2017).

The results of the current study have some similarity to those of previous studies. Participants with high preexisting debt and court fines were less likely to achieve stable housing, and participants without legal fines were more likely to achieve housing by 4 months than those with legal fines. This finding is consistent with Mogk et al. (2020), who found that individuals experiencing homelessness in Seattle with legal fines had homeless durations twice as long as those without (51 vs. 25 months). The importance of targeted support to meet the unique needs of individual participants was a key finding of the current study and aligns with Walter et al.'s (2021) recommendations to consider individual dynamics, such as readiness for change, when studying living situations and residential trajectories during reentry.

Comparing this investment directly to costs of incarceration or to the costs of homelessness is challenging due to a paucity of data in this area. However, the low level of funding identified in this project substantiates other reports that found it more cost-effective to house individuals than to support them in homelessness. For example, the cost of sheltering and caring for individuals with mental illness who were experiencing homelessness in New York City was $40,451 annually per person in 1999 dollars, or roughly $60,000 in 2021 dollars (Culhane et al., 2002). If these same individuals found housing, their costs for social services were reduced by $16,000 a year. A similar study in 2009 following more than 10,000 individuals experiencing homelessness in Los Angeles found the public cost for residential supported housing to be roughly $7,260 a year, as opposed to roughly $35,000 a year in social services costs (Flaming et al., 2009). The societal costs to house an individual in prison are larger still. In 2015, the estimated cost of housing an inmate for 1 year in Oregon was $44,021 (Mai & Subramanian, 2017).

These data clearly show that the costs of helping individuals secure housing after incarceration accrue much larger savings by preventing homelessness and/or reincarceration. Certainly, the regional cost of living will vary, and would likely impact the threshold of support necessary to facilitate successful housing placement. In this case, $1,000 is a low threshold compared to regional costs of living, but the finding that this threshold facilitates faster placement should be encouraging to other small programs. While the modest spending level identified in this project did not capture the operational costs of the housing assistance program, results suggest that reentry can be facilitated at a low cost to cities and communities.

A defining attribute of this program that supported clients' needs was the stipulation that funds could be spent in a flexible manner to eliminate debt related to incarceration or housing history. We consider this stipulation integral to the program's success because it enabled clients to pay off multiple types of debt and escape the cycle of poverty, homelessness, and recidivism. For example, unlike many financial resources provided through government sources, it permits payment of debts accrued during incarceration, a well-documented challenge faced by this population (Harper et al., 2020). Indeed, among individuals who were not housed, median spending on debt was higher compared to those who were housed, suggesting that program funds were still needed to help those individuals achieve financial stability. Unsurprisingly, among individuals placed in private housing, more financial assistance went toward rent, while among individuals placed in supportive housing, more financial assistance was available for other types of spending (e.g., fines and arrears; see Figure 1). This suggests that flexible assistance is important for meeting disparate individualized needs post-incarceration. However, further studies are needed to understand the effect of flexible financial assistance on reentry.

This study has some general implications for criminal justice reform, as well as for recovery and mental health. It is clear that flexible funding, involving modest sums, can assist the formerly incarcerated to achieve housing more rapidly, and speed of housing placement may be crucial to

prevent recidivism. Similar to the goal of Housing First programs, which are frequently studied in connection with individuals with addiction and/or mental health issues, flexible support to attain housing is a critical step toward successful reentry into society. However, it is also important to acknowledge that housing barriers during reentry are structural; while programs such as the one described in this study can be moderately effective for small sample sizes, policy and system changes (e.g., banning criminal background checks during the tenant screening process) are necessary to see larger-scale success. Finally, although exact amounts differ regionally, the cost of assisting in housing placement is much lower than the cost of prison or the costs of emergency services and shelter use by individuals experiencing homelessness, addiction, or mental health issues.

Several lessons emerged from this work. Housing programs depend on staff capacity for success, and findings from the qualitative interviews confirmed the value of the support provided by program advocates during the process of finding and securing housing. It is encouraging that the four organizations that implemented this program were able to do so in the context of multiple disasters: the COVID-19 pandemic, anti-Black police violence and subsequent protests, and an unprecedented Oregon wildfire season. This required nimble staffing and procedures that could be responsive to client and community needs. These needs rightfully took precedence over the collection and quality of data for our program evaluation,

LIMITATIONS AND FUTURE RESEARCH

This project carries multiple limitations related to sample size. First, this study was conducted in a relatively small cohort of clients. Second, the sensitive nature of the program data proscribed reporting any data for groups smaller than 10 individuals. Third, recruitment for interviews and housing placements were affected by both the COVID-19 pandemic and the unprecedented Oregon wildfire season. Fourth, advocates struggled to complete stability assessments, limiting our conclusions about the duration of the program's effect on housing stability and related outcomes (e.g., employment, new offenses, evictions). We had substantial missing data at the 6-month follow-up point, and program staff were able to contact only a subset of the original participants (n = 47) eligible for 6-month follow-up (n = 85). Of those 47, 41 were stably housed (87%). However, we are hesitant to suggest that this is the true stability rate due to the large amount of missing data, and additional studies are needed to evaluate stability in this population and other long-term outcomes. Our cautious estimate is that half the population remained stably housed. These aspects of the study limited its statistical power, potentially also limiting the generalizability of the findings. Additionally, the costs of staffing and running the programs were not included in the financial analysis, and thus this project did not evaluate the total cost of running such a housing assistance program. We did not assess this total cost and the cost of ongoing housing support for participants as part of this evaluation; as such, our conclusions about program sustainability are limited. Finally, the internal validity of our findings is limited by the study design, which did not include a comparison group. Additional support for staff can improve both implementation of the program and future efforts to evaluate impact in the short and long term.

Overall, our results show that modest investments in reentry post-incarceration are cost-effective for the public. Interventions of this nature may also prevent recidivism, thus reducing the number of incarcerated individuals. Additional studies are needed to assess the long-term effects of modest reentry investments on recidivism, employment, education, vocational training, custody of children, and other indicators of post-incarceration stability.

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RESEARCH REPORT

Examining the Impact and Timing of Jail Sanctions on Drug Court Completion

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Abstract

*The current study examined the impact and timing of jail sanctions on program completion among participants in a Kentucky specialty court (KSC) outcome evaluation. Sampling focused on participants in 14 representative programs statewide (*N *= 700). This study relied solely on secondary data, including the (1) KSC participant assessment, (2) management information system, and (3) CourtNet record. The multivariate analysis used an extended Cox regression model. The impact of the first jail sanction was dependent on the participant's time in the program. Receiving the first jail sanction early in the program was associated with an increased hazard of drug court termination; however, the hazard declined as time in the program increased. Further, in comparison to male participants, female participants were associated with a 22% reduced hazard of drug court termination (hazard ratio [HR] = 0.778,* p *< .05). In other words, being female increased the time to drug court termination. Individuals with more than four positive drug tests were associated with a 38% reduced hazard of termination (HR = 0.623,* p *< .01). Stated differently, having more than four positive drug screens increased one's time to program termination. The findings emphasize the importance of sanctions* and *their timing, as well as of detailed monitoring of an individual's progress in the program to allow necessary modifications to individualized plans to ensure success.*

Keywords: *drug court, program completion, jail, consequence, sanctions*

Drug court, a type of treatment court or problem-solving court, is a community-based rehabilitation program for individuals with substance use issues and criminal justice involvement. Drug court programs need cooperation from criminal justice, substance use treatment, and community agencies to provide comprehensive, community-based treatment (Substance Abuse and Mental Health Services Administration, 1996). Multiple stakeholders coordinate these efforts, including judges, prosecution and defense attorneys, and law enforcement, as well as treatment providers (National Association of Drug Court Professionals [NADCP], 1997). This coordination is critical to program success. Guidelines for drug court operations are established in Defining Drug Courts: The Key Components (NADCP, 1997) and include (1) justice system processing and treatment integration, (2) a nonadversarial approach, (3) early or prompt assessment and program placement, (4) a continuum of treatment and other support services, (5) frequent and random drug testing, (6) having a multidisciplinary team with coordinated strategies, (7) ongoing judicial interaction, (8) program monitoring and evaluation, (9) interdisciplinary education, and (10) community partnerships. The Key Components offer guidelines while still allowing flexibility to meet unique needs. Drug court participants' individualized plans consist of numerous components, such as substance use treatment, case management, supervision and monitoring, drug testing, and status hearings, as well as additional services such as job skills training, trauma and/or family therapy, and mental health treatment (Segal et al., 2013).

While most research shows positive outcomes for drug court participants, there are variations in outcomes across programs (Latessa & Reitler, 2015). For example, data on drug court completion suggest an average graduation rate of 59%; however, the range across programs reporting was from 35% to 92% (Marlowe et al., 2016). Past research suggests that several participant characteristics (e.g., age, education, minority status, and prior substance use) can influence program outcomes (Listwan et al., 2003; Shannon, Jones, Newell, & Neal, 2018). Further, developing research has also begun to examine and identify the impact of specific during-program occurrences on outcomes (Sevigny et al., 2013).

One during-program occurrence that has a potential impact on outcomes is the use of sanctions, or consequences imposed in response to a program infraction or noncompliance (e.g., a missed meeting or a positive drug screen). For the purposes of this paper, the term *sanction* refers to all consequences intended to modify behavior resulting from a disregard of rules or failure to meet requirements, and includes any response from the team designed to modify future behavior (e.g., jail time or extra homework) in response to a past action. *Therapeutic responses,* which are a different type of response than sanctions, address continued use, relapse, or other issues that may require an increased level of treatment. Examples of therapeutic responses may include assigning a mentor or recovery coach, increasing self-help activities, and increasing levels of treatment. Existing literature suggests that a majority of drug court participants receive a sanction during program participation (Gibbs et al., 2021; Guastaferro & Daigle, 2012; Shannon, Jones, Newell, & Payne, 2018). Further, the literature suggests that drug courts vary widely in the procedures used for administering sanctions (e.g., written sanction matrix, standardized protocol; Fisher, 2014). According to Marlowe (2008), positive reinforcement of desired behavior is more effective than punishing undesirable behavior in relation to program outcomes. However, Marlowe (2008) also acknowledges there must be punishment for specific behaviors that are a risk to public safety. Fischer & Geiger (2011) assert that a sanction must be perceived as reasonable and responsive to participant needs to be effective.

