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BEST PRACTICES IN DRUG COURTS

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SPECIAL ISSUE

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NATIONAL DRUG COURT INSTITUTE

C. West Huddleston, III, Chief Executive Officer
Carolyn D. Hardin, MPA., Senior Director
1029 N. Royal Street, Suite 201
Alexandria, Virginia 22314
Tel. (703) 575-9400, Fax (703) 575-9402
www.ndci.org

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THE DRUG COURT REVIEW

Published annually, the *Drug Court Review's* goal is to keep the Drug Court practitioner abreast of important new developments in the Drug Court field. Drug Courts demand a great deal of time and energy of the practitioner, allowing little opportunity to read lengthy evaluations or keep up with important research in the field. Yet, the ability to marshal scientific and research information and "argue the facts" can be critical to a program's success and ultimate survival.

The *Drug Court Review* builds a bridge between law, science, and clinical communities, providing a common tool to all. A headnote indexing system allows access to evaluation outcomes, scientific analysis, and research on Drug Court related areas. Scientific jargon and legalese are interpreted for the practitioner in common language.

Although the *Drug Court Review's* emphasis is on scholarship and scientific research, it also provides commentary from experts in the Drug Court and related fields on important issues to Drug Court practitioners.

The *Drug Court Review* invites submission of articles relevant to the Drug Court field. This would include but not be limited to drug testing, case management, cost analysis, program evaluation, legal issues, application of incentives and sanctions, and treatment methods.

For complete submission guidelines, please visit http://www.ndci.org.

THE NATIONAL DRUG COURT INSTITUTE

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NDCI's mission is to promote education, research, and scholarship to the Drug Court field and other court-based intervention programs.

Since its inception in December 1997, NDCI has emerged as the preeminent source of cutting-edge training and technical assistance to the Drug Court field, providing research-driven solutions to address the changing needs of treating substance-abusing offenders. NDCI launched five separate team-oriented Drug Court training programs, eight comprehensive, discipline-specific training programs, and five separate subject matter training programs.

NDCI developed a research division responsible for creating a scientific agenda and publication dissemination strategy for the field. NDCI has published a monograph series, fact sheets, and legal issues publications on relevant issues to Drug Court to help maintain fidelity to the Drug Court model and expansion.

For additional information about NDCI and its training programs, visit http://www.ndci.org.

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C. West Huddleston, III
Chief Executive Officer
National Association of Drug Court Professionals
National Drug Court Institute

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INTRODUCTION

SPECIAL ISSUE ON BEST PRACTICES IN DRUG COURTS

Douglas B. Marlowe, JD, PhD

THE FIRST GENERATION of research on most programs addresses the basic question of whether the program can be effective under typical conditions. Studies compare the effects of the program to no treatment or to alternative programs addressing the same condition and determine whether, on average, it significantly outperforms the alternatives. These so-called horse races are necessary to decide whether continuing to invest time and effort in the intervention is justifiable, but they do not grapple with the more important questions of who the program is most effective for (i.e., its target population), how to make it most efficient and cost-effective, and how to avoid any negative side effects it might produce.

The second generation of research delves beyond the average effects of an intervention to identify the factors that distinguish effective programs from those that are ineffective or even harmful. This is referred to as research on *best practices*. The most common approach is for evaluators to compare the characteristics of programs that have significant positive outcomes with those that have poor or insignificant outcomes. Presumably, services that are provided by effective programs and not provided by ineffective programs are likely to be important ingredients of an effective intervention. Of course, one cannot place full confidence in the reliability of such findings because the services were not under experimental control. Programs may have differed, simply by chance, on dimensions that were not in fact responsible for the differences in outcomes. Nevertheless, in the absence of definitive evidence from controlled research studies, it makes logical sense to emulate the practices of effective programs and avoid the practices of ineffective or harmful programs.

Drug Courts have decidedly entered into the second generation of research on best practices. No longer preoccupied with the answered question of whether they work, Drug Courts are now focusing their attention on characterizing the attributes of exemplary programs. In the process, they are also identifying the attributes that are lacking in a small subgroup of poorly performing Drug Courts. These so-called outlier programs have the potential to give the Drug Court field a black eye, and provide fodder for critics who may be opposed to the Drug Court model on purely philosophical or attitudinal grounds.

This special issue of the *Drug Court Review* fills critical gaps in the literature on best practices in Drug Courts, and offers concrete guidance for Drug Court practitioners to enhance their operations and improve their outcomes. In the first invited article, Drs. Shannon Carey, Juliette Mackin, and Michael Finigan compare the programmatic policies and procedures, services offered, and outcomes produced from a large sample of sixty-nine Drug Courts in several states. Each of their studies employed a parallel methodology that permitted the researchers to examine common factors influencing effectiveness and cost-effectiveness across all or most of the jurisdictions. The results lent substantial support to many of the key components of the Drug Court model. For example, substantially greater reductions in crime and lower societal costs were produced by Drug Courts that had multidisciplinary team involvement in their court hearings and team meetings, held more frequent judicial status reviews, performed intensive urine drug testing, and administered gradually escalating incentives and sanctions. The best Drug Courts ensured their teams attended timely training events and engaged in ongoing performance monitoring of their operations and outcomes.

In the second article, Drs. Janine Zweig, Christine Lindquist, P. Mitchell Downey, John Roman and Ms. Shelli Rossman review findings from the Multisite Adult Drug Court Evaluation (MADCE). Funded by the National Institute of Justice (NIJ), this groundbreaking study compared outcomes for more than 1,000 participants in twenty-three adult Drug Courts located in seven geographic regions around the country to those of a carefully matched comparison sample. Not only did the findings confirm that the Drug Courts reduced crime and

drug abuse and improved the participants' psychosocial functioning, but, more importantly, they also revealed a number of practices that were associated with better results. Again, the findings confirmed many of the core tenets of the Drug Court model. Better outcomes were produced, for example, by Drug Courts that had moderately predictable sanctioning schedules, exercised greater leverage over their participants, and had judges with more positive interactional styles.

In the third article, Dr. Harry Wexler, Mr. Mark Zehner, and Dr. Gerald Melnick report on their application of the NIATx (Network for the Improvement of Addiction Treatment) process improvement model in ten Drug Courts. Funded by the Center for Substance Abuse Treatment (CSAT), NIATx has been proven to improve client access to and retention in substance abuse treatment, but had not heretofore been applied in the justice system. The results revealed that relatively simple and modest adjustments to the Drug Courts' organizational and administrative processes substantially reduced wait times and no-shows for appointments and increased admission rates and participant engagement in treatment. If Drug Courts intend to "go to scale" and make meaningful contributions to the justice system, they must learn new ways to improve their recruitment rates and streamline their operations to serve more people more efficiently. The NIATx model shows considerable promise for helping Drug Courts in this critical challenge.

In the fourth article, Mr. Michael Tobin, a highly experienced public defender, offers suggestions to help defense attorneys recognize and resolve ethical challenges in Drug Courts. Among many issues, Mr. Tobin offers practical suggestions for advising clients about the anticipated benefits and burdens of participating in Drug Court, advocating for fair and effective procedures in the program, educating the defense bar about the Drug Court option, and protecting client confidentiality and due process. Most importantly, he addresses the important issue of avoiding role conflicts when exercising the functions of adversarial counsel as opposed to membership on a multidisciplinary Drug Court team. Although the recommendations do not necessarily represent the unanimous opinion of the defense bar or

NADCP policy, they reflect the considered wisdom of an experienced defense expert who has carefully thought through these issues for decades.

Finally, in the fifth article, Drs. David Festinger, Karen Dugosh, David Metzger, and Douglas Marlowe report outcomes from a study examining HIV risk behaviors among participants in a felony Drug Court in Philadelphia. Funded by the National Institute on Drug Abuse (NIDA), the study revealed that sexual risk behaviors, including unprotected sex with multiple partners, were prevalent. Many of the Drug Court participants lived in geographic zones of the city characterized by high HIV seroconversion rates and a high prevalence of persons living with HIV/AIDS, thus heightening the probability of exposure to the virus. The criminal justice system, especially jails and prisons, has long been recognized as a major vector for the spread of HIV and a critical juncture for launching prevention and early detection efforts. The results of this study suggest Drug Courts should be playing a much more active role in administering HIV prevention and detection protocols.

In summary, the articles in this special issue address critical issues pertaining to best practices in Drug Courts that can optimize outcomes and make the most efficient use of scarce resources. Defining best practices is especially critical as Drug Courts go to scale and address the full scope of our nation's drug problem. The appalling figures are well known: 1 out of every 100 American citizens is behind bars with the burden borne disproportionately by minorities and the poor (Pew Center on the States, 2008). Our prisons are overcrowded with nonviolent offenders charged with drug-related offenses and our budgets are buckling under the weight of enormous correctional expenditures, yet, crime rates and drug-use initiation rates are barely budging or are merely shifting in character. Drug Courts have been credited with helping to "bend the curve" of incarceration downward, especially for racial minority citizens (Mauer, 2009). But Drug Courts still serve only a small fraction of the roughly 1.5 million adults arrested each year in the U.S. who are at risk for substance abuse or dependence (Bhati, Roman, & Chalfin, 2008). Drug Courts need to treat every American in need, and that requires them to optimize their ser-

vices, take advantage of economies of scale, and instill greater efficiencies in their operations. Best practice standards reflect the hard-won knowledge of the Drug Court field garnered from more than two decades of earnest labor and honest self-appraisal. As more and more Drug Courts come on line, it is essential they benefit from this institutional memory and avoid relearning the painful lessons of the past.

REFERENCES

Bhati, A.S., Roman, J.K., & Chalfin, A. (2008). *To treat or not to treat: Evidence on the prospects of expanding treatment to drug-involved offenders.* Washington, DC: The Urban Institute.

Mauer, M. (2009, April). *The changing racial dynamics of the War on Drugs.* Washington, DC: The Sentencing Project.

Pew Center on the States. (2008). *One in 100: Behind Bars in America 2008*. Washington, DC: Author.

INVITED SUBMISSION

WHAT WORKS? THE TEN KEY COMPONENTS OF DRUG COURT: RESEARCH-BASED BEST PRACTICES

Shannon M. Carey — Juliette R. Mackin
Michael W. Finigan

[1] Best Practices in Drug Courts—*Studies of 69 Drug Courts revealed significantly better outcomes for programs that followed the Ten Key Components.*

[2] Characteristics of Effective Drug Courts—*The most effective and cost-effective Drug Courts worked collaboratively as a team, provided structure and accountability, offered wraparound services, trained team members, and monitored performance and outcomes.*

[3] Characteristics of Cost-Effective Drug Courts—*Investments in treatment and supervision services, staff training, program evaluation, and management information systems were recouped by greater improvements in outcome costs to the taxpayer.*

DRUG COURT PROGRAMS VARY tremendously in how they operationalize the Ten Key Components (NADCP, 1997). Although research clearly shows that adult Drug Courts can significantly improve treatment outcomes and reduce recidivism, outcomes vary considerably across participants and programs (e.g., Lowencamp, Holsinger, & Latessa, 2005; Mackin et al, 2009; Carey & Waller, 2011). Thus, we must not only examine the effectiveness of the nation's Drug Courts, but get inside the "black box" to determine which practices lead to better participant and program outcomes such as reduced criminal recidivism and lower costs (i.e., greater savings).

For this study, we determined Drug Court practices related to lower recidivism and lower costs in sixty-nine Drug Courts nationally. The

analysis builds on a previous study of eighteen Drug Courts in four states and one U.S. territory (Carey, Finigan, & Pukstas, 2008).

RESEARCH ON DRUG COURT EFFECTIVENESS

Drug Courts use the coercive authority of the criminal justice system to provide treatment to addicts in lieu of incarceration. This model of linking the resources of the criminal justice system and substance treatment programs has proven effective for increasing treatment participation, decreasing criminal recidivism, and reducing use of the health care system (Carey & Finigan, 2004; Gottfredson, Najaka, & Kearley, 2003; Finigan, 1998).

In a 2001 review for the National Drug Court Institute, Belenko summarized Drug Court research, both published and unpublished, conducted between 1999 and 2001. Conclusions from his review indicated that Drug Courts were relatively successful in reducing drug use and criminal activity while participants were in the program. Program completion rates nationally were (and remain) around 47 percent. Belenko (1998, 2001) noted that the research on long-term outcomes was less definitive. In his report, he called for more research into the services that Drug Court participants receive while in the program as well as the long-term impact of Drug Courts. A myriad of research on Drug Courts has answered his call since this important review.

A 2005 review by the Government Accountability Office (GAO), looking at six New York State Drug Court programs found a significant reduction in crime in five of those programs. New arrests leading to a conviction one year postprogram decreased by 6–13 percentage points.

Adding to this evidence, a 2006 meta-analysis of sixty Drug Court outcome evaluations showed that postadjudication Drug Courts reduced recidivism by an average of 10%, and preadjudication courts averaged a 13% reduction (Shaffer, 2006).

Another study found twenty-four Oregon Drug Court programs reduced recidivism (measured as number of rearrests) on average by 44% (Carey & Waller, 2011). Finally, the National Institute of Jus-

tice's (NIJ's) Multisite Adult Drug Court Evaluation (MADCE) of twenty-three Drug Courts found an average reduction in recidivism of 16% (Rempel & Zweig, 2011).

Research has also shown that Drug Court programs are cost beneficial in local criminal justice systems with cost-benefit ratios ranging $3–$27 for every one dollar invested in the program (Carey & Finigan, 2004; Carey, Finigan, et al., 2006; Carey & Waller, 2011; Crumpton et al., 2004; Fomby & Rangaprasad, 2002; Marchand, Waller, & Carey, 2006a and 2006b). More limited research has shown that Drug Courts also fiscally benefit other publicly supported services, such as child welfare, physical health care, mental health care, and employment security (Finigan, 1998; Crumpton, Worcel, & Finigan, 2003; Carey, Sanders, et al., 2010a and 2010b). Studies show some Drug Courts cost less to operate than standard court processing of offenders (Carey & Finigan, 2004; Carey, Finigan, et al., 2006). The overall findings continue to show that Drug Courts are effective in many areas. The question as to *why* has fueled another body of research on Drug Courts.

Since Belenko's report, more Drug Court research has focused on identifying the characteristics of an effective Drug Court program and profiling the ideal participant. To this end, Marlowe and colleagues found that high-risk participants graduated at higher rates, provided more drug-negative urine specimens at six months after program admission, and reported significantly less drug use and alcohol intoxication at six months when they were matched to hearings held every other week as compared with the usual less frequent schedule (Marlowe et al., 2007). Many Drug Courts are working toward identifying and enrolling high-risk/high-need offenders into their programs as their target population.

In research on characteristics of an effective program (defined as a program that significantly reduced recidivism), Shaffer (2006) found that a program length between eight and sixteen months provided the best recidivism outcomes. Programs that lasted less than eight or more than sixteen months were significantly less effective. Also, program requirements such as restitution and education were associated with program effectiveness. Finally, Drug Courts that had

internal treatment providers were more effective than Drug Courts that had external treatment providers. Shaffer suggests this may be because of the direct control a Drug Court would enjoy with an internal provider. NIJ's MADCE study indicated drug testing, judicial supervision, and the threat of jail or prison upon termination were important contributing factors as to why Drug Courts work (Rempel & Zweig, 2011). Many of Shaffer's and the MADCE findings are supported by the promising practices research described below (Carey, Finigan, & Pukstas, 2008) and by the research presented in this paper.

PROMISING PRACTICES RELATED TO POSITIVE OUTCOMES IN DRUG COURTS

Results from previous Drug Court research in eighteen Drug Courts in four states and one U.S. territory (Carey, Finigan, & Pukstas, 2008) as well as other research in California (Carey, Pukstas, et al., 2008; Carey, Waller, & Weller, 2010; Carey, Finigan, et al., 2006) and Oregon (Carey & Waller, 2011; Finigan, Carey, and Cox, 2007) have shown several promising practices within the framework of the Ten Key Components. Carey and colleagues collected data on over 200 practices engaged in by twenty-five California Drug Courts and twenty-four Oregon Drug Courts. In all three of these studies, analyses were run to determine which practices related to higher graduation rates, lower recidivism, and greater cost savings. The studies found the following themes related to the best outcomes:

- *Team Engagement*—All team members (judge, attorneys, coordinator, probation, treatment, law enforcement) should attend case staffings and court sessions.
- *Wraparound Services*—Participants need additional support services such as anger management, educational assistance, and relapse prevention.
- *Drug Testing*—Programs should drug test two to three times per week, obtain test results back within forty-eight hours, and require participants to have no positive drug tests for at least ninety days before graduation.

- *Responses to Participant Behavior (Incentives and Sanctions)*—Team members should receive written rules or guidelines regarding sanctions and incentives and require participants to pay program fees and complete community service in order to graduate.
- *Drug Court Hearings and the Judge's Role*—Participants should be required to attend Drug Court hearings once every two weeks and the judge should spend at least three minutes per participants on average at court hearings.
- *Data Collection and Monitoring*—Data should be maintained electronically and programs should participate in evaluation and use program statistics to make program improvements.
- *Training*—Staff should participate in training prior to program implementation, judges should receive formal training, and all team members should be trained as soon as possible.

Volumes of research has been conducted on Drug Courts during the over twenty years of their existence. One can find journal articles written on almost any aspect of Drug Courts, from racial differences in Drug Court graduation rates (McKean & Warren-Gordon, 2011) to the effect of faith on program success (Duvall et al., 2008). Moreover, Drug Court best practices continue to be identified and taught at national Drug Court training conferences. Using a larger sample, this article further supports this previous research by confirming, updating, and adding to the research findings about specific Drug Court practices that relate to significantly better outcomes.

METHODS

Between 2000 and 2010, NPC Research conducted over 125 evaluations of adult Drug Court program operations. For this study, we selected sixty-nine of these evaluations because they used consistent methods for collecting detailed process information, included recidivism and cost analyses using the same methodology, and had sufficient sample sizes (total $n \geq 100$) for valid analysis. All process evaluations were designed to assess how and to what extent the Drug Court programs had implemented the Ten Key Components. The Drug Courts represented diverse geographic areas in Oregon, California, Indiana, Maryland, Michigan, Vermont, and Guam. In total, this

study included 32,719 individuals (16,317 Drug Court participants and 16,402 comparison group members).[1]

Participation by the Drug Court programs in these evaluations was voluntary. These courts either directly contracted with NPC Research for evaluation services as part of their own quality improvement initiatives or collaborated with NPC Research as part of larger state or federal grant initiatives.

Data Collection

The data used in these analyses were collected as a part of process, outcome, and cost evaluations performed by NPC Research between 2000 and 2010. A brief description of the process, outcome, and cost data collection methodology is summarized below.[2]

Process Data Collection

For the process evaluations, the team relied on a multi-method approach. This strategy included a combination of site visit observations, key informant interviews, focus groups, and document reviews. This broad approach allowed the team greater access to descriptive program data than would have been available using any single method. A standard methodology was applied at each site to provide comparable data.

Key informant interviews were conducted with the Drug Court coordinator, judge, prosecutor, defense attorney, treatment providers, and probation and law enforcement representatives. Frequently, representatives from other involved agencies were also interviewed. NPC Research developed a standardized Drug Court typology interview guide and online survey to provide a consistent method for collecting structure and process information. The topics for the survey and typology interview guide were based on the Ten Key Components

[1] See http://www.npcresearch.com/Files/Appendix_A_Adult_drug_courts_participating_in_this_research.pdf for the programs included in this analysis.

[2] Detailed descriptions of the methodology and data collection performed for each Drug Court's full evaluation can be found in the program site-specific reports at www.npcresearch.com.

(NADCP, 1997) and were chosen from three main sources: the evaluation team's extensive Drug Court experience, the American University Drug Court Survey, and a published paper by Longshore and colleagues (2001) describing a conceptual framework for Drug Courts. The survey and typology interview guide covered many areas including specific Drug Court characteristics, structure, processes, and organization.

Outcome Data Collection

For the Drug Court participant sample, NPC Research identified individuals at each Drug Court who enrolled in the programs over a specified time period (at least a 2-year period). These individuals were selected using a Drug Court database or paper files listing Drug Court participants. To create a comparison group, NPC Research identified similarly situated individuals who were eligible for Drug Court but did not participate and received traditional court processing. Both groups were examined through existing administrative databases for a period of at least two years following entry. When databases were not available, data were gathered from paper files maintained by the program and other agencies involved with the offender population. The evaluation team utilized county and statewide data sources on criminal activity and treatment utilization to determine how Drug Court participants and the individuals from comparison groups differed in court processing and subsequent recidivism-related events (e.g., rearrests, new court cases, new probation, and incarceration).

Cost Data Collection

NPC Research performed the cost studies in these Drug Court programs using an approach called transaction and institutional cost analysis (TICA) (Crumpton, Carey, & Finigan, 2004). The TICA approach views an individual's interaction with publicly funded agencies as a set of transactions in which the individual utilizes resources contributed from multiple agencies. Transactions are those points within a system where resources are consumed or change hands. In the case of Drug Courts, when a Drug Court participant appears in court or has a drug test, resources such as judge time, public defender

time, court facilities, and urine cups are used. Court appearances and drug tests are transactions. In addition, the TICA approach recognizes that these transactions take place within multiple organizations and institutions that work together to create the program. These organizations and institutions contribute to the cost of each transaction with program participants. TICA is a practical approach to conducting cost assessment in an environment such as a Drug Court, which involves complex interactions among multiple taxpayer-funded organizations.

In order to maximize the study's benefit to policymakers, a cost-to-taxpayer approach was used in these evaluations. This focus helps define which cost data should be collected (costs and avoided costs involving public funds) and which cost data are omitted from the analyses (e.g., costs to the individual participating in the program). In this approach, any criminal-justice-related cost incurred by the Drug Court or comparison group participant that directly impacts a citizen (either through tax-related expenditures or the results of being a victim of a crime perpetrated by a substance abuser) is used in the calculations.

Process Data Analysis

Analysis of Drug Court Practices

Statistical frequencies were performed across all sixty-nine Drug Court programs on each of over 200 adult Drug Court practices to determine the number of programs that implemented each practice. The frequencies provided us with the amount of variation that existed across programs in implementing any particular practice. The practices were categorized by component for each of the Ten Key Components (based on earlier work by Carey, Finigan, & Pukstas, 2008).

Some Drug Court practices did not vary greatly across these sixty-nine Drug Courts. If all Drug Courts performed the same practice, it was not possible to determine whether courts that performed a given practice had better outcomes than courts that did not. If a practice was not included in the results as a practice related to positive outcomes, this does not necessarily mean that the practice is not important; alternatively, it might not have been measurable with these

data. Practices that were common in over 90% of the programs are reported on the NPC Research Web site.[3]

Analysis of Practice in Relation to Recidivism and Costs

The analyses presented in this paper include only evaluations that had recidivism and cost outcomes (a total of sixty-nine programs). The quantitative analysis assessed court-level characteristics (practices performed or services provided by the program) and court-level outcomes, specifically, average reduction in number of rearrests and average increase in cost savings for each Drug Court. Costs, in particular, can vary across jurisdictions based on many factors that are not related to the Drug Court program, including cost of living in the area and the availability of different resources. For this reason, the *percent difference* (effect size) between the Drug Court participant sample and the comparison sample was used as a method for equilibrating the results across sites.

This study defines *recidivism* as the average number of rearrests over two years from program entry. *Reduction in recidivism* is defined as the percent decrease in average number of rearrests for the Drug Court participants when compared with the comparison group.

Outcome costs are defined as costs incurred because of criminal recidivism for both the Drug Court participants and comparison group members in the two years after Drug Court entry (or an equivalent date for the comparison group). Recidivism-related costs include rearrests, new court cases, probation and parole time served, and incarceration in jail and prison. For this study, reductions in outcome costs (or increases in cost savings) were calculated as the percent difference in outcome costs between the Drug Court group and the comparison group. The higher the percentage, the bigger the cost savings for Drug Court participants over the comparison group.

