# Problem-Solving Court Policies on Cannabis Use

## Nathaniel P. Morris, MD

Problem-solving courts have developed across the United states to offer specific offenders, including those with substance use or mental disorders, alternatives to incarceration that often involve community-based treatment services and judicial supervision. At the same time, dozens of states have legalized the use of cannabis for medical or recreational purposes, even as cannabis use remains illegal under federal law. State legalization of cannabis use has introduced legal and medical complexities for problem-solving courts, particularly concerning the management of offenders who use cannabis. This article reviews implications of cannabis use for defendants' eligibility and participation in problem-solving courts, with a focus on adult drug courts and mental health courts. This article also examines a range of policies, such as abstinence-based, tolerance-based, and adaptive approaches, that problem-solving courts may consider implementing. Further research is needed to characterize existing problem-solving court policies toward cannabis use and to develop evidence-based practices that courts may follow.

#### J Am Acad Psychiatry Law 47:493-503, 2019. DOI:10.29158/JAAPL.003883-19

Mental disorders and substance use disorders are highly prevalent among criminal offenders in the United States justice system.<sup>1-3</sup> Criminal justice involvement, including arrest and incarceration, may interrupt medical treatment, impede recovery, and exacerbate symptoms for individuals with these disorders.<sup>2,4,5</sup> As a result, policymakers have sought to divert such offenders from incarceration, to improve their access to medical care, and to enhance community supports.<sup>1,3</sup> The development of problemsolving courts represents one type of criminal justice reform aimed at achieving these goals.

Broadly defined, problem-solving courts are specialty courts that offer certain criminal offenders, including those with substance use disorders or mental disorders, alternatives to incarceration that often involve community-based treatment services and judicial supervision.<sup>6-8</sup> These courts have emerged alongside recognition of therapeutic jurisprudence, the study of legal systems as social forces that can shape the mental health and behavior of affected individuals.<sup>9</sup> Participants in problem-solving courts often, although not always, enroll in these programs on a voluntary basis.<sup>6,8</sup> Problem-solving courts may accept participants charged with misdemeanors, nonviolent felonies, or violent felonies, although extreme crimes, such as murder, firearms-related violence, and rape, tend to be disqualifying.<sup>6,8,10-12</sup> Today, there are an estimated 3,000 drug courts and 300 mental health courts across the United States.<sup>13,14</sup>

Alongside the emergence of problem-solving courts, another policy trend, widespread legalization by U.S. states of cannabis use for medical or recreational purposes, has disrupted traditional practices in the U.S. justice system. At the start of 2019, 33 U.S. states and the District of Columbia had legalized the use of cannabis for medical purposes, and 10 states and the District of Columbia had legalized recreational use of cannabis.<sup>15</sup> Over 200 million Americans now live in locations where cannabis use is legal at the state level for medical or recreational purposes.<sup>16</sup>

The spread of cannabis legalization among U.S. states has introduced legal and medical complexities for problem-solving courts.<sup>17,18</sup> As an example, state legislatures may have legalized cannabis use for medical or recreational uses, but cannabis use remains

Published online September 18, 2019.

Dr. Morris is a Resident in Psychiatry at the Stanford University School of Medicine, Stanford, California. Address correspondence to: Nathaniel P. Morris, MD, Department of Psychiatry and Behavioral Sciences, 401 Quarry Road, Stanford, CA 94304. Email: npm@stanford.edu.

Disclosures of financial or other potential conflicts of interest: None.

illegal under U.S. federal law<sup>19,20</sup>; these legal discrepancies introduce uncertainty in the management of cannabis-using defendants in problem-solving courts. Further, as a result of historical restrictions on cannabis-related research, a great deal is unknown about the health effects of cannabis use.<sup>21,22</sup> Existing studies suggest that cannabis use may have therapeutic functions in some contexts, but it also carries a host of potential adverse health effects.<sup>21,22</sup> Examples of possible therapeutic functions of cannabis use include treatment of chemotherapy-related nausea, spasticity, chronic pain, and anorexia among patients infected with human immunodeficiency virus.<sup>21,23</sup> Examples of adverse health effects of cannabis use include altered brain development, cognitive impairment, psychosis, impaired driving, chronic cough, decreased birth weight in offspring of pregnant women, and addiction.<sup>21,24</sup>

Cannabis use remains controversial in both law and medicine.<sup>19,20</sup> Because problem-solving courts operate at the interface between law and medicine, these controversies raise a pressing question: How should problem-solving courts address cannabis use among defendants?

# **Types of Problem-Solving Courts**

There are many different forms of problemsolving courts. Drug courts are one example that focus on offenders grappling with problems related to substance use, which may include alcohol use disorders, opioid use disorders, stimulant use disorders, and cannabis use disorders.<sup>7,8</sup> Participants in drug courts may also have co-occurring mental disorders or other medical conditions that may need to be addressed. Studies suggest that participation in these courts may lead to lower likelihood of reoffending and to decreased illicit substance use compared with adjudication through traditional criminal courts.<sup>25-30</sup> But drug courts have also faced criticisms, including that these courts conflate substance possession or use with substance use disorders, that courts select low-risk participants who are expected to succeed, that court officials without medical training may determine treatment decisions, and that the utility of these courts has been overstated.<sup>31,32</sup>

In a hypothetical example, a defendant charged with a misdemeanor and a nonviolent felony suffers from an opioid use disorder, and his defense attorney refers his cases to a drug court. If the court determines that the defendant is an appropriate referral and the defendant voluntarily agrees to adhere to the court's treatment plan, he may live in the community under court supervision, rather than face incarceration. The court's treatment requirements may include routine appointments with mental health professionals in the community, adherence to recommended medications or psychotherapy, random drug and alcohol testing, and regular court visits. For adhering to the treatment plan and avoiding new criminal charges, the defendant may receive rewards, such as verbal praise, gift cards, graduation from the program and reduction or dismissal of criminal charges.<sup>6-8,11</sup> In contrast, for failing to adhere to the treatment plan or receiving criminal charges for new offenses, the defendant may face sanctions, including stricter treatment protocols, more frequent court visits, brief stays in detention, or referral back to traditional criminal court.<sup>6-8,11</sup>