Existing literature presents mixed findings on whether sanctions influence program outcomes. Some studies suggest that receipt of a sanction during program participation does not significantly influence the likelihood of becoming inactive, dropping out, or program termination (Guastaferro & Daigle, 2012; McRee & Drapela, 2012). However, other research suggests that sanctions, in general, have the potential to influence outcomes. Specifically, some research suggests that receiving any sanction or response is associated with two-year

post-program recidivism (Shannon, Jones, Newell, & Payne, 2018). Specifically, Shannon, Jones, Newell, and Payne (2018) showed that participants who received a sanction or response had an 89% greater likelihood of recidivism compared to those who did not receive a sanction or response.

Research also indicates that specific sanctions have a greater potential to be detrimental to program outcomes. The use of jail as a sanction is associated with reduced odds of program completion (Shannon et al., 2016). Gill (2016) also showed that jail sanctions are predictive of program dropout. Data from Wu et al. (2012) suggest that program graduates are less likely to receive jail sanctions, in comparison to program terminators. According to the Adult Drug Court Best Practice Standards (NADCP, 2013; NADCP, 2015), which offer a research-based perspective on effective drug court practices, jail sanctions are to be used sparingly and reserved for those who pose an immediate public safety risk. Additionally, the standards encourage the use of jail only after less severe sanctions have been ineffective (NADCP, 2013). Further, a meta-analytic review revealed that courts with a 50% or higher program completion rate are significantly less likely to use jail sanctions (Sevigny et al., 2013). However, the literature also suggests that a majority of drug court participants receive a jail sanction during program participation (Guastaferro & Daigle, 2012; Shannon et al., 2020).

In addition to the type of sanction, literature indicates that the timing of the first sanction also may be important for drug court outcomes (Brown et al., 2010; McRee & Drapela, 2009). Prior drug court research shows that the majority of sanctions occur within the first few months of participation (Guastaferro & Daigle, 2012). However, McRee and Drapela (2012) found that more participants who did not complete their program received a sanction within the first 30 days of participation. Research also suggests a relationship between the severity of the first sanction and program completion. McRee and Drapela (2012) found that when the first sanction was jail individuals were significantly less likely to complete the program. Brown et al. (2010) expanded on these results by showing a considerably stronger relationship between jail sanctions administered within the first 30 days and program noncompletion than for those who received sanctions later in drug court participation.

As stated previously, the use of jail as a sanction is intended for individuals who are an immediate risk to public safety. Continued substance use during drug court participation may qualify as an immediate risk, as substance use can impair one's judgment, which could lead to harm to others. Research shows that testing positive for substance use while enrolled in drug court can increase one's chances of receiving a jail sanction versus other types of sanctions. For example, Gibbs et al. (2021) found that individuals who had a positive drug screen between 15 and 30 days of program participation had a higher probability of receiving a jail sanction, in comparison to a fine. Findings from a survey of drug court graduates showed that they view jail as a sanction as being harsh and inconsistent with the notion of substance use disorder as a disease; rather, the graduates emphasized that interactions with the judge, increased treatment, quality treatment, and positive reinforcement were more influential on success (Contrino et al., 2016).

The purpose of the current study was to examine the impact of jail sanctions as well as the timing of those sanctions on drug court completion among a sample of participants in a Kentucky specialty court (KSC) outcome evaluation study. Based on past literature, the study hypothesis was that jail sanctions occurring within the first 30 days of program participation would have a significant negative influence on program completion. In order to investigate and isolate the impact of jail sanctions and the timing of those sanctions, the study analyses included other participant characteristics and during-program occurrences to control for potential effects on program outcomes in the multivariate analysis. One important note about the current study regards the examination of during-program occurrences, specifically sanctions and therapeutic responses. The Adult Drug Court Best Practice Standards refer to sanctions as consequences disliked by participants (e.g., jail or community service), whereas therapeutic responses are changes to treatment requirements to address unmet needs (and are not intended to be sanctions; NADCP, 2013). Based on the secondary dataset

available in the current study, it was not possible to distinguish between the constructs of sanctions and therapeutic responses because neither the intent nor the incident warranting a response was available; thus, these were analyzed as one variable. The authors do acknowledge the difference in the purpose of sanctions and therapeutic responses as described in the Adult Drug Court Best Practice Standards (NADCP, 2013).

METHODOLOGY

KSC Overview

KSC programs provide an alternative to incarceration, aimed at restoring individuals with substance use and criminal justice involvement to productive citizenship while protecting public safety. At the time this study was completed, KSC programs consisted of three phases and an aftercare component, which an individual could complete in a minimum of 15 months for misdemeanor offenses and 18 months for felony offenses. The program targets individuals with nonviolent offenses charged with misdemeanor and/or felony drug and drug-related crimes. Eligible participants receive a referral for a legal screening and the KSC participant assessment to ensure that the individual does not have a history of violent crimes and to document that the individual has a substance use disorder. The KSC participant assessment, which is adapted from the Addiction Severity Index (ASI), examines program eligibility (McLellan et al., 1980). If the participant is eligible, the team meets to discuss program entry. Kentucky has 120 counties encompassing 57 jurisdictions; at the time of this publication, all but two counties had an established drug court program (some smaller counties have a multijurisdictional program). KSCs operate under a unified court system. The Kentucky Administrative Office of the Courts (AOC) oversees all KSC programs. Each program operates in accordance with *Defining Drug Courts: The Key Components* (NADCP, 1997) and seeks to incorporate the Adult Drug Court Best Practice Standards (NADCP, 2013, 2015). There is uniformity in program implementation via a statewide procedures manual, statewide policies, and the Administrative Rules of the Supreme Court.

Participants

The current study analyses were part of a larger outcome evaluation project for KSCs; the goal of the outcome evaluation project was to compare the two different types of service providers within KSCs and associated program outcomes. Participant sampling focused on 14 sites, which compared six sites offering services in-house via recovery coordinators (RCs) with eight sites offering the same services but via an externally contracted partner. The services were the same; it was the method or the provider of the services that was different. Selection of sites was done in collaboration with the AOC and was representative of the 14 service regions across Kentucky and of the different types of service providers.

The total population size for participants who entered KSCs from these 14 sites was N = 2,056. This included all individuals who entered their programs after February 16, 2008, and exited before February 28, 2014. This sampling frame allowed us to examine participant outcomes (i.e., program completion), as the exit date ensured that individuals had completed or terminated participation in the program. To achieve the overall project goal to examine program completion, the research team did not include participants in the sampling frame whose status was administrative discharge, transferred out, suspended, or deceased. There were two possible program exit statuses of interest: (1) program graduate, an individual who met all program requirements and completed the KSC program; and (2) program terminator, an individual who did not meet the program requirements and whose participation was terminated. Removing those who did not fall into these two statuses of interest reduced the total population to N = 1,958. From these 1,958 individuals, random sampling methodology was used to select 700 individuals for study participation. Random sampling narrowed the sample size and increased the feasibility of conducting this study, given the time, funding, and necessary data collection, entry, coding, and analyses. Participant sampling focused on each of the 14 KSC sites independently, including the six sites where services were offered in-house via RCs (n = 300) and the eight sites where services were provided via an externally contracted provider (n = 400).

The research team used several steps to pull a random sample of participants from each of the 14 sites. The first step involved using the StatTransfer program (v13) to transfer participants' data (N = 1,958) from a Microsoft Excel file to the Statistical Package for the Social Sciences (SPSS). Once transferred, the research team separated data by site into unique SPSS files. The second step involved pulling a random sample from each specific site in SPSS to achieve the desired sample size (50 participants from each site × 14 sites = 700 total participants).

Sources of Data and Measures

The current study relied solely on secondary data from various sources, including the (1) KSC participant assessment, (2) management information system (MIS), and (3) CourtNet.

The KSC participant assessment, adapted from the ASI (McLellan et. al, 1980), provided information on participants' social and demographic characteristics, as well as their mental and physical health. Participants self-reported social and demographic characteristics, including gender, age, race, ethnicity, marital status, education level, employment status, and living arrangements in the past 12 months. The measurement for mental health was, "Have you ever been prescribed medication for any psychological/emotional problem?" To examine physical health, the assessment asked each participant to answer the question, "Are you taking any prescribed medication on a regular basis for a physical health problem?"

The MIS provided information on drug of choice and during-program occurrences. KSC staff who supervised program participants input all data into the MIS. Participants self-reported their drug of choice when asked to identify a major problem substance (e.g., alcohol, cocaine, heroin, benzodiazepines, opiates/opioids). The MIS also provided data on during-program occurrences, including type of discharge, dates of program participation (translated into the number of days in the drug court program), number of positive drug screens, sanctions and therapeutic responses, and services and sessions received; each of these types of data is further discussed below. Type of discharge was whether the participant graduated or was terminated from the program. For the purpose of this evaluation, there was no distinction between the various reasons for program termination (i.e., noncompliance, new arrests, etc.). Sanctions and therapeutic responses included all actions taken by the drug court team to modify participant behavior. Various types of sanctions and therapeutic responses present in the dataset were utilized to create a composite variable (any sanction or therapeutic response) that included additional assignments, community service, curfew, an arrest warrant for failing to appear, incarceration, drug test, self-help meetings, phase demotion, and suspension. This composite variable showed the prevalence of an action by the team (sanction and/or therapeutic response), as the variable was potentially associated with the dependent variable, program completion, based on the drug court literature. Incarceration sanctions were examined independently, as they were related to the topic of interest for this paper. The MIS also provided information on the types of services and sessions received during program participation, which included individual and group sessions (conducted by various professionals) and self-help groups.