For the analyses of Drug Court practices in relation to outcomes, we coded the vast majority of the data on program practices as *yes* or *no* questions, either *yes,* the program performed that practice, or *no,*

[3] See Appendix B at http://www.npcresearch.com/Files/Appendix_B_Practices_performed_in_90_percent_or_more_of_the_programs_in_this_analysis.pdf.

the program did not perform that practice. For example, the practice "a representative from treatment regularly attends Drug Court sessions" was coded as *yes* if the treatment representative regularly attended court or *no* if the treatment representative did not. In a few cases, we used continuous data (such as the number of days between arrest and program entry). We analyzed program recidivism and cost outcomes for those practices where the data revealed sufficient variation across sites.

To be considered a *best practice* for this article, data on a Drug Court practice had to be available in at least forty programs ($n \geq 40$), with at least ten programs in each yes or no category. That is, at least ten programs engaged in that practice *and* at least ten programs did not engage in that practice. However, in three cases where differences were substantial and significant, we included a practice where we had data for only thirty-five programs. In addition to best practices, we also included *promising practices*, where $n \geq 20$ and at least five programs represented each *yes/no* category.

We considered analyzing the practice and outcome data using a mixed model approach that used a nested design with *Drug Court program* as a grouping variable and outcome data at the client level (number of rearrests and two-year outcome costs per individual); however, we determined this would not best support the purpose of this analysis of best practices, which was to determine what program practices are related to program-level outcomes rather than individual outcomes (e.g., average reductions in recidivism, not whether or not a particular individual was rearrested or experienced a specific program practice). Therefore, these data could best be applied to program level analyses such as t-tests. The use of control variables was also considered (such as program population characteristics—ethnicity, gender, or drug of choice; rural vs. urban; program capacity; number of case managers or treatment providers; etc.). However, the sample size (n = 69) was not large enough to control for the numerous potential variables. Further, determining which variables to include as controls for each separate program practice on a theoretical basis when analyzing over 200 program practices was too complicated to be feasible and would not provide helpful or meaningful results.

We ran t-tests to compare the reduction in recidivism and the improvement in cost savings between courts that answered *yes* and courts that answered *no* for each practice. In cases where the data for a practice were continuous variables (such as number of treatment agencies that worked with the program), we used regression analyses to determine overall significance and examined the data for clear cut points. We then ran t-tests using these cut points. Results were considered statistically significant at $p < .05$ and considered "trends" up to $p < 0.15$.

Drug Court Population and Program Characteristics

Of the sixty-nine programs with recidivism data, 69% were post-plea only, 96% took offenders with felony charges, and 51% took offenders with either misdemeanor or felony charges.

The Drug Court programs included in this analysis ranged from a capacity of 20 active participants to over 400. The participant population for these programs varied in racial/ethnic composition within each Drug Court from 100% Latino to 99% White to 96% African–American. Participant gender ranged from 13% female in some Drug Courts to 55% female in others. Drugs of choice also varied widely, with some courts being made up entirely of methamphetamine users (100%), some consisting of mostly heroin users (80%), while others had a majority of marijuana users (78%). The average length of stay in these Drug Courts ranged from five months to twenty-nine months. The average graduation rate was 46%. A table that provides a description of the range in program and participant characteristics across the study sites can be found on the NPC Research Web site.[4]

Recidivism rates and costs also varied widely between sites based on factors that had little to do with the program itself, such as the availability of the police to make arrests (e.g., fewer police may result in fewer arrests) and the cost of living in the area. For this reason, we equilibrated the recidivism and cost outcomes across programs by

[4] See http://www.npcresearch.com/Files/Characteristics_of_program_and_participant_population_in_69_drug_courts.pdf.

creating a percent difference between the Drug Court group and its comparison group for each outcome to establish the effect size. The effect size for the recidivism rate consisted of the difference in the number of rearrests between the Drug Court participants and comparison group divided by the number of rearrests for the comparison group. The percent increase in cost savings was calculated by subtracting the recidivism-related costs for the Drug Court from the recidivism costs for the comparison group, then dividing by the comparison group recidivism costs.

The average reduction in recidivism across these sixty-nine programs was 32%, and the average increase in cost savings was 27%. Just over 9% of the sixty-nine Drug Court programs had significantly greater participant recidivism than their comparison group, and 3% had outcomes that cost significantly more money than the comparison group. An additional 10% showed no significant difference in recidivism between the Drug Court and comparison group, and 23% showed no significant difference in costs. Just over 81% of the programs had significant reductions in recidivism of 10% or greater (up to 100% reductions), and 74% had significant cost savings of 16% or higher (up to 95% savings in costs).

Limitations of the Analyses

One limitation of these analyses is that some Drug Courts may have comparatively high-risk populations, for example, populations that have higher rates of mental illness, more severe addictions, low educational levels, and few economic opportunities. Drug Courts with proportionately more participants in this situation are more likely to have fewer positive outcomes, despite the fact that such Drug Courts might be implementing best practices. The data on risk level of the participants in these Drug Courts were not available to determine how this factor might have impacted outcomes.

Secondly, and related to the first limitation, is that the analyses performed were univariate correlations and there was no experimental control over what services or policies were provided by the programs in this study. Therefore, we cannot confidently attribute causality. That is, we cannot say with certainty that a particular practice caused

a particular reduction in recidivism or increase in cost savings. The more effective programs might have differed on variables that had nothing to do with their outcomes.

These analyses of best practices did not control for program population characteristics or some context characteristics (such as rural vs. urban programs). However, because of the vast flexibility and variation in the Drug Court model, many types of programs and populations were represented in this sample and, therefore, these findings should hold for many Drug Court programs.

RESULTS

The findings from these analyses are extensive. We found over fifty practices with significant correlations with recidivism or cost or both and some practices which were of interest because they were not significantly related to outcomes. The presentation of the results is therefore broken down into sections. The first section provides the full list of practices that met the criteria for best practices. This section also includes lists of the top ten practices by effect size for reduced recidivism and the top ten practices related to cost savings. The second section describes the promising practices that were significantly related to reductions in recidivism or to cost savings. The third section describes practices that are interesting because they were not significantly related to either outcome. Finally, the last section provides a discussion of the overarching themes among these practices.

Best Practices

Table 1 lists the best practices along with the overall effect sizes and level of significance for reductions in recidivism and for cost savings. These effect sizes show how large the reductions in recidivism and the increases in cost savings are for Drug Courts that perform a specific practice compared with the Drug Courts that do not. For example, courts where law enforcement is a member of the Drug Court team had 87% greater reductions in recidivism than courts that did not have law enforcement on the team. The figure 87% is the effect size. Although the Drug Courts that do not include law enforcement on the

team still reduced recidivism, the Drug Courts that do include law enforcement reduced recidivism 87% more. Table 1 also has the practices organized within each of the Ten Key Components (NADCP, 1997) following the convention established by these authors in an earlier study (Carey, Finigan, & Pukstas, 2008).[5]

TABLE 1	DRUG COURT BEST PRACTICES RELATED TO REDUCED RECIDIVISM AND HIGHER COST SAVINGS (BY KEY COMPONENT)		
KC[1]	**Practice**	**Reduction in Recidivism**	**Increase in Cost Savings**
1	Law enforcement is a member of the Drug Court team	0.87*	0.44†
1	Judge, both attorneys, treatment, program coordinator, and probation attend staffings	0.50*	0.20
1	The defense attorney attends Drug Court team meetings (staffings)	0.21	0.93*
1	A representative from treatment attends Drug Court team meetings (staffings)	1.05†	0.00
1	Coordinator attends Drug Court team meetings (staffings)	0.58†	0.41
1	Law enforcement attends Drug Court team meetings (staffings)	0.67*	0.42~
1	Judge, attorneys, treatment, probation, and coordinator attend court sessions (status review hearings)	0.35†	0.36~
1	A representative from treatment attends court sessions (status review hearings)	1.00†	0.81†

[5] NPC Research provides a table of these best practices with greater detail including the specific recidivism reductions and relative cost savings in programs that did and did not perform each practice as well the sample size for each category. See Appendix C at http://www.npcresearch.com/Files/Appendix_C_Best_practices_comparing_yes_to_no_with_N_sizes.pdf.

TABLE 1	DRUG COURT BEST PRACTICES RELATED TO REDUCED RECIDIVISM AND HIGHER COST SAVINGS (BY KEY COMPONENT)		
KC[1]	Practice	Reduction in Recidivism	Increase in Cost Savings
1	Law enforcement attends court sessions (status review hearings)	0.83*	0.64*
1	Treatment communicates with court via e-mail	1.19*	0.39
2	Drug Court allows nondrug charges	0.95*	0.30
3	The Drug Court excludes offenders with serious mental health issues	0.16	–0.43*
3	The time between arrest and program entry is 50 days or less	0.63*	–0.19
3	Program caseload (number of individuals actually participating at any one time) is less than 125	5.67*	0.35
4	The Drug Court works with two or fewer treatment agencies	0.74*	0.19
4	The Drug Court has guidelines on the frequency of individual treatment sessions that a participant must receive	0.52*	–0.19
4	The Drug Court offers gender-specific services	0.20†	–0.10
4	The Drug Court offers mental health treatment	0.80†	0.12
4	The Drug Court offers parenting classes	0.65*	0.52˜
4	The Drug Court offers family/domestic relations counseling	0.65†	–0.12
4	The Drug Court offers anger management classes	0.48	0.43˜

TABLE 1	DRUG COURT BEST PRACTICES RELATED TO REDUCED RECIDIVISM AND HIGHER COST SAVINGS (BY KEY COMPONENT)		
KC[1]	Practice	Reduction in Recidivism	Increase in Cost Savings
4	The minimum length of the Drug Court program is 12 months or more	0.57*	0.39
5	Drug test results are back in two days or less	0.73*	0.68*
5	In the first phase of Drug Court, drug tests are collected at least two times per week	0.38	0.61˜
5	Participants are expected to have greater than 90 days clean (negative drug tests) before graduation	1.64˜	0.50†
6	Only the judge can give sanctions to participants	0.31˜	0.04
6	Sanctions are imposed immediately after noncompliant behavior (e.g., Drug Court will impose sanctions in advance of a participant's regularly scheduled court hearing)	0.32	1.00*
6	Team members are given a copy of the guidelines for sanctions	0.55†	0.72˜
6	In order to graduate participants must have a job or be in school	0.24	0.83*
6	In order to graduate participants must have a sober housing environment	0.14	0.48˜
6	To graduate participants must have paid all court-ordered fines and fees (e.g., fines, restitution)	0.48˜	0.30
7	Participants have status review sessions every two weeks in first phase	0.48†	–0.23

TABLE 1	DRUG COURT BEST PRACTICES RELATED TO REDUCED RECIDIVISM AND HIGHER COST SAVINGS (BY KEY COMPONENT)		
KC[1]	**Practice**	**Reduction in Recidivism**	**Increase in Cost Savings**
7	Judge spends an average of 3 minutes or greater per participant during status review hearings	1.53*	0.36
7	The judge was assigned to Drug Court on a voluntary basis	0.84˜	0.04
7	The judge's term is indefinite	0.35*	0.17
8	The results of program evaluations have led to modifications in Drug Court operations	0.85†	1.00*
8	Review of the data and/or regular reporting of program statistics has led to modifications in Drug Court operations	1.05*	1.31*
9	All new hires to the Drug Court complete a formal training or orientation	0.54†	0.07

NOTE: Practices that are significantly related to reductions in recidivism are not always significantly related to cost savings and vice versa. This finding is most likely because the two outcomes are indicators of different factors. The recidivism outcome essentially reflects the number of times participants engaged the criminal justice system (i.e., the number of rearrests). The cost outcome often reflects the seriousness of the crimes associated with those rearrests. More serious charges often result in more extensive sentences—more time incarcerated and on probation or parole—and a greater number of new court cases, all of which are related to higher costs.

[1]Key Component; ˜Trend ($p<.15$); †$p < 0.1$; *$p < .05$

Top Ten Practices for Reducing Recidivism

Following are the top ten practices related to reducing recidivism from Table 1 ranked by effect size, starting with the largest.

1. Drug Courts with a program caseload (number of active participants) of less than 125 had more than five times greater reductions in recidivism than programs with more participants.

Figure 1 demonstrates how the reductions in recidivism decrease as programs get larger. Likely, as the Drug Court gets larger, the caseloads per case manager and treatment provider also get larger. The larger programs may be tempted to decrease the level of supervision or otherwise "water down" the Drug Court intervention. In addition, the role of the judge has been demonstrated to be a key factor in participant success. All of the Drug Courts in this study were single-judge programs and therefore the larger programs had a single judge seeing up to 400 active participants. Judges report difficulty in getting to know participants to the extent that they need to when they see over 100 participants. Although the reason for this result is not clear from the available data, this finding had the largest effect size by far of any finding in this study. Part of the reason for this extremely large effect size is that programs with populations of greater than 125 participants had a very small reduction in recidivism (an average of 6%) compared with programs with 125 or fewer, which had an average of 40% reduction in recidivism. Clearly the smaller programs did substantially better. We do not believe that, based on this result, larger

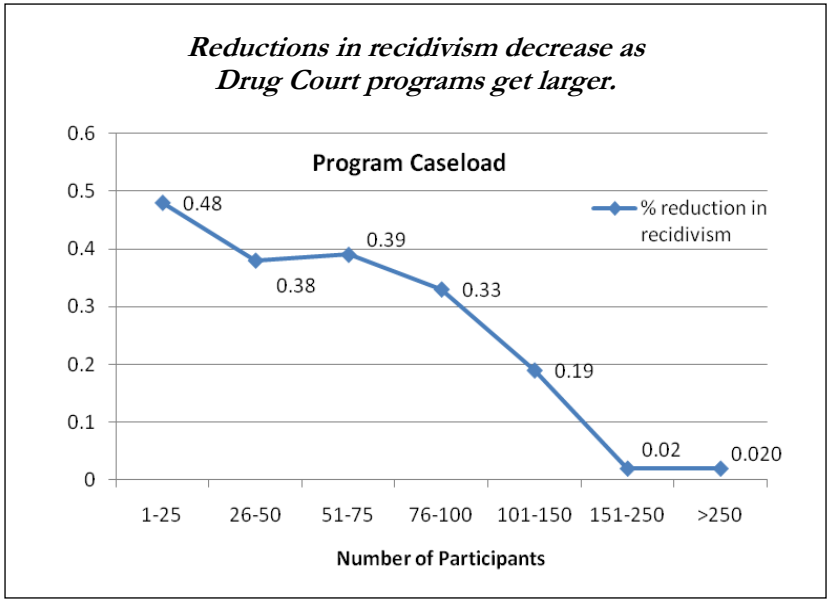

Figure 1. Participant Caseload Compared with Reductions in Recidivism

programs must become smaller. More research is needed to fully understand what is driving this result. In the meantime, larger programs should be examining their practices to ensure that they are maintaining fidelity to the Drug Court model and to best practices.

2. Drug Courts where participants were expected to have greater than 90 days clean (negative drug tests) before graduation had 164% greater reductions in recidivism compared with programs that expected less clean time.

Graduation requirements have been an important issue, and a contentious one, for some Drug Courts. This finding is consistent with the literature, which shows that the longer individuals remain abstinent from drugs and alcohol, the more likely they will continue to remain abstinent in the future (e.g., Kelly & White, 2011).

3. Drug Courts where the judge spent an average of three minutes or greater per participant during court hearings had 153% greater reductions in recidivism compared with programs where the judge spent less time.

Three minutes does not seem like much time. Yet one of the crucial aspects of the Drug Court model is the influence of the judge, which requires significant and meaningful interaction with the participant. Our data show a linear effect on positive outcomes when more judge time is spent with the participant (see Figure 2). Moving from under three minutes to just over three minutes effectively doubles the reduction in recidivism, while spending seven minutes or more effectively triples the positive outcome.

4. Drug Courts where treatment providers communicated with the court or team via e-mail had 119% greater reductions in recidivism.

Good communication is important for any successful team effort, and this is particularly true of Drug Court. For a Drug Court to provide immediate sanctions and rewards, communication about participant activities must be quick and accurate. Using e-mail as a primary communication method allows swift communication simultaneously with all team members, making this an effective format.

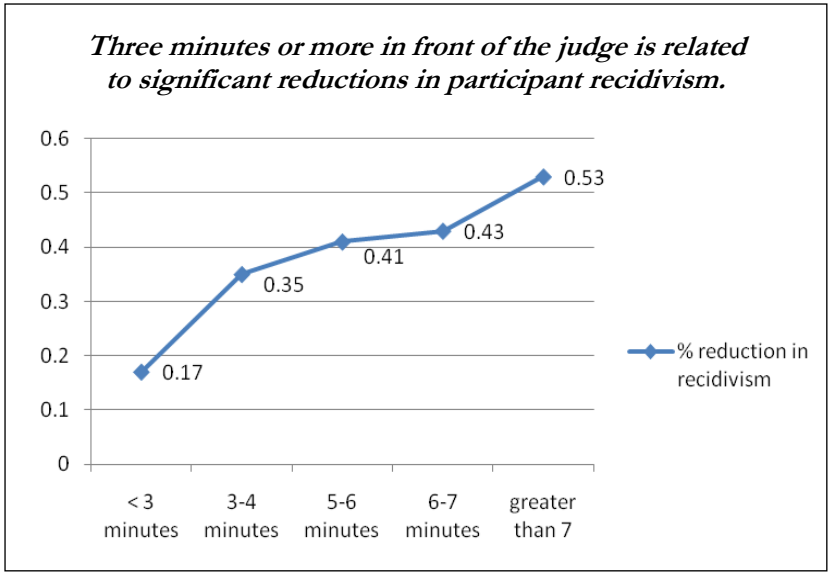

Figure 2. Number of Minutes before the Judge Compared with Reductions in Recidivism

5. Drug Courts where a representative from treatment attended Drug Court team meetings (staffings) had 105% greater reductions in recidivism.

Most of our sites (n = 50) required treatment providers to attend the case staffing because this is highly relevant to their role and is a crucial place for their feedback, but a large minority (11) did not. While they may have had feedback about participants delivered to the staffing, they did not send a representative to be part of the team. These data suggest that this is not as good a practice.

6. Drug Courts where internal review of the data and program statistics led to modifications in program operations had 105% greater reductions in recidivism.

Parallel to the practice of having independent evaluation of the Drug Court program (point ten on this top ten list) is the internal collecting, tracking, and use of data to improve program practice. The key elements to this best practice are twofold:

- The program uses an electronic data collection and management system that allows staff to provide the Drug Court with relevant statistics on program performance and operations, which the team can use to garner insights into its performance, guide improvements, and reveal areas where training is needed.
- The Drug Court *uses* the data as a basis for practical program change and continues to use it to monitor progress.

7. Drug Courts where a treatment representative attended court hearings had 100% greater reductions in recidivism than programs where treatment did not attend.

Most of the programs in this study required treatment providers to attend the case staffing because this is highly relevant to their role and is a crucial place for their feedback. However, the role of treatment seems less obvious when it comes to status hearings. Status hearings for Drug Court generally involve sanctions and rewards for activities related to treatment. Having treatment providers attend status hearings demonstrates to participants that the team works together to make decisions about their care and demonstrates in court that the program is intended to be therapeutic. This also makes it more difficult for participants to tell different stories to treatment and the Drug Court, thus "playing off" treatment providers and the rest of the team against each other.

8. Drug Courts that allowed nondrug charges (e.g., theft or forgery) had 95% greater reductions in recidivism than Drug Courts that accepted only drug charges.

This practice has been a source of controversy among Drug Courts. Early in the Drug Court movement, common belief held that the Drug Court was primarily geared to offenders with drug possession charges. This idea ignored the important role of drug addiction and abuse in many other crimes such as burglary or robbery. Increasingly, prosecutors and other referral sources to Drug Court began to feel that offenders with nondrug charges would also benefit from Drug Court. These data support that conclusion. This finding illustrates the greater impact Drug Court can have on public safety when participants with more serious offenses (including higher-risk participants) are given the benefit of intense supervision and treatment.

9. Drug Courts that had a law enforcement representative on the Drug Court team had 88% greater reductions in recidivism than programs that did not.

Programs that include a law enforcement representative on the team describe that role as crucial for two main reasons:

- Law enforcement often has more frequent contact than Drug Court personnel with Drug Court participants on the street and in home settings and therefore provides good insight into what is happening to participants in their lives outside of court and treatment.
- Including law enforcement creates a two-way process where law enforcement representatives not only contribute an important perspective to the Drug Court, but also return information to law enforcement organizations, which promotes a better understanding of the value of Drug Court.

10. Drug Courts that had evaluations conducted by independent evaluators and used them to make modifications in Drug Court operations had 85% greater reductions in recidivism than programs that did not use these results.

Evaluations by independent research teams are sometimes viewed by sites as an inconvenience required by a funder. Partly this perception may result from using evaluators who do not understand Drug Courts and do not address questions that might lead to program improvement. However, part of this perception may also reflect the discomfort or lack of familiarity of some Drug Court staff with the use of numbers or statistics. Whatever the reason, using evaluation feedback to modify program practices appears to be worth the effort.

The key elements to this best practice are twofold:

- The program has an evaluation by an independent research team that provides insights into its program performance, guidance on potential improvements, and training in ongoing data collection to monitor improvements.
- The Drug Court *uses* the independent evaluation as a basis for practical program change.

Top Ten Practices for Cost Savings

Many of the top ten practices for reducing recidivism are the same ones that also contribute to saving costs. Following are the top ten practices related to increased cost savings from Table 1 ranked by effect sizes, starting with the largest.

1. Drug Courts where internal review of the data and program statistics led to modifications in program operations had 131% higher cost savings.

Using data from program management information systems (MIS) to track progress and make program modifications correlates strongly with cost savings. Regularly monitoring data further provides feedback that the team can use to make necessary adjustments to meet goals in a timely and regular manner. This finding appears in both of the top ten practices lists.

2. Drug Courts that had evaluations conducted by independent evaluators and used them to make modifications in Drug Court operations had 100% greater cost savings.

Having a good, useful independent evaluation is important to this best practice. As with the preceding practice, this practice depends on the program's willingness to make changes based on data and to continue to use data to monitor progress. This finding appears in both of the top ten practices lists.

3. Drug Courts where sanctions were imposed immediately after noncompliant behavior had 100% greater cost savings.

The value of having sanctions imposed immediately after noncompliant behavior is a central tenet of behavior modification. It also appears to increase positive outcomes and cost savings in Drug Courts. *Immediately* is defined as bringing a participant in to the next available court hearing if they are not already scheduled for it, or administering the sanction before the next court hearing. Study results also showed that when programs wait until the scheduled court appearance for noncompliant participants instead of bringing them in earlier, participant outcomes do not improve. If teams wait too long (two weeks or more) before applying a sanction, the participants may

have other issues that are more relevant by then, or they may even have worked to improve their behavior by then, in which case they are receiving a sanction at the same time as they are doing well, providing them with a message that is unclear and may even be defeating.

4. Drug Courts where the defense attorney attended Drug Court team meetings (staffings) had 93% greater cost savings.

The value of having a defense attorney present at staffing is twofold: first, it helps protect the rights of the Drug Court participant, and second, it appears to increase positive outcomes and cost savings. The goal of problem-solving courts is to change behavior by leveraging compliance with treatment while protecting both participant rights and public safety. Drug Court participants are seen more frequently, supervised more closely, and monitored more stringently than other offenders. Thus, they often have violations of program rules and probation. Counsel must be there to rapidly address the legal issues, settle the violations, and move the case back into treatment and program case plans.

5. Drug Courts where participants must have a job or be in school in order to graduate had 83% greater cost savings.

Both having a job and being in school have a clear and logical connection to costs after the participant leaves the program. If the participant is engaged in positive activities that lead to higher (and legal) income, they are less likely to engage in drug use or other criminal activities.

6. Drug Courts where a treatment representative attended court sessions had 81% greater cost savings.

Having a treatment representative at Drug Court sessions related to significant cost savings, illustrating the importance of treatment providers as team members. This finding appears in both of the top ten practices lists.