Mental health courts are another example of problem-solving courts. Whereas drug courts focus on offenders who use substances, mental health courts tend to focus on offenders with mental disorders, such as schizophrenia, schizoaffective disorder, bipolar disorder, or major depressive disorder.<sup>6</sup> These offenders may or may not have co-occurring substance use, and the criteria for admission into mental health courts can vary by jurisdiction.<sup>10,33</sup> Studies have found variable results on the usefulness of mental health courts, but some evidence indicates these courts may reduce recidivism and improve connection to treatment services among participants compared with traditional criminal courts.<sup>6,25,34-37</sup>

Additional types of problem-solving courts, such as veteran treatment courts, family treatment courts, and gambling courts, address behavioral health concerns. The analysis and commentary in this article may be relevant to these other types of problemsolving courts, but this article largely focuses on adult drug courts and mental health courts in the following sections.

## Prevalence of Cannabis Use

Approximately 15 percent of U.S. adults used cannabis in the past year, and 9 percent used cannabis in the last 30 days, according to a study conducted in 2017.<sup>38</sup> A 2016 national survey suggested cannabis is the most commonly used illicit drug in the past month among Americans aged 12 years or older, and as many as 4 million Americans had a cannabis use disorder within the prior year.<sup>39</sup> Moreover, cannabis use is widespread among U.S. criminal offenders. The Bureau of Justice Statistics reported that more than 60 percent of state prisoners and sentenced jail inmates between 2007 and 2009 had ever regularly used marijuana or hashish.<sup>40</sup> One study of male county jail inmates in 2016 estimated that more than 20 percent met criteria for a moderate to severe cannabis use disorder.<sup>41</sup> Research indicates that the prevalence of adult cannabis use may be rising in both the general population and incarcerated individuals.<sup>40-44</sup>

Because cannabis use, possession, and distribution remains illegal among many U.S. states and under federal law, individuals continue to flow into U.S. justice systems for violations related to cannabis. In 2017, U.S. law enforcement carried out more than 650,000 arrests for cannabis-related offenses.<sup>45</sup> Widespread use among criminal offenders and the ongoing criminalization of cannabis suggest that cannabis use is highly relevant to problem-solving courts.

Research supports this assumption. A 2016 national report indicated that cannabis was the primary substance of abuse among 8 to 22 percent of adult drug court participants.<sup>8</sup> In other studies, as much as 30 percent or more of participants in drug courts report cannabis is their primary substance of choice.<sup>28,46-49</sup> Many drug court participants use cannabis even if it is not their primary substance of abuse-e.g., 50 to 66 percent of adult drug court participants report cannabis as a primary, secondary, or tertiary substance of abuse.8 The prevalence of cannabis use among mental health court participants is less well studied. In several studies of mental health courts, however, more than 60 percent of participants or graduates with mental disorders also had co-occurring substance use or substance-related disorders.<sup>50-54</sup> In one example, a 2016 report on Orange County Collaborative Courts in California indicated that 12 percent of adult mental health court admissions listed cannabis as their primary drug of use.<sup>55</sup> These findings suggest that cannabis use is likely prevalent in mental health court populations as well.

## **Eligibility Criteria**

Different problem-solving courts may use different eligibility criteria when admitting defendants to their dockets. As previously discussed, drug courts tend to focus on offenders who use substances and who may or may not have co-occurring mental disorders.<sup>7,8</sup> By comparison, mental health courts tend to focus on offenders with mental disorders who may or may not have co-occurring substance use.<sup>6</sup>

At the referral stage, an offender may screen in or screen out of a problem-solving court as a result of cannabis use. For instance, according to a 2013 statewide survey of New York adult drug courts, 77 percent admitted participants who used only cannabis.<sup>46</sup> An offender with a cannabis use disorder and no co-occurring substance use or mental disorders might hypothetically screen into the majority of these New York adult drug courts. Yet the same offender might hypothetically screen out of the remaining 23 percent of courts due to using only cannabis and therefore not meeting eligibility criteria.

Reasons vary as to why problem-solving courts may screen out potential participants who use cannabis. In drug courts, it is possible that officials lack resources to manage all offenders who use cannabis, believe cannabis use disorders are less treatable compared with other substance use disorders, or view cannabis as less harmful compared with other substances.<sup>28,46,56</sup> As an example, in Pennsylvania, the Fayette County adult drug court manual states in a section on eligibility criteria that "Cannabis Use Disorder will be accepted with a co-occurring substance abuse disorder due to treatment program time restrictions" (Ref. 57, p 18). The survey of New York drug courts referred to participants who used only cannabis as "arguably the lowest need subgroup of drug users" (Ref. 46, p 57). In a multi-site adult drug court assessment, the report excluded cannabis from the category of "serious" drugs and referred to cannabis as a "less serious" drug.<sup>28</sup> In contrast, some mental health courts may screen out offenders who use cannabis if such use is determined to be more problematic or more directly related to criminal behavior than a primary mental disorder.<sup>10</sup>

Amid widening state legalization of cannabis use, it remains to be seen whether problem-solving court eligibility criteria and other policies around cannabis use will resemble those related to other legally available substances. For example, drug courts generally screen in participants for problematic alcohol use, conduct random alcohol testing, and require abstinence from alcohol as a condition of participating in these courts.<sup>7,8,11,46</sup> Alcohol use is prevalent among adult drug court participants, with 29 to 38 percent reporting that alcohol is their primary substance of abuse.<sup>8</sup> Some offenders with problematic alcohol use may find themselves referred into subspecialty courts, such as driving under the influence (DUI) courts that manage individuals with repeated DUIrelated offenses.<sup>8</sup> A complete review of problemsolving court policies regarding alcohol and other legally available substances is beyond the scope of this article; however, it is possible that problem-solving courts may approach cannabis use differently than other legally available substances, especially in light of the notion that cannabis use may be prescribed for medical purposes.