CourtNet is the official recording system for criminal activity in Kentucky. The CourtNet record, provided by the AOC for each study participant, supplied information on convictions prior to and during their participation in drug court. The AOC provided a complete list of possible convictions and the categorization of these by level of offense (i.e., felony and misdemeanor) as specified in the Kentucky Revised Statutes. Convictions, both prior to and during drug court, were distinct variables showing the number of felony and misdemeanor convictions, respectively. A composite variable then showed the total number of any felony or misdemeanor convictions combined. Further, the composite variables for the total number of any felony or misdemeanor convictions, as well as the separate felony and misdemeanor conviction variables, were recoded to dichotomous (yes/no) variables.

Procedures

The research team entered the participant assessment and MIS data into SPSS. Data were coded as prior to or during drug court, using the

participation dates from the MIS. The CourtNet record needed extensive coding before being entered into SPSS. Convictions were categorized by level of offense according to the 2013 Kentucky Revised Statutes. Four independent coders conducted the CourtNet analyses. The first author conducted quality control by coding 10% of each coder's CourtNet records and analysis. The quality control was designed to catch errors in coding, not intercoder discrepancies. The coding protocol did not allow for subjective interpretation; convictions were listed on the coding protocol by level of offense. The CourtNet analyses focused on categorizing convictions prior to and during KSC participation. After coding, these data were entered into SPSS for analysis.

Analysis

The research team conducted analyses using IBM SPSS Statistics 25 and SAS Enterprise Guide 8.2. Bivariate analyses focused on examining between-group differences (program graduates vs. program terminators) based on the dependent variable, program completion. SPSS bivariate analyses consisted of chi-square and *t* tests to analyze between-group differences on sociodemographic, mental and physical health, drug of choice, during-program occurrences, and criminal history. The bivariate analyses sought to identify other variables significantly associated with the dependent variable for inclusion as control variables in the multivariate analyses to isolate the influence of jail sanctions on program completion. SPSS data were transferred to SAS for multivariate analysis to examine the main research question, "Is receiving a jail sanction associated with program completion, and is the timing important?" The multivariate analysis used an extended Cox regression model. The team used SAS to test regression assumptions (proportional hazards and linearity assumptions) and run regression models. The predetermined significance level for all analyses was .05. To retain the entire sample for analyses, for participants who did not receive a jail sanction, the days to first jail sanction variable was coded as 0 and represented no jail time (n = 184). For those who received a jail sanction, the time to first jail sanction remained unchanged, with data ranging from 1 day to 711 days (n = 516).

To prevent overfitting the final multivariate model, certain statistically significant factors in the bivariate analyses were excluded. Specifically, for education, a similar indicator, employment status, was used due to statistical significance at $p < .001$. For living arrangements, sanctions and therapeutic responses, pre–drug court convictions, and during-program convictions, only select indicators were used, due to overlap. Finally, individual services and sessions conducted by drug court staff and self-help groups were excluded due to zero cell counts.

Next, three preliminary Cox regression models tested assumptions and identified factors significantly associated with program completion via the SAS PROC PHREG procedure. The first preliminary model contained all 20 variables of interest from the bivariate analyses (i.e., those meeting the predetermined significance level, as well as the variables retained after omission due to overlap) to determine if the regression model as a whole violated the proportional hazards assumption (PHA). The Wald test was statistically significant ($\chi^2 = 42.507$, $df = 20$, $p = .002$), indicating violation of the PHA. The second and third preliminary models also contained these 20 variables and identified those significantly associated with the dependent variable.

The second preliminary model contained the participants' sociodemographic and other background factors. Sociodemographic factors included age in years (continuous), gender (0 = male [reference], 1 = female), race (0 = White [reference], 1 = non-White), and marital status (0 = not married [reference], 1 = married). The remaining background factors (coded as 0 = no [reference], 1 = yes) were as follows: employed at the time of drug court assessment, lived with parents, drug(s) of choice (opiates/opioids, marijuana, stimulants, and/or alcohol), taking prescribed medication for a physical health problem, any pre–drug court felony conviction, and any pre–drug court misdemeanor conviction. After running the regression, age and any pre–drug court felony conviction were the only factors significantly associated with program completion. The third preliminary model contained during-program categorical variables (coded as 0 = no [reference], 1 = yes), including individual therapy conducted by treatment providers, group therapy conducted by treatment

providers, group sessions conducted by drug court staff, any during-program felony conviction, and any during-program misdemeanor conviction. Additionally, two continuous variables, number of positive drug tests and number of days to first jail sanction, were included. Number of positive drug tests and number of days to first jail sanction were the only during-program occurrences that were significantly related to program completion.

Before running the final multivariate model, the proportional hazards and linearity assumptions were tested on variables, separately and simultaneously, emerging as statistically significant in the second and third preliminary models, as well as those of importance based on existing drug court literature (i.e., gender and race). To perform these assumption tests in SAS, PROC PHREG procedures with ASSESS statements within the procedures were used. The linearity assumption was tested on the continuous variables: age, number of positive drug tests, and number of days to first jail sanction. The results from the separate and simultaneous tests indicated that the number of positive drug tests and number of days to first jail sanction variables failed the linearity assessment. As a solution to linearity failure, both variables were recoded categorically (Goldstein & Ottesen, 2017). Using the sample's mean number of positive drug tests, the categorical variable as 0 = ≤4 positive drug tests, 1 = >4 positive drug tests. Based on existing literature regarding the timing of jail sanctions (Brown et al., 2010), the categorical version of this variable as 0 = >30 days to first jail sanction, 1 = ≤30 days to first jail sanction. Next, the PHA was assessed on the statistically significant categorical variable from the sociodemographic factors' preliminary model (i.e., any pre–drug court felony conviction), the newly created categorical variables resulting from linearity failure (i.e., number of positive drug tests–categorical and number of days to first jail sanction–categorical), and on categorical variables of importance according to existing literature (i.e., gender and race). Separate and simultaneous tests revealed that all the variables passed the PHA except for number of days to first jail sanction–categorical. To resolve this issue, the final regression model included the variable as a time-dependent covariate (Goldstein & Ottesen, 2017).

The final regression model was an extended Cox regression due to the inclusion of a time-dependent covariate (Brembilla et al., 2018). Cox regressions must contain a time and status variable; number of days from drug court entrance to exit was the time variable, and drug court termination was the status variable. The extended Cox regression included seven variables: age, gender, race, days to first jail sanction–categorical, number of positive drug tests–categorical, any pre–drug court felony conviction, and the time-dependent covariate, which was an interaction/product term between the variable failing the PHA and a function of time (i.e., number of days to first jail sanction–categorical × number of days from drug court entrance to exit). When a time-dependent covariate is included, the main variable (in this case, the recoded version of the jail sanctions variable: number of days to first jail sanction–categorical) must be included in the model as well (Kleinbaum & Klein, 2012).

RESULTS

Table 1 presents participants' sociodemographic characteristics. The sample majority were White (94.0%) and male (58.7%). There were several statistically significant relationships. Graduates were about four years older than program terminators (t = 6.206, p < .001). A greater proportion of program graduates were employed at the time of the drug court assessment (χ^2 = 25.219, p < .001). In addition, a greater proportion of program terminators reported being unmarried or separated, while more program graduates reported being married (χ^2 = 5.965, p < .05). A greater proportion of program graduates had at least a high school education (χ^2 = 4.600, p < .05). Assessing living arrangements revealed that more program graduates lived with an intimate partner and children (χ^2 = 12.162, p < .001), an intimate partner only (χ^2 = 4.778, p < .05), or children only (χ^2 = 8.756, p < .01). On the other hand, more program terminators lived with their parents (χ^2 = 11.353, p < .01) or with other relatives (χ^2 = 5.442, p < .05).

Table 1. Sociodemographic Characteristics

	Program graduates (*n* = 286)	Program terminators (*n* = 414)	Total (*N* = 700)	*df*	Test statistic
Age (*SD*)	31.94 (8.98)	27.99 (7.15)	29.61 (8.18)	520	$t = 6.206^{***}$
Employed	43.1%	24.9%	32.3%	1	$\chi 2 = 25.219^{***}$
Gender					
Male	54.9%	61.4%	58.7%		
Female	45.1%	38.6%	41.3%		
Race					
White	95.1%	93.2%	94.0%		
Non-White (African American, Native American)	4.9%	6.8%	6.0%		
Marital status					
Not married or separated (single, never married, separated, divorced, widowed)	78.7%	85.7%	82.9%	1	$\chi 2 = 5.965^{*}$
Married	21.3%	14.3%	17.1%		
Education level					
Below 12th grade	26.4%	34.1%	30.9%	1	$\chi 2 = 4.600^{*}$
High school graduate or more	73.6%	65.9%	69.1%		
Living arrangements in past 12 months					
Alone	4.5%	4.6%	4.6%		
Intimate partner and child(ren)	24.2%	13.6%	17.9%	1	$\chi 2 = 12.162^{***}$
Intimate partner only	10.2%	5.6%	7.5%	1	$\chi 2 = 4.778^{*}$
Child(ren) only	8.7%	3.3%	5.5%	1	$\chi 2 = 8.756^{**}$
Parent(s)	33.0%	46.2%	40.8%	1	$\chi 2 = 11.353^{**}$
Parent(s) and child(ren)	7.6%	6.2%	6.7%		
Other relatives	8.3%	14.4%	11.9%	1	$\chi 2 = 5.442^{*}$
Friends	2.7%	4.4%	3.7%		
No stable arrangements	0.8%	1.8%	1.4%		

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

As shown in Table 2, significantly more program terminators reported the following drugs of choice: opiates/opioids ($\chi^2 = 5.709$, $p < .05$), marijuana ($\chi^2 = 15.024$, $p < .001$), and alcohol ($\chi^2 = 4.104$, $p < .05$). However, more program graduates reported stimulants as their drug of choice ($\chi^2 = 8.141$, $p < .01$). A third of the sample reported sedatives as their drug of choice. Table 2 also displays the participants' health status. Nearly half of the sample reported having taken a prescription medication for a psychological or emotional problem in their lifetimes. A greater proportion of program graduates reported taking a prescribed medication on a regular basis for a physical health problem ($\chi^2 = 5.373$, $p < .05$).