7. Drug Courts where team members are given a copy of the guidelines for sanctions had 72% greater cost savings.

Interestingly, the results also showed that providing *participants* with written guidelines was not related to recidivism or cost outcomes. Therefore, it appears that guidelines may be more crucial for the *team* in determining its responses to participant behavior. Written guidelines can provide a range of potential team responses to participants' behaviors, including treatment responses, sanctions, and incentives rather than a one-to-one response for each behavior. This range of potential responses serves to remind team members of the variety of incentives and sanctions available while also providing some consistency across participants. Programs without written guidelines have a tendency to use a smaller number of sanctions and limit themselves to the incentives that they are most familiar with.

8. Drug Courts where drug test results were available in 48 hours or less had 68% greater cost savings.

Receiving drug test results quickly allows the team to respond more quickly with swift and certain sanctions and incentives. One method that works well for many programs is to use instant-results tests for the majority of drug tests, only sending to a lab for confirmation if the participant continues to deny use after a positive instant result. If the confirmation test comes back positive, the participant pays for that test as a sanction for providing false information in addition to any sanction or treatment response for the drug use itself. If the confirmation is negative, then the program pays the testing fee.

9. Drug Courts where drug tests were collected at least two times per week in the first phase had 68% greater cost savings.

Drug testing is the one truly objective means Drug Courts have of assessing whether their services are successfully changing participant behavior. It plays a crucial role in participant success. In focus groups, participants regularly reported that the only thing that kept them from using at the beginning of the program (before they were truly engaged in recovery) was knowing they would be tested and caught. Drug testing at least twice per week makes it more difficult for participants to use between tests, particularly if the tests occur on a random schedule. Testing less frequently makes prediction easier so that participants can find times to use without detection.

10. Drug Courts where a law enforcement representative attended court sessions had 64% greater cost savings than courts where law enforcement did not.

A law enforcement team member provides a unique perspective on participants and can contribute information that is invaluable to the team and the participants.

Promising Practices

Promising practices are those that significantly related to recidivism and costs, but did not meet the more stringent criteria outlined for best practices. The practices listed in Table 2 show promise for providing adult Drug Court programs with a strong infrastructure that contributes to program and participant success.[6]

Offer Services to Address Participant Needs

Drug Court programs that provide participant supports appear to have better outcomes. Many program services that address participant needs, including gender-specific services, mental health treatment, parenting classes, family counseling, and anger management classes, help participants avoid rearrest and save the program money in the long run (see Table 1). Three practices related to program services were encouraging enough to include under promising practices: residential treatment, health care, and dental care.

Residential Treatment—Offering residential treatment often completes a continuum of treatment services for those participants with the most severe substance abuse issues and may translate into a 106% improvement in recidivism outcomes.

Health and Dental Care—Most Drug Court participants had lifestyles that negatively impacted their physical health and many did not have consistent access to health or dental care. For example, use of

[6] The NPC Research Web site provides a table of promising practices with greater detail including the specific number of Drug Courts in each category and the specific recidivism reductions and relative cost savings. See Appendix D at http://www.npcresearch.com/Files/Appendix_D_Promising_practices_comparing_yes_to_no_with_N_sizes.pdf.

TABLE 2	DRUG COURT PROMISING PRACTICES		
KC[1]	Practice	Reduction in Recidivism	Increase in Cost Savings
4	The Drug Court offers residential treatment	1.06†	0.26
4	The Drug Court offers health care	0.50~	0.46
4	The Drug Court offers dental care	0.59†	0.38
6	Participants are required to pay court fees	0.18	2.08*
6	The Drug Court reports that the typical length of jail sanction is longer than two weeks	–0.59*	–0.45~

NOTE: For promising practices, $n \geq 20$ with at least 5 in each category.
[1]Key Component; ~Trend ($p<.15$); †$p < 0.1$; *$p < .05$

some substances (e.g., methamphetamines) creates serious physical health and dental problems. Programs that offered dental care had 59% greater reductions in recidivism than programs that did not and programs that offered health care had 50% greater reductions in recidivism.

Although not statistically significant, offering any one of these three services also produced improvements in cost of 23–26 percent.

Require Participants to Pay Court Fees

Court fees are one way that Drug Court programs create an institutionalized, sustainable source of program funding. These fees must be proportional to a participant's ability to pay and should not create a barrier to success or a disincentive to participate in the program. This fee strategy enhances participant engagement, promotes the belief that the program is valuable, and allows participants to invest in their own change process. Programs that required court fees had 208% higher cost savings than programs that did not. Note that these cost savings do not reflect the costs of running the program, but specifically refer only to outcome costs, costs that occurred outside of the program and are related to recidivism events such as rearrests and time in jail.

Therefore, the cost savings are not achieved because the program had collected larger participant fees.

Consider Participant Sanctions Carefully

Two of the promising practices involve the use of sanctions in Drug Court programs, specifically the use of jail as a sanction and terminating program participation owing to rearrest for drug possession. Some view these sanctions as tougher on crime, yet the results of this study indicate that programs have better outcomes when they address noncompliance issues through other strategies.

Use Jail As a Sanction Sparingly—This study assessed the impact of using briefer compared with longer jail sanctions. Drug Courts that levied longer-term jail sanctions had worse outcomes than those using shorter-term jail sanctions (see Figure 3).

Programs that used sanctions of less than six days had average reductions in recidivism of 46% compared with 19% for programs that used longer-term jail sanctions. In addition, jail is an extremely expensive resource. Programs relying on jail sanctions longer than two weeks saw 45% less cost savings after program participation.

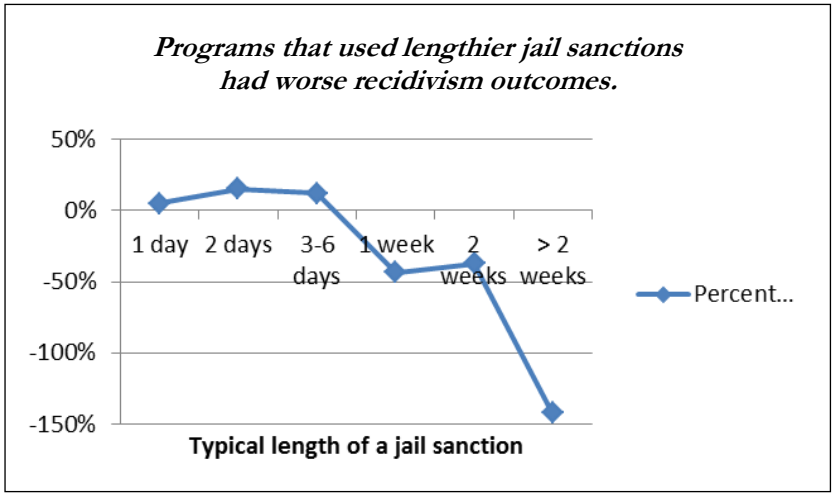

Figure 3. Duration of Jail Sanction Time Compared with Reduction in Recidivism

Retain Participants with New Possession Charges Rather Than Terminate Them—Although all programs must consider and establish policies and procedures for maintaining public safety and determining when participants are no longer appropriate for community-based interventions, a new arrest should not necessarily be grounds for automatic program termination. This study found that programs that terminated participants upon a new arrest for drug possession had lower recidivism reductions and lower cost savings than programs that did not terminate participants for a new drug charge. Programs that terminated participants for drug-possession arrests had 50% worse recidivism outcomes and 48% worse cost savings than programs that retained these participants in the program. These findings illustrate the importance of providing more services to this population of offenders, and that the continuity and persistence of Drug Court supervision and treatment pays off in the long run.

Train Staff in Preparation for Drug Court Program Implementation

Good management practices consistently demonstrate that employees need to understand their roles and tasks if they are to do their jobs effectively, and Drug Courts are no exception. As this article supports, Drug Court programs are collaborations with key elements that are important to implement to achieve desired outcomes. In this study, those programs that trained team members in preparation for program implementation averaged a 55% greater reduction in recidivism. Even more striking was the cost savings that resulted from training. Programs that invested in this practice had an average of 238% greater cost savings than programs that did not invest in training.

In sum, many of the promising practices described in this section involve activities or services that have resource implications programs might consider too expensive or time consuming, such as offering residential treatment or dental care or paying for staff training. However, this study provides evidence that these investments likely pay off in better long-term outcomes for both participants and the program as a whole. Smart use of system resources, such as limited

use of jail as a sanction and implementation of affordable participant fees, can also help make program investments feasible while at the same time improving outcomes.

Interesting Practices Not Significantly Related to Outcomes

Some practices are important by virtue of the fact that they were *not* significantly related to better or worse outcomes. Three main findings are particularly relevant to programs in determining their target population and their overall model. These findings relate to violence charges, mixing certain participant populations, and frequency of court appearances.

Drug Courts that allow participants with current violence charges or prior violence convictions had no difference in recidivism or cost outcomes.

This has been a highly political and controversial topic. Many prosecutors will not allow violent offenders in Drug Court because of public safety concerns. However, the data show that programs that allow violent offenders do equally well as programs that allow only nonviolent offenders. Other research also supports this finding (see Saum, Scarpitti, & Robbins, 2001; Saum & Hiller, 2008). In fact, research suggests allowing violent offenders into Drug Court programs can have a bigger positive effect on recidivism and cost outcomes than allowing only nonviolent offenders because greater savings are achieved when violent crimes are prevented rather than less serious (less costly) crimes.

In general, most violent offenders are not incarcerated for long and are subsequently back in the community under supervision that is much less intensive than the supervision provided by Drug Court. Because of proven reductions in recidivism for Drug Court programs compared with the traditional court system, Drug Courts actually do a better job of protecting public safety. However, choosing what kind of violence charges are allowed is important because the safety of the staff and other participants is paramount.

Drug Courts that mix pre- and postadjudication participants or allow participants with misdemeanors or felonies into the program had no difference in recidivism or cost outcomes.

The Drug Court model appears to work for offenders who have a substance use problem and are involved with the criminal justice system. Whether the program operated with a mix of pre- and postadjudication participants or operated either preadjudication or postadjudication exclusively had no relation to recidivism or cost in the current study. This finding is contrary to the findings by Shaffer (2006) and for the MADCE study (Rempel & Zweig, 2011) that mixing pre- and postadjudication offenders had worse outcomes compared with programs that served each of those populations exclusively. Further research needs to be performed to resolve this discrepancy.

Similarly, whether the charge that led to Drug Court participation was a misdemeanor or felony also had no relation to subsequent outcomes.

Drug Courts that see participants at court sessions weekly during the first phase had no better outcomes than courts that saw them every two weeks.

Although our best practice results show that seeing participants every two weeks in the first phase is related to significantly better outcomes (see Table 1) compared with programs that see participants monthly or less often, weekly court appearances do not appear to have significant additional benefit. Overall, what is important is assessing the risk and need level of participants and determining the appropriate level of court supervision needed at the time of entry (Marlowe et al., 2006). Perhaps for very high-risk and high-need participants, weekly court appearances might be appropriate, while participants that are more in the middle of the risk/need range might perform adequately with less frequent supervision.

Reiteration of Study Limitations

With over 200 practices being examined, determining a theoretical reason for using a particular covariate in the analysis for each in-

dividual practice was not feasible. Therefore, the analyses performed for the above results did not adjust for covariates (e.g., services available in the community or numbers of available case managers) or for the risk or need level of the participant populations.

SUMMARY AND CONCLUSIONS

Themes in Best Practices

Interestingly, when the best and promising practice results were examined for emerging themes among practices (see Tables 2 and 3), those themes led us back to the Ten Key Components. Following is a discussion of the main themes that emerged from a review of practices that significantly related to program outcomes.

Teams Sink or Swim Together—A holistic approach works. Having more people at the table collaborating pays off. Everyone brings value and the investment is worth the effort and cost. This result may be a function of communication. These data strongly make a case that all key players (e.g., judge, coordinator, treatment representative, prosecutor, defense attorney, law enforcement representative) should be members of the Drug Court team and be present both at status hearings and at staffing meetings.

Relationships Matter—Having teams that get together and work together, having fewer providers (which promotes more individual relationships and communication) and fewer participants (so that the team and judge know everyone), and ensuring participants get at least three minutes on average of the judge's attention at each review session all help create an effective program.

Wraparound and Habilitation Services Are Key—Drug Court programs that focus on providing participant supports have better outcomes. Programs with such wraparound services avert rearrests and save taxpayer money in the long run when they address participant needs such as relapse prevention, gender-specific services, mental health treatment, parenting classes, family counseling, anger management classes, health and dental services, and residential care.

Structure and Consistency Are Crucial—Practices that demonstrate this theme include having written guidelines for sanctions, guidelines on the number of individual treatment sessions, drug test results within forty-eight hours, drug testing at least twice per week, status reviews every other week, immediate sanctions (including those that occur outside of court and thus happen more swiftly), and a program designed to take at least twelve months. These factors ensure that participants are learning about structure, accountability, safety, and dependability.

Participants Must Be Set Up for Success—Participants should be stable before leaving the program. Best practices within this theme include requiring that participants have a job or be in school, have at least ninety days clean, have participated in the program at least twelve months, have sober housing, and have paid all fees before they can graduate. If these practices are in place, participants should be ready to set their own goals and succeed in their lives.

Continuous Program Improvement Leads to Positive Outcomes—Programs that collect and use data, seek out training, acquire the support and insights of experts (including evaluators), and use the data and expert feedback to make ongoing adjustments to enhance practices see improvements in outcomes. These results demonstrate that Drug Courts that develop practices that focus on understanding and improving program performance have better outcomes than those that do not.

The Drug Court Model Is Effective with Difficult Populations—Drug Courts work for a wide range of populations and for participants who are seen as difficult to change and serve. These findings show that an offender's criminal justice status (or mental health status) should not be a barrier. It does not matter whether a program's population is only preadjudication, only postadjudication, or a mix of both. Nor does it matter whether participants have violent histories or not, or whether they have misdemeanors or felonies. The focus is on treatment and consistent supervision. These results suggest that Drug Courts can successfully include a wide variety of offender populations.

Perhaps the most overarching theme is a picture of Drug Courts that are well organized. These programs have teams that are engaged in program activities and are collaborating, think through their program and clearly communicate expectations to staff and participants, and are dedicated to program improvement. These Drug Courts are the most effective in helping participants recover their futures, reducing participant recidivism, decreasing crime, and saving taxpayer money.

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References

The evaluation reports for the sixty-nine Drug Courts used for this study are available online at NPCresearch.com.

Belenko, S. (1998). Research on drug courts: A critical review. *National Drug Court Institute Review, 1*(1), 1–42.

Belenko, S. (2001). Research on drug courts: A critical review: 2001 update. *National Drug Court Institute Review, 4*, 1–60.

Carey, S.M., & Finigan, M.W. (2004). A detailed cost analysis in a mature drug court setting: A cost-benefit evaluation of the Multnomah County Drug Court. *Journal of Contemporary Criminal Justice*, *20*(3) 292–338.

Carey, S.M., Finigan, M.W., Crumpton, D., & Waller, M.S. (2006). California drug courts: Outcomes, costs and promising practices: An overview of phase II in a statewide study. *Journal of Psychoactive Drugs,* (SARC Suppl. 3), 345–356.

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008). *Exploring the key components of Drug Courts: A comparative*

study of 18 adult drug courts on practices, outcomes, and costs. Portland, OR: NPC Research.

Carey, S.M., Pukstas, K., Waller, M.S., & Finigan, M.W. (2008). *Drug courts and state mandated drug treatment programs: outcomes, costs and consequences*. Portland, OR: NPC Research.

Carey, S.M., Sanders, M.B., Waller, M.S., Burrus, S.W.M., & Aborn, J.A. (2010a). *Marion County Fostering Attachment Treatment Court process, outcome and cost evaluation*. Portland, OR: NPC Research.

Carey, S.M., Sanders, M.B., Waller, M.S., Burrus, S.W.M., & Aborn, J.A. (2010b). *Jackson County Community Family Court process, outcome, and cost evaluation.* Portland, OR: NPC Research.

Carey, S.M., & Waller, M.S. (2011). *Oregon drug courts: Statewide costs and promising practices.* Portland, OR: NPC Research.

Carey, S.M., Waller, M.S., & Weller, J.M. (2010). *California drug court cost study: Phase III: Statewide costs and promising practices.* Portland, OR: NPC Research.

Crumpton, D., Brekhus, J., Weller, J.M., & Finigan, M.W. (2004). *Cost analysis of Baltimore City, Maryland, Drug Treatment Court*. Portland, OR: NPC Research.

Crumpton, D., Carey, S. M., & Finigan, M. W. (2004). *Enhancing cost analysis of drug courts: The transactional and institutional cost analysis approach.* Portland, OR: NPC Research.

Crumpton, D., Worcel, S.D., & Finigan, M.W. (2003). *Analysis of foster care costs from the Family Treatment drug court Retrospective Study*. Rockville, MD: Center for Substance Abuse Treatment.

Duvall, J., Staton-Tindall, M., Oser, C., & Leukefeld, C. (2008). Persistence in turning to faith as a predictor of drug use and criminality among drug court clients. *Journal of Drug Issues, 38*(3), 911–928.

Finigan, M.W. (1998). *An outcome program evaluation of the Multnomah County S.T.O.P. drug diversion program.* Portland, OR: NPC Research. Available at http:/www.npcresearch.com/Files/OPE.pdf.

Finigan, M.W., Carey, S.M., & Cox, A. (2007). *The impact of a mature drug court over 10 years of operation: Recidivism and costs*. Portland OR: NPC Research.

Fomby, T.B., & Rangaprasad, V. (2002). *Divert Court of Dallas County: Cost-benefit analysis*. Dallas, TX: Southern Methodist University, Department of Economics.

Gottfredson, D.C., Najaka, S.S. & Kearley, B. (2003). Effectiveness of drug treatment courts: Evidence from a randomized trial. *Criminology & Public Policy*, *2*(2):171–196.

Government Accountability Office. (2005). *Adult drug courts: Evidence indicates recidivism reductions and mixed results for other outcomes.* Washington, DC: Author.

Kelly, J.F., & White, W.L., eds. (2011) *Addiction Recovery Management: Theory, Research and Practice.* New York: Humana Press.

Longshore, D.L., Turner, S., Wenzel, S.L., Morral, A.R., Harrell, A., McBride, D., Deschenes, E., & Iguchi, M.Y. (2001). Drug courts: A conceptual framework. *Journal of Drug Issues, 31*(1), 7–26.

Lowenkamp, C.T., Holsinger, A.M., & Latessa, E.J. (2005). Are drug courts effective? A meta-analytic review.

Journal of Community Corrections, 15(1), 5–11.

Mackin, J.R., Carey, S.M., Finigan, M.W., Lucas, L.M., Lambarth, C.H., Waller, M.S., Herrera Allen, T., Weller, J.M., & Linhares, B. (2009). *Maryland problem-solving courts evaluation, phase III: Integration of results from process, outcome, and cost studies conducted 2007–2009*. Portland, OR: NPC Research.

Marchand, G., Waller, M.S., & Carey, S.M. (2006a). *Kalamazoo County (MI) Adult drug treatment court outcome and cost evaluation*. Portland, OR: NPC Research.

Marchand, G., Waller, M.S., & Carey, S.M. (2006b). *Barry County (MI) Adult Drug Court outcome and cost evaluation.* Portland, OR: NPC Research.

Marlowe, D.B., Festinger, D.S., Dugosh, K.L., Lee, P.A., & Benasutti, K.M. (2007). Adapting judicial supervision to the risk level of drug offenders: Discharge and 6-month outcomes from a prospective matching study. *Drug and Alcohol Dependence*, *88*(Suppl.1), S4–S13.

Marlowe, D.B., Festinger, D.S., Lee, P.A., Dugosh, K.L., & Benasutti, K.M. (2006). Matching judicial supervision to client risk status in drug court. *Crime and Delinquency*, *52*(1), 52–76.

McKean, J., & Warren-Gordon, K. (2011). Racial Differences in Graduation Rates from Adult Drug Treatment Courts. *Journal of Ethnicity in Criminal Justice*, *9*(1), 41–55.

National Association of Drug Court Professionals. (1997). *Defining drug courts: The key components* (NCJ Publication No. 165478). Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance.

Rempel, M., & Zweig, R. (2011, July). *Findings and implications of NIJ's Multisite Adult Drug Court Evaluation (MADCE).* Presented at the National Association of Drug Court Professionals 17th Annual Training Conference, Washington, DC.

Saum, C.A. & Hiller, M.L. (2008). Should violent offenders be excluded from Drug Court participation: An examination of the recidivism of violent and nonviolent Drug Court participants. *Criminal Justice Review, 33*(3), 291–307.

Saum, C.A., Scarpitti, F.R., & Robbins, C.A. (2001). Violent Offenders in Drug Court. *Journal of Drug Issues, 31*(1), 107–128.

Shaffer, D.K. (2006). *Reconsidering Drug Court effectiveness: A meta-analytic review*. Las Vegas: University of Nevada, Department of Criminal Justice.

Shannon M Carey, *PhD, is executive vice president and senior research associate at NPC Research. Her research has focused on criminal justice and substance abuse, particularly Drug Courts and cost analyses. Dr. Carey has been involved in evaluations of over 150 adult, juvenile, DWI, reentry, and family treatment Drug Courts nationally. She has also led the efforts to create online tools that Drug Courts can use to determine their own costs and benefits.*

Juliette R. Mackin, *PhD, executive vice president and senior research associate at NPC Research, has worked in the areas of juvenile and adult Drug Courts, juvenile crime prevention, adolescent and adult substance use or abuse, strengths-based approaches to service delivery, child abuse and neglect prevention and treatment, early childhood behavioral health, and human services coordination. Dr. Mackin has helped develop, validate, and implement risk assessment tools in use statewide in Oregon and a strength-based assessment tool used in Alaska.*

Michael W. Finigan, *PhD, is president and founder of NPC Research, located in Portland, Oregon. NPC Research, founded in 1990, was created as a network of skilled professionals to produce research designed to aid public policy makers in making research-based decisions. The focus of Dr. Finigan's work is examining criminal justice issues along with substance abuse and mental health issues for both adolescents and adults.*

Direct correspondence to Shannon Carey at NPC Research, 5100 SW Macadam Avenue, Suite 575, Portland, OR 97239. carey@npcresearch.com

DRUG COURT POLICIES AND PRACTICES: HOW PROGRAM IMPLEMENTATION AFFECTS OFFENDER SUBSTANCE USE AND CRIMINAL BEHAVIOR OUTCOMES

Janine M. Zweig — Christine Lindquist
P. Mitchell Downey — John K. Roman — Shelli B. Rossman

[4] Adult Drug Court Rankings—*A sample of 23 adult Drug Courts were ranked by their ability to reduce substance use and criminal behavior.*

[5] Drug Court Practices and Criminal Behavior—*Drug Courts that prevented more criminal acts had high leverage over their participants, medium predictability of sanctions, positive judicial attributes, and admitted participants at the same point in the criminal justice process (i.e., all pre-plea or post-plea).*

[6] Drug Court Practices and Substance Use Outcomes—*Drug Courts that prevented more drug use had medium predictability of sanctions, participant populations that entered post-plea, and positive judicial attributes.*

[7] High-Performance Drug Courts—*The most effective Drug Courts created synergistic effects by implementing multiple best practices.*

THE JUSTICE POLICY CENTER at the Urban Institute, RTI International (RTI), and the Center for Court Innovation (CCI) conducted the Multisite Adult Drug Court Evaluation (MADCE)—a five-year study of adult Drug Courts funded by the National Institute of Justice. In addition to examining whether Drug Courts work to reduce drug use and crime, another goal of the MADCE was to explain *how* Drug Courts work by studying key program policies and practices that lead to more successful outcomes for participants. In this report, we identify variations in policies and practices across Drug Courts and determine whether these variations influenced program effectiveness.

In 1997, the Bureau of Justice Assistance (BJA) promulgated ten key components of Drug Courts. In part, these components recommend that Drug Courts monitor abstinence through frequent alcohol and drug testing, use coordinated strategies to respond to participants' compliance with sanctions and incentives, and provide ongoing judicial interaction with each Drug Court participant. Although the ten key components are consistently recommended as central to the Drug Court model, many have not been subjected to empirical investigation. When Drug Court programs have been evaluated, much of the previous literature focused on participant-level experiences rather than on court-level practices. However, the receipt and amount of Drug Court services correlates highly with individual outcomes. That is, Drug Courts routinely increase the amount of services they provide to participants in direct response to participants' infractions or other behaviors.