## Identification of Cannabis Use

Identifying cannabis use in problem-solving court populations often begins when individuals are referred and screened for eligibility to participate in such courts. Even if cannabis does not play a role in the referral and screening of a candidate, cannabis use may become apparent at any point during the admission process or later participation in a problemsolving court. Some problem-solving court participants may openly acknowledge using cannabis to treatment teams or to court officials. Other participants may appear at court visits or medical appointments intoxicated, smelling of cannabis, or carrying cannabis in their belongings. Treatment teams may discover a history of cannabis use after speaking with a participant's family members or reviewing a participant's medical records.

A common route through which problem-solving courts determine that participants are using cannabis is through urine drug screening. For example, in a study of adult misdemeanor drug courts in Delaware, 44 percent of participants screened positive for cannabis use on their intake urine testing.<sup>58</sup> Problemsolving courts may conduct urine drug screens when admitting a new participant, as well as on a frequent and often random basis thereafter.7,8,59 Whether someone who uses cannabis tests positive for this substance on a urine drug test depends on multiple factors, including recency of use, frequency of use, type of cannabis product used, and type of screen administered. Urine drug screens typically detect cannabis use through the presence of tetrahydrocannabinol metabolites, and these metabolites may be detectable in urine as many as 30 days after last cannabis use.<sup>60,61</sup> But these drug tests may not detect all cannabis-related use, such as some cannabidiol products and synthetic cannabinoids.<sup>62</sup> Additional types of drug screens, such as hair or oral fluid testing, exist to detect cannabis use, although problem-solving courts tend to rely on urine drug testing due to ease of administration, perceived reliability, and inexpensiveness.<sup>28,59,61</sup> How problem-solving courts conduct drug testing and whether court officials understand the meaning of test results may shape court responses to participants who use cannabis.

## **Responding to Participants' Cannabis Use**

In addition to developing eligibility criteria for defendants and mechanisms for identifying cannabis use, problem-solving courts must decide how to respond to cannabis use among existing participants on their dockets. Given recent changes in the legal standards and medical knowledge on cannabis use, policymakers may develop varying attitudes toward cannabis use among participants of problem-solving court. These attitudes may emerge as a result of a combination of factors, including the function of specific problem-solving courts (e.g., drug courts versus mental health courts), state laws, offender demographics, opinions of court officials and mental health professionals, and past experiences with court participants who used cannabis.

This section reviews a range of policies, a range of policies on cannabis use that problem-solving courts may implement that problem-solving courts may implement regarding cannabis use among participants. These different approaches are briefly summarized in Table 1.

## Abstinence-Based Approach

Problem-solving courts may require that participants completely abstain from cannabis use. For example, after Michigan legalized medical cannabis use in 2008, a subsequent survey found that a number of Michigan drug courts had decided to ban all cannabis use among participants.<sup>63</sup> Several drug court coordinators replied that they would regard cannabis use, even if for medical purposes, as a violation of court policies and potential grounds for dismissal from their programs.<sup>63</sup> The National Association of Drug Court Professionals (NADCP) released a 2012 position statement on cannabis, supporting "reasonable prohibitions in Drug Courts against the use of smoked or raw [cannabis] by participants and the imposition of suitable consequences, consistent with evidence-based practices, for positive drug tests and other evidence of illicit [cannabis] consumption" (Ref. 18, p 6). Drug court handbooks from multiple states suggest courts have commonly required that

#### Morris

 Table 1
 Examples of Problem-Solving Court Policies Toward Cannabis Use

Court Policy Toward Cannabis Use	Sample Court Rules for Participants	Sample Court Responses to Cannabis Use
Abstinence-based approach	Do not use or possess any drugs or alcohol do not even think about applying for a [medical cannabis] card. <sup>65</sup>	Take corrective actions.
	As a participant in the Adult Drug Treatment Court, you are agreeing not to use alcohol and other drugs defendants with certificates for medical [cannabis] are not eligible for admission. A participant who obtains a certificate will be dismissed from the Court. <sup>67</sup>	Corrective actions may include verbal warnings, increased court visit frequency, stricter drug test scheduling, delays of program graduation, brief stays in detention, or referral back to traditional criminal court.
Tolerance-based approach	This court does not encourage cannabis use given its health risks and illegal status under federal law; however, we do not take punitive actions against participants in our court for using cannabis.*	Do not take corrective actions.
	This court does not monitor participants for cannabis use.*	Potentially educate participant about the health effects of cannabis use.
Adaptive approach	As a participant in Drug Court, you are agreeing to not use alcohol, illegal drugs, or unauthorized medication. This includes medical [cannabis] unless authorized by the court. <sup>90</sup>	Tailor response to individual participant's needs.
	Use of prescribed medical [cannabis] is presumptively prohibited and shall be reviewed by the Court on a case by case basis. <sup>92</sup>	Consider whether participant has valid medical indication for cannabis use. Evaluate whether cannabis use appears to be harmful or helpful for the participant.

\* Proposed, rather than actual, examples of court rules for participants.

participants abstain from any cannabis use,<sup>64-69</sup> with one handbook warning participants to "not even think about applying for a [medical cannabis] card" (Ref. 65, p 13). Similarly, mental health courts in several states have explicitly prohibited the use of any cannabis, including for medical purposes.<sup>70-75</sup>

Of note, drug court and mental health court handbooks often mention or prohibit use of "marijuana," "drugs," "illegal drugs," "illicit drugs," or "illegal substances" but may not clarify whether these terms apply to legal medical or recreational cannabis use under state laws.<sup>76-80</sup>

In an abstinence-based approach, problemsolving courts might treat any discovery of cannabis use as a violation of program policies and take corrective actions. Corrective actions may include verbal warnings, increased court-visit frequency, stricter drug-test scheduling, delays of program graduation, or even brief stays in detention. In some cases, problem-solving courts may discharge participants from their dockets as a result of cannabis use, which may include referral back to traditional criminal courts for processing of the defendants' original charges.