Table 2. Drug of Choice and Health

	Program graduates (*n* = 286)	Program terminators (*n* = 414)	Total (*N* = 700)	*df*	Test statistic
Drug of choice					
Opiates/opioids	56.4%	65.6%	61.8%	1	$\chi2 = 5.709$*
Marijuana	42.1%	57.4%	51.1%	1	$\chi2 =15.024$***
Stimulants	52.0%	40.8%	45.4%	1	$\chi2 = 8.141$**
Sedatives	28.6%	35.2%	32.5%		
Alcohol	34.8%	42.6%	39.4%	1	$\chi2 = 4.104$*
Mental health					
Ever been prescribed medication for any psychological/ emotional problem	44.6%	45.1%	44.9%		
Physical health					
Taking any prescribed medication on a regular basis for a physical health problem	27.0%	19.5%	22.5%	1	$\chi2 = 5.373$*

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 3 presents the during-program occurrences, including time in drug court, drug screens, sanctions and therapeutic responses, and services and sessions received. Program graduates spent nearly 400 more days in drug court than program terminators (t = 23.849, p < .001). Further, program graduates averaged fewer positive drug screens than program terminators (t = -2.045, p < .05). A greater proportion of program terminators received any sanction or therapeutic response (χ^2 = 21.757, p < .001) and incarceration sanctions (χ^2 = 36.999, p < .001). Program graduates averaged a higher number of days between drug court entrance and their first jail sanction (t = 2.029, p < .05). A greater proportion of program graduates attended various therapies and sessions, including individual sessions conducted by drug court staff (χ^2 = 20.149, p < .001), individual therapy conducted by treatment providers (χ^2 = 28.124, p < .001), self-help groups (χ^2 = 26.987, p < .001), group sessions conducted by drug court staff (χ^2 = 24.036, p < .001), and group therapy conducted by treatment providers (χ^2 = 23.261, p < .001).

Table 3. During-Program Occurrences

	Program graduates (*n* = 286)	Program terminators (*n* = 414)	Total (*N* = 700)	*df*	Test statistic
Average number of days from drug court entrance to exit (*SD*)	700.85 (182.75)	303.63 (257.88)	465.92 (301.82)	697	t = 23.849***
Drug screens					
Average number of positive drug screens (*SD*)	3.50 (5.44)	4.42 (6.11)	4.04 (5.86)	698	t = –2.045*
Sanctions and therapeutic responses					
Received any sanction or therapeutic response	76.2%	89.4%	84.0%	1	χ2 = 21.757***
Received an incarceration sanction	61.5%	82.1%	73.7%	1	χ2 = 36.999***
Average number of days between drug court entry and first jail sanction	99.35 (153.80)	77.39 (119.36)	86.36 (134.83)	510	t = 2.029*
Services and sessions received					
Individual sessions (conducted by drug court staff)	100.0%	93.2%	96.0%	1	χ2 = 20.149***
Individual therapy (conducted by treatment providers)	67.8%	47.6%	55.9%	1	χ2 = 28.124***
Self-help groups	100.0%	91.1%	94.7%	1	χ2 = 26.987***
Group sessions (conducted by drug court staff)	89.5%	74.6%	80.7%	1	χ2 = 24.036***
Group therapy (conducted by treatment providers)	74.1%	56.3%	63.6%	1	χ2 = 23.261***

*p < .05. ***p < .001.

As shown in Table 4, fewer program graduates (80.1%) received any felony and/or misdemeanor conviction before drug court when compared with program terminators (86.0%; $\chi^2 = 4.318$, $p < .05$). Program graduates also averaged fewer felony and misdemeanor convictions prior to drug court participation ($t = -4.305$, $p < .001$). The same relationships existed when assessing pre–drug court felony convictions separately; significantly fewer program graduates received felony convictions ($\chi^2 = 16.485$, $p < .001$), and program graduates averaged a lower number of felony convictions ($t = -3.415$, $p < .01$). Over three fourths of the sample received a misdemeanor conviction before entering drug court. Program graduates averaged significantly fewer misdemeanor convictions before drug court ($t = -3.537$, $p < .001$).

Table 4 also presents during-program convictions. Similar to the pre–drug court convictions, fewer program graduates received any during-program felony and/or misdemeanor conviction ($\chi^2 = 13.246$, $p < .001$). Program graduates also averaged fewer during-program felony and/or misdemeanor convictions ($t = -4.485$, $p < .001$). Similar relationships emerged when assessing during-program felony and misdemeanor convictions separately. Specifically, significantly fewer program graduates received felony ($\chi^2 = 10.955$, $p < .01$) and misdemeanor ($\chi^2 = 8.860$, $p < .01$) during-program convictions. Program graduates also averaged significantly fewer felony ($t = -2.757$, $p < .01$) and misdemeanor ($t = -3.961$, $p < .001$) during-program convictions when compared to program terminators.

Table 4. Felony and Misdemeanor Convictions

Conviction	Program graduates (n = 286)	Program terminators (n = 414)	Total (N = 700)	*df*	Test statistic
Pre–drug court					
Any felony and/or misdemeanor conviction	80.1%	86.0%	83.6%	1	$\chi2 = 4.318$*
Average number of felony and/or misdemeanor convictions (*SD*)	4.79 (7.14)	7.61 (10.21)	6.46 (9.18)	697	$t = -4.305$***
Any felony conviction	17.1%	30.7%	25.1%	1	$\chi2 = 16.485$***
Average number of felony convictions (*SD*)	0.35 (1.03)	1.21 (4.96)	0.86 (3.89)	463	$t = -3.415$**
Any misdemeanor conviction	80.1%	84.5%	82.7%		
Average number of misdemeanor convictions (*SD*)	4.44 (6.62)	6.41 (8.02)	5.60 (7.54)	676	$t = -3.537$***
During program					
Any felony and/or misdemeanor conviction	11.9%	22.7%	18.3%	1	$\chi2 = 13.246$***
Average number of felony and/or misdemeanor convictions (*SD*)	0.16 (0.51)	0.45 (1.18)	0.33 (0.98)	598	$t = -4.485$***
Any felony conviction	0.3%	4.6%	2.9%	1	$\chi2 = 10.955$**
Average number of felony convictions (*SD*)	0.01 (0.18)	0.07 (0.38)	0.05 (0.32)	621	$t = -2.757$**
Any misdemeanor conviction	11.5%	20.0%	16.6%	1	$\chi2 = 8.860$**
Average number of misdemeanor convictions (*SD*)	0.15 (0.48)	0.38 (1.06)	0.29 (0.87)	614	$t = -3.961$***

* $p < .05$. ** $p < .01$. *** $p < .001$.

All cases (N = 700) were retained for the extended Cox regression analysis (Table 5). The impact of the first jail sanction was dependent on time in the program. Receiving the first jail sanction early in the program was associated with an increased hazard of drug court termination; however, the hazard declined as time in the program increased. The negative coefficient on the time-dependent variable suggests a reduced hazard over time. When estimating the hazard ratios (HRs) at different time points, the HRs decreased (as evidenced by the negative regression coefficient) at each subsequent time point. The following HRs (not shown in table) were calculated: 60 days (11.389), 90 days (10.513), 180 days (8.267), 365 days (5.045), 548 days (3.095), and 730 days (1.904; Kleinbaum & Klein, 2012). As one example of how to interpret these findings, at 60 days the HR of 11.389 means that individuals who were still in drug court at day 60, and whose first jail sanction occurred 30 days or less after program entry, had a hazard of termination that was 11.389 times higher than individuals whose first jail sanction occurred more than 30 days after program entry. Additionally, in comparison to male participants, female participants were associated with a 22% reduced hazard of drug court termination (HR = 0.778, $p < .05$). In other words, being female increased the time to drug court termination. Individuals with more than four positive drug tests were associated with a 38% reduced hazard of termination (HR = 0.623, $p < .01$). Stated differently, having more than four positive drug screens increased one's time to program termination.

Table 5. Extended Cox Proportional Hazards Model of Time to Drug Court Termination (N = 700)

Variable	Parameter estimate	Standard error	Hazard ratio	95% CI	
				Lower	Upper
Age	0.01329	0.00695	1.013	1.000	1.027
Female	–0.25113	0.12351	0.778*	0.611	0.991
Non-White	0.42283	0.28274	1.526	0.877	2.656
≤30 days to first jail sanction	2.59288	0.59111	13.368***	4.197	42.583
≤30 days to first jail sanction × number of days from drug court entrance to exit	–0.00267	0.0008340	0.997**	0.996	0.999
>4 positive drug tests	–0.47325	0.14391	0.623**	0.470	0.826
Yes, received any felony conviction before drug court	–0.30311	0.16546	0.739	0.534	1.021

* $p < .05$. ** $p < .01$. *** $p < .001$.

DISCUSSION

The purpose of the current study was to examine the impact of jail sanctions, and of the timing of the first jail sanction, on program completion among a sample of KSC participants. Based on past literature, the study hypothesis was that jail sanctions occurring within the first 30 days of program participation would have a significant negative influence on program completion. The present findings partially support this hypothesis, with study data suggesting that jail sanctions have a negative impact, but that the actual impact of receiving a sanction within 30 days of program entry depends on how long one remains in the program. It appears that the hazard of terminating is highest in the first two months to a year in the program (i.e., from 60 days to 365 days) for individuals who receive their first jail sanction within 30 days of drug court entry. In practical terms, this is a shorter duration than KSC programs, which require a minimum of 15 months for misdemeanor offenses and 18 months for felony offenses.

These data highlight the potential critical impact of jail sanctions on participants' future program performance. Further, the data suggest that one sociodemographic factor (gender) and another during-program occurrence (number of positive drug tests) are associated with time to program termination. While all significant variables are noteworthy, the strongest, most highly significant variables (statistically significant at $p < .01$ or lower) were the during-program occurrences (i.e., time-dependent jail sanctions or having four or more positive drug tests). This relationship therefore suggests that, with detailed and close monitoring of these program occurrences during every participant's progression through the program, there is an opportunity to make necessary changes to participants' individualized plans to ensure successful completion.