For this reason, this article focuses on the effectiveness of court-level practices. Few previous studies focused on court-level policies and many of those examined the effectiveness of specific Drug Court practices, primarily court appearances, treatment, and sanctions. In brief, although most Drug Courts require regular status hearings for program participants, requirements pertaining to the frequency of status hearings vary across courts. In a series of related studies, researchers were able to compare the impact of twice-monthly versus as-needed status hearings (Festinger et al., 2002; Marlowe et al., 2003; Marlowe, Festinger, & Lee, 2004; Marlowe et al., 2005). Overall, little support was found for the relationship between frequency of judicial status hearings and drug use or recidivism with the exception of two subgroups—those with a history of substance abuse treatment and those with antisocial personality disorder (ASPD)—who benefited from twice-monthly status hearings. Beyond the frequency of judicial status hearings, Finigan, Carey, and Cox (2007) examined whether judges differed in their success in reducing recidivism among Drug Court participants and whether they improved with experience. They found that all judges exhibited fewer rearrests for Drug Court participants than for comparison cases, and judges who had more than

one rotation on the bench achieved better outcomes during their second rotation.

The provision of substance abuse treatment is a major component of most Drug Courts and key to the program model (BJA, 1997). Harrell, Cavanagh, and Roman (2000) explored treatment as a court-level practice in an experimental study in which drug felony defendants were randomly assigned to one of three court dockets (sanctions, treatment, and standard[1]). After random assignment, defendants in the sanctions and treatment dockets who failed two drug tests while on pretrial release—and were therefore considered program eligible—were offered the intervention services available within their respective dockets. Outcomes were compared for program-eligible defendants in all three dockets, with some analyses restricted to the subset of defendants who agreed to participate in the intervention services available within the sanctions and treatment dockets.

Results indicated that program-eligible defendants within the treatment docket were more likely to test drug-free in the month prior to sentencing and had a smaller percentage of positive drug tests than program-eligible defendants in the standard docket. Reductions in drug use were even more significant among program participants in the treatment docket (i.e., those who agreed to receive the comprehensive treatment available). Being eligible for the treatment program had no impact on self-reported drug use or the likelihood of arrest in the year after sentencing, although program participants in the treatment docket did have fewer arrests for drug offenses.

Another key component of Drug Courts is using a coordinated strategy for governing participant compliance and noncompliance (BJA, 1997). Typically, Drug Courts respond to participant behavior with sanctions for noncompliance and incentives for compliance. Re-

[1] For the purposes of this study, the dockets were defined as follows: The sanctions docket had clearly defined penalties that were applied swiftly to participants for failing drug tests and encouraged entering treatment. The treatment docket offered comprehensive treatment programs designed to provide participants with skills, self-esteem, and community resources to help them leave the criminal life. While the sanctions and treatment dockets offered new intervention services, the standard docket handled drug cases in a routine manner (Harrell, Cavanagh, & Roman, 2000).

lated to this, results for the sanctions docket in the Harrell, Cavanagh, and Roman (1998) study included the following: program-eligible defendants in the sanctions docket who agreed to receive the intervention services were more likely to test drug-free in the month before sentencing (and had a lower percentage of positive drug tests) and were less likely to be arrested in the year after sentencing than program-eligible defendants in the standard docket.

Current Study

Although Drug Courts share several common elements, substantial variation has been documented in how policies and practices are implemented across Drug Courts (Carey, Finigan, & Pukstas, 2008; Rempel et al., 2003). The purpose of the current study is to identify how implementation of Drug Court policies and practices varies and which strategies are most effective in reducing and preventing criminal behavior and drug use. The study included a number of Drug Courts ($n = 23$) selected to reflect variations in key policies and practices. We chose ten specific policies and practices to explore that might relate to the ability to prevent future crime and substance use. Specifically, we examined the influence of leverage, predictability of sanctions, adherence to treatment best practices, drug testing, case management, judicial status hearings, point of entry into the program, multidisciplinary decision making among the Drug Court team, positive judicial attributes, and judicial interaction.

METHODS

Design

The MADCE was a longitudinal, quasi-experimental design consisting of twenty-three Drug Courts and six comparison sites. The study was designed to compare Drug Court participants to offenders with similar drug use, criminal histories, and psychosocial profiles in jurisdictions that do not offer Drug Courts. We conducted an extensive site-selection process to identify Drug Courts and comparison sites that reflected substantial variation in the implementation of various Drug Court polices, such as differences in sanction and supervi-

sion policies. To identify sites, we first administered the adult Drug Court survey as a Web-based instrument between February and June 2004 (see Zweig, Rossman, & Roman, 2011). A total of 380 Drug Courts completed the survey, representing a 64% response rate of the 593 Drug Courts identified across the U.S. that met the eligibility requirements of primarily serving adults and being in operation for at least one year at that time. Although national in scope, the sample was not nationally representative. Nonetheless, it provided an important foundation for understanding Drug Court programs throughout the country.

Using data from the survey, we chose twenty-three Drug Courts located in seven geographic clusters and then identified six comparison jurisdictions in similar locations.[2] The comparison sites included several alternative models for handling drug-involved offenders, representing the diverse activities employed in jurisdictions that had not implemented Drug Courts.[3] Notably, some comparison sites mandated offenders to community-based treatment, but without other components of the Drug Court model; other comparison sites involved standard probation.

Procedure

The data for the current analyses came from three sources. The first source of data was the Web-based adult Drug Court survey identified above. Drug Court staff completed the survey, answering general information questions about the Drug Court, program structure and operations, treatment and drug testing, and courtroom practices.

The second source of data was a process evaluation that included multiple contacts with Drug Courts ultimately included in the study.

[2] More detail about recruiting sites and selection criteria can be found in Rossman et al. (2011). Altogether, MADCE includes 29 sites in eight states (Florida, Georgia, Illinois, New York, North Carolina, Pennsylvania, South Carolina, and Washington).

[3] Comparison sites included: Pierce County, WA Breaking the Cycle program; Human Services Associates TASC in Florida; Stewart-Marchman-ACT Behavioral Health Care, Florida; Illinois TASC; and North Carolina probation (NC is divided into two judicial districts and, therefore, we divided the comparison participants similarly, representing two comparison sites).

In 2004, phone interviews about court operations were conducted with potential Drug Courts during site selection. The process evaluation assessed each Drug Court's adherence to best practices related to leverage, sanctioning, and treatment in order to secure a varied sample of Drug Courts. In 2006 after the impact study began, evaluation team members visited the twenty-three Drug Courts to interview stakeholders and conduct observations of staffing meetings and court hearings. Program structure and management, operations, treatment, drug testing, and courtroom practices were assessed through open-ended questions and observations.

The third source of data was in-person interviews with offenders across the twenty-nine Drug Court and comparison sites conducted at three intervals: (1) when participants enrolled in the Drug Courts or comparison sites to provide a baseline, (2) six months after the baseline interview, and (3) eighteen months after baseline. Baseline enrollment took place during a 16-month period from March 2005 through June 2006. During that time, Drug Courts and comparison sites identified people enrolling in or entering their systems. These individuals were recruited by trained field interviewers who conducted informed consent procedures. The interviews with study participants lasted 1.5–2 hours and covered topics such as background characteristics, attitudes and perceptions (e.g., perceived legal pressure, motivations, perceptions of court, and judicial fairness), in-program behavior (e.g., receipt of treatment and other services), and outcomes (criminal behavior, drug use, and other measures of personal functioning).

Offender Sample

We enrolled 72% of eligible study participants at baseline, for a total initial sample of 1,781 offenders. Subsequently, 86% of those individuals completed 6-month interviews, and 83% completed 18-month interviews. The majority of the sample was male (70%), and the average age of study participants was 33.7 years with the Drug Court group being significantly younger than the comparison group. More than half the sample was white (55%), one-third was black/African–American (33%), 6% was Hispanic/Latino, and 6% fell

into other categories including multiracial. Just over one-third (35%) of the sample reported having a high school diploma or GED equivalency diploma; one-quarter (25%) reported having some college-level education; and 41% of the sample had less than a high school education. Slightly more than one-third of sample members (36%) were working at the time of baseline. Sixty-two percent of the sample had never been married; 11% were married; and 27% were divorced, separated, or widowed at the time of the baseline interview. Half reported having children younger than 18 years of age.

Study members, on average, reported that they began using drugs at the age of 13.6 years and had been using drugs for an average of 20 years. In the six months before they entered the program, 81% of the sample used some form of illicit drug or alcohol, and 57% used drugs other than alcohol or marijuana (including amphetamines, cocaine, heroin, hallucinogens, and nonprescribed medications). The study grouped participants by their primary substance of abuse, because many were polysubstance users. The subgroups were alcohol; marijuana; amphetamines (including methamphetamine); cocaine (powder and crack cocaine); and a subgroup hereafter referred to as *other drugs* (heroin, hallucinogens, and nonprescribed medications).

More participants in the Drug Court group reported using drugs than in the comparison group. They also reported significantly more days of use. On average, participants in both groups used drugs or alcohol 12.9 days per month, or 7.4 days per month when alcohol and marijuana were excluded.

Significantly more individuals in the comparison group had prior arrests before the one that brought them into the study (92% of the comparison group versus 86% of the Drug Court group). Of those arrested, comparison participants reported having more prior arrests (about eleven) than the Drug Court group (about eight).[4]

[4] Although we employed strategies to recruit comparable offenders for both the treatment and comparison samples, some differences existed, and although we retained in the study the majority of offenders at 6 and 18 months, some differences existed between those who remained in the study and those who did not. We employed two statistical corrections to correct for baseline differences between the Drug Court

Analytic Strategy

We employed complementary approaches using quantitative and qualitative methodologies to evaluate the effectiveness of Drug Court policies and practices. First, we tested the effectiveness of particular practices using a traditional quantitative approach, hierarchical modeling. Generally, Drug Court participants are repeatedly exposed to the same judge; thus, it is easy to confuse the effect of the judge on outcomes with the effect of the court. Hierarchical models parse out individual effects on outcomes from court effects. This article presents findings for each policy and practice using hierarchical analysis of variance with follow-up Tukey tests of group comparisons.[5]

Second, we employed an innovative approach that ranked Drug Courts' levels of effectiveness at preventing drug use and crime. We created a score for each individual that was the difference between the person's expected outcome and his or her observed outcome in Drug Court. Thus, we predicted what participants' drug use and criminal activities would have been without Drug Court and subtracted the observed outcomes from the predicted outcomes.[6] For example, a Drug Court participant's actual observed outcome may have been two days of drug use per month. But, the same person's predicted outcome had they not been in Drug Court might have been ten days of drug use per month. Thus, this person's score on number of days of drug use prevented per month would be eight days.[7]

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and comparison samples and between retained and attrited cases in the two follow-up interviews. More details can be found in Rempel and Farole (2011).

[5] Further details on why we chose this statistical analysis can be found in Zweig and colleagues (2011).

[6] We estimated drug use and criminal activity outcomes for the comparison group based on variables that predict such activities (e.g., criminal history at baseline, substance use history at baseline, etc.). Then, estimated coefficients from the comparison group were applied to Drug Court participants' characteristics (i.e., their values on variables that predict substance use and criminal activity) to determine the expected behaviors for each individual had they not been in the Drug Court program.

[7] Further details on how the study scored outcomes can be found in Zweig and colleagues (2011).

We then ranked Drug Courts based on the average performance of their participants. Overall, Drug Courts as a whole prevented 1.7 crimes per month on average, but this ranged widely ($SD = 16$, $r = -264–32$). Also, Drug Courts as a whole prevented 1.6 days of drug use per month on average, but this, too, ranged widely ($SD = 7$, $r = -33–37$). Positive average values for the Drug Courts indicated that participants did better as a result of being in Drug Court, whereas negative values indicated participants did worse than expected. Drug Courts were ranked based on two outcomes: days of drug use prevented and number of criminal activities prevented. Courts were ranked in general and then by particular subgroups of participants. [8]

Once the court rankings were created for the two outcomes, we assigned codes to each Drug Court that characterized the way they implemented particular policies and practices. From this, we identified patterns within effective Drug Courts and top–performing Drug Courts in how they implemented policies and practices and compared these with lower-performing Drug Courts.

RESULTS

Court Rankings

To determine whether the effect of Drug Court practices varied across participants, we created thirty-one subgroups based on participant attributes as self-described in the baseline interview. We chose these thirty-one measures for two reasons. First, the effectiveness of Drug Courts has been shown to vary based on some individual characteristics, such as participants' substance use and criminal histories. Second, we identified individual characteristics that seemed related to substance use and criminal behavior even if they had not been studied as part of a previous Drug Court evaluation. The thirty-one subgroups for which rankings were created reflect three broad categories:

- *Background Characteristics*—Age 30 and older or under age 30; male or female; in an intimate relationship or not; having features

[8] Further details on how rankings were developed can be found in Zweig and colleagues (2011).

of depression or not; and having antisocial personality disorder (ASPD) or not

- *Criminal History*—No prior arrests, one to four prior arrests, or more than four prior arrests; previous incarceration or no previous incarceration; and any relatives or friends with a conviction or no such relatives or friends
- *Substance Use Factors*—Age of first drug use 15 years or younger or over 15 years; any substance abuse treatment during the six months before baseline or no such treatment; any relatives or friends with drug problems or no such relatives or friends. Primary drug of choice: alcohol, marijuana, amphetamines, cocaine, or other drugs; drug use of any kind other than marijuana. Used aggression-inducing drugs (i.e., amphetamines, cocaine) at some point or never used aggression-inducing drugs

Court Rankings for Crimes Prevented

Table 1 describes the Drug Court rankings for crimes prevented. Throughout the rankings, each Drug Court is represented by a letter rather than court name to provide anonymity. Letters above the bold line in each column represent Drug Courts achieving participant outcomes better than the expected outcomes—that is, effective courts. Drug Courts below the bold line are those where participant outcomes were worse than the expected outcomes. In columns without a bold line, all courts achieved positive results.

In each column, bold letters represent the top three Drug Courts with the most participants meeting that subgroup criterion. To be eligible for such, a Drug Court had to have at least 50% of its population meeting that criterion. Columns with no bold letters indicate that no court in that subgroup met this criterion. In addition, a Drug Court had to provide five participants in the given subgroup to be included in that ranking. Therefore, some subgroups contain fewer courts because some courts did not meet this criterion. The general ranking indicates that eighteen of the twenty-three Drug Courts in our study effectively prevented crime for their participant populations. However, rankings varied substantially among the subgroups. On average, more Drug Courts performed positively for the following groups:

TABLE 1	COURT RANKINGS: SUBSTANCE USE PREVENTED AT 18 MONTHS										
	General Ranking	Age 30 and Over	Under Age 30	Male	Female	In Intimate Relationship	Not in Intimate Relationship	Features of Depression	No Features of Depression	Features of ASPD[1]	No Features of ASPD
1	W	**W**	Q	Q	W	**Q**	D	E	T	Q	W
2	Q	**S**	M	W	S	W	S	R	E	W	L
3	S	**G**	G	G	Q	G	W	A	//	G	S
4	G	Q	L	**L**	I	T	I	//	//	D	**G**
5	L	L	D	D	V	V	M	//	//	S	Q
6	D	V	V	B	M	M	**L**	//	//	M	V
7	M	D	T	M	T	S	V	//	//	V	D
8	V	B	S	S	U	N	K	//	//	L	M
9	T	R	U	V	G	L	G	//	//	T	N
10	N	N	K	K	O	D	B	//	//	R	**I**
11	I	I	I	R	R	O	**R**	//	//	I	B
12	R	M	N	N	C	R	N	//	//	N	K
13	B	T	O	T	K	**I**	T	//	//	O	T
14	K	K	R	E	E	B	E	//	//	B	E
15	O	O	E	I	B	E	J	//	//	K	U
16	E	J	B	O	**P**	K	O	//	//	J	O
17	F	E	J	**J**	A	A	C	//	//	E	R
18	J	A	**P**	F	//	J	P	//	//	C	P
19	C	C	C	C	//	**U**	U	//	//	A	**F**
20	U	U	**H**	A	//	H	F	//	//	P	J
21	P	F	A	U	//	C	A	//	//	U	C
22	A	H	//	**H**	//	P	**H**	//	//	H	A
23	H	//	//	//	//	//	//	//	//	//	H

TABLE 1	COURT RANKINGS: SUBSTANCE USE PREVENTED AT 18 MONTHS											
	General Ranking	No Prior Arrests	1–4 Prior Arrests	More Than 4 Prior Arrests	Previous Incarceration	No Previous Incarceration	Relatives/Friends with a Conviction	No Relatives/Friends with a Conviction	First Drug Use Age 15 or Younger	First Drug Use Over Age 15	Substance Abuse Treatment Before Baseline	No Treatment Before Baseline
1	W	R	L	W	I	Q	W	T	G	W	I	**Q**
2	Q	S	D	G	W	S	**Q**	V	S	**Q**	**W**	G
3	S	Q	**M**	S	O	D	**S**	K	W	**D**	S	T
4	G	P	N	**L**	S	M	G	M	Q	L	**L**	S
5	L	D	V	M	Q	V	D	O	V	S	M	**D**
6	D	O	Q	V	T	G	**L**	P	L	M	G	V
7	M	A	T	T	K	W	V	I	I	T	K	L
8	V	H	K	**J**	R	F	**M**	B	M	G	N	U
9	T	J	C	B	V	**L**	R	H	N	V	O	M
10	N	K	U	I	M	**N**	I	C	R	K	E	B
11	I	T	S	K	E	U	E	A	T	B	**R**	N
12	R	//	G	R	C	T	T	E	O	C	H	R
13	B	//	I	E	A	B	**N**	J	B	N	A	K
14	K	//	B	O	U	K	B	R	E	R	P	O
15	O	//	E	**F**	//	R	J	//	K	I	B	E
16	E	//	O	U	//	I	K	//	**F**	O	C	J
17	F	//	R	C	//	E	O	//	A	E	J	**F**
18	J	//	A	A	//	O	C	//	**P**	**J**	T	**C**
19	C	//	P	P	//	**J**	F	//	U	U	U	I
20	U	//	J	H	//	A	A	//	C	A	//	A
21	P	//	H	//	//	C	P	//	**H**	P	//	P
22	A	//	//	//	//	P	U	//	J	H	//	H
23	H	//	//	//	//	H	H	//	//	//	//	//

TABLE 1	COURT RANKINGS: SUBSTANCE USE PREVENTED AT 18 MONTHS										
				Primary Drug of Choice							
	General Ranking	Relatives/ Friends with Drug Problems	No Relatives/Friends with Drug Problems	Alcohol	Marijuana	Amphetamines	Cocaine	Other Drugs[2]	Other Than Marijuana	Tried Aggression Drugs[3]	Never Tried Aggression Drugs
1	W	Q	T	M	S	**V**	Q	M	Q	Q	A
2	Q	W	F	I	T	U	S	K	**M**	W	I
3	S	S	O	G	Q	W	M	T	G	S	O
4	G	D	P	L	G	S	W	E	W	G	K
5	L	G	C	**N**	B	T	K	R	V	**D**	**P**
6	D	**L**	I	C	K	D	R	O	**D**	L	E
7	M	**M**	K	J	V	R	L	S	S	M	C
8	V	V	H	A	O	//	E	P	I	**V**	J
9	T	E	R	T	M	//	J	//	L	N	//
10	N	I	A	K	R	//	I	//	**N**	T	//
11	I	**N**	E	//	I	//	V	//	E	E	//
12	R	T	J	//	**P**	//	B	//	R	I	//
13	B	R	//	//	E	//	T	//	T	K	//
14	K	K	//	//	C	//	O	//	K	B	//
15	O	B	//	//	A	//	A	//	J	**R**	//
16	E	J	//	//	J	//	C	//	B	O	//
17	F	O	//	//	U	//	H	//	O	J	//
18	J	C	//	//	//	//	U	//	P	P	//
19	C	A	//	//	//	//	//	//	C	C	//
20	U	U	//	//	//	//	//	//	U	F	//
21	P	P	//	//	//	//	//	//	A	U	//
22	A	H	//	//	//	//	//	//	F	A	//
23	H	//	//	//	//	//	//	//	H	H	//

NOTES: (A) Courts below the black lines were ones where we predicted that participants' expected outcomes would be better than their actual outcomes. (B) Courts were not included in the ranking if they had fewer than five people meeting the category criterion (indicated by //). (C) Bold letters represent the top three Drug Courts for percentage of population meeting that criterion. No bold letter indicates that no Drug Court had over 50% of their population meeting that criterion.

[1]Antisocial personality disorder; [2]Heroin, hallucinogenics, & prescription drugs; [3]Amphetaines, cocaine

- People age 30 years and older compared with younger than 30 years
- Males compared with females
- People with one to four prior arrests compared with those with no prior arrests or with more than four prior arrests
- People with no previous incarceration compared with those who had been incarcerated before
- People with relatives or friends with a conviction compared with those with no such relatives or friends
- People whose age of first drug use was older than 15 years compared with those age 15 or younger
- People with relatives or friends with drug problems compared with those with no such relatives or friends

We also examined court success for participant subgroups characterized by primary drug of choice. Drug Courts were more effective at preventing crime for participants whose primary drugs of choice included alcohol, amphetamines, cocaine, and other drugs.

All Drug Courts were effective at preventing crime within the other drug subgroup. All Drug Courts but one had positive outcomes within the alcohol and amphetamine subgroups. Drug Courts were less effective at preventing crime within the marijuana subgroup. Of the seventeen Drug Courts serving participants whose primary drug of choice was marijuana, only nine were effective.

When looking across the columns of Table 1, the top performing Drug Courts appear effective across a range of participant types, although the exact placement of the courts in the rankings varies somewhat across subgroups. For example, Court S ranked third in the general ranking, second for participants age 30 years and older, and eighth for participants under age 30. In addition, although rankings varied by subgroup, a set of high-performing Drug Courts emerged—with the top courts largely remaining the same across subgroups—as did a set of low-performing courts. The top five Drug Courts in the general ranking were G, L, Q, S, and W. Four of these Drug Courts appeared routinely in the top five courts across subgroups (G was in the top five courts 15 times; Q and S, 19 times; and W, 18 times). The other court that appeared in the top five courts across subgroups was

Court D, ranked sixth in the general ranking and ranked in the top five in twelve subgroups.

Court Rankings for Substance Use Prevented

Table 2 shows the Drug Court rankings for days of substance use prevented. According to the general ranking, twenty-two of the twenty-three Drug Courts in our study effectively prevented future substance use for their participant populations overall. Thus, more Drug Courts in the MADCE were effective at preventing substance use than criminal behavior.

Again, subgroups varied substantially. On average, more courts performed positively in preventing substance use for the following groups:

- People age 30 years and older compared with younger than 30 years
- Males compared with females
- People who had not been incarcerated before compared with those who had
- People with relatives or friends with a conviction compared with those with no such relatives or friends
- People whose age of first drug use was 15 years or younger rather than older
- People who had no substance abuse treatment within six months before baseline compared with those who had some
- People with relatives or friends with drug problems compared with those with no such relatives or friends

The pattern of Drug Court effectiveness for substance use prevented was similar to that found for crimes prevented. Court performance varied based on the participants' primary drug of choice. Drug Courts effectively prevented crime when the participants' primary drugs of choice included alcohol, amphetamines, cocaine, and other drugs but were less effective at preventing crime among participants whose primary drug of choice was marijuana. Therefore, although not all Drug Courts were effective for their participants in the marijuana subgroup, more of these Drug Courts prevented substance use more effectively than they prevented crime.