Defendants who are deemed ineligible for problem-solving courts due to cannabis use may have

limited options for legal recourse because courts have yet to establish that participation in problem-solving courts is a constitutionally protected right. For example, several state courts that have faced this question with regard to drug courts have determined that appellants did not have a fundamental right to participate in drug courts.<sup>81-83</sup>

Potential advantages of an abstinence-based approach toward cannabis use include having a uniform abstinence policy that may simplify court procedures and ensure that all participants are treated equally with respect to cannabis use. This strategy may be particularly useful in drug courts where participants struggle with substance use; allowing some participants and not others to use substances might send mixed messages and potentially indicate that substance use is acceptable, which may hinder a drug court's effectiveness. An abstinence-based approach is consistent with federal law, as well as with numerous states' laws, under which cannabis use remains illegal. Problem-solving courts may rely on state and federal funding, and it is possible that allowing cannabis use among court participants may jeopardize such funding. An abstinence-based approach may help decrease participant use of cannabis and therefore might mitigate adverse health effects of cannabis use, which may be particularly important among vulnerable participants who suffer from mental disorders or substance use disorders.

Potential disadvantages of an abstinence-based approach toward cannabis use include that participants who have used cannabis may fear interacting with the court or speaking honestly with their treatment teams due to anticipation of punishment for violating abstinence-based rules.<sup>84</sup> When required to abstain from cannabis use, court participants may turn to other substances, such as synthetic cannabinoids, in pursuit of similar effects as cannabis use or to avoid detection on drug tests.<sup>62</sup> Banning all cannabis use may preclude patients from using cannabis prescribed to them for medical reasons and conflict with the treatment recommendations of medical professionals.<sup>84</sup> Further, such bans may conflict with state laws that have legalized cannabis use for medical or recreational purposes. Defendants who might benefit from entering into problem-solving courts may be deterred from doing so if participants must remain abstinent from cannabis.

#### **Tolerance-Based Approach**

Rather than require complete abstinence from cannabis use, problem-solving courts might adopt a tolerance-based approach, which represents the opposite end of the policy spectrum. In this approach, problem-solving courts generally tolerate cannabis use among participants, regardless of participants' reasons for using cannabis. Courts that pursue this approach may simply choose to ignore cannabis use among participants, similar to so-called "Don't Ask, Don't Tell" policies.<sup>85</sup> Another option may be to educate participants about the health effects of cannabis use and to monitor participant cannabis use through medical appointments, drug testing, and court visits, but not to take corrective actions in response to cannabis use. An online search conducted in January 2019 could not identify any drug courts or mental health courts that openly publicize such a tolerance-based approach, though it is possible that some courts are more lenient toward cannabis use and follow an informal version of this approach.

Potential advantages of a tolerance-based approach also include having a universal policy that simplifies court procedures and treats all participants equally with regard to cannabis use. Given the prevalence of cannabis use among criminal offenders, a tolerance-based approach may help avoid widespread punishment of court participants who use cannabis. Avoiding widespread punishment for cannabis use might free up court resources, allow treatment teams to focus on other behavioral health problems, expedite graduation from such courts, and attract new entrants into problem-solving courts who might otherwise not join if cannabis use were banned. Participants who may benefit from therapeutic functions of cannabis may continue using cannabis without fear of reprisal.<sup>84</sup> Further, a tolerance-based approach may be consistent with state laws allowing for the medical or recreational use of cannabis.

Potential disadvantages of a tolerance-based approach toward cannabis use include that court participants might be more likely to use cannabis and to suffer from adverse health effects related to cannabis use. Court participants with mental disorders or substance use disorders may be at increased risk for particular adverse health effects from cannabis use, including cognitive impairment, psychosis, and addiction. Tolerating cannabis use among court participants may signal to other participants that substance use is acceptable or encouraged, which may impair recovery or foster criminal behavior among court participants.<sup>71</sup> The effects of allowing offenders to use cannabis on local crime rates is unknown. Although some research suggests associations between cannabis use and violence, the effects of allowing offenders to use cannabis on local crime rates is unknown.<sup>86-89</sup> Finally, tolerance of cannabis use may conflict with federal and state laws that prohibit cannabis use, which may place participants at risk of further criminal charges and could jeopardize the legal status or funding of problem-solving courts utlizing this approach.

#### Adaptive Approaches

Problem-solving courts may wish to use adaptive approaches toward cannabis use rather than universal policies for all participants. One option for an adaptive approach might be referred to as an "opt-in" policy. In this situation, a problem-solving court would generally pursue abstinence from cannabis among participants, educating participants about the risks of cannabis use, discouraging cannabis use, and taking corrective actions in response to cannabis use; however, a subset of participants may be able to "opt in" to cannabis use by demonstrating medical necessity, such as producing a cannabis-related prescription or treatment plan recommended by a medical professional. The NADCP position statement on cannabis indicates some acceptance for this "opt-in" approach, recommending that courts "require convincing and demonstrable evidence of medical necessity presented by a competent physician with expertise in addiction" (Ref. 18, p 6) before allowing a participant to use smoked or raw cannabis for medical purposes. Problem-solving courts in states including California,<sup>90</sup> Michigan,<sup>63</sup> Minnesota,<sup>91</sup> Rhode Island,<sup>63</sup> and Washington<sup>92</sup> have approached cannabis use along these lines, in which courts may review medical cannabis use on a case-by-case basis and may potentially authorize participant cannabis use if deemed medically necessary.

Statutory changes related to cannabis use in the criminal justice system may be one reason for the development of these adaptive policies. For example, California Health and Safety Code § 11362.795 states that a criminal defendant who qualifies for medical use of cannabis under state law "may request that the court confirm that he or she is allowed to use medicinal cannabis while he or she is on probation or released on bail."<sup>93</sup>

Pursuant to this statute, the court must document a decision, as well as reasoning behind this decision, related to the defendant's request to use medicinal cannabis.<sup>93</sup> In light of this broader "opt-in" policy for criminal defendants on probation or released on bail seeking to use cannabis for medical purposes, problem-solving courts that supervise defendants in the community might also choose to use this approach.