The study data are consistent with other drug court literature showing the importance of sanction timing as well as the negative impact of jail sanctions. Research suggests that the majority of drug court participants receive a sanction during program participation (Gibbs et al., 2021; Guastaferro & Daigle, 2012; Shannon, Jones, Newell, & Payne, 2018), and that the majority of sanctions occur within the first few months of participation (Guastaferro & Daigle, 2012). However, when interpreted in light of other findings, the data suggest caution and consideration when using jail sanctions early in the program. Fisher (2014) argued that using punitive sanctions, particularly in early remission, does not decrease any criminal behavior associated with addiction. Along a similar line, Brown et al. (2010) showed a considerably stronger relationship between jail sanctions administered within the first 30 days and program termination, compared with sanctions administered later in drug court participation. Several other studies also showed incarceration sanctions as being associated with reduced odds of program completion (Gill, 2016; Shannon et al., 2016; Wu et al., 2012). The relationship between jail sanctions and drug court termination may be associated with a host of factors. For example, Brown et al. (2010) discussed the need to examine and understand an individual's criminal ties and prior criminal justice involvement; for those with more criminal involvement, jail sanctions may have little impact other than to strengthen criminal ties and potentially weaken prosocial connections and behaviors, such as drug court participation.

Life course theory may offer a possible explanation for the variance in results for those who earn jail sanctions early in their drug court journey, perhaps suggesting that some individuals are not yet invested enough in the process for drug court to be a "turning point." It can certainly be argued that drug court can be a turning point in an individual's life (Messer et al., 2016), therefore providing an opportunity to change one's life trajectory. However, some participants with less than a month's duration in the program may not feel as invested; therefore, receiving a sanction as severe as jail may have enough of a negative impact that it becomes more difficult for those participants to use drug court as a positive turning point. Bivariate results determined that program completion was associated with being older, being employed, having at least a high school education, and living with an intimate partner and/or child. All of these circumstances provide not only more support and stability for the drug court participant, but also more to "lose" if they were to "fail." This study also found that women were more likely to graduate than were men. Some research has shown that drug court can be more of a significant turning point for women due to the positive impact sobriety can have on their relationship with their children (Messer et al., 2016).

Implications

These study findings have numerous implications for drug court programming. First, given that sanctions are both a frequent and necessary part of drug court programming (NADCP, 1997, 2013, 2015), there is some evidence to suggest that participants are more receptive to "known" sanction policies. In their 2012 study, Guastaferro and Daigle used a sanction matrix and found that, despite the majority of participants receiving a sanction, over three fourths (77%) of those receiving one continued to be involved in drug court. Further building on this notion, Cheesman et al. (2016) showed that individuals who knew the written sanction guidelines early in their programs had 4.35 times greater odds of success

compared with participants in programs that did not provide guidelines early on. Additionally, the unknown element of sanctioning can be particularly detrimental for individuals with certain characteristics or experiences. Specifically, if an individual had prior felony convictions and did not receive written sanction guidelines, the graduation rate was 43.7%, which is notably lower than for individuals without a felony conviction (81.6%; Cheesman et al., 2016). Marlowe (2008) also emphasized the importance of participants knowing what to expect with sanctions and stressed that using a sanction of inappropriate magnitude can be detrimental to the therapeutic relationship. Therefore, drug court programs should use careful consideration when developing sanction policies. In addition, it is important to have various options for sanctions to meet the unique risk and need levels of program participants. Further, data from this study suggest that there needs to be a critical assessment of how and when jail sanctions can and should be used. A known sanction policy and/or having specified options does not necessitate a "one-size-fits-all" model and can still offer flexibility. This is particularly critical given the findings from this and other studies pointing to the importance of being responsive to gender-specific needs in drug court programming (Fischer & Geiger, 2011). Sevigny et al. (2013) suggested several options other than incarceration, such as providing more intensive programming, as a way to minimize program noncompletion. Others have emphasized the importance of graduated supervision and a continuum of care, which allows the program to be responsive to individual needs (Fischer & Geiger, 2011).

Second, participants' duration in drug court appears to be a critical consideration for sanctions. Data from Gibbs et al. (2021) found that the longer individuals participated in drug court, the more likely the team was to use jail sanctions. The study authors emphasized that jail can be therapeutic, providing a "time out" to help drug court participants get sober, as a last step before the team undertakes measures of last resort (e.g., removing participants from the program; Gibbs et al., 2021). Regarding the current study, as the number of days in drug court increased, the hazard of termination decreased for those who received a jail sanction within 30 days of drug court entry. Although these individuals received a major sanction early in their drug court participation, a longer tenure in the program seemed to provide a protective effect. This result highlights the fact that some individuals are resistant to change despite entering the program, which might be somewhat expected given the high-risk and high-need population drug courts are encouraged to serve. However, having a rocky start should not deter drug court professionals or participants, because it does not guarantee program failure. Participants have a better chance of success the longer they remain in the program (Shannon et al., 2016). One imperative factor that can improve their chances of success is an individualized program plan. Other than sanctions, personal and external motivators could help shift some participants from resisting change to accepting it, allowing drug court to become a positive turning point (Messer et al., 2016). These motivators may occur for a variety of reasons, such as desiring to stay out of jail (Patra et al., 2010), regaining custody of children, improving mental or physical health (Webster et al., 2006), obtaining a job, receiving an education, securing safe or stable housing (Patra et al., 2010), receiving praise from the drug court judge (Rossman et al., 2011), and forming new, supportive bonds (Gallagher & Nordberg, 2016; Patra et al., 2010). This is where individualized planning is pivotal, as it should consider factors such as the participant's background, goals, triggers, and program progression, which can help the team identify motivators and ultimately better serve program participants. The drug court team should work with the participant to devise an individualized program plan and goals and to determine if, when, and how a participant's plan or goals should change (Kushner et al., 2014; Steadman et al., 2013). Because individuals present to drug court with varying backgrounds, substance use habits, and mental and physical health challenges, the team should bear in mind that there is no "one-size-fits-all" approach to treatment.

Finally, the number of positive urine drug screens can be an important and known factor for consideration. Gibbs et al. (2021) showed that the number of positive alcohol and drug screens influences the use of sanctions and therapeutic responses. Further, Gill (2016) found that more

program graduates had diluted urine drug screens, which may suggest an attempt to hide substance use, when compared with individuals who dropped out. From the current study, the positive drug test finding emphasizes the importance of admitting and treating high-risk and high-need clients in drug court. According to the current study, having four or more positive drug screens increased one's time to termination, meaning that these individuals stayed in the program longer. This may suggest that the drug courts assessed in this study did not simply terminate participants for continued substance use, but allowed them to remain in the program to improve their chances of successful rehabilitation. High-risk and high-need drug court participants require "intensive mental health or substance use disorder treatment with continuous monitoring by criminal justice professionals" (National Association of Drug Court Professionals, n.d., *High Risk and High Need* section). In fact, adhering to treatment and supervision requirements is the main or "proximal" goal for these participants, while abstinence is a more challenging or "distal" goal (Marlowe, 2012, p. 5). Treating continued substance use requires an "intensive" approach, and being in the program for an extended period of time (rather than automatic termination for substance use) provides time for staff to implement such an approach.

LIMITATIONS

There are several study limitations that warrant discussion. While the larger study used probability sampling techniques, the final sample may contain some bias. First, some of the participants originally selected for the study ultimately were not included because components of the secondary data (i.e., paper-based assessment) could not be located. To achieve the desired sample size, random sampling with replacements ensured the inclusion of the target number of individuals from each site. Second, the selection of 14 representative sites (as opposed to including all programs statewide) could have resulted in a biased sample. Regarding generalizability, these data represent drug courts in only one state, and the study sample had limited racial diversity. Further, data missing from the assessment influenced the ability to examine some variables (e.g., age of first substance use).

Over the study timeframe, the KSC assessment underwent several revisions to modify questions to better assess clients for the program. In addition, some questions and variables seemed particularly susceptible to participants' inability to recall information. Related to this issue is the likelihood of program- and court-related variation in the use of and timing of jail sanctions; these were unmeasured aspects in the larger study and ultimately could not be controlled for statistically. As a result, there were some important areas that might have also been influential on the outcome that could not examine. Also, given that this study relied primarily on secondary data, certain variables (e.g., sanctions and therapeutic responses) could only be analyzed together, since there was no distinction in the MIS on the purpose of the response. The study analyses focused on examining factors significantly associated with program completion, of which jail sanctions emerged as significant. These data cannot address factors that might have influenced the likelihood of receiving a jail sanction (e.g., prior criminal history), which might reflect a higher-risk and/or higher-need participant, nor can they adequately explore differences among participants who received a jail sanction early who did or did not ultimately complete the program. Both of these are important considerations and warrant future focused research. Finally, these data are derived from existing secondary datasets; analyses show correlations or relationships and do not imply causality.

CONCLUSION

Findings from the current study build on a small but growing body of literature focused on understanding the impact of specific sanctions on drug court performance. While the Adult Drug Court Best Practice Standards recommend that jail sanctions be used sparingly and for those who pose an immediate public safety risk (NADCP, 2013), data from this study as well as extant drug court research suggest this is not always the case. Jail is a commonly used sanction for program participants. Findings from the current study offer compelling evidence to suggest that drug court teams review, revisit, and modify this practice, as having jail as a sanction early in the program can dramatically reduce the likelihood of participant success, especially for those participants who ultimately

do not remain in the program long term. In most cases, there are other sanction options that may be more appropriate for use early in the program (e.g., increased treatment or supervision requirements).

Further, this study identifies a specific individual factor (gender) and a specific during-program occurrence (number of positive drug tests) that are significantly associated with program completion. Both of these can be detected via regular review of participant progress and can thus be targeted via individualized services to improve outcomes. Having knowledge early in the program about factors associated with program completion can help teams target treatment and resources more effectively. Importantly, these data are not intended to suggest that individuals with specific characteristics will not be successful in drug court or that they should be prematurely removed from the program. Further, these data do not imply that an individual sanctioned to jail early in the program cannot ultimately be successful. In fact, data from this study refute this by showing the importance of the time a participant spends in the program, despite early setbacks via jail sanctions. Individuals come into drug court with a variety of unique risks and needs. Data collected at program intake and during program participation should be used to develop the most appropriate combination of resources to more effectively address these risks and meet the needs of the individual.