TABLE 2	COURT RANKINGS: SUBSTANCE USE PREVENTED AT 18 MONTHS										
	General Ranking	Age 30 and Over	Under Age 30	Male	Female	In Intimate Relationship	Not in Intimate Relationship	Features of Depression	No Features of Depression	Features of ASPD[1]	No Features of ASPD
1	G	M	G	G	M	G	D	E	E	G	L
2	M	B	U	Q	W	**U**	I	R	T	D	U
3	Q	I	Q	U	S	M	M	A	//	Q	M
4	U	Q	D	M	U	**Q**	U	//	//	M	Q
5	I	L	M	V	I	**I**	S	//	//	U	**I**
6	D	N	S	I	Q	T	V	//	//	S	N
7	S	U	V	K	T	W	**L**	//	//	I	**G**
8	L	C	I	T	**P**	S	N	//	//	V	V
9	F	**G**	K	**L**	G	V	C	//	//	C	**F**
10	V	**S**	L	F	V	B	O	//	//	T	T
11	C	**W**	T	C	O	K	G	//	//	K	C
12	T	T	**P**	S	R	D	K	//	//	W	W
13	W	V	C	B	C	P	W	//	//	L	B
14	K	O	**H**	D	E	L	T	//	//	O	S
15	N	R	O	E	B	C	J	//	//	P	E
16	B	J	A	W	A	E	B	//	//	R	K
17	P	E	N	O	K	N	**R**	//	//	H	P
18	O	D	E	N	//	R	P	//	//	B	O
19	E	K	R	R	//	A	E	//	//	A	D
20	R	A	J	**J**	//	H	F	//	//	N	R
21	J	F	B	A	//	O	A	//	//	J	J
22	A	H	//	**H**	//	J	**H**	//	//	E	A
23	H	//	//	//	//	//	//	//	//	//	H

TABLE 2	COURT RANKINGS: SUBSTANCE USE PREVENTED AT 18 MONTHS											
	General Ranking	No Prior Arrests	1–4 Prior Arrests	More Than 4 Prior Arrests	Previous Incarceration	No Previous Incarceration	Relatives/Friends with a Conviction	No Relatives/Friends with a Conviction	First Drug Use Age 15 or Younger	First Drug Use Over Age 15	Substance Abuse Treatment Before Baseline	No Treatment Before Baseline
1	G	S	Q	G	I	U	G	T	U	G	I	U
2	M	D	U	U	O	Q	**Q**	V	M	L	C	G
3	Q	P	**M**	M	W	M	I	O	Q	**Q**	**L**	M
4	U	R	V	I	Q	F	**M**	I	G	M	S	**Q**
5	I	Q	C	**L**	M	G	U	B	I	I	M	T
6	D	J	K	P	T	S	**S**	C	S	W	G	**D**
7	S	H	L	T	K	D	D	P	V	S	**W**	V
8	L	A	T	S	C	V	C	K	**F**	T	E	B
9	F	O	D	K	S	I	**L**	A	C	**D**	N	S
10	V	T	S	V	R	**L**	V	E	T	U	P	**F**
11	C	K	N	W	E	C	T	R	W	C	K	**C**
12	T	//	G	A	V	T	W	J	L	K	O	I
13	W	//	B	**J**	U	**N**	K	H	K	V	U	K
14	K	//	I	C	A	K	F	//	**P**	B	**R**	R
15	N	//	O	B	//	P	E	//	A	N	T	L
16	B	//	E	E	//	B	B	//	O	R	H	J
17	P	//	P	**F**	//	O	J	//	E	O	A	O
18	O	//	R	O	//	E	R	//	B	P	J	P
19	E	//	A	R	//	W	**N**	//	R	E	B	E
20	R	//	J	H	//	R	P	//	**H**	**J**	//	A
21	J	//	H	//	//	A	O	//	//	A	//	H
22	A	//	//	//	//	**J**	A	//	//	H	//	//
23	H	//	//	//	//	H	H	//	//	//	//	//

TABLE 2	COURT RANKINGS: SUBSTANCE USE PREVENTED AT 18 MONTHS										
				Primary Drug of Choice							
	General Ranking	Relatives/ Friends with Drug Problems	No Relatives/Friends with Drug Problems	Alcohol	Marijuana	Amphetamines	Cocaine	Other Drugs[2]	Other Than Marijuana	Tried Aggression Drugs[3]	Never Tried Aggression Drugs
1	G	I	F	I	Q	**V**	U	M	G	G	I
2	M	Q	C	M	V	U	S	K	U	M	A
3	Q	G	T	C	S	S	Q	T	M	U	K
4	U	**M**	P	G	I	T	M	S	Q	Q	O
5	I	U	O	**N**	M	D	J	E	I	D	P
6	D	D	I	L	K	W	R	P	D	I	C
7	S	S	R	T	B	R	T	O	S	S	E
8	L	V	E	J	G	//	W	R	C	L	J
9	F	**L**	K	A	C	//	E	//	T	C	//
10	V	K	A	K	**P**	//	I	//	V	V	//
11	C	T	H	//	U	//	C	//	J	T	//
12	T	E	J	//	T	//	L	//	L	W	//
13	W	W	//	//	A	//	O	//	O	F	//
14	K	C	//	//	O	//	V	//	E	E	//
15	N	J	//	//	E	//	B	//	B	K	//
16	B	N	//	//	J	//	K	//	R	B	//
17	P	B	//	//	R	//	A	//	F	P	//
18	O	O	//	//	//	//	H	//	N	N	//
19	E	R	//	//	//	//	//	//	K	O	//
20	R	P	//	//	//	//	//	//	W	R	//
21	J	A	//	//	//	//	//	//	P	J	//
22	A	H	//	//	//	//	//	//	A	A	//
23	H	//	//	//	//	//	//	//	H	H	//

NOTES: (A) Courts below the black lines were ones where we predicted that participants' expected outcomes would be better than their actual outcomes. (B) Courts were not included in the ranking if they had fewer than five people meeting the category criterion (indicated by //). (C) Bold letters represent the top three Drug Courts for percentage of population meeting that criterion. No bold letter indicates that no Drug Court had over 50% of their population meeting that criterion.

[1]Antisocial personality disorder; [2]Heroin, hallucinogenics, & prescription drugs; [3]Amphetaines, cocaine

Although rankings shift somewhat for the substance abuse outcome as they did with the criminal behavior outcome, a set of high-performing Drug Courts emerged—with the top courts largely remaining the same across subgroups—as did a set of low-performing courts. The top five Drug Courts in the general ranking were G, I, M, Q, and U. These five appeared in the top five performing Drug Courts across subgroups the most (G was in the top five courts 14 times; I, 17 times; M, 24 times; Q, 19 times; and U, 18 times). Thus, we concluded that the top-performing Drug Courts at preventing substance use were the same for both their overall population served and specific participant types. In addition, note that two Drug Courts (G and Q) appeared in the top five for both the crime and substance abuse outcomes.

Drug Court Policies and Practices

Below are the results of the analyses for each of the ten policies and practices examined. First, we present how the policy or practice was measured and operationalized in this study. Then, we present findings from both the qualitative and quantitative analyses. For each item, we describe the results for the criminal behavior outcome followed by the substance use outcome.

Leverage

Leverage measures the coercive power of the Drug Court (Longshore et al., 2001). The commonly held consensus is that the more leverage the court has over an individual, the more likely that individual will comply with the Drug Court requirements and therefore succeed in the program. Data for the leverage measure were collected from telephone interviews conducted before the impact study. We operationalized leverage based on five factors that we scored and summed for an overall leverage score:

- An employee of the Drug Court conducted case management (2 points).
- Drug Court participants regularly participated in court hearings (2 points).

- The Drug Court had explicit consequences for dropping out or failing out (2 points).
- The Drug Court told the participant about the explicit consequences (1 point).
- The participant signed a contract which specified the explicit consequences (1 point).

Each Drug Court's leverage was classified as high (7–8 points; 11 courts total), medium (5–6 points; 6 courts total), or low (0–4 points; 6 courts total). We overlaid these classifications on the rankings, coding each Drug Court based on its implementation, and examined resulting patterns.[9]

The qualitative analysis for leverage showed that nearly all of the high-leverage Drug Courts effectively prevented crime. Additionally, many high-leverage Drug Courts clustered toward the top of the ranks, indicating that the highest-performing courts had high leverage and lower-performing courts had either low or medium leverage, though no medium-leverage court was ineffective.

The quantitative analysis revealed that high-leverage Drug Courts prevented significantly more crimes than low-leverage courts ($F = 4.15$, $p < .05$). No statistically significant differences were found between medium- and high-leverage Drug Courts or between low- and medium-leverage Drug Courts for preventing crime. High-leverage courts prevented an average of 4.1 crimes per month compared with 1.4 crimes prevented by low-leverage courts. Medium-leverage courts prevented 2.0 crimes per month.

For substance use, again, most of the high-leverage Drug Courts were effective. However, the clustering of high-leverage Drug Courts toward the top of the ranks for the crime outcome was less pronounced than for the substance use outcome. Low- and medium-leverage courts were distributed throughout the ranks of effective courts, but no medium-leverage courts were ineffective.

In terms of preventing substance use, we found marginally significant differences among Drug Courts with varying leverage ($F = 2.38$,

[9] The full documentation of the qualitative analysis and tables for this finding and all later findings can be found in Zweig and colleagues (2011).

$p < .10$). High-leverage courts prevented an average of 2.6 days of substance use per month, medium-leverage courts prevented 3.1 days, and low-leverage courts prevented 1.8 days.

Predictability of Sanctions

Predictability of sanctions measures the extent to which the Drug Court communicated to participants how and when they would be sanctioned. A coordinated sanction policy (BJA, 1997; Goldkamp, White, & Robinson, 2001) and the extent to which participants are aware of the policy, aware of consequences for noncompliance, able to predict when a sanction will occur, and able to predict what the sanction will be (Longshore et al., 2001) are believed to influence a participant's compliance with program requirements and, thereby, program success. We measured this concept during process evaluation telephone interviews and operationalized predictability of sanctions based on three factors:

- The Drug Court maintained an official schedule of sanctions (2 points).
- The Drug Court provided the official schedule of sanctions to the participant (2 points).
- The Drug Court always or almost always adhered to the official schedule of sanctions (2 points).

We scored and summed responses to quantify the predictability of the sanction policies. Each Drug Court was classified as high predictability (6 points; 9 courts total), medium predictability (3–5 points; 4 courts total), or low predictability (0–2 points; 10 courts total).

The qualitative analysis showed all but one of the medium-predictability courts effective, and many of the low-predictability courts were more successful than anticipated. The high-predictability courts were dispersed throughout the ranks of effective Drug Courts and clustered below the bold line in Tables 1 and 2.

The quantitative analysis revealed that, for the overall model, statistically significant differences existed among Drug Courts with varied predictability of sanctions ($F = 3.31$, $p < .05$). However, the follow-up Tukey tests of differences among groups failed to identify

which groups were significantly different from one another. This was likely because Tukey tests of comparisons between groups are a conservative method for identifying group differences. However, the means for each group indicated that the medium-predictability Drug Courts were the most effective at preventing future crimes (4.3 per month), followed by the low-predictability courts (3.9 per month), whereas the high-predictability courts prevented 1.8 crimes per month. Nearly all medium-predictability courts were effective, while courts with a high predictability of sanctions were generally ineffective.

For the substance use outcome, our qualitative analysis showed a similar pattern to the crime outcome. However, all of the medium-predictability Drug Courts were effective and clustered toward the top of the rankings, and low-predictability Drug Courts were dispersed throughout the rankings. Medium-predictability courts prevented significantly more days of substance use than high-predictability courts ($F = 4.32$, $p < .05$), an average of 4.1 days as compared with 2.0 days per month. Low-predictability courts prevented 2.7 days of substance use per month.

Point of Entry into Drug Court Program

Goldkamp and colleagues and Longshore and colleagues (2001) both identify the point in the criminal justice process at which participants enter the Drug Court program—either pre- or post-plea—as important to the Drug Court model. The point in the criminal justice process at which participants enter the Drug Court program may influence how well they perform and their ability to succeed. We asked program representatives where in the criminal justice process participants entered into the Drug Court program, and operationalized the concept as pre-plea entry (diversion strategies) and post-plea entry (in which convictions stood or were lessened after completion of the program). Drug Courts were classified as pre-plea (all participants entered as part of a diversion strategy; 7 courts), combination (courts where some participants entered the program pre-plea and some, post-plea; 6 courts), or post-plea (10 courts).

The qualitative analysis for preventing criminal acts showed that pre-plea Drug Courts and post-plea Drug Courts clustered toward the upper rankings across subgroups. Combination Drug Courts dispersed throughout the rankings, and most of the ineffective Drug Courts were combination courts. Thus, Drug Courts with one point of entry into their program performed more effectively and prevented more crime than those that allowed multiple points.

The quantitative analysis supports this claim. Statistically significant differences ($F = 7.42$, $p < .05$) existed between Drug Courts in which all the participants entered the program through pre-plea courts versus through combination courts. Also, significant differences existed between post-plea courts and combined courts. The average number of crimes prevented per month for pre-plea courts was 4.6, for post-plea courts was 3.6, and for combined courts was 0.8.

In the qualitative analysis for the substance use outcome, a similar pattern holds as for the crime outcome. Drug Courts that had one point of entry into their program prevented more substance use. Drug Courts with participants who came in post-plea prevented significantly more days of drug use per month (3.0 days) than combined courts (1.7 days; $F = 3.88$, $p < .05$). Pre-plea courts prevented an average of 2.9 days of drug use per month.

Positive Judicial Attributes

Goldkamp and colleagues and Longshore and colleagues (2001) include courtroom dynamics and interactions with judges as important factors of the Drug Court experience for program participants. The idea was that participants developed a relationship with the judge, and the extent to which participants saw this relationship as constructive contributed to their program compliance and success. MADCE quantified this by measuring positive judicial attributes. The site-visit team observed, measured, and scored the judge's actions and demeanor toward the participants during Drug Court proceedings.

The team assigned the Drug Court judge a value of 1 to 5 for respectfulness, fairness, attentiveness, enthusiasm, consistency/predictability, caring, and knowledge. After summing the ratings for

each judge, the team created three approximately equal performance categories for the Drug Courts: high (30 points or more; 8 courts), medium (27–29 points; 7 courts), and low (0–26 points; 7 courts).

This qualitative coding showed that, across several subgroups, Drug Courts with high and medium scores for positive judicial attributes clustered in the upper rankings. Those with low scores clustered toward the bottom with a few exceptions. Drug Courts with high and medium scores on positive judicial attributes were more likely to be among top-performing courts than among ineffective courts.

The results of the quantitative analysis revealed statistically significant differences among Drug Courts depending on how they were coded for positive judicial attributes ($F = 5.81$, $p < .05$). Significant differences existed between Drug Courts with high scores on positive judicial attributes and courts with low scores. Also, significant differences existed between courts with medium scores and courts with low scores. Drug Courts with high scores for positive judicial attributes prevented 3.6 crimes per month, courts with medium scores prevented 4.2, and courts with low scores, 0.7 crimes per month.

A similar pattern holds for preventing substance use based on judicial attributes. In terms of the quantitative analysis, Drug Courts with high scores on positive judicial attributes prevented significantly more days of drug use per month (3.2 days) than courts with low scores (1.9 days; $F = 3.16$, $p < .05$). Courts with medium scores prevented 2.6 days of drug use.

Case Management

All Drug Courts in the MADCE sample had case managers to oversee participant progress and assist in accessing necessary services. We wanted to determine if the frequency of contact with case managers related to program success. A question on the Adult Drug Court Survey (Zweig, Rossman, & Roman, 2011) inquired about the frequency at which participants saw case managers during phase 1 (the first two months) of the program. Each Drug Court was classified as high frequency (more than one contact per week; 6 courts total),

medium frequency (one contact per week; 13 courts total), or low frequency (less than one contact per week or not at all; 4 courts total).

Drug Court rankings for preventing criminal acts based on frequency of case management during the first two months of the program showed no strong pattern, but some patterns emerged. Most of the high-frequency Drug Courts in which participants met with their case managers more than once per week were effective. Medium-frequency Drug Courts were dispersed throughout the ranks, both above and below the bold line in Tables 1 and 2, and ranked in the top two courts in several subgroups. All but a couple of courts classified as low frequency were ineffective or lower-performing.

Although no clear patterns were identified based on the qualitative coding, the results of the quantitative analyses showed evidence of some relationships between frequency of case management and court effectiveness. In terms of preventing criminal acts, the model was marginally significant ($F = 2.84$, $p < .10$). Drug Courts with case managers who met with participants more than once per week prevented more criminal acts per month (4.3 acts) than did low-frequency courts (1.2 acts). Medium-frequency courts prevented 3.0 criminal acts per month.

As with the crime outcome, no clear pattern emerged for the Drug Court rankings regarding preventing substance use. Many of the Drug Courts where case managers met with participants more than once per week proved effective, as did all of the courts where participants met with case managers less than once per week or not at all. Drug Courts that had case managers meet with participants once per week were dispersed throughout the rankings.

The quantitative analysis testing prevention of substance use showed marginally significant differences among Drug Courts based upon the frequency of case management meetings ($F = 2.50$, $p < .10$). Drug Courts where case management meetings occurred more than once per week prevented an average of 3.0 days of substance use per month; courts with case management meetings one time per week prevented an average of 2.1 days of substance use; and courts with less than one meeting per week or no meetings prevented 3.2 days of

use. Notably, Drug Courts that had infrequent case management meetings tended to rely on treatment providers to do this work. When treatment providers were the case managers, they were more likely than other providers to see participants more than once weekly (Zweig et al., 2011). This might explain why the Drug Courts with both high and low frequency of case management meetings prevented about the same numbers of days of drug use.

Other Court Policies and Practices

The remaining five Drug Court policies and practices did not relate to offender outcomes. However, because most of the Drug Courts included in MADCE followed a high standard with respect to these policies and practices, insufficient variation made empirically establishing their effectiveness difficult. Below are results summaries for these practices.

Adherence to Treatment Best Practices—The provision of treatment is considered a core aspect of the Drug Court model (BJA, 1997). To be included in the MADCE, the Drug Court had to provide some type of substance abuse treatment to their program participants. To understand the quality of the treatment, we asked a series of questions during the initial telephone interviews with potential sites. These questions did not cover a full set of best practices for treatment provision but did capture a picture of the treatment being provided. Thus, we operationalized adherence to treatment best practices based on the following five factors:

- The treatment provided by the Drug Court was structured, that is, the Drug Court followed a treatment program manual (2 points).
- A clinical assessment was conducted for treatment needs (1 point).
- Individualized treatment plans were developed for each participant (1 point).
- Individualized treatment plans were used to make referrals (1 point).
- Individualized treatment plans were updated periodically (1 point).

The responses were scored and summed for an overall score of adherence to best practices and each Drug Court was classified as high (6 points; 15 courts total), medium (4–5 points; 6 courts total), or low (0–3 points; 2 courts total).

After scoring Drug Courts for the above ratings, no clear patterns emerged for the crime or drug outcomes during the qualitative analysis. Similarly, we found no statistically significant differences between low-, medium-, and high-adherence courts for crimes prevented and substance use prevented during the quantitative analysis. Not enough variation existed among Drug Courts to fully examine this practice because most courts adhered to treatment best practices at either medium or high levels, based on very limited information rating the quality of the treatment provided.

Drug Testing—Routine drug testing to examine compliance with drug-use requirements is important to Drug Courts (BJA, 1997). During the Adult Drug Court Survey (Zweig, Rossman, & Roman, 2011), Drug Courts were asked about the frequency of drug testing during phase 1 (or first two months) of the program and classified as high frequency (more than once per week; 19 courts total), medium (once per week; 4 courts total), or low (less than once per week or not at all; 0 courts).

The results for frequency of drug testing during the first two months of the program mirror the results for adherence to treatment best practices. After coding court rankings for frequency of drug testing, most of which ranked as high frequency, neither qualitative nor quantitative analyses revealed any clear or statistically significant patterns for the crime or drug-use outcomes. Not enough variation exists between Drug Courts to fully examine this practice.

Judicial Status Hearings—Regular contact between Drug Court participants and the Drug Court judge is considered an essential aspect of the Drug Court model (BJA, 1997; Longshore et al., 2001), and the contact between participant and judge is thought to be an essential catalyst to program compliance and success. The practice was measured through questions asked during process evaluation site visits and operationalized as average frequency of judicial status hear-

ings each month. Each Drug Court was classified as high (four times per month; 16 courts total), medium (twice per month; 4 courts total), or low (once per month; 1 court). Two Drug Courts were missing data on this variable.

The results for frequency of judicial status hearings mirror the results for the two previous low-variability practices. Most Drug Courts had high frequency of status hearings; thus, neither the qualitative nor quantitative analyses show differences in outcomes among Drug Courts based on frequency of such hearings.

Multidisciplinary Team Decision Making—The foundation of the Drug Court model includes an interdisciplinary team of interested parties comprising court staff, treatment staff, prosecutors, defense attorneys, etc. (BJA, 1997). The MADCE hypothesized that the extent to which team members participated in a collaborative manner—that is, the extent to which members attend and interact in court staffings and decisions about specific participants—may affect program outcomes. Thus, during site visits, we observed team member interactions during court staffing meetings.

We operationalized multidisciplinary team decision making by scoring the attendance and level of participation of the following stakeholders at Drug Court staffings: judges, prosecutors, defense attorneys, program coordinators, case managers, probation officers, treatment liaison staff, and other stakeholders. Scores of 1 to 5 were assigned to each stakeholder (with zero points assigned if the stakeholder did not attend), and the scores were summed to reflect overall participation from the stakeholders. Each Drug Court was classified as high (23–25 points; 8 courts), medium (18–22 points; 6 courts), or low (15–17 points; 6 courts). Three Drug Courts were not scored because of missing data.

The results of the qualitative analysis showed no clear patterns for high-, medium-, and low-rated Drug Courts, and the quantitative analyses indicated no statistically significant differences among courts for either preventing crime or substance use. Thus, multidisciplinary team decision making was not directly related to outcomes for participants in this study.

Judicial Interaction—In addition to positive judicial attributes, the MADCE team created a second measure to capture interaction between Drug Court participants and judges. During process evaluation site visits, the team observed Drug Court hearings and noted the frequency with which the judge engaged in interactive behaviors during the court session. For each case reviewed by the judge during the session, the site visit team documented whether the judge made regular eye contact with the defendant for most of the appearance, talked directly to the defendant as opposed to through the defendant's attorney, asked nonprobing questions (e.g., questions eliciting only yes, no, or one-word answers), asked probing questions, imparted instructions or advice, explained the consequences of future compliance (e.g., phase advancements, graduation), explained consequences of future noncompliance (e.g., jail or other legal consequences), allowed the defendant to ask questions or make statements.

For each of these eight actions, we created a variable reflecting whether the judge engaged in that action for more than 50% of his or her cases. Then, we counted the total number of actions that the judge regularly displayed (i.e., actions displayed for more than 50% of observed cases). Based upon these scores, the Drug Courts were assigned a value of low, medium, or high with the cut points selected to create a relatively even spread of courts across categories. Six courts were classified as having high judicial interaction (6 or more actions); seven courts were classified as having medium judicial interaction (4–5 actions); and seven courts were classified as low (0–3 actions).

The results of the qualitative analysis showed no clear patterns for high-, medium-, and low-rated Drug Courts, and the quantitative analyses indicated no statistically significant differences among courts for either preventing crime or substance use. Thus, judicial interaction did not directly relate to participant outcomes in this study.

DISCUSSION

This analysis examined how the relationship between variation in implementation of ten Drug Court policies and practices affects participant outcomes. Among the Drug Court policies and practices ex-

amined, four predicted court effectiveness: leverage, predictability of sanctions, the point in the criminal justice process at which participants enter the program, and positive judicial attributes. We found all four of these policies and practices effective at preventing crime, and all but leverage to be effective in preventing substance use (although this finding was marginally significant). More specifically, Drug Courts that prevented higher numbers of criminal acts per month had high leverage, medium predictability of sanctions, participant populations that enter at the same time point in the criminal justice process, and medium or high scores on positive judicial attributes. Drug Courts that prevented more days of drug use per month had medium predictability of sanctions, participant populations that enter at post-plea, and high scores on positive judicial attributes.