Another option for an adaptive approach may be referred to as an "opt-out" policy. At baseline, this approach might be similar to a tolerance-based approach toward cannabis use, generally allowing participants to use cannabis for medical or recreational purposes without sanction. But under this framework, the court may take corrective actions if concern arises that cannabis use is hindering a participant's recovery or leading to deleterious consequences, such as adverse health effects or additional criminal behavior. Examples that might trigger corrective actions include a treatment team raising alarm that a participant is becoming psychotic due to cannabis use or a judge suspecting that a participant is repeatedly intoxicated from cannabis use during court visits.

Potential advantages of adaptive approaches to cannabis use include the ability to tailor these approaches to the individual needs of court participants, which may optimize harm reduction from cannabis use and other substances, as opposed to one-size-fits-all policies.<sup>94-96</sup> Small studies of drug courts have examined adaptive algorithms that adjust judicial supervision and case-management services depending on participants' performance; these studies have found mixed results, although some findings indicate adaptive programming may improve shortterm outcomes like drug-abstinence rates.<sup>97-99</sup> Adaptive treatment plans toward cannabis use might enhance the likelihood of participant recovery and successful program completion, given that some participants may use cannabis for medical needs.<sup>84</sup> Offenders who would be suitable for participation in a problem-solving court may be more likely to do so if they learn that courts are willing to allow cannabis use within specific boundaries. In addition, adaptive approaches to cannabis use may allow for more flexibility to the often-changing legal standards and medical knowledge around cannabis use.

Potential disadvantages of adaptive approaches to cannabis use include that participants may become frustrated or confused by variable treatment plans that allow some participants to use cannabis and bar others from doing so. Court officials and health care professionals may hold differing opinions about what constitutes a legitimate medical need for cannabis use or when to be concerned about a participant's cannabis use. Because adaptive approaches may allow some court participants to use cannabis without sanction, these policies might invite increased cannabis use and adverse health effects among participants as a result of such use. Participants who are allowed to use cannabis under an adaptive approach risk criminal charges under federal and many states' laws. As with a tolerance-based approach, it remains unclear whether adaptive approaches and the possibility of increased cannabis use among court participants might influence rates of recidivism or local crime.

## Conclusions

Problem-solving courts have become popular models for criminal justice reform, and these specialty courts must now grapple with widespread legalization by U.S. states of cannabis use. Cannabis use is prevalent among criminal offenders in the United States, including participants in problemsolving courts, and may carry legal or medical implications for users. Problem-solving courts must decide how to manage cannabis use among defendants, not only when determining which offenders are eligible for admission to such specialty courts, but also after identifying cannabis use among existing participants.

This article examines some of the ways in which cannabis use may affect eligibility for problemsolving courts, including possibly screening in or out referred defendants, and different ways in which problem-solving courts may discover cannabis use among defendants. This article also reviews a range of policies, including abstinence-based, tolerancebased, and adaptive approaches, that problem-solving courts may adopt toward participants' cannabis use.

As legal standards and medical knowledge about cannabis use continue to evolve, further study into problem-solving court policies toward cannabis is needed. For example, some evidence suggests that drug courts may be less helpful for individuals who primarily use cannabis compared with other sub-stances.<sup>28,46,100</sup> One multi-site study reported that drug courts were less effective at preventing crime among participants who primarily used cannabis, as opposed to other substances.<sup>28</sup> Å single-site report found an association between termination from drug court and participant cannabis use.<sup>100</sup> The reasons behind such findings are unclear, although difficulty treating cannabis use disorders, public and court perceptions of cannabis as less harmful compared with other substances, and long detection windows for cannabis metabolites in drug tests may be contributory.<sup>28,56,100</sup>

Future research would be useful to better understand the intersection between problem-solving courts and cannabis use. Individual problem-solving courts might publish recurring reports on participant demographics and outcomes, which could yield longitudinal insights related to cannabis use in these settings. On a wider scale, regular statewide or national surveys could clarify how problem-solving courts in different regions approach cannabis use among participants, especially within the context of different state laws around cannabis use. These studies might also elucidate how problem-solving court policies toward cannabis use compare with policies toward other legally available substances such as alcohol and tobacco. Further investigation into the effects of different cannabis policies on problemsolving court participants, including clinical outcomes, connection to treatment services, likelihood of recidivism, and time to case resolution, may help identify evidence-based practices that courts can implement moving forward.

#### Acknowledgments

The author thanks Lisa Lightman, Director of San Francisco Collaborative Courts, Superior Court of California, County of San Francisco, for insightful comments and suggestions during the preparation of this manuscript.

#### References

- 1. Hirschtritt ME, Binder RL: Interrupting the mental illnessincarceration-recidivism cycle. JAMA 317:695–6, 2017
- 2. Prins SJ: Prevalence of mental illnesses in US state prisons: a systematic review. Psychiatric Serv 65:862–72, 2014
- Belenko S, Hiller M, Hamilton L: Treating substance use disorders in the criminal justice system. Curr Psychiatry Rep 15:414, 2013
- 4. Sue K: How to talk with patients about incarceration and health. AMA J Ethics 19:885–93, 2017
- Reingle Gonzalez JM, Connell NM: Mental health of prisoners: identifying barriers to mental health treatment and medication continuity. Am J Public Health 104:2328–33, 2014
- Almquist L, Dodd E. Mental health courts: a guide to researchinformed policy and practice. New York: Council of State Governments Justice Center, 2009
- Bureau of Justice Assistance: Defining drug courts: the key components. Washington, DC: US Department of Justice, Office of Justice Programs, 2004
- 8. Marlowe DB, Hardin CD, Fox CL. Painting the current picture: a national report on drug courts and other problem-solving courts in the United States. Alexandria, VA: National Drug Court Institute, 2016
- 9. Winick BJ: Therapeutic jurisprudence and problem solving courts. Fordham Urb L J 30:1055–103, 2003
- Wolff N, Fabrikant N, Belenko S: Mental health courts and their selection processes: modeling variation for consistency. Law & Hum Behav 35:402–12, 2011
- Marlowe DB, Fox CL, Blackburn PK, *et al*: Adult Drug Court Best Practice Standards, Volume I, Text Revision. Alexandria, VA: National Association of Drug Court Professionals, 2018
- Erickson SK, Campbell A, Lamberti JS: Variations in mental health courts: challenges, opportunities, and a call for caution. Community Met Health J 42:335–44, 2006
- National Institute of Justice: Drug courts. May 2018. Available at: https://www.ncjrs.gov/pdffiles1/nij/238527.pdf. Accessed January 7, 2019
- Council of State Governments Justice Center: Mental health courts. Available at: https://csgjusticecenter.org/mental-healthcourt-project. Accessed January 7, 2019
- Charles S: The year in pot: states embrace legalization, but questions persist. NBC News. December 31, 2018. Available at: https://www.nbcnews.com/health/health-news/year-pot-statesembrace-legalization-questions-persist-n953396. Accessed January 7, 2019
- Nichols C: Do a majority of Americans live in states with legal marijuana? Politifact. April 19, 2018. Available at: https://