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RESEARCH REPORT

Drug Court Participants' Risky Behavior and Perceptions Following an HIV Education Program

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Abstract

Drug courts were created to allow individuals with nonviolent offenses who have drug-related charges an alternative to incarceration. In addition to offering treatment for substance use disorder, drug court programs focus on helping participants improve their health, and one aspect of this effort is education on the human immunodeficiency virus (HIV). Research is limited on HIV education, delivery, and outcomes in drug court settings. The purpose of this study was to examine the delivery of an HIV education program, Embracing Healthy Love, by measuring its effects on participant knowledge, participant perceptions of HIV-related stigma, and participant sexual and drug-related behaviors. Results (N *= 229) showed that knowledge and perceptions of stigma increased and risky behaviors decreased following the education program. The results also implied that changes in behavior were not directly related to changes in knowledge. The findings provide insight into and implications regarding the effectiveness of this method of delivering an HIV intervention in drug courts.*

INTRODUCTION

The human immunodeficiency virus (HIV) can be transmitted from human to human through sexual contact (semen or vaginal or anal secretions), through contact with blood (such as blood transfusions or open cuts and sores), from mother to child during birth or through breast milk, or through intravenous (IV) drug use (Centers for Disease Control and Prevention [CDC], n.d.-a). Although great strides have been made in understanding, preventing, and treating HIV, the virus remains problematic in the United States (CDC, 2019).

Justice-involved individuals with both substance use disorder (SUD) (Earnshaw et al., 2015) and co-occurring mental health disorders (COM) (Wainberg et al., 2016) are at a higher risk for HIV than not only those without COM, but also the general population. Those who have a diagnosis of an SUD or COM and who also have a history of criminal involvement already experience stigma, further highlighting the need for "normalized" HIV education and stigma-reduction training to lower HIV risk and improve knowledge (Davtyan et al., 2014). Polcin et al. (2017) noted that national efforts to decrease the rate of incarcerated individuals have resulted in a higher demand for pre- and postadjudicated programs that address the mental and physical health needs of participants. HIV education, risk reduction, testing, and treatment are among the numerous service needs experienced by this population and are necessary for long-term health and recovery.

Although drug court participants face many challenges related to maintaining employment, housing, and personal relationships, they also experience a number of physical and mental health concerns. Participants are at risk of spreading HIV to others through drug use, sex, or other risky behaviors (Gordon et al., 2013). Research has shown that drug court participants are at an elevated risk for HIV and, in fact, that their likelihood of contracting HIV is tenfold greater than that of the general population (Festinger et al., 2012; Robertson et al., 2012). States recognize the risks of drug court participants contracting HIV, yet efforts to respond to this problem either are not in place or are limited. For example, although the Adult Drug Court Best Practice Standards encourage interventions to reduce HIV among enrollees (National Association of Drug Court Professionals [NADCP], 2015), very few courts address HIV prevention (Festinger et al., 2012; Robertson et al., 2012). The state drug courts included in this study are an exception, with HIV education being added as part of the complementary services that participants receive. The lack of HIV prevention efforts is surprising given that pilot studies show adult drug court participants are at high risk of contracting HIV. For example, one study found 69% of drug court participants in an urban area in Arkansas were at high risk of contracting HIV (Sockwell et al., 2017). Further, participants in the study held beliefs that made it difficult for them to seek more information or testing (Sockwell et al., 2017). Because a central goal in preventive HIV care is to provide both risk-reduction counseling and HIV testing, these findings suggest that efforts to educate drug users and prevent HIV infection are needed.

Embracing Healthy Love (EHL) is a program developed by researchers and educators at the Arkansas Department of Health (ADH) and the University of Arkansas for Medical Sciences (UAMS).[1] EHL's objective is to educate high-risk populations, including state drug court participants, on safe practices and to develop more positive attitudes toward HIV-positive people. This study examined the effectiveness of EHL and HIV testing in a pilot evaluation conducted by a state drug court.

Substance misuse is a common thread among drug court participants because it impairs judgment and increases risky behaviors, including unprotected and/or unsafe sex (Robertson et al., 2012). With high rates of IV drug use among drug court participants, an intervention for these individuals would likely reduce the number of new HIV infections.

Current Study

Although 49 state drug courts participated in the EHL educational events, only four complied with submitting data. This study is based on a program evaluation of individuals (N = 229) enrolled in four drug courts, with surveys completed between March and November 2018. The resulting study was a collaboration among the state drug courts, the ADH, and UAMS. UAMS submitted and received approval from its institutional review board to evaluate the EHL program. EHL is a one-time, hour-long HIV education session manualized with notes embedded in a PowerPoint presentation developed in partnership between UAMS and the ADH. The EHL curriculum covers HIV knowledge such as who is at risk, how it is contracted and prevented

1. For more information about the Embracing Healthy Love curriculum, contact Zuakernah Belo at the Arkansas Department of Health, Zuakernah.Belo@arkansas.gov.

(with a focus on preexposure prophylaxis [PrEP]), and the criminal laws regarding HIV/AIDS. HIV stigma is also a focus in the EHL curriculum.

Sanctions for not participating were at the discretion of the drug court, as EHL was requested by the state drug court program. Participants were asked to complete a survey to measure their attitudes about HIV and their involvement in risky behaviors at a pretest, at a posttest immediately after the educational session, and again at a two-week follow-up.

An ADH disease intervention specialist facilitated the EHL educational events. Specialists working for the department are required to have at least a bachelor's degree and are required to attend a 40-hour HIV training provided by the CDC (CDC TRAIN, an affiliate of the TRAIN Learning Network powered by the Public Health Foundation, https://www.train.org/cdctrain/training_plan/4401).

METHODS

Research Questions

This study addressed changes from pretest to posttest in drug court participants' knowledge about HIV and changes in behaviors that increase their risk of contracting HIV. Additionally, it examined the relationship between specific types of risky behaviors (e.g., risky drug use or risky sexual behavior) and attitudes about HIV. Research questions addressed are:

1. Did HIV knowledge increase significantly from pretest to posttest?
2. Did participants report a change in risky behaviors?
3. Did participants report a change in perceptions of HIV stigma?
4. What is the relationship between HIV knowledge, risky behavior, and HIV stigma?

Study Design

Following guidance from the Adult Drug Court Best Practice Standards, Volume II, Chapter VI, Section K (NADCP, 2015), state drug court participants received complementary HIV education. Drug court counselors were responsible for scheduling the EHL class for their participants, with the disease intervention specialist traveling to their area once per quarter. The specialist traveled to the drug court location on the day of the event. Drug court participants were asked to complete a paper pretest survey to assess risky behavior, knowledge, and perceptions about HIV prior to the face-to-face EHL class. After the EHL class was complete, the specialist administered a paper posttest survey to measure changes in knowledge and perceptions. The specialist asked each participant to create a generic individual identifier based on an algorithm that they would remember later (e.g., the initials of their first and last name and last four digits of their social security number). This algorithm allowed for matching and tracking participants' pretest and posttest results. Voluntary HIV and sexually transmitted disease (STD) testing was offered immediately after the class to everyone who participated. The specialist referred any participants who tested positive for HIV for confirmatory testing. Two weeks after the education session, the drug court counselors distributed a second posttest survey during the participants' group session to measure changes in their behaviors and perceptions. All who participated in the EHL session were asked to complete the two-week follow-up. UAMS staff monitored incoming data and summarized the participating locations for the state drug court contact. The state drug court contact encouraged staff to comply and schedule trainings.

Measures

The researchers developed measures to be sensitive to changes in knowledge and behaviors. Some questions were based on surveys used in prior research (Stringer et al., 2016), while project leadership created others specifically for the EHL program evaluation. This study focused on four outcome variables: (1) knowledge about HIV, (2) risky behaviors, (3) perceptions of HIV stigma, and (4) the relationship between knowledge, risk, and stigma.

To measure knowledge about HIV, the survey asked participants to respond to three statements related to contraction of HIV, for example, "A person can get HIV through contact with a toilet seat" (see Appendix 1). They were asked to mark the statements as either "False = 0," "True = 1," or "I'm not sure = 2." We recoded the responses for the statements so that all scores measured knowledge consistently (i.e., "False or I'm not sure = 0," "True = 1").

To measure risky behaviors, the survey asked participants to respond to a series of questions regarding their behavior. HIV risk was determined by various behaviors the participant may have engaged in that put them at risk of contracting

HIV, such as not using condoms, sharing IV drugs, or having sex with multiple partners. HIV risk was also determined by assessing secondary risk, which included behaviors that may lead to contracting HIV, such as using alcohol or drugs. The measure of risky behaviors included 12 questions designed to gauge risky drug use behaviors and risky sexual behaviors (see Appendix 1), for example, "Have you ever used a needle to inject street drugs?" Responses were coded "No = 0" and "Yes = 1." We based the sexual risk questions on the CDC risk reduction tool (CDC, n.d.-b). Questions regarding sexual risk behavior asked about sexual practices, such as "Approximately how many different sexual partners have you had in the past year?" This question was open-ended to allow respondents to write their number of partners. A second question was "Were any of your partners HIV positive?" with the response options "No = 0," "Yes = 1," and "Unknown = 2." Based on responses to questions about risky behaviors, we recoded items as necessary and computed one composite score to test Research Question 2 (Did participants report a change in risky behaviors?). We then split the composite scores for risky behaviors into drug use and sexual behaviors for Research Question 4 (What is the relationship between HIV knowledge, risky behavior, and HIV stigma?), where these items were treated as independent variables.