In addition, when Drug Courts implemented the combined practices in the ways found to be effective, a synergistic effect may have occurred such that they were among the top-performing Drug Courts (that is, courts able to prevent the most crimes and the most days of drug use for many participant subgroups). Table 3 identifies the court policies and practices of the top-performing Drug Courts with respect to the four components that emerged in our analyses. Recall that

TABLE 3	COURT POLICIES AND PRACTICES FOR TOP-PERFORMING COURTS							
Court Policy/ Practice	**Top Performers: Crime & Drug Use Prevention**		**Remaining 3 Top Performers: Crime Prevention**			**Remaining 3 Top Performers: Drug Use Prevention**		
	G	**Q**	**L**	**S**	**W**	**I**	**M**	**U**
Leverage	High	High	Med	High	High	Low	High	Med
Sanctions predictability	High	Med	High	Low	High	Low	Low	Med
Program Point of Entry	post-plea	post-plea	post-plea	pre-plea	pre-plea	post-plea	post-plea	pre-plea
Positive Judicial Attributes	High	High	Med	Med	Med	High	High	Low

two courts were in the top-five-ranked courts for both crime and drug use prevention—Courts G and Q. As shown in Table 3, Court Q implemented all four policies in the ways we found to be effective, and Court G implemented three of the four policies in those ways. The remaining three courts in the top five for crime prevention (L, S, and W) and the remaining three courts in the top five for substance use prevention (I, M, and U) all implemented at least two or three of the four policies in the ways that appeared to produce positive outcomes.

These top-performing Drug Courts seemed purposeful in the ways they implemented policies and practices described here as most effective. The combination of these practices implied that these Drug Courts did not simply implement such components randomly; they fit the practices together. They apparently differentiated participants according to risk, need, or circumstance, rather than trying to fit one model of the Drug Court program to all participants. Additionally, these Drug Courts appeared to have judges who understood the value of building relationships with participants in which the individuals felt respected and supported, perhaps inclining them toward more success.

Several of the policies and practices we examined here have not been previously examined in the literature. Specifically, no previous studies of which we were aware examined the differential effectiveness of programs based on their participants' stage of criminal justice system processing when they enter the program. In addition, although leverage has been hypothesized to be a critical factor for Drug Court success (Longshore et al., 2001), ours was the first study to empirically document that Drug Courts classified as having high levels of leverage were the most effective at reducing criminal behavior among their participants.

Other findings generated from these analyses build on previous court-level research. For example, Harrell and colleagues (2000) demonstrated that graduated sanctions (as a court-level characteristic) were more effective than standard dockets in reducing arrest and the number of offenses committed among program participants. We built on these findings by examining the predictability of sanctions as a court-level characteristic. Interestingly, although highly predictable

sanctioning practices are considered a cornerstone for developing a coordinated strategy governing Drug Court responses to participants' compliance (and are listed as one of the Drug Court key components), we did not find empirical support for this practice. Drug Courts classified as having medium predictability of sanctions were the most effective, which suggests that flexibility in responding to participants' performances may be desirable.

In addition, we found strong evidence that positive judicial attributes positively influenced participant performance. Previous studies have identified substantial variation in participant success among various Drug Court judges (Finigan, Carey, & Cox 2007). We found that Drug Courts with a judge with more positive attributes were better able to prevent criminal behavior and substance use.

Conclusions and Implications

This study[10] contributes to our understanding of how Drug Courts should implement practices to increase their effectiveness in preventing crime and drug use. First, the results suggest that Drug Courts with high leverage, medium predictability of sanctions, single points of entry into the program, and high positive judicial attributes are better at preventing criminal activities and substance use. More specifically, Drug Courts with high leverage regularly monitor participants through Drug Court case managers and judicial hearings. They also have explicit known consequences for failure in the program that participants acknowledge in signed contracts. These practices might focus a participant's attention on the fact that the alternative to Drug Court is not desirable and that he or she is being monitored closely, making the consequence of noncompliance and the alternative for failure very real. These findings also imply that Drug Courts with low leverage (those courts which participants perceive as not having obvious consequences for failure or as not closely monitoring program compliance) are unable to succeed in preventing crime.

[10] Limitations to this analysis and how we addressed them can be found in Zweig et al., (2011).

Second, Drug Courts with medium predictability of sanctions have sanction schedules that participants may or may not know about and that may or may not always be followed. These courts have a coordinated sanctioning strategy, yet exercise some flexibility in its implementation in a way that apparently matters to participants. Perhaps participants perceive flexibility in implementation of sanctions as more fair than those Drug Courts that strictly follow a schedule that does not take into account particular individuals or circumstances. While it seems clear that participants need to know that sanctions are a consequence of noncompliance in the program, sanctions that are rigidly set or perceived as unfair may actually frustrate participants or weaken their resolve to comply with program requirements. In addition, if programs with rigid, highly predictable sanctioning practices had been shown to be the most effective in this analysis, that finding would run counter to our other finding on positive judicial attributes. Programs with judges who treated participants fairly and respectfully achieved better success than programs without such judges. Perhaps rigid sanctioning practices and some features of positive judicial attributes do not easily coexist in a single Drug Court.

Third, Drug Courts with single points of entry into their program have participant populations that either all entered the program before they entered a plea (a diversion program) or all entered the program after their plea. These courts do not have a mix of participants who represent different stages of the criminal justice system process. Perhaps Drug Courts that have a singular focus of participant population might be better at tailoring their practices to meet the needs of a preadjudication or a postadjudication population. When a mixed population is in the program, Drug Courts may be less organized in their approach or may be uniformly implementing practices when such practices might not be appropriate for their clientele.

Fourth, Drug Courts that have high scores on positive judicial attributes are those courts in which judges demonstrate to defendants respect, fairness, attentiveness, enthusiasm, consistency and predictability, caring, and knowledge about the person's case and situation. Our courtroom observations of judicial attributes indicate that how the judge builds a relationship with participants, treats participants,

and behaves in the courtroom matters for participant outcomes. This finding once again underlines the role of therapeutic jurisprudence in problem-solving courts.

Fifth, although the study results focused on the practices that were most effective for the most subgroups, policy makers and practitioners can see the results by subgroups in Tables 1 and 2 and use the information to determine which policies and practices are effective for the subgroups they serve. We find that while the top-performing Drug Courts tend to be effective across subgroups, the specific practices that are most effective vary for different groups. This analysis builds on the limited previous research indicating that not all practices are equally effective across the population subgroups served by Drug Courts.[11] Clearly, more detailed analyses of what works for specific subgroups could be conducted based on the findings presented in this paper.

Finally, findings from this study lend themselves to other future research endeavors. Specifically, we examined each Drug Court policy and practice by itself. Future analysis and research might include looking more closely at different combinations of policies and practices in order to identify critical combinations that appear to account for most of the variability in program effectiveness.

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[11] For examples see Marlowe et al., 2003; Marlowe et al., 2005; Marlowe, Festinger, & Lee, 2004; and Festinger et al., 2002.

REFERENCES

Bureau of Justice Assistance. (1997). *Defining drug courts: The key components*. Washington, DC: U.S. Department of Justice. NCJ 205621.

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes and costs.* NPC Research: Portland, OR.

Festinger, D.S., Marlowe, D.B., Lee, P.A., Kirby, K.C., Bovasso, G., & McLellan, A.T. (2002). Status hearings in drug court: When more is less and less is more. *Drug and Alcohol Dependence, 68*(2): 151–157.

Finigan, M.W., Carey, S.M., & Cox, A. (2007). *Impact of a mature drug court over 10 years of operation: Recidivism and costs*. Portland, OR: NPC Research.

Goldkamp, J.S., White, M.D., & Robinson, J.B. (2001). Do drug courts work? Getting inside the drug court black box. *Journal of Drug Issues, 31*(1): 27–72.

Harrell, A.V., Cavanagh, S., & Roman, J.K. (1998). Findings from the evaluation of the DC Superior Court Drug intervention program. Submitted to the National Institute of Justice. Washington, DC: The Urban Institute.

Harrell, A.V., Cavanagh, S., & Roman, J.K. (2000, April). Findings from the evaluation of the DC Superior Court Drug intervention program. *National Institute of Justice Research in Brief*. Washington, DC: U.S. Department of Justice.

Harrell, A., Cavanagh, S., & Roman, J. (2000). Findings from the evaluation of the DC Superior Court Drug intervention program. Submitted to the National Institute of Justice. Washington, DC: The Urban Institute.

Longshore, D.L., Turner, S., Wenzel, S.L., Morral, A.R., Harrell, A., McBride, D., Deschenes, E., & Iguchi, M.Y. (2001). Drug courts: A conceptual framework. *Journal of Drug Issues 31*(1): 12.

Marlowe, D.B., Festinger, D.S., Dugosh, K.L., & Lee, P.A. (2005). Are judicial status hearings a "key component" of drug court? Six and twelve month outcomes. *Drug and Alcohol Dependence*, 79.

Marlowe, D.B., Festinger, D.S., & Lee, P.A. (2004). The judge is a key component of drug court. *Drug Court Review, 4*(2):.1–34.

Marlowe, D.B., Festinger, D.S., Lee, P.A., Schepise, M.M., Hazzard, J.E.R., Merrill, J.C., Mulvaney, F.D., & McLellan, A.T. (2003). Are judicial status hearings a key component of drug court? During-treatment data from a randomized trial. *Criminal Justice & Behavior, 30,* 141–162.

Rempel, M., & Farole, D.J. (2011). Impact methodology: Analytic strategy for producing unbiased estimates of drug court impact. In S.B Rossman, J.K. Roman, J.M. Zweig, M. Rempel, & Lindquist C., H. (Eds), *Volume 4: The Multisite Adult Drug Court Evaluation: The impact of drug courts.* Washington, DC: Urban Institute.

Rempel, M., Fox-Kralstein, D., Cissner, A., Cohen, R., Labriola, M., Farole, D., Bader, A., & Magnani, M, (2003). *The New York state adult drug court evaluation: Policies, participants and impacts*. Center for Court Innovation. New York: Center for Court Innovations.

Rossman, S.B., Roman, J.K., Zweig, J.M., Lindquist, C.H, & Rempel, M. (2011). *Volume 1. The Multisite Adult Drug Court Evaluation: Study Over-*

view and Design. Washington, DC: Urban Institute.

Zweig, J.M., Lindquist, C.H., Downey, P.M., Roman, J.K., & Rossman, S.B. (2011). Chapter 7: Impacts of court policies and practices. In S.B. Rossman, J.K. Roman, J.M. Zweig, M. Rempel, & C. Lindquist (eds.). *The Multisite Adult Drug Court Evaluation: The Impact of Drug Courts: Vol. 4.* (pp. 121–213). Washington, DC: Urban Institute.

Zweig, J.M., Rossman, S.B., & Roman, J.K. (2011). *The Multisite Adult Drug Court Evaluation: What's Happening with drug courts? A portrait of adult drug courts in 2004: Vol. 2.* Washington, DC: Urban Institute.

Janine M. Zweig, *PhD, is a senior fellow with the Urban Institute's Justice Policy Center. Her research interests focus on vulnerable populations, such as offenders (including those with substance use issues), victims of violent crime (including intimate partner violence and sexual violence), and adolescents (including issues related to teen dating violence, substance use, and other health risk behaviors). Her work includes quantitative and qualitative methodologies, longitudinal studies, and multisite evaluations.*

Christine Lindquist, *PhD, is a senior research sociologist at RTI International. Her research interests and areas of expertise include prisoner reentry, families and incarceration, criminal justice approaches to substance abuse treatment, and violence against women (including workplace approaches for addressing intimate partner violence and sexual assault among university women) with a particular focus on evaluating the effectiveness of interventions in these areas.*

P. Mitchell Downey, *MA, is a research associate with the Urban Institute's Justice Policy Center. He has served as a quantitative analyst on a variety of projects addressing crime policy questions, including the Multisite Adult Drug Court Evaluation.*

John K. Roman, *PhD, is a senior fellow in the Justice Policy Center at the Urban Institute. His research focuses on evaluations of innovative crime control policies and justice programs.*

Shelli B. Rossman*, MA, is a senior fellow in the Justice Policy Center at the Urban Institute. Her research interests encompass criminal justice including reentry, problem-solving courts, community-based and correctional supervision, case management and comprehensive service delivery for offender populations, delinquency prevention and intervention, and victimization; public health focusing on substance abuse, HIV/AIDS, and reproductive health; and community safety.*

Direct correspondence to Janine Zweig at 2100 M St. NW, Washington, DC 20037. jzweig@urban.org

IMPROVING DRUG COURT OPERATIONS: NIATX ORGANIZATIONAL IMPROVEMENT MODEL

Harry K. Wexler — Mark Zehner — Gerald Melnick

[8] Applying NIATx to Drug Courts—*The NIATx (Network for the Improvement of Addiction Treatment) performance improvement model was used to increase client access to and engagement in Drug Court services.*

[9] Improving Participant Flow in Drug Courts—*The NIATx performance improvement model reduced wait times, increased admissions rates, and reduced no-show rates in nine Drug Courts.*

[10] Achieving Best Practices in Drug Courts—*The NIATx performance improvement model shows promise for helping Drug Courts implement organizational changes to adopt best practices.*

BY UNITING JUSTICE with rehabilitation for substance-abusing offenders, Drug Courts introduced an important innovation to the court system. The expansion of the adjudication role and allowing judges to divert offenders from prison created a new paradigm. The use of criminal justice and social services in tandem (i.e., a carrot and stick approach) is widely accepted, and the Drug Court movement has achieved considerable recognition; however, to succeed, Drug Courts have had to respond to the challenge of integrating disparate criminal justice and treatment system components, each with individual concerns and philosophies regarding public safety missions, individual rights, and personal growth. While the Drug Court movement has consistently reported positive outcomes (Marlowe, 2010), offering substance abuse treatment as an alternative to incarceration requires substantial integration and management of organizational processes for each Drug Court—administrative practices that create barriers to treatment, duplication of efforts, and long wait times for treatment.

Each Drug Court's success corresponds with how well it addresses these operational challenges.

This article reports on a program in which NIATx (Network for the Improvement of Addiction Treatment) with assistance from the National Development & Research Institutes (NDRI) provided technical assistance for adult treatment Drug Courts that received grant awards from the Center for Substance Abuse Treatment (CSAT) in 2009. The program goal was to improve Drug Court operations that increase client access to and engagement in Drug Court services, thereby increasing recovery and reducing recidivism. The organizational improvement model that NIATx developed has been highly successful in improving the functioning of substance abuse treatment programs (McCarty et al., 2007; Hoffman et al., 2008). The present program applied these same techniques to improve access and engagement in Drug Courts.

ABOUT NIATX

Founded in 2003, NIATx works with behavioral health organizations to help them get more people into treatment and *keep* them in treatment long enough to experience the benefits of recovery. The NIATx model was developed in response to two national initiatives: Paths to Recovery, funded by the Robert Wood Johnson Foundation (RWJF), and Strengthening Treatment Access and Retention (STAR), funded by CSAT. The thirty-nine substance abuse treatment organizations that participated in the first initiatives used a simple process-improvement model to change the business practices and reduce administrative barriers to treatment that impeded their ability to deliver quality care (Cappocia et al., 2007).

NIATx Areas Of Application

The original NIATx projects generated a strong body of knowledge about how substance abuse treatment organizations could improve the quality of addiction treatment. NIATx has worked with nearly 3,000 behavioral health organizations around the country, most of whom are health care providers treating persons suffering from

substance use, mental health disorders, or both (McCarty et al., 2007; Hoffman et al., 2008). Within substance abuse treatment, the NIATx model has demonstrated success in all aspects of care, from screening and brief intervention to medically managed intensive residential treatment and therapeutic communities. NIATx has organized learning collaboratives (Kilo, 1998) for provider agencies working to improve outcomes for pregnant and postpartum women, adolescent substance abusers, those at risk for or suffering from HIV/AIDS, opioid abusers, cultural minorities (such as African–Americans and Latinos), and many other targeted treatment programs.

Calls for organizational and systems improvement to increase treatment access and quality within criminal justice settings have been growing (Heck & Thanner, 2006; McCarty & Chandler, 2009). Applications of the NIATx model have helped organizations to reduce their paperwork burden, increase recovery services for persons who have completed treatment, or adopt evidence-based practices such as medication-assisted treatment. Adopting a NIATx approach within Drug Courts offers an excellent opportunity to identify and remove process barriers in both the treatment and justice systems that impede the ability of substance abusers to achieve and maintain recovery.

The NIATx Model

As a starting place, the NIATx model of process improvement leads organizations or programs to focus upon four aims that address client access to and continuation in substance abuse treatment:

- Reduce wait time to treatment
- Reduce no-shows
- Increase admissions
- Increase continuation in treatment

To create improvement in these four aims, the NIATx model stresses five principles for successful organizational change (Gustafson & Hundt, 1995):

- Understand and involve the customer (the offender, or participant, in the case of Drug Courts)
- Fix key problems

- Pick a powerful change leader
- Get ideas from outside the organization or field
- Use rapid-cycle testing

In addition to these five principles, bringing management and staff together to work in an integrated manner is central to the NIATx model (McCarty et al., 2007). Support from a senior leader (the *executive sponsor*) is essential for a quality improvement project to succeed. The executive sponsor is usually the director or CEO of an organization or, in the case of Drug Courts, a judge. This person becomes responsible for authorizing the time and resources needed to complete the project successfully. The executive sponsor also designates a staff member as the *change leader* to manage the organizational improvement process that addresses one of the four aims. Together, the executive sponsor and the change leader agree to establish a *change project*—a process improvement initiative that sequentially targets *one* NIATx aim at *one* location with *one* population. The change leader, who is responsible for organizing and conducting the project, together with the executive sponsor, assembles a *change team*, which includes a short list of staff members from their Drug Court system. The change team measures baseline data, selects change ideas to test, implements and monitors the change, determines its impact, and reports the results.

The change team uses process improvement tools to identify and address organizational structural or system issues that interfere with or inhibit clients from accessing and continuing in treatment. Two fundamental tools are the walk-through and rapid-cycle testing using the plan-do-study-act (PDSA) cycle.

Walk-Through—This is the primary method of identifying potential targets for change. Staff members take on the role of a client needing treatment to experience the process as a participant would. Taking this view of Drug Court and treatment services—from arrest or first contact, through intake, screening, assessment, and admission, to final discharge or graduation—helps staff members to understand problems from the participant's perspective. Simultaneously, staff members involved with the process are asked to provide a candid description of their observations and experience. Input from participants

and from those who serve them helps the change team to prioritize areas that need work to achieve their change project goal.

Rapid Cycle Testing—After using the walk-through observations and feedback to identify areas for change, the change team (which should have an appointed data coordinator) relies on the PDSA cycle to turn a change idea into action. The PDSA cycle represents the sequential flow of information gathering, decision making, action, and assessment. Critical to change team success is doing a series of short rapid cycles, with each cycle—from planning through implementation—taking only two weeks. This allows the change team to assess quickly whether the new idea is leading them toward the intended improvement and to make decisions about what next steps should be. The team adopts the change as a new standard of operation only when it has been demonstrated to be an improvement through comparison of baseline and follow-up observations (for example, reducing time from first contact to assessment from eight days to two days).

The process of measuring change is very important and should speed the improvement process rather than delay it. By collecting just enough consistent data before, during, and after each change, teams measure progress with respect to the goals they set and provide information for evaluating a change's impact. Often in the PDSA change process, it is easier to rely on manual data collection for quick and rapid feedback on the success of the change. This means relying on small samples collected over short time periods to measure change progress.

Using this method of testing changes, the NIATx model (1) minimizes risks and expenditures of time and money because changes are not implemented systemwide until effectiveness is demonstrated; (2) reduces disruption to participants and staff in making changes; (3) lessens resistance to change by starting on a small scale; and (4) learns from the ideas that work as well as from those that do not. By starting with small changes to test ideas quickly and easily and by using simple, pragmatic measurements to monitor the effect of changes over time, the PDSA model can lead to larger improvements through successive quick cycles of change.

The NIATx Learning Collaborative

To foster the adoption and implementation of the process improvement model and expedite the sharing of innovations, NIATx organizes learning collaboratives that involve a variety of activities and services intended to facilitate the formation of a learning community for adult learning and provide practice in using the NIATx model, including the following:

- *Learning Sessions*—Change teams convene at single- or multiday workshops to learn from each other and outside experts.
- *Conference Calls*—Teleconference calls and webinars are held, generally monthly, during which change leaders discuss issues and share progress on their change projects.
- *Coaching*—An expert in process improvement works with a change team to help it make, sustain, and spread process improvement.
- *NIATx Web Site*—A storehouse of process improvement tools, promising practices, and success stories, this Web site (www.niatx.net) provides complete instructions on how to conduct a NIATx change project.

IMPLEMENTATION

CSAT funded grants to forty-four Drug Court treatment projects in 2009 (Substance Abuse & Mental Health Services Administration (SAMHSA), 2009). These grantees were invited to participate in the program to focus on access and engagement improvement efforts during 2010. Ten Drug Courts were chosen to participate in the NIATx Learning Collaborative for Adult Treatment Drug Courts to improve client access to and retention in Drug Courts. The ten courts represented diverse geography (East Coast, West Coast, Midwest, South,) urban and rural settings, ranges in size, different types of Drug Courts (tribal, family, prison diversion, etc.), and varying stages of maturation (less than two years of court existence to more than twenty years).

NIATx Technical Assistance

The approach with the ten Drug Courts followed the NIATx learning collaborative model described above. The first step toward participation in the NIATx learning collaborative for each Drug Court was to conduct a walk-through prior to any coaching or in-person training. Based on their walk-through findings and exploratory baseline measures, each Drug Court considered an aim, formed change teams, and delegated executive sponsor and change leader roles prior to attending the first of three learning sessions.

Two to three members of each Drug Court's change team attended the first learning session, a kickoff meeting that included training in the NIATx process improvement model and tools for change team success, establishing goals for their change project from the four NIATx aims, and creating a project charter. Subsequent learning sessions, held six months and one year after the kickoff, focused on peer networking and sharing lessons learned and success stories so that Drug Courts could learn from each other and from expert NIATx coaches in person.

Each site received additional assistance in the form of coaching via monthly technical-assistance telephone calls and a one-day site visit. Coaching support helped Drug Courts select personnel for change teams, utilize process improvement tools to identify change barriers (flow charts, fish-bone diagrams, etc.), select improvements to test (nominal group technique, etc.), monitor change data (spreadsheets, graphs, etc.), and communicate the results (storytelling, etc.). Each month, NIATx conducted a conference call or webinar for members of the ten change teams, which offered continued training and provided a forum for the teams to share their experiences in applying process improvement in Drug Court settings.

Over the course of one year, change teams implemented test changes through PDSA cycles progressively until they had achieved their target improvement, lost momentum on an aim, or identified a higher priority aim to address. At the third and final learning session,

nine of the ten original Drug Courts[1] came together to report their progress and exchange ideas on the success of their process improvement projects.

IMPROVEMENTS IN COURT OPERATIONS

Over the course of the 12-month collaborative, eight Drug Courts worked on reducing the wait time to treatment, two Drug Courts targeted reducing no-shows to appointments, and four Drug Courts targeted increasing admissions.

Each Drug Court self-reported its change project results to its collaborative peers at the final learning session in short presentations consisting of essential information that summarized the data they used to monitor and measure the effectiveness of their NIATx change efforts, what process they changed, and how.

Wait Time Reductions

The eight Drug Courts that focused on wait times conducted eleven change projects targeting the steps in the client flow. These courts achieved a median reduction of 57% in client wait time. The time it takes participants to traverse the steps from arrest to receiving addiction counseling is often influenced by inefficient business, bureaucratic, or administrative practices and policies. Wait time reduction improvements adopted by these Drug Courts fell into three general categories: scheduling modifications, paperwork revisions, and inclusive communications.

Scheduling Changes

Some Drug Courts improved wait times by modifying their scheduling practices. One court's change team concentrated on the treatment agency's process of scheduling admissions appointments. Traditionally participants had to contact the counselor, who would then offer an appointment slot according to his or her availability. Al-

[1] One of the original ten courts dropped out because of internal administrative issues but expressed interest in continuing with the NIATx process after the issues were resolved.

ternatively, the agency adopted an open-clinic scheduling method where participants needed only to contact the agency front-office staff for the next available appointment slot; counselors were assigned when the participants arrived for their appointment. This scheduling method produced an 84% reduction in wait time for participants between the orientation session and an admissions appointment, decreasing from an average of over twelve days to around two days.