www.politifact.com/california/statements/2018/apr/19/johnchiang/do-majority-americans-live-states-legal-marijuana. Accessed January 7, 2019

- 17. Marlowe DB: Treatment courts and medical marijuana. Presented at the 2018 Illinois Association of Problem-Solving Courts Conference, Normal, IL, October 18, 2018
- National Association of Drug Court Professionals: Position Statement on Marijuana. 2012. Available at: https://web. archive.org/web/20180903014841/https://www.nadcp.org/ sites/default/files/nadcp/NADCP%20Board%20Position%20 Statement%20-%20Marijuana.pdf. Accessed March 6, 2019
- Haffajee RL, MacCoun RJ, Mello MM: Behind schedule: reconciling federal and state marijuana policy. N Engl J Med 379: 501–4, 2018
- Krystal H: The misclassification of medical marijuana. J Am Acad Psychiatry Law 46:472–79, 2018
- 21. McCormick M, Abrams DI, Alegria M, *et al*: The health effects of cannabis and cannabinoids: the current state of evidence and recommendations for research. Washington, DC: The National Academies of Sciences, Engineering, and Medicine, 2017
- Wilkinson ST, Yarnell S, Radhakrishnan R, *et al*: Marijuana legalization: impact on physicians and public health. Annu Rev Med 67:453–66, 2016
- Whiting PF, Wolff RF, Deshpande S, *et al*: Cannabinoids for medical use: a systematic review and meta-analysis. JAMA 313: 2456–73, 2015
- Volkow ND, Baler RD, Compton WM, Weiss SRB: Adverse health effects of marijuana use. N Engl J Med 370:2219–27, 2014
- Centre for Justice Innovation: Problem-solving courts: an evidence review. Available at: https://justiceinnovation.org/ publications/problem-solving-courts-evidence-review. Accessed August 20, 2019
- Wittouck C, Dekkers A, De Ruyver B, *et al*: The impact of drug treatment courts on recovery: a systematic review. Sci World J 2013:1–12, 2013
- Mitchell O, Wilson DB, Eggers A, MacKenzie DL: Assessing the effectiveness of drug courts on recidivism: a meta-analytic review of traditional and non-traditional drug courts. J Crim Just 40: 60–71, 2012
- Rossman SB, Rempel M, Roman RK, *et al*: The multi-site adult drug court evaluation: the impact of drug courts, volume 4. Washington, DC: The Urban Institute, 2011
- Brown RT: Systematic review of the impact of adult drug treatment courts. Transl Res 155:263–74, 2010
- Wilson DB, Mitchell O, MacKenzie DL: A systematic review of drug court effects on recidivism. J Exp Criminol 2:459–87, 2006
- Physicians for Human Rights: Neither justice nor treatment: drug courts in the United States. June 2017. Available at: https:// phr.org/wp-content/uploads/2017/06/phr\_drugcourts\_report\_ singlepages.pdf. Accessed March 4, 2019
- Drug Policy Alliance: Drug courts are not the answer: toward a health-centered approach to drug use. March 2011. Available at: http://www.drugpolicy.org/drugcourts. Accessed August 20, 2019
- Castellano U, Anderson L: Mental health courts in America: promise and challenges. Am Behav Sci 57:163–73, 2013
- Lowder EM, Rade CB, Desmarais SL: Effectiveness of mental health courts in reducing recidivism: a meta-analysis. Psych Serv 69:15–22, 2018
- 35. Dean R: What is the impact of mental health courts? A systematic literature review. Unpublished master of social work clinical research paper. St. Catherine University and University of St. Thomas, St. Paul, MN, 2017