To measure perceptions of HIV stigma, the survey included items pulled from a stigma survey designed by the Health Policy Project (Appendix 2; Hardee et al., 2012). The original design of the survey was to measure HIV stigma in healthcare settings. Examples of statements include the following: "People who are HIV-positive should feel ashamed of themselves" and "Most people living with HIV have had many sexual partners." Responses to these questions ranged on a four-point Likert scale from "Strongly agree = 1" to "Strongly disagree = 4." We recoded these statements so that higher scores indicated higher levels of stigma, and then computed a composite score. We conducted factor analysis and reliability testing to determine which of the original items on the survey could be used to reliably indicate measures of each variable.

Barriers to Assessment

Some drug court staff reported not being able to find a date that worked for both a drug court and the specialist and thus were unable to schedule EHL sessions. Confusion as to who would have participants complete the surveys led to some data not being collected. Drug court staff also reported that adding paperwork to collect increased their already high workload.

Some drug court sites submitted surveys without the generic identifiers on the forms, which made it impossible to match pretest and posttest surveys for these participants. Further, some sites received incorrect forms, and the information on these surveys was slightly different from the other surveys. Those surveys were not used for the purposes of this paper. Although UAMS, the state drug courts, and ADH were able to resolve these issues over the course of a month, the inaccuracies posed some limitations for the dataset.

Analytical Methods and Results

A total of 269 drug court participants completed EHL between March and November 2018. Of these, 229 completed a pretest, 200 completed the first posttest immediately after completing the program, and 209 completed the second posttest at the two-week follow-up. UAMS staff used scanning software (Remark) to read data from the forms. The software was unable to pick up some handwritten text (IDs). The software was not able to read some data, and these data were entered manually so staff could match IDs. There were no assurances from the disease intervention specialist or drug court staff that all data were completed or turned in for analysis. We used a matched dataset for analysis. Of the 229 participants, 66% (178) could be matched on at least two surveys, and 8% (22) could be matched on all three surveys. There were 114 records that could not be matched in pre-to-post retention due to a lack of identifiers. As depicted in Table 1, most drug court participants taking part in the EHL program were male (61%) and White (71%). Most indicated that they were heterosexual (92%). These two characteristics are very similar to the state drug court population as a whole.

We conducted descriptive analyses (e.g., frequencies) and an examination of bivariate relationships among all variables of interest. Additionally, we conducted correlations, *t* tests, and cross-tabulation analyses as needed to study the relationships between knowledge, risk, and stigma perceptions while controlling for other factors that may have influenced these relationships. Research questions involved pretest and posttest comparisons (RQ1 through RQ3). Multiple comparisons were made between the posttest survey completed immediately after the educational session and the posttest measure at the

two-week follow-up. To test RQ4, we conducted multiple pairwise ordinary least squares (OLS) regressions in order to retain the highest sample size given the retention rates in the follow-ups, controlling for demographics and HIV knowledge, risky behavior, and perceptions of HIV stigma.

Table 1. EHL Program Participant Demographics

Characteristic	*n*	%
Sex		
Male	122	61%
Female	77	39%
Race/Ethnicity		
White	145	71%
Non-White	11	29%
Sexual orientation		
Heterosexual	121	92%
LGBTQ	10	8%

Note. Measures of demographics included only participant sex, race/ethnicity, and sexual orientation. Sexual orientation was measured on both the pretest and on the second posttest. The other demographic questions were included only on the first posttest survey (distributed immediately after program completion).

Research Question 1: Did HIV Knowledge Increase Significantly From Pretest to Posttest?

The first research question examined changes in drug court participants' knowledge about HIV after receiving the EHL education. A paired sample *t* test revealed differences in knowledge across time. Participants' mean knowledge was 1.76 ($SD = 1.07$) prior to EHL education. Knowledge increased and was significantly higher at the posttest ($M = 2.36$, $SD = 0.98$, $t(147) = -2.53$, and $p = .000$) and at the two-week follow-up ($M = 2.27$, $SD = 0.95$, $t(89) = -2.53$, and $p = .013$). Table 2 highlights mean differences between pretest, posttest, and two-week follow-up.

Research Question 2: Did Participants Report a Change in Risky Behaviors?

We examined drug court participants' risky behaviors before and after receiving EHL education to assess whether there were changes. A composite measure of overall risk was tested to assess the separate effects of risky sexual and drug use behaviors alone. The results are presented in Table 2. For overall risk, risky behavior at the two-week follow-up ($M = 0.69$, $t(55) = 2.69$, $p = .009$) was significantly lower than at the pretest ($M = 1.19$). We then conducted separate examinations of drug-related risky behavior and sex-related risky behavior. The assessment of drug-related risky behaviors included questions about IV drug use and sharing of drug paraphernalia. Questions regarding sex-related risky behavior included ones on condom use, previous STD tests, and number of sexual partners. Between the pretest and two-week follow-up, risky drug use behavior decreased, but the change was not significant; however, it approached significance at the 0.10 level. There were no significant changes in condom use and STD testing.

Research Question 3: Did Participants Report a Change in Perceptions of HIV Stigma?

We looked at drug court participants' attitudes about HIV stigma after receiving EHL education. The results are presented in Table 2. We examined individual perceptions about HIV and stigma toward people with HIV by comparing changes at all three time points and found that stigma was significantly higher at the posttest ($M = 6.95$, $t(127) = 2.62$, $p = .003$) and two-week follow-up ($M = 7.05$, $t(76) = 2.68$, $p = .041$) compared to the pretest ($M = 6.24$). Further, overall stigma scores were relatively low at each time point, which indicates that most participants did not have high levels of stigma to begin with.

Table 2. Paired Sample *t* Tests Predicting Changes in HIV Knowledge, Risky Behaviors, and HIV Stigma

	t test for knowledge of means						
						95% confidence interval of difference	
	t	*df*	Sig (2-tailed)	Mean difference	Std. error difference	Lower	Upper
Knowledge – pretest to posttest	–6.26	147	0.00***	–0.61	0.10	–0.80	–0.42
Knowledge – pretest to two-week follow-up	–2.53	89	0.01**	–0.32	0.13	–0.58	–0.07
Changes in risky behavior – pretest to two-week follow-up	2.69	55	.01**	1.89	0.71	3.29	2.69
Drug behavior – pretest to two-week follow-up	1.83	77	.07	0.40	0.21	–0.03	0.82
Condom use – pretest to two-week follow-up	0.27	73	.79	0.07	0.26	–0.44	0.58
Previous STD test – pretest to two-week follow-up	0.89	80	.38	0.11	0.13	–0.14	0.36
Stigma – pretest to posttest	–3.07	127	.00**	–0.71	0.13	–1.17	–0.25
Stigma – posttest to two-week follow-up	–2.04	76	.04*	–0.64	0.23	–1.24	–0.03

*$p < .05$. **$p < .01$. ***$p < .001$.

Research Question 4: What Is the Relationship Between HIV Knowledge, Risky Behavior, and HIV Stigma?

We examined the relationships between variables, using a composite measure of overall risky behavior, and then analyzed individual subscales that measured specific types of risky behaviors (e.g., drug use vs. sexual behavior). The relationships between variables at the pretest are presented in Table 3. Model 1 tested predictors of overall risk at the pretest; knowledge and perceptions of stigma at the pretest were added as predictors to the model, controlling for gender, race, and sexual orientation. The model was not significant, and there were no significant relationships between the variables.

Model 2 tested the influence of knowledge and stigma on condom use, an indicator of risky sexual behavior, controlling for demographic characteristics, number of partners, exchange of sex for money or drugs, and drug risk at baseline. Model 2 was not significant, and there were no significant relationships between these variables. Model 3 tested the influence of knowledge and stigma on risky drug use behaviors, controlling for demographic characteristics, condom use, and exchange of sex for money or drugs at baseline. This model showed significance in the expected direction when looking at number of partners. As the number of partners increased by 1, risky drug use behavior increased by 0.45 ($p = .008$).

DISCUSSION

The intention of this study was to determine whether HIV education administered by trained HIV professionals in state drug courts would increase knowledge, reduce perceptions of HIV stigma, encourage HIV testing, and decrease behaviors that put individuals at risk for HIV. EHL is an education-based program designed to influence drug court participants' knowledge, perceptions, and behaviors related to HIV. Research questions focused on changes in participants' knowledge about HIV, changes in their perceptions

Table 3. Relationships Between HIV Knowledge, Risky Behavior, and HIV Stigma at Pretest

	Model 1 (*N* = 68)	Model 2 (*N* = 69)	Model 3 (*N* = 69)
Variable			
Male	–0.18 (1.28)	0.99 (0.50)	1.04 (0.40)
White	0.88 (1.54)	1.80 (0.59)	–0.99 (0.49)
LGBTQ	1.19 (2.98)	0.29 (1.16)	0.48 (0.95)
Knowledge	–0.01 (0.59)	–0.88 (0.23)	0.80 (0.19)
Stigma	0.06 (0.26)	1.27 (0.10)	0.69 (0.08)
Number of partners		–0.34 (0.16)	0.32 (0.17)*
Exchanged sex for money or drugs		0.66 (0.80)	0.19 (0.64)
Risky drug use behavior		1.67 (0.11)	2.73 (0.10)
Condom use			–0.34 (0.10)
Goodness of Fit			
F value	0.41	1.43	1.85
P value	0.84	0.20	0.09
R squared (adj.)	–0.05	0.05	0.09

*$p < .05$. *Note*. All variables are measured at pretest. The dependent variable in Model 1 is the composite measure of risky behaviors. The dependent variable in Model 2 is condom use, which is an indicator of risky sexual behavior. The dependent variable in Model 3 is risky drug use behavior.

of HIV stigma, changes in risky behaviors, and the relationships between HIV education, knowledge, perception of stigma, and behavior.

Findings from our study showed that drug court participants reported greater knowledge and, counter to expectations, higher perceptions of stigma toward individuals living with HIV after the EHL training. Similar to other studies (Sorensen & Copeland, 2000) that examine HIV education for drug court participants, our findings suggest that educational programs aimed at HIV reduction work. We did not find a relationship between education, stigma perceptions, and risky sexual behavior before or after intervention, but there was an association between perceptions of HIV stigma and drug use behavior, and this relationship was significant at the two-week follow-up. These results are similar to those of a study done previously in a drug court setting that did not show changes in attitudes (Whiteside-Mansell et al., 2021).