A second Drug Court's change team addressed the elapsed time between screening for Drug Court and admission thereto. Their change team initially found that an unsatisfactory number of clients were being held over each week for a decision on admission. They PDSA-tested a different scheduling process wherein the daily docket for the court team began one-half hour before other Drug Court activity, thereby reducing distractions. This practice created a better environment for Drug Court staff to communicate about clients that resulted in thirty-seven and fifteen fewer days between screening and admission for preadjudication and postadjudication participants, respectively.

A third Drug Court reduced wait times by implementing a centralized electronic scheduling program coupled with the reassignment of participant scheduling responsibility away from counselors and onto the treatment facility administrative support staff. The Drug Court also changed the practice of having participants return for treatment the following Monday to having participants report for the next available session, sometimes resulting in same-day treatment, thereby considerably reducing wait times.

Paperwork Revisions

Drug Courts also improved wait times through paperwork reduction. One Drug Court's efforts reduced the time required for a Drug Court referral to be assessed for treatment from twenty-eight days to twelve days by developing an improved flow of referral paperwork between other criminal court divisions and the Drug Court team. They did this through the addition of an inbox in the courthouse specifically for Drug Court orders and by sharing new participant information among all Drug Court team members using a tracking spreadsheet.

However, while the improved wait times increased efficiency between referral and assessment, doing so created a new problem: it increased time between a participant's completed assessment and admission to treatment by 140%. The wait times between assessment and treatment grew from twenty-five days to as many as sixty, providing a lesson regarding the interdependence of many of the processes involved in getting participants into treatment. As part of the continuous improvement process, the change team then turned its attention to overcoming this new bottleneck.

Another Drug Court that implemented a paperwork change project improved wait times by changing the paperwork requirements, including the revision of a standard screening form to a simplified checklist that reduced the narrative obligation and included the date of referral. By including the date, the staffing team became more aware of the elapse of time to sentencing and allowed them to prioritize cases accordingly.

Inclusive Communication

Drug Courts also pursued reducing wait times by setting up more inclusive communication practices. One Drug Court did this by including a partner agency staff person in case management efforts. The court implemented a monthly clinical case staffing between treatment staff, Drug Court coordinators, and court staff to coordinate discharges, new admissions, and directly monitor capacity.

Another Drug Court, where participants waited on average sixty-two days for treatment assessment and placement, addressed this by increasing informal communications between the court staff and the health center. The Drug Court instituted a standard 30-day maximum wait. Communication between the court coordinator and treatment counselors increased, and they concentrated on efficiently assigning appointments, resulting in an average wait time of only ten days.

Admissions Increases

Four Drug Courts tested ways to improve their admission or referral totals. For three of these courts, monthly average admissions to

Drug Court treatment increased sharply to almost double (92%–100%) and the fourth court showed a fourfold increase in referrals owing to their very low baseline. Change team interventions that were effective for increasing admissions included staff placement and outreach.

Staff Placement

To boost their enrollment totals, the change teams of three courts placed a Drug Court coordinator on-site at the courthouse on the day of hearings to meet with new clients and their families to increase the rate of new admissions.

Outreach

Another court conducted substantial outreach and education about Drug Court with social workers at a partner referral agency to increase admissions to the court. The Drug Court ran successive change cycles that included developing a newsletter, conducting in-person meetings between court and referral agency personnel to build understanding and strengthen relationships, and rerouting referrals from the public defender's office to the jail social workers so that Drug Court staff received earlier notice.

Reductions in No-Show Rates

Reductions in no-show rates and related increases in program participation were accomplished by change team interventions including reminder calls, escorting participants, and reporting attendance to the Drug Court.

Reminder Calls

One Drug Court with a failure rate of 41% for participant appearances at scheduled orientation appointments was able to reduce that to 18% by making reminder phone calls to the participant the day prior to their appointment.

Escorting Participants and Reporting Attendance

Another Drug Court focused on participants' attendance at a 2-day pretreatment group with baseline attendance rates of 62 percent. After several PDSA cycles, they adopted changes that included escorting participants to the classroom and reporting attendance directly to the Drug Court. The rate of participant attendance improved to 76 percent.

Synergistic Improvement Effects

Drug Courts that achieved improvements on one aim realized improvements on other measures. For example, a Drug Court that produced a seven-day reduction in wait time by making intakes available on the same day the participant called for an appointment found a concomitant 35% increase in their intake completion.

DISCUSSION

The project described in this article represents a first step in applying the NIATx model to achieve organizational improvement best practices in the Drug Court environment. NIATx offers a method to pair systematic experimentation with innovation until it can be fully adopted in the court. Through participation in the learning collaborative and applying the NIATx process improvement model, the adult treatment Drug Courts improved organizational and administrative processes in their programs that reduced wait times and no-shows and increased admissions and participant engagement with treatment. These improvement projects provided courts of different models, sizes, populations, and geographies substantial gains in performance, experience, and training in the application of process improvement tools and organizational change for continued growth. At the final learning session, each of the Drug Courts reported that changes they had developed during this project had become standard procedure.

The Drug Court community appears especially interested in exploring and adopting best practices to improve their operations and outcomes. In a system focused on rehabilitation and accountability, strengthening offender adherence at each step, from monitoring ap-

pearances through treatment participation, imparts considerable value. During walk-through and change team discussions, a number of courts reported that delaying treatment hindered operations and interfered with the offender's recovery. The participating Drug Courts demonstrated the capacity of the NIATx model to facilitate organizational improvements such as timeliness of services in complex Drug Court environments. The NIATx approach has proved an effective practice in the participating Drug Courts and is a promising best practice for Drug Courts that face similar challenges.

Next Steps

Increasingly, Drug Courts and treatment programs serving criminal justice populations are requesting training and tools to implement process improvement. In addition to a wide array of free guides, tools, and other resources, NIATx regularly offers free webinars on current topics of interest as well as continuing education in NIATx implementation (available online at www.niatx.net). Several state and national Drug Court professional associations have hosted NIATx training workshops at annual meetings. NIATx continues to develop a pool of expert coaches, to maintain a roster of NIATx-experienced peer mentors within Drug Courts to support process improvement efforts in criminal justice, and to serve future collaborative efforts for the field.

New Directions

Research is needed to evaluate the longer-term impact of NIATx-facilitated changes and enhanced communication among Drug Court participants. The improved client flow within participating Drug Courts demonstrates the positive organizational effects of the NIATx-related changes, which may in turn improve participant recovery and recidivism. Considerable evidence supports the effectiveness of Drug Courts. A next step is to explore how organizational functioning influences outcomes. Proving the value of improved organizational effectiveness for participants would be especially beneficial.

The experiences of the Drug Courts that participated in the *NIATx* Learning Collaborative for Adult Treatment Drug Courts program of-

fer information and guidance to other court systems seeking operational changes to improve service coordination and delivery. Applying NIATx process improvement practices can help overcome resistance to organizational change and resolve operational issues that hinder the delivery of effective services. The lessons learned from this project confirm that the NIATx organizational change model offers a highly promising practice for improving the efficiency and success of Drug Court systems.

Points of view, opinions, and conclusions in this paper do not necessarily reflect those of the U.S. Department of Health & Human Services (DHHS), Substance Abuse and Mental Health Administration (SAMHSA), Center for Substance Abuse Services (CSAT), NIATx, or NDRI.

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REFERENCES

Cappocia, V.A., Cotter, F., Gustafson, D.H., Cassidy, E., Ford, J.H., Madden, L., Owens, B.H., Farnum, S.O., McCarty, D., & Molfenter, T. (2007). Making "stone soup": How process improvement is changing the addiction treatment field. *Joint Commission Journal on Quality and Patient Safety, 33*(2), 95–103.

Gustafson, D.H., & Hundt, A.S. (1995). Findings of innovation research applied to quality management principles for heath care. *Health Care Management Review, 20*(2), 16–33.

Heck, C. & Thanner, M.H. (2006). Drug court performance measurement: Suggestions from the National Research Advisory. *Drug Court Review, 5*(2), 33–50.

Hoffman, K.A., Ford, J.H., Choi, D., Gustafson, D.H., & McCarty, D. (2008). Replication and sustainability of improved access and retention within the Network for the Improvement of Addiction Treatment. *Drug and Alcohol Dependence*, *98(1–2)*, 63–69.

Kilo, C.M. (1998). A framework for collaborative improvement: lessons from the Institute for Healthcare Improvement's Breakthrough Series. *Quality Management in Health Care, 6*(4), 1–13.

Marlowe, D.B. (2010, December). Research update on juvenile drug treatment courts. *National Association of Drug Court Professionals: Need to Know.* Retrieved May 2, 2011, http://www.ndcrc.org/content/need-know-research-update-juvenile-drug-treatment-courts.

McCarty, D., Chandler, R.. (2009). Understanding the importance of organizational and system variables on addiction treatment services within criminal justice settings. *Drug and Alcohol Dependence, 103*(Suppl. 1), S91–S93.

McCarty, D., Gustafson, D.H., Wisdom, J.P., Ford, J., Choi, D., Molfenter, T., Capoccia, V., & Cotter, F. (2007). The Network for the Improvement of Addiction Treatment (NIATx): Enhancing access and retention. *Drug and Alcohol Dependence*, *88*(2–3), 138–145.

Substance Abuse & Mental Health Services Administration (SAMHSA). (2009). FY 2009 SAMHSA Grant Awards; Center for Substance Abuse Treatment [CSAT] TI09-003 adult treatment drug courts. Retrieved May 2, 2011, from http://www.samhsa.gov/Grants/2009/awards/ti0903.aspx.

Harry K. Wexler, *PhD, a senior principal investigator emeritus at National Development and Research Institutes (NDRI), has acquired a national reputation in the areas of substance abuse policy, treatment, and research during the last forty years. His current work focuses on the effect of open communication and consensus on treatment effectiveness and organizational change. He has written numerous articles and has served as editor of special issues of the Prison Journal.*

Mark Zehner *is an associate researcher with the Center for Health Enhancement Systems Studies (CHESS) and NIATx at the University of Wisconsin–Madison. He is currently the project lead at the NIATx National Program Office for several federally funded improvement collaboratives for treatment capacity and quality. Mr. Zehner is also a NIATx coach and a faculty presenter for the NIATx Change Leader and Coaching Academies.*

Gerald Melnick, *PhD, is a senior principal investigator at the Center for the Integration of Research & Practice (CIRP) at National Development and Research Institutes (NDRI). His research activities include the effect of organizational characteristics on the success of substance abuse treatment programs, the effect of stigma on recidivism in first-time nonviolent felons, and the preparedness of state criminal justice systems to treat co-occurring substance use and mental disorder.*

Direct correspondence to Harry K. Wexler, PhD, Center for the Integration of Research & Practice (CIRP), National Development & Research Institutes, Inc. (NDRI), 71 W 23 Street, 8th Floor, New York, NY 10010. (212) 845-4400. hkwexler@aol.com

PARTICIPATION OF DEFENSE ATTORNEYS IN DRUG COURTS

Michael Tobin

> ***[11] Responsibilities of Defense Attorneys in Drug Court—****A defense attorney's responsibilities to an individual client may differ from those of a member of a collaborative treatment court team.*
>
> ***[12] Decision to Enter Drug Court—****In representing a client potentially eligible for treatment court, a defense attorney should be knowledgeable about the court's procedures and explain the potential advantages and disadvantages of treatment court compared to traditional litigation.*
>
> ***[13] Defense Representation on a Drug Court Team—****Defense representatives must advocate for fair procedures in the Drug Court and educate the defense bar generally regarding Drug Court operations.*
>
> ***[14] Defense Attorneys Serving in Dual Roles—****Where the same defense attorney acts as adversary counsel for individual clients and a Drug Court team member, the attorney must take precautions to balance potential role conflicts.*

THE ROLE OF A DEFENSE ATTORNEY in a Drug Court is a complex one. General guidelines for defender programs (including assigned-counsel systems) and for individual defense attorneys can be useful, contributing to the effectiveness of Drug Courts. The recommended best practice for a defender organization is to recognize and implement the collaborative and nontraditional role of a defense representative on a Drug Court team. This representative does not serve as adversary counsel for individual Drug Court participants, but rather as an advocate for evidence-based practices that advance the court's

therapeutic goals.[1] Because Drug Courts' primary goals are to help participants overcome addiction and thereby to reduce recidivism, the defense representative helps the Drug Court's participants by advocating for effective court policies and practices.

General Purposes and Attributes of Treatment Courts

Drug Courts and other treatment courts "were created in response to the perception that the traditional, adversarial criminal justice system does not adequately address"[2] issues such as alcohol or drug abuse, which in turn are risk factors for future criminal involvement. These courts blend attributes of traditional court procedures with therapeutic procedures not generally associated with court hearings. The traditional attributes include mandatory court appearances and the potential for sanctions. The therapeutic procedures include the delivery of support services to participants and the use of incentives to encourage and recognize progress in treatment.

Drug Courts typically conduct frequent review hearings to oversee treatment for drug abuse, which may include abuse of alcohol as well as abuse of controlled substances. The Drug Courts offer participants the opportunity to obtain a lesser sentence or dismissal of charges upon successful completion of the treatment program. The Drug Court model "calls for collaboration among various components

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[1] *EDITOR'S NOTE—The author's recommendation that "adversary counsel" and "defense representative" functions should ordinarily be performed by different attorneys is not universally agreed upon by defense experts and does not reflect an official position of NADCP or NDCI. Nevertheless, this article presents the considered wisdom of a highly experienced defense expert in addressing thorny ethical dilemmas commonly confronted in Drug Courts. Moreover, research does suggest outcomes may be improved by including separately designated defense representatives on the Drug Court team who have substantial training and experience with the Drug Court model, practices, and procedures.*

[2] *Critical Issues for Defense Attorneys in Drug Court,* p. 3 (National Drug Court Institute 2003). Although this article specifically references Drug Courts, many jurisdictions have implemented treatment courts to focus on other issues, such as alcohol abuse, mental illness, or issues unique to veterans. *See* W. Huddleston & D. Marlowe, *Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Court Programs in the United States*, p. 1 and nn. 1–2 (Bureau of Justice Assistance 2011) (reporting a total of 3,648 problem-solving courts, including 2,459 Drug Courts).

of the criminal justice and substance abuse treatment systems to combine the coercive power of the court with effective and scientifically based treatment practices."[3] Studies of Drug Courts have confirmed that treatment is more successful than incarceration in preventing recidivism.[4]

The collaborative aspects of Drug Courts often include the participation of a public defender or other defense attorney on a Drug Court team.[5] As a team member, the defense attorney may have the opportunity to improve justice policy by expanding opportunities for defendants to have their social service needs addressed effectively and to have their cases dismissed or reduced. However, the nontraditional role of team member also raises ethical and practical questions regarding the boundaries of this collaborative role and the traditional adversarial role of defense counsel.[6]

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[3] *Drug Courts: The Second Decade*, p. 17 (National Institute of Justice 2006).

[4] *See* W. Huddleston & D. Marlowe, *Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Court Programs in the United States*, p. 9 (Bureau of Justice Assistance 2011) (citing numerous studies showing that Drug Courts reduce crime in comparison to other justice-system dispositions).

[5] *See, e.g.*, Defining Drug Courts: The Key Components, p. 8 (National Association of Drug Court Professionals (NADCP) 1997) (listing defender among important participants in the planning process for a Drug Court); *id.*, p. 11 (prosecutor and defense counsel, as members of drug-court team, must shed adversarial roles and focus on participant's "recovery and law-abiding behavior").

[6] See *America's Problem-Solving Courts: The Criminal Costs of Treatment and the Case for Reform,* pp. 30–41 (National Association of Criminal Defense Lawyers 2009). The defense attorney is not the only member of the typical Drug Court team who needs to adapt to a nontraditional role. The judge, although still the ultimate decision maker, receives input from all other team members and often seeks consensus from the team. The judge also talks directly to participants about many facets of their lives at the regular review hearings. The prosecutor and law enforcement (including the probation department) refrain from investigating or prosecuting violations of law that come to light as part of Drug Court.

The ability of team members to adapt to the nontraditional role of team member is critical to the success of the court; conversely, an inability to accept a collaborative role is counterproductive. The nontraditional role does not mean that the defense representative should always agree with other team members. The defense representative will generally best understand the barriers that make it difficult for participants to overcome addiction and to manage other life issues while engaged in an intensive treatment program. The defense representative may have the most compassion for and patience with Drug Court participants. Therefore, the defense representative may

Although research conclusively shows the effectiveness of Drug Courts, studies also show that effectiveness depends upon fidelity to specific components of such courts.[7] When key components are dropped or when the treatment programs are "watered down," lower graduation rates and higher recidivism have occurred.[8] Therefore, attorneys working in treatment courts need to be aware of (and to advocate for) the research-based approaches that lead to successful results for participants.

SUMMARY OF RECOMMENDATIONS

Defense attorneys should participate in all aspects of Drug Courts to ensure that these courts treat defendants fairly, following effective and therapeutic procedures. Each treatment court should include a defense representative on a team that oversees the court's policies and operations. Defendants participating in a Drug Court should also have access to adversary counsel, although as a practical matter, the therapeutic model of a Drug Court is inconsistent with traditional litigation procedures.[9]

Managers or staff attorneys of indigent-defense providers often serve on a Drug Court team to represent the interests of participants. This role is referred to as the "defense representative" in the balance of this article, and depending on the features of the jurisdiction, the

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often need to remind and persuade other team members to refrain from unduly punitive actions and policies.

[7] W. Huddleston & D. Marlowe, *Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Court Programs in the United States*, p. 14 (Bureau of Justice Assistance 2011).

[8] *Id.*, pp. 14–15.

[9] *See generally infra* nn. 56–60 and associated section. If the court is operating fairly and effectively, the participants view the Drug Court as collaborative, rather than as adversarial. Conversely, if participants frequently perceive unfairness in the court's procedures, the court is probably not fulfilling its therapeutic goals (because court participants are not necessarily defendants in pending cases while in Drug Court and are not necessarily formally represented by an attorney during Drug Court proceedings, the term "participants" is used in this article to refer generally to the individuals supervised in the treatment court program; the terms "clients" or "defendants" are used to emphasize either the attorney-client relationship or the pendency of criminal proceedings).

role may also be fulfilled by a private attorney or a representative of a bar association.[10] The defense representative should know the local justice system sufficiently to assess the benefits and risks of a proposed or existing Drug Court. The defense representative should also communicate regularly with the defense bar regarding the Drug Court's policies and practices.

The differences between the roles of defense representative and adversary counsel are discussed in detail below. Practical and ethical challenges often arise if the same person serves both as the defense representative on a Drug Court team and as adversary counsel for individual participants in the court. Thus, when possible, the defense representative should refrain from serving in these two roles simultaneously. The dual roles create at least the appearance of a conflict between the duty to assist the Drug Court (in fulfilling its broad, therapeutic mission) and the duty to advocate at each court session for individual clients.[11]

If the circumstances of a jurisdiction require an attorney to serve in these roles simultaneously,[12] he or she should clearly communicate

[10] Although indigent defendants and other defendants have common interests in a fair process, indigent defendants have the additional concern that Drug Courts do not impose financial requirements that render their participation impossible or impractical. Thus, the indigent-defense perspective is critical to ensure that any fees imposed on participants are waived or substantially reduced for indigent participants.

[11] For example, research suggests that direct interaction between the judge and participants furthers the court's therapeutic mission. *See, e.g.*, J. Miller and D. Johnson, *Problem Solving Courts: New Approaches to Criminal Justice,* p. 158 (Rowman & Littlefield 2009) (discussing how a judge in a reentry court promotes success of participants through "unique dialogues that address their individual strengths, needs, and challenges"). However, as adversary counsel, an attorney generally discourages a client from speaking in open court, especially if the judge is asking the client about possible rules violations.

[12] In a rural area, for example, there may be only one public defender in the county. The same attorney often serves both as a member of the Drug Court team and as the adversary attorney for individual participants. Serving in the dual roles may be the only practical way in such a county to operate a Drug Court with a defense attorney participating as a team member. If so, the defense attorney should educate other team members regarding the areas in which duties to individual clients take precedence over the role of a team member. However, when resources allow for separation of the team-member and adversary roles, this separation is the best practice both to avoid

with clients regarding the attorney's responsibilities as a member of the Drug Court team. The attorney should also advise other members of the team that when serving an individual client, the attorney may challenge the Drug Court's procedures and the specific actions of other team members.[13]

IMPORTANCE OF DEFENSE PARTICIPATION

Principle Eight of the American Bar Association (ABA) Ten Principles of a Public Defense Delivery System recommends that "[p]ublic defense should participate as an equal partner in improving the justice system." Although the attributes and policies of treatment courts vary widely, national studies show that when operated effectively, treatment courts can benefit individual defendants and the broader community by helping individuals overcome issues often linked to criminal behavior.[14]

A large percentage of defendants in the criminal justice system have a history of irresponsible use of drugs or alcohol.[15] Many others

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ethical conflicts for the attorney and to promote fidelity to effective practices in the Drug Court.

[13] The attorney might, on behalf of a client, challenge a drug-testing procedure or the accuracy of a specific test result, even without any specific evidence that the test result was inaccurate. Depending on their frequency and the litigation methods used, these types of challenges may cause other team members to view the attorney as an adversary instead of a partner on the treatment court team.

In the role of team member, the defense representative should be interested in the accuracy of testing procedures and of specific test results (an interest that all team members should share). Thus, the defense representative should advocate for fair procedures to correct or confirm the results of less-reliable screening tests. The defense representative could also properly suggest ways to eliminate or reduce the ability of participants to use someone else's urine for testing. An adversary attorney, however, would arguably be unable to take steps that the attorney knew or suspected would lead to adverse legal consequences for a client.

[14] *See* R. Warren, *Evidence-Based Practices to Reduce Recidivism: Implications for State Judiciaries*, p. 15 & n. 86 (Crime and Justice Institute, National Institute of Corrections and National Center for State Courts 2007) (citing numerous "[r]igorous scientific studies and meta-analyses" showing "that Drug Courts significantly reduce recidivism among Drug Court participants in comparison to similar but nonparticipating offenders").

[15] *See, e.g., Drug Use and Dependence, State and Federal Prisoners,* 2004, p. 1 (U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Spe-

suffer from mental disorders,[16] and some have multiple treatment needs.[17] Drug Courts and other treatment courts have shown the potential to reduce recidivism by combining regular court reviews with evidence-based treatment and case management.[18] These courts are also able to keep defendants in the community instead of serving substantial terms of incarceration.

Generally, these courts are operated by a team comprising representatives of several agencies. For example, a Drug Court team often includes a judge, prosecutor, probation agent, social worker, public defender, and law enforcement officer. "Active defender participation in all phases of the Drug Court, from design to operation, makes it more likely that the program will be client-oriented."[19]

A resolution of the National Association of Drug Court Professionals (NADCP) also supports the participation of a defense representative in the development and operation of Drug Courts. This resolution identifies eligibility criteria, selection of treatment provid-

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cial Report, October 2006) (citing 2004 statistics that showed 53% of state inmates and 45% of federal inmates met the psychiatric community's criteria for drug dependence or abuse); *Alcohol and Crime*, p. 1 (U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, April 1998) (citing 1996 statistics that showed 36% of the estimated 5.3 million persons supervised by corrections officials in the U.S. had been drinking when they committed the offense for which they were convicted).

[16] *See, e.g., Mental Health Problems of Prison and Jail Inmates*, p. 1 (U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Special Report, September 2006) (citing 2005 statistics showing that slightly more than half of the inmates surveyed reported either a recent mental-health diagnosis or recent symptoms of a mental disorder).

[17] *See, e.g.*, *id.* (citing 2005 statistics showing that of state prison inmates reporting a recent mental-health diagnosis or recent symptoms of a mental disorder, 74% reported a history of substance abuse).

[18] *See, e.g.*, W. Huddleston & D. Marlowe, *Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Court Programs in the United States*, p. 14 (Bureau of Justice Assistance 2011).