- Edgely M: Why do mental health courts work? A confluence of treatment, support, and adroit judicial supervision. Int'l J L & Psychiatry 37:572–80, 2014
- Cross B: Mental health courts effectiveness in reducing recidivism and improving clinical outcomes: a meta-analysis. Unpublished master's thesis. University of South Florida, Tampa, FL, 2011
- Steigerwald S, Wong PO, Cohen BE, et al: Smoking, vaping, and use of edibles and other forms of marijuana among U.S. adults. Ann Intern Med 169:890–2, 2018
- 39. Ahrnsbrak R, Bose J, Hedden SL, *et al*: Key substance use and mental health indicators in the United States: results from the 2016 National Survey on Drug Use and Health. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 2017
- Bronson J, Stroop J, Zimmer S, Berzofsky M: Drug use, dependence, and abuse among state prisoners and jail inmates, 2007–2009. Washington, DC: Bureau of Justice Statistics, 2017
- Proctor SL, Hoffmann NG, Raggio A: Prevalence of substance use disorders and psychiatric conditions among county jail inmates: changes and stability over time. Crim Just & Behav 46: 24–41, 2019
- 42. Han BH, Palamar JJ: Marijuana use by middle-aged and older adults in the United States, 2015–2016. Drug Alcohol Depend 191:374–81, 2018
- Maura PM, Carline H, Brown QL, *et al*: Age differences in daily and nondaily cannabis use in the United States, 2002–2014. J Stud Alcohol Drugs 79:423–31, 2018
- Compton WM, Han B, Jones CM, et al: Marijuana use and use disorders in adults in the USA, 2002–14: analysis of annual cross-sectional surveys. Lancet Psych 3:954–64, 2016
- 45. Federal Bureau of Investigations: 2017 Crime in the United States: Persons Arrested. Available at: https://ucr.fbi.gov/crimein-the-u.s/2017/crime-in-the-u.s.-2017/topic-pages/personsarrested. Accessed January 7, 2019
- 46. Cissner AB, Rempel M, Walker Franklin A, et al: A statewide evaluation of New York's adult drug courts: identifying which policies work best. New York: Center for Court Innovation, 2013
- The Public Policy Center: Evaluation of Nebraska's problemsolving courts. March 31, 2012. Available at: https:// supremecourt.nebraska.gov/sites/default/files/drug-court-reportfinal-report.pdf. Accessed January 9, 2019
- Shaffer DK, Hartman JL, Listwan SJ, et al: Outcomes among drug court participants: does drug of choice matter? Int'l J Offender Ther Comp Criminology 55:155–74, 2011
- Montana Judicial Branch: Montana drug courts: an updated snapshot of success and hope. Available at: https://courts. mt.gov/portals/189/cao/ct\_services/treatment/docs/2012\_dc\_ report.pdf. Accessed January 9, 2019
- Canada KE, Markway G, Albright D: Psychiatric symptoms and mental health court engagement. Psychol Crime & L 22:513– 29, 2016
- Lowder EM, Desmarais SL, Baucom DJ: Recidivism following mental health court exit: between and within-group comparisons. Law & Hum Behav 40:118–27, 2016
- 52. Falk KC, Moravec S. An analysis of Allegheny County Mental Health Court. Pittsburgh, PA: Allegheny County Department of Human Services, 2011
- McNiel DE, Binder RL: Effectiveness of a mental health court in reducing criminal recidivism and violence. Am J Psychiatry 164: 1395–403, 2007
- Cosden M, Ellens J, Schnell J, Yamini-Diouf Y: Efficacy of a mental health treatment court with assertive community treatment. Behav Sci & L 23:199–214, 2005

- 55. Superior Court of California County of Orange: Collaborative Courts 2016 Annual Report. Available at: https://www. occourts.org/directory/collaborative-courts/reports/2016\_annual\_ report.pdf. Accessed January 8, 2019
- Keyhani S, Steigerwald S, Ishida J, *et al*: Risks and benefits of marijuana use: a national survey of U.S. adults. Ann Int Med 169:282–90, 2018
- Fayette County Court of Common Pleas, Adult Drug Court: Revised July 12 2017. Available at: https://www.fayette countypa.org/DocumentCenter/View/524/Adult-Drug-Court-Manual-PDF-?bidId=. Accessed August 20, 2019
- DeMatteo D, Marlowe DB, Festinger DS, Arabia PL: Outcome trajectories in drug court: do all participants have drug problems? Crim Just & Behav 36:354–68, 2009
- Marlowe DB, Fox CL, Blackburn PK, *et al*: Adult Drug Court Best Practice Standards, Volume II. Alexandria, VA: National Association of Drug Court Professionals, 2015
- 60. Kulig K: Interpretation of workplace tests for cannabinoids. J Med Toxicol 13:106–10, 2017
- 61. Hadland SE, Levy S: Objective testing: urine and other drug tests. Child Adolesc Psychiatr Clin N Am 25:549–65, 2016
- Gunderson EW, Haughey HM, Ait-Daoud N, *et al*: A survey of synthetic cannabinoid consumption by current cannabis users. Subst Abus 35:184–9, 2014
- 63. Bureau of Justice Assistance Drug Court Clearinghouse: Frequently asked questions series: state medical marijuana legislation and relevant drug court policies at both the state and local level. Revised March 13, 2013. Available at: https:// jpo.wrlc.org/bitstream/handle/11204/803/faq\_state%20medical %20marijuana%20legislation%20and%20relevant%20drug%20 court%20policies.pdf?sequence=3&isallowed=y. Accessed January 8, 2019
- 64. State of Michigan, 86th Judicial District Court: Drug Court Handbook. Revised August 2018. Available at: http:// www.gtchd.org/documentcenter/view/9222/drug-court-handbook. Accessed January 8, 2019
- 65. Jordan SB, Stressman J, Turpel N, Beck K. Jackson County Adult Treatment Court Participant Handbook. November 2017. Available at: https://www.co.jackson.mi.us/documentcenter/view/225/ participant-handbook-pdf?bidid=. Accessed January 8, 2019
- 66. Participant Handbook: Weld County Adult Treatment Court Program. Revised September 2015. Available at: https://www. courts.state.co.us/userfiles/file/court\_probation/19th\_judicial\_ district/treatment%20courts/atc%20handbook%20(revised %20sept%202015).pdf. Accessed January 8, 2019
- Maine Adult Drug Treatment Court Policy Procedure and Manual. Revised 2013. Available at: http://lldc.mainelegislature.org/ open/rpts/kf3890\_z99m25\_2014.pdf. Accessed August 20, 2019
- Adult Drug Court Superior Court of California, County of Mendocino Participant Handbook. June 2013. Available at: https://courts.mt.gov/portals/189/drugcourt/forms/manual/ mendocino%20county%20adult%20drug%20court%20participant %20manual.docx. Accessed January 8, 2019
- Navajo County Superior Court: Drug Court Participant Handbook. Revised June 2012. Available at: https://jpo.wrlc.org/ bitstream/handle/11204/1433/3950.pdf?sequence=1&isallowed= y. Accessed January 8, 2019
- Eighth Judicial District Court: Mental Health Court Participant Handbook. 2018. Available at: http://dpbh.nv.gov/uploaded files/dpbhnvgov/content/boards/rbhpb/meetings/2018/2018% 20mhc%20handbook%20(7).pdf. Accessed January 8, 2019
- Snohomish County Mental Health Court: Non-Prescribed Drugs/Marijuana Policy. November 2017. Available at: https://

snohomishcountywa.gov/documentcenter/view/47673/mhcmarijuana-policy-pdf. Accessed January 8, 2019