These findings will help guide policy regarding HIV education in drug courts across the country. As it stands, the state drug courts have implemented EHL as part of their programs, but it is not clear whether the newly established educational programs are structured effectively, because many programs lack assessment. Jones et al. (2019) suggested that elevated HIV risk behaviors are associated with poorer outcomes and "unfavorable drug court behaviors." Unlike other historical indicators of drug court success—such as age of first use, history of arrests, and education level—HIV risk behavior can be modified with targeted interventions that improve knowledge, reduce stigma, and motivate risk reduction through behavior change models (De Vasconcelos et al., 2018). It is unclear whether drug courts evaluate the effectiveness of such programs or simply participate to "check off boxes," meaning that they do just enough to meet their requirement.

Overall, stigma perception levels were low; however, there were significant increases in perceptions of stigma at each time point. The program could be expanded to increase the length of time between intervention and follow-up. This would allow agencies to see if participants make lasting lifestyle changes that promote healthier decision-making. Future research could examine this question with a longitudinal design.

We did not find a relationship between participant education level, perceptions of HIV stigma, and risky sexual behaviors at either the pretest or

posttest. Although a power analysis indicated that the sample size was sufficient, it is still possible that a larger sample may be needed to detect significant relationships between these constructs. Further, the follow-up survey was given to drug court participants after two weeks, which may not be enough time to accurately assess behavior change. Participants may need more time to reflect on what they learned in the class and establish new habits. Future research should consider a six-month time frame, because this is the amount of time most federal grants use to assess behavioral changes (Substance Abuse and Mental Health Services Administration, 2017).

There was an association between perceptions of HIV stigma and drug use behavior, and this relationship was stronger at the two-week follow-up. This result may be due to the way the study was designed to connect both HIV and drug use behaviors with perceptions of stigma. As discussed earlier, alcohol or drug use is considered a secondary risk for HIV because it impairs judgment and the ability to think about long-term consequences. A second explanation could be that active drug users are able to use neutralization techniques (i.e., justifications) to continue their drug use while minimizing their perception of its potential harm (Sykes et al., 1957). This is an area for future research and practice to explore. Research should examine what factors may connect HIV stigma and drug use. Further, drug courts may need to look at the role of stigma in educational programming. Obviously, the goal of the program was not to increase stigma, but strategies that decrease drug use will also reduce the harms of such behavior. Programs may need to address decision-making prior to drug use or address the neutralization techniques drug users employ to justify their behavior.

LIMITATIONS AND LESSONS LEARNED

The overall goal of this paper is to foster conversations on how to incorporate HIV education and testing into drug courts. Like most program evaluations, this preliminary study had some limitations. Unstandardized data collection processes led to high rates of missing data. Even with somewhat limited matched data, however, we were able to see increased knowledge regarding HIV among participants. The study was designed by UAMS, the evaluator, to help the drug courts meet the Adult Drug Court Best Practice Standards (NADCP, 2015). Other limitations of note include: (1) no fidelity measures were in place on the delivery of the EHL training, so programming differences among drug courts caused inconsistencies in the training delivery; (2) because EHL was implemented in all of the state drug courts, and all drug court participants were to participate in an EHL class with voluntary HIV testing, there was no comparison group for this study; and (3) several issues occurred with participant IDs so that we were unable to match pretest, posttest, and two-week follow-up data for some participants. Thus, our findings should be interpreted cautiously, though this study supports further examination of such programs and suggests they may be useful.

Lessons learned from this study are currently being implemented in a drug court program in the state and can inform program development in other states. Some drug courts in the state are now using an independent expert for trainings, online data collection methods that track and match participants' pretest and posttest data automatically, at-home HIV testing options to reduce stigma around testing, and online courses to avoid limitations on classroom availability. Sorensen & Copeland (2000) determined that an HIV education program for drug court participants helped reduce HIV risk. Future studies can further this line of inquiry by assessing what evidence-based HIV intervention makes the greatest impact on drug court participants. With various drug court program styles, future studies could also focus on how to avoid inconsistencies in the delivery of evidence-based HIV intervention and data collection.

CONCLUSION

Drug court programs present a unique opportunity to focus on both health and drug use while treating individuals who traditionally would have been sentenced to jail or prison. Research is limited on HIV education, delivery, and outcomes in drug court settings. Our results showed that, following the education program, knowledge increased; perceptions of stigma were low at each time point, with significant, yet slight, increases; and risky behaviors decreased, though analyses showed that changes in behavior were not directly related to changes in knowledge in this sample. These findings provide insight into the effectiveness of this method of delivery for HIV intervention in drug courts and provide a baseline for future studies.

Appendix 1. Drug Court Pre-Survey

Drug Court Pre-Survey

ID_____

(ID-First 2 of first name, first 2 of last name and last 4 of SSN)

	True	False	I'm not sure
A person can get HIV through contact with a toilet seat	O	O	O
A person can get HIV through contact with the urine of an HIV positive individual	O	O	O
A person can get HIV through contact with the saliva of an HIV positive individual	O	O	O
An athlete who is using steroids can get HIV through sharing these needles with an HIV positive individual	O	O	O
An HIV positive individual can look and feel healthy	O	O	O
Having sexual intercourse with more than one partner can increase someone's risk of being infected with HIV	O	O	O
Immediately taking a test 1 week after having sex with an HIV positive individual will tell a person whether he or she has contracted HIV	O	O	O

Which is currently the major risk factor for Hepatitis C infection in the United States?

O Tattoos O Injecting-drug use O Blood transfusion O Sexual activity O Working in healthcare occupations

Approximately how many different sexual partners (vaginal or anal sex) have you had in the past year? _____

In the last year, have you had either vaginal or anal sex with: (Check all that apply)	O	Men	O	Transgender (male-to-female)	O	Other
	O	Women	O	Transgender (female-to-male)		
Were any of your partners HIV positive?	O	Yes	O	No	O	unknown
Did you have sex with an injection drug user?	O	Yes	O	No	O	

How often do you use condoms:	Always	sometimes	never	haven't had sex
Anal	O	O	O	O
Vaginal	O	O	O	O
Oral	O	O	O	O

	Yes	**No**
Have you ever been in jail?	O	O
Have you ever used a needle to inject street drugs?	O	O
Did you share needle/cooker/or cotton?	O	O
Have you ever exchanged sex for money/drugs/other?	O	O
Have you ever had a sexually transmitted disease (STD) such as syphilis, chlamydia, gonorrhea, herpes, or genital warts?	O	O

Appendix 1. Drug Court Pre-Survey

Drug Court Pre-Survey

ID_____

(ID-First 2 of first name, first 2 of last name and last 4 of SSN)

	Strongly Agree	Agree	Disagree	Strongly Disagree
People who are HIV positive should feel ashamed of themselves	O	O	O	O
I would be ashamed if someone in my family was HIV positive	O	O	O	O
Most people living with HIV have had many sexual partners	O	O	O	O
People get infected with HIV because they engage in "irresponsible behaviors"	O	O	O	O
Being HIV positive is punishment for "bad behavior"	O	O	O	O
Women who are HIV positive should be allowed to bear children if they wish	O	O	O	O

	Yes	**No**	If so, list timeframe of previous test
Have you ever been tested for HIV?	O	O	_____
Have you ever been tested for Hep C?	O	O	_____
Have you ever been tested for other STDs?	O	O	_____

Appendix 2. Drug Court Post-Survey

Drug Court Post-Survey ID_____

	True	False	I'm not sure
A person can get HIV through contact with a toilet seat	O	O	O
A person can get HIV through contact with the urine of an HIV positive individual	O	O	O
A person can get HIV through contact with the saliva of an HIV positive individual	O	O	O
An athlete who is using steroids can get HIV through sharing these needles with an HIV positive individual	O	O	O
An HIV positive individual can look and feel healthy	O	O	O
Having sexual intercourse with more than one partner can increase someone's risk of being infected with HIV	O	O	O
Immediately taking a test 1 week after having sex with an HIV positive individual will tell a person whether he or she has contracted HIV	O	O	O
A pregnant woman who is HIV positive can pass the virus on to her unborn baby	O	O	O
I feel better informed about HIV	O	O	O

Which is currently the major risk factor for Hepatitis C infection in the United States?

O Tattoos O Injecting-drug use O Blood transfusion O Sexual activity O Working in healthcare occupations

	Poor	Fair	Good	Excellent
This education session was useful to me	O	O	O	O
The Presenter(s) held my attention	O	O	O	O
The presenter(s) were knowledgeable about HIV Transmission	O	O	O	O
The presenter(s) were knowledgeable about STD Transmission	O	O	O	O
The presenter(s) were knowledgeable about Hepatitis C transmission	O	O	O	O
The presenter(s) were knowledgeable about HIV prevention	O	O	O	O
The presenter(s) were knowledgeable about Hepatitis C prevention	O	O	O	O
The presenter(s) were knowledgeable about PreP	O	O	O	O
I felt comfortable asking questions	O	O	O	O
	O	O	O	O
	O	O	O	O

Gender O Male O Female

Hispanic or Latino O Yes O No

Race

O White O American Indian or Alaska Native O Asian

O African American O Native Hawaiian or Pacific Islander O Other

Appendix 2. Drug Court Post-Survey

Drug Court Post-Survey ID_____

	Strongly Agree	Agree	Disagree	Strongly Disagree
People who are HIV positive should feel ashamed of themselves	O	O	O	O
I would be ashamed if someone in my family was HIV positive	O	O	O	O
Most people living with HIV have had many sexual partners	O	O	O	O
People get infected with HIV because they engage in "irresponsible behaviors"	O	O	O	O
Being HIV positive is punishment for "bad behavior"	O	O	O	O
Women who are HIV positive should be allowed to bear children if they wish	O	O	O	O

If you're **NOT** getting a STD/HIV Screen today, please complete the following questions on why you weren't screened.	Yes	No
Afraid of needles	O	O
I have been tested in the last 3 months	O	O
I don't have time to get tested today	O	O
I don't feel like I need a test	O	O
The information shared today does not pertain to me	O	O

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