[19] Michael Judge, *Critical Issues for Defenders in the Design and Operation of a Drug Court*, p. 2 (NLADA Indigent Defense, November 1997). *See also* K. Weibrecht, *Evidence-Based Practices and Criminal Defense: Opportunities, Challenges, and Practical Considerations*, pp. 26–27 (National Institute of Corrections 2008) (discussing how when involved as a policy maker, defense attorney can educate others regarding the needs of defendants).

ers, confidentiality, and other court policies as proper topics for defender input.[20]

DEFENSE PARTICIPATION IN DEVELOPING A DRUG COURT

Defense representatives often participate in the planning for and development of a Drug Court.[21] This participation may result from membership in a criminal justice coordinating council or from formation of a local ad hoc work group interested in a treatment court. Some grant applications require that planning groups include a defense representative. Defense participation helps to ensure that the Drug Court has a therapeutic focus rather than a punitive focus.[22] To help ensure that the Drug Court provides effective services to participants, the defense representative should address such issues as eligibility criteria, application and admission process, access to treatment and other services, court expectations and procedures, incentives and sanctions, and confidentiality of information that court officials learn about participants in the Drug Court context.

The defense representative must work with representatives of other agencies in the planning and development of a Drug Court (the

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[20] NADCP, Resolution regarding Indigent Defense in Drug Courts (April 19, 2002), *reprinted at* nlada.org/Defender/Defender_Library. *See also* K. Weibrecht, *Evidence-Based Practices and Criminal Defense: Opportunities, Challenges, and Practical Considerations*, pp. 26–28 (National Institute of Corrections 2008) (defense attorney should advocate for matching treatment to the needs of program participants, for use of treatment modalities that have a track record of effectiveness, and for evaluation procedures to ensure that practices remain evidence based).

[21] *See* G.F. Roper and J.E. Lessenger, Drug Court Organization and Operations, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 287 (Springer Science and Business Media 2007). *But see America's Problem-Solving Courts: The Criminal Costs of Treatment and the Case for Reform*, p. 8 (National Association of Criminal Defense Lawyers 2009) (noting that the criminal defense bar has not consistently had input in development of problem-solving courts throughout the country).

[22] *See* C.L. Asmus and D.E. Columbini, Juvenile Drug Courts, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 271 (Springer Science and Business Media 2007) (recognizing that the public defender advocates for rights of participants and "monitors sanctions imposed by the court to ensure that they are within the legal and philosophical parameters of the program").

court, prosecution, law enforcement, probation and parole, and social services are ordinarily represented on a Drug Court team). Thus, although the defense representative can influence the standards and procedures adopted for the Drug Court, the team must reach a consensus.

Ultimately, for the defense representative to recommend the Drug Court for consideration by the defense bar in individual cases, the court must present potential benefits to defendants when compared to other available means of resolving their cases (litigation or negotiation under preexisting procedures and penalty structures). If the Drug Court has this beneficial potential (for example, it provides both treatment services and the potential to earn dismissal or substantial reduction of charges), defense attorneys and their clients can assess the potential benefits on a case-by-case basis to determine whether to seek admission to the Drug Court. Conversely, if efforts to work in a collaborative manner are ultimately unsuccessful in developing a therapeutic court program with significant benefits for participants, the defense representative should consider withdrawing from further participation as a member of the Drug Court team.[23]

Written policies and other documents are important to provide consistency and fairness in the Drug Court's operations.[24] Written informational materials can assist the defense representative in educating other defense attorneys about the Drug Court. Standard forms

[23] Because the ability to influence court policies is generally greater for a member of the court team, a defense representative should not take this action lightly or without making every reasonable effort to improve the court's procedures. However, at some point, if the court is not providing effective services to participants, the continued participation of the defense representative sends the wrong message to the defense bar and to defendants. The label "treatment court" is misleading if the court does not follow effective practices.

[24] *See* G.F. Roper and J.E. Lessenger, Drug Court Organization and Operations, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 286 (Springer Science and Business Media 2007) (stating that benefits of a written manual include notice to participants of court's requirements and permanent record of the respective duties of court personnel).

should address waivers and authorizations that defendants are required to sign as a condition of participation.[25]

The success of Drug Courts depends on adherence to research-based practices. If either the court procedures or the treatment protocols are deficient, the Drug Court is unlikely to reduce recidivism. Therefore, the defense representative needs to learn the underlying principles behind a successful Drug Court and apply that knowledge to the specific criteria adopted or proposed in his or her jurisdiction.[26]

DEFENSE PARTICIPATION IN DRUG COURT OPERATIONS

Defense representatives often serve as members of a Drug Court team that oversees ongoing court operations.[27] If the planning phase

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[25] *See id.*, p. 292 (recognizing need for waiver if defense attorneys do not appear at regular status hearings; need for waiver of confidentiality of medical information). If a Drug Court is complying with best practices, including participation of an effective defense representative on the court team, participants will rarely request the assistance or presence of an adversary attorney at the status hearings. Nonetheless, it is helpful for all defense attorneys to be familiar with the operations of a local Drug Court, and the court should welcome their attendance.

[26] Without a thorough knowledge of the type of treatment and supervision that is effective for the court's participants, the defense representative is unable to advocate for practices that will maximize the opportunities for participants to succeed. For example, the prevalent model for a Drug Court (including frequent judicial reviews) is most effective for high-risk participants. Michigan Supreme Court Administrative Office, *Best Practices for Standardized Risk Assessment*, p. 9 (2010); *see also* K. Weibrecht, *Evidence-Based Practices and Criminal Defense: Opportunities, Challenges, and Practical Considerations*, pp. 4, 8 (National Institute of Corrections 2008) (a higher level of treatment is appropriate for individuals who present a high risk of recidivism).

If the court's participants include persons properly classified as low risk, it may be counterproductive to require the same frequency of in-person court appearances. Michigan Supreme Court Administrative Office, *Best Practices for Standardized Risk Assessment*, p. 9 (2010). By keeping current with research findings regarding treatment courts, the defense representative is best able to advocate for effective practices and advise other defense attorneys about the strengths and weaknesses of the local Drug Court.

[27] *See* G.F. Roper and J.E. Lessenger, Drug Court Organization and Operations, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 288 (Springer Science and Business Media 2007).

has resulted in standards and procedures that benefit clients, the defense representative's main goal on the team may be to ensure that the Drug Court adheres to these standards and procedures (while continuously evaluating the court's benefits to clients and looking for areas for improvement). If the Drug Court's framework does not provide significant benefits to clients, however, the defense representative may need to insist upon substantial changes in the court's operations before he or she agrees to serve on the team.

If the same defense representative serves on the planning team and the operations team, the transition from one role to the other may be relatively seamless. The representative will generally understand the perspectives of the other team members and the reasons behind the written standards and procedures. Conversely, a defense representative without experience on the planning team may lack this base of knowledge and may need to learn enough information to evaluate the beneficial potential for clients.

Changes in Drug Court personnel, such as a new judge or prosecutor, can result in significant changes in court operations. Thus, the defense representative may have an opportunity to promote improvements in court procedures, but may also need to advocate against proposals that dilute the court's effectiveness.

The responsibilities of the Drug Court team may include the selection of treatment providers, admission of participants into the court, review of participants' progress, and regular staffing meetings before each court session. At the staffing meetings, the team generally reviews how each participant has done since his or her last court date and recommends to the Drug Court what action to take or what topics to address with each participant.[28]

For participants who are doing well, the Drug Court action will generally consist of a positive progress report, a brief conversation between the judge and the participant, and scheduling of the next

[28] *See id.*, pp. 294–96 regarding a typical day of Drug Court review hearings, including the team meeting before court.

court date.[29] The participant may be eligible for modest rewards for his or her positive report, such as a longer interval between court hearings (many Drug Courts have three specified phases for participants, each characterized by its own frequency of hearings and drug or alcohol tests[30]). A participant who has violated the Drug Court's rules may face a sanction, which could be community service work, a written assignment, extra drug or alcohol testing, ineligibility for an incentive, or brief confinement in jail.[31]

The defense representative, although not serving in the role of adversary counsel for each participant, can and should advocate generally for Drug Court practices that benefit participants. For example, the defense representative should advocate for a broad array of supportive services, including help with transportation, housing, and education, to assist indigent participants. Similarly, the defense representative should advocate for adherence to policies that protect participants and can seek to amend the Drug Court's policies and operations to serve participants better.[32]

The defense representative should advocate for policies of graduated sanctions and rewards that recognize the high incidence of relapse during treatment programs.[33] In the team meetings that often

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[29] *See generally id.*, pp. 296–98, regarding the typical interaction between the Drug Court judge and participants at the court's review hearings.

[30] *See, e.g., id.*, p. 293 & Table 19.1.

[31] *See generally* D. Marlowe, Strategies for Administering Rewards and Sanctions, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* pp. 317–333 (Springer Science and Business Media 2007) (describing strategies for use of rewards and sanctions in treatment courts in light of research regarding behavior modification).

[32] *See id.*, p. 325 (discussing "ratio burden" that can result from "multiple demands on clients that can be difficult to fulfill simultaneously"). The defense representative should assist participants in voicing practical considerations, such as work or school schedules, child-care duties, and transportation issues, that may limit their ability to attend all the recommended or required programming.

[33] *See, e.g.*, *id*., pp. 325–26 (distinguishing between "behaviors that clients are readily capable of engaging in," such as attending court and treatment sessions, and goals that may take longer to accomplish, such as prolonged abstinence from drugs). During the early phases of a client's treatment, rewards and sanctions of a relatively higher magnitude should be reserved for behaviors that the client can readily control. *Id.*, p. 326.

precede the court's review hearings, the defense representative should point out mitigating factors and may suggest potential sanctions other than incarceration.[34]

The defense representative should educate the local defense bar regarding treatment courts.[35] This education should include the Drug Court's potential advantages and disadvantages for clients represented by the local defense bar. Specific topics should include eligibility criteria and processes, legal consequences of successfully completing treatment (and of failure to complete treatment), and general policies and procedures of the Drug Court. The defense representative should encourage defense attorneys to contact him or her for specific information as needed. The defense representative should also encourage attorneys to observe at least one session of the Drug Court to understand the review sessions that their clients will attend if admitted to the program.

Drug Court participants are often not represented by adversary counsel at the court's review hearings. Participants frequently have questions and concerns that they may prefer to share with the defense representative rather than with the judge or with treatment providers. The defense representative should support participants by providing them with information about Drug Court procedures and by encouraging them in their efforts to complete the treatment court program. Where applicable, the defense representative must make clear that he or she is not serving as adversary counsel for program participants.[36]

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[34] *See infra* nn. 71–74 and associated section regarding principles for effective sanctions in drug court.

[35] *See* NADCP, Resolution regarding Indigent Defense in Drug Courts (April 19, 2002), *reprinted at* nlada.org/Defender/Defender_Library ("Inclusion and training of private counsel appointed to represent indigent defendants in Drug Court is necessary, particularly in jurisdictions which do not have an institutional public defense entity"). *See also America's Problem-Solving Courts: The Criminal Costs of Treatment and the Case for Reform*, p. 40 (National Association of Criminal Defense Lawyers 2009).

[36] Although the defense representative protects the general interests of participants in fair and compassionate court procedures, his or her proper role is to work as a collaborative team member to promote the successful rehabilitation of participants. *See, e.g.*, J. Miller and D. Johnson, Problem Solving Courts: New Approaches to Criminal Justice, p. 166 (Rowman & Littlefield 2009) (acknowledging team approach as best

ADVERSARY COUNSEL: ADVICE TO CLIENTS REGARDING DRUG COURTS

All defense attorneys should be reasonably knowledgeable about Drug Courts operating in the jurisdiction where they practice.[37] This knowledge should include a general understanding of the criteria for eligibility, the requirements for successful completion of the treatment program, and the likely consequences for failure to complete the program.

Defense counsel should be familiar with a wide range of potential dispositions that may benefit his or her clients. Thus, knowledge about a local Drug Court is a specific example of an attorney's obligation to investigate potential ways of resolving cases to his or her clients' benefit.[38] The attorney need not have an encyclopedic knowledge of the specific details of the potential treatment programs offered or available through the court, but should have general knowledge and should be able to respond to reasonable questions from clients about the Drug Court. The attorney may wish to communicate with the defense representative on the Drug Court team regarding specific questions.

In advising a client about potential participation in a Drug Court, defense counsel should provide competent and zealous representation, which should include reasonable factual investigation, consideration of potential legal and factual defenses, consideration of other dispositional alternatives, and communication with the client about the potential advantages and disadvantages of the Drug Court.[39]

Participation in a treatment court often occurs as a result of a negotiated agreement to settle a pending case. The client must ultimate-

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practice in a problem-solving court); J.L. Nolan, Jr., Reinventing Justice: The American Drug Court Movement, pp. 75–76 (Princeton, N.J. 2001) (successful Drug Courts rely upon a collaborative team approach).

[37] *See* ABA Model Rules of Professional Conduct 1.1 (lawyer shall provide competent representation, which includes necessary knowledge and preparation).

[38] *See id.*

[39] *See* ABA Model Rules of Professional Conduct 1.1 (competence), 1.4 (communication).

ly decide whether to seek admission to the Drug Court, to proceed to trial, or to pursue another disposition. Counsel's obligation is to prepare the client to make an informed choice. Counsel meets this obligation by preparing the case thoroughly, by negotiating effectively, and by communicating with the client regarding the range of possible ways to proceed.[40] In addition to describing the Drug Court, counsel may help the client make an informed choice by arranging for the client to attend a Drug Court session[41] and to meet with current or former participants of the Drug Court program.

As part of the adversary representation, counsel should advise the client about any waiver of rights in the Drug Court. In large part, the waiver of rights may be similar to any waiver of rights that accompanies a plea of guilty or no contest. However, there may be specific rights waived in connection with the Drug Court procedures, including the right to counsel at court hearings and the right to confidentiality of treatment records.[42]

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[40] The timeline for applying to enter a Drug Court can be a concern for adversary counsel in advising a client (and for the defense representative, in the broader context of promoting fair procedures). A legitimate therapeutic purpose is served by encouraging a prompt commitment to treatment. *See, e.g.*, La Crosse County Drug Treatment Court Program, *Policies and Procedures Manual*, p. 5 (May 2009) ("Addicts are most vulnerable to successful intervention when they are in the crisis of initial arrest and incarceration, so intervention must be immediate and up-front"). Further, for a defendant with a serious addiction or a pattern of abusing drugs or alcohol, a delay in starting a treatment program may be detrimental. The defendant will be either in jail unable to post bail or at risk of arrest for additional offenses because of his or her drug or alcohol use.

However, an arbitrary deadline can interfere with counsel's ability to investigate the facts of the case, to investigate other possible dispositions, and to consult adequately with the client. *See generally America's Problem-Solving Courts: The Criminal Costs of Treatment and the Case for Reform*, p. 38 (National Association of Criminal Defense Lawyers 2009) (recommending that Drug Court should allow adequate time for case preparation, including litigation of motions). One possible approach is an opt-out period during which a client may enter Drug Court while adversary counsel continues to investigate the case, obtain and review discovery, and discuss with the client potential legal and factual defenses.

[41] *See id.*

[42] *See infra* n. 46 for sample language regarding a waiver of the right to counsel at review hearings in Drug Court. Regarding treatment records, the Drug Court will ordinarily require participants to sign an agreement that information may be released to specific individuals and agencies. Although the judge often will discuss aspects of a

Adversary counsel does not generally attend all Drug Court sessions.[43] Counsel should clearly communicate to his or her client, before the client seeks admission in the Drug Court, the extent to which counsel will be available to attend court hearings or to answer questions while the client is a participant.[44] If the client is required to request a new appointment of an adversary attorney for any issue that arises in the Drug Court, counsel should advise the client regarding the process for such a request.

Adversary counsel should also advise the client regarding the consequences of an unsuccessful termination from the Drug Court. The client needs to know the sentence or the range of potential sentences that he or she could face in a future sentencing hearing. Similarly the client needs to know the potential sentence that could follow future revocation of probation or parole. Counsel should also discuss with the client that if the client is unsuccessful in Drug Court, the client will have spent a period of time in a challenging and structured treatment program, after which the client may still face the applicable sentence. In sum, although the benefits of success may be substantial, the client also needs to understand that if he or she is unsuccessful, the overall consequences for the underlying charge may be more onerous than if the client has received a traditional sentence.

ADVERSARY REPRESENTATION IN DRUG COURT

The best practice for an indigent-defense program is to offer adversary representation whenever a Drug Court participant faces incarceration as a sanction.[45] If adversary representation is limited or

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participant's treatment at the review hearings, in the presence of team members and the other participants, the records are not made available to the general public.

[43] *See infra* nn. 52–53 and accompanying text.

[44] *See* ABA Model Rules of Professional Conduct 1.4(b) (a lawyer shall explain an issue sufficiently that the client may make an informed decision). Access to the assistance of counsel could be a pertinent factor for a client to consider when deciding whether to participate in a Drug Court.

[45] *See* State of New Jersey Drug Court Program, Participation Agreement, ¶ 17 (participant has "right to an attorney during court proceedings"). *See generally* Rothgery

unavailable in Drug Court proceedings, prospective participants should be notified before entering the Drug Court. Participants may knowingly and voluntarily waive the right to counsel as part of an agreement to follow the rules of the Drug Court.[46] Despite this type of waiver, the attorney who served as adversary counsel on the underlying case should remain available to answer his or her client's questions during the time that the client is participating in the Drug Court.[47]

Ideally, Drug Court participants should have access to adversary counsel throughout the process. Regardless of the court's therapeutic purpose, the availability of adversary counsel is important, especially when a sanction will impact the client's liberty (for example, jail or an inpatient program). Participants may not need to consult frequently with counsel, especially when they are progressing well in their treatment programs or when they are satisfied with the court's measured response to infractions. However, their conduct in treatment and in the court hearings can affect the ultimate disposition of their under-

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v. Gillespie County, 554 U.S. 191, 128 S. Ct. 2578, 2591 n.16 (2008) (constitutional right to counsel applies to critical stages of a criminal proceeding that amount to "trial-like confrontations") (citations omitted). When the court confronts a treatment court participant with information regarding a failed drug test or other alleged rules violations, the proceeding arguably meets the criteria for a "critical stage," thus implicating the constitutional right to counsel. As a practical matter, however, the court may have authority to modify bail (or the probation department may have authority to hold the participant in jail) pending an adversary hearing. Thus, if the participant is facing a sanction of one or two days in jail, he or she may agree to the sanction instead of requesting a formal hearing.

[46] Several Wisconsin counties include the following standard language in their participant contracts: "For purposes of regular drug court review hearings, I agree to waive my right to have my attorney of record present. I understand that my case may be discussed without my attorney or the prosecutor present." *See, e.g.*, *Dunn County Diversion Court Participant Contract*, ¶ 21; *Eau Claire County Drug Court Program Participant Contract*, ¶ 21; *Jackson County Drug Court Participant Contract*, ¶ 20; *Polk County Drug Court Participant Contract*, ¶ 20; *Trempeleau County Drug/OWI Court Participant Contract*, ¶ 20.

[47] *See generally supra* nn. 37–44 and associated section. The defense representative should be available to answer the questions of participants regarding the Drug Court. However, adversary counsel can best answer questions regarding the underlying case and the likely effect on its ultimate resolution if the client does or does not successfully complete the court program.

lying criminal cases and can affect their status in the Drug Court from week to week. Therefore, the ability to confer confidentially with adversary counsel can benefit participants while they participate in a Drug Court.

Because of differences among both the structures of defender programs and the procedures of treatment courts, local practices vary regarding the availability of appointed counsel throughout an individual defendant's participation in a Drug Court.[48] The defense representative should provide interested parties (including the local defense bar, prospective participants in the Drug Court, and other justice agencies) information regarding the scope of adversary representation that attorneys appointed for the indigent will provide in the Drug Court.[49] This communication should include providing access to materials such as policy manuals, participant contracts, and authorization forms for release of treatment information to specified parties.

In many Drug Courts, a defendant's participation in the court follows a negotiated agreement, such as a plea agreement or a diversion agreement.[50] If the defendant successfully completes the treatment

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[48] Drug Courts follow one of three different models regarding the phase of the criminal proceeding at which the defendant is admitted to the court: pre-plea, between plea and adjudication, or postadjudication. *See* G.F. Roper, Roadblocks to Success, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 342 (Springer Science and Business Media 2007). The model of a particular court may affect whether the appointment of the attorney on the original charge continues throughout the time that the client is in the treatment court. For example, an appointment might continue for a case in which no adjudication of guilt has yet occurred, but not for a case in which the client has already been convicted and placed on probation.

[49] For staff public defenders, office policies may define the scope of representation that they are required or expected to provide. The high volume of cases assigned to public defenders make it difficult for them to appear regularly at review hearings for each client whom they represented before admission to treatment court. For appointed private attorneys, local rules regarding reimbursement and the attorneys' duties to other clients may influence whether or not attorneys ordinarily attend review hearings. However, the main reason for the rare attendance of adversary counsel may be the fairness of the procedures followed in many Drug Courts. *See infra* n. 53.

[50] *See* W. Huddleston & D. Marlowe, *Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Court Programs in the United States*, pp. 24-25 (Bureau of Justice Assistance 2011) (noting that the participants in most adult Drug Courts have entered a plea of guilty as a condition of entering the court program). The agreement may call for dismissal of charges, reduction of charg-

program, the charge is often reduced or dismissed.[51] An indigent defendant is eligible for appointment of an attorney on the underlying charge. The attorney may negotiate on the client's behalf regarding participation in Drug Court. (Although the appointment is not for the specific purpose of seeking admission to Drug Court, the attorney advises the client of this option as part of representation on the pending charge.) However, in most Drug Courts, the attorney does not attend the court's regular review hearings, even when the defendant faces a sanction for noncompliance.[52] Nonetheless, Drug Courts should permit attendance and participation of adversary counsel.[53]

Defendants should be advised when a defense representative attends the Drug Court as a member of the court team, rather than as adversary counsel, for each individual defendant.[54] Although an attor-

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es, and/or a lesser sentence upon successful completion of the treatment court program. Some Drug Courts accept individuals who are on supervision (parole or probation) and who seek to participate in Drug Court as an alternative to revocation of supervision.

[51] *See, e.g.*, Michael O'Hear, Rethinking Drug Courts: Restorative Justice as a Response to Racial Injustice, 20 *Stan. L. & Policy Rev*. 463, 479 (2009).

[52] *See, e.g., America's Problem-Solving Courts: The Criminal Costs of Treatment and the Case for Reform*, p. 34 (National Association of Criminal Defense Lawyers 2009) (describing some jurisdictions in which the custom for defense attorneys is not to appear in Drug Court). The absence of adversary counsel at these hearings is consistent with the collaborative approach characteristic of Drug Courts. *See Defining Drug Courts: The Key Components*, p. 11 (NADCP, Drug Court Standards Committee 1997) (recommending that the defense counsel and prosecutor "shed their traditional adversarial courtroom relationship and work together as a team").

[53] *See* G.F. Roper, Roadblocks to Success, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* pp. 348–49 (Springer Science and Business Media 2007) (recommending that judge offer to adjourn hearing on imposition of sanctions until adversary counsel is available, but sharing experience that defendants and defense bar rarely contest sanctions when "satisfied that the judge will not impose sanctions heavy-handedly or without abundant, clear evidence of a violation"). Conversely, if participants are frequently contesting alleged violations or the severity of the sanctions, the court may lack that shared confidence in a fair process.

[54] *Cf. Defining Drug Courts: The Key Components*, p. 12 (NADCP, Drug Court Standards Committee 1997) (defense counsel should explain to the defendant the rules of the Drug Court and all rights that he or she is relinquishing as part of an agreement to enter the court program). Although *The Key Components* does not explicitly differentiate between a defense attorney serving in a representative capacity and serving as adversary counsel, many of the actions recommended for defense

ney who has served for a long time on a Drug Court team may understand his or her nontraditional role at the review hearings, the attorney should ensure that Drug Court participants also understand that the attorney's role is not to provide individual representation in Drug Court. If the Drug Court is not treating defendants fairly at the review hearings, the defense representative should seek improvements in the court process and should advise the defense bar of the concerns about the court's actions.[55]

A major distinction exists between an ordinary review hearing and an expulsion hearing, the latter generally occurring only after a participant has failed repeatedly