- District Court of Thurston County: Mental Health Court Contract. 2017. Available at: https://www.co.thurston.wa.us/distcrt/ docs/mhvc%20contract%20version%2017-2.pdf. Accessed January 8, 2019
- 73. Yakima County Mental Health Court: Participant Handbook. Updated April 2015. Available at: https://www.yakimacounty. us/documentcenter/view/8572/mhc-handbook-04-07-15. Accessed January 8, 2019
- 74. Sixth Judicial District Behavioral Health Court: Participant Handbook. Revised March 2015. Available at: https://jpo.wrlc.org/ bitstream/handle/11204/4348/particpant%20handbook\_6th% 20judicial%20district%20behavioral%20health%20court% 20colorado.pdf?sequence=1&isallowed=y. Accessed January 8, 2019
- Tuscola Mental Health Court: Participant Handbook. Available at: https://www.tuscolacounty.org/courts/doc/circuit/TMHC %20Participant%20Handbook.pdf. Accessed August 20, 2019
- 76. Sarasota County Health Care Court: Health Care Court Program Adult Participant Handbook. Updated December 2018. Available at: https://www.jud12.flcourts.org/portals/0/ documents/programs/mental-health/hcc-client-handbook.pdf. Accessed January 8, 2019
- 77. Twentieth Judicial Circuit Court, State of Florida, Charlotte County: Mental Health Court Program Adult Patient's Handbook. Revised December 2015. Available at: https:// www.cbhcfl.org/wp-content/uploads/2018/10/mental-healthcourt-handbook-12-15.pdf. Accessed January 8, 2019
- Chittenden County District Court: Mental Health Court Program Participant Handbook and Agreement. March 2012. Available at: http://forms.vermontlaw.edu/criminaljustice/ chittenden/ip4/mhcourt/mhcparticipanthandbook.doc. Accessed August 20, 2019
- Citrus County Mental Health Court: Misdemeanor Program Participation Handbook. Available at: https://www.citrusbocc.com/ commserv/suppserv/court/misdemeanor-handbook.pdf. Accessed January 8, 2019
- Lowndes County Accountability Court: Mental Health Court Program Participant Handbook. Available at: https:// southernjudicialcircuit.com/LCAC/MHCourtHandbook.pdf. Accessed January 8, 2019
- 81. Phillips v State, 25 So. 3d 404 (Miss. Ct. App. 2010)
- 82. Jim v State, 911 So. 2d 658 (Miss. Ct. App. 2005)
- 83. State v Harner, 103 P.3d 738 (Wash. 2004)
- Higgins MM: Total inclusion: opening therapeutic justice courts to medical marijuana patients in Michigan. W Mich Cooley J Prac Clinical L 17:126–70, 2016
- Halloran L: With repeal of 'Don't Ask, Don't Tell,' an era ends. NPR. September 20, 2011. Available at: https://www.npr.org/ 2011/09/20/140605121/with-repeal-of-dont-ask-dont-tell-anera-ends. Accessed January 8, 2019
- Dugre JR, Dellazizzo L, Giguere CE, *et al*: Persistency of cannabis use predicts violence following acute psychiatric discharge. Front Psychiatry 8:176, 2017
- 87. Norstrom T, Rossow I: Cannabis use and violence: is there a link? Scan J Public Health 42:358–63, 2014
- Ostrowsky MK: Does marijuana use lead to aggression and violent behavior? J Drug Educ 41:369–89, 2011
- Moore TM, Stuart GL: A review of the literature on marijuana and interpersonal violence. Aggress Violent Behav 10:171–82, 2005
- Napa County Drug Court: Participant's Handbook. Revised September 2016. Available at: http://www.napa.courts.ca.gov/ sites/default/files/images/documents/handbook%20team%20

revision%209-23-2016%20%283%29.pdf. Accessed January 8, 2019

- Minnesota Judicial Branch Fifth Judicial District: Adult Treatment Court Guideline Manual. Revised June 2018. Available at: http://www.mncourts.gov/mncourtsgov/media/fifth\_district/ Treatment%20Courts/5JD-Guideline-Manual-Adult-Drug-Court.pdf. Accessed August 20, 2019
- 92. Skagit County Mental Health Court Protocol. November 2012. Available at: https://jpo.wrlc.org/bitstream/handle/11204/ 2943/policies%20and%20procedures%20manual\_skagit%20 county%20mental%20health%20court%20washington.pdf? sequence=3&isallowed=y. Accessed January 8, 2019
- 93. Cal. Health & Safety Code § 11362.795 (2017)
- Canadian Nurses Association: Harm reduction for non-medical cannabis use. Updated January 2018. Available at: https://www. cna-aiic.ca/-/media/cna/page-content/pdf-en/harm-reductionfor-non-medical-cannabis-use.pdf. Accessed January 8, 2019
- 95. Lau N, Sales P, Averill S, *et al*: A safer alternative: cannabis substitution as harm reduction. Drug Alcohol Rev 34:654–9, 2015

- 96. Hall W, Fischer B. Harm reduction policies for cannabis, in Harm Reduction: Evidence, Impacts and Challenges. Edited by Rhodes T. Luxembourg: European Monitoring Centre for Drugs and Drug Addiction Monographs, 2010, pp 235–52
- Marlowe DB, Festinger DS, Dugosh KL, et al: An experimental trial of adaptive programming in drug court: outcomes at 6, 12 and 18 months. J Experimental Criminology 10:129– 49, 2014
- Marlowe DB, Festinger DS, Dugosh KL, et al: Adaptive programming improves outcomes in drug court: an experimental trial. Crim Just & Behav 39:514–32, 2012
- Marlowe DB, Festinger DS, Arabia PL, *et al*: Adaptive interventions may optimize outcomes in drug courts: a pilot study. Curr Psychiatry Rep 11:370–6, 2009
- Marchand G, Waller M, Carey SM: Kalamazoo County adult drug treatment court outcome and cost evaluation. September 2006. Available at: https://npcresearch.com/wp-content/ uploads/Kalamazoo-Final-Report\_10061.pdf. Accessed March 4, 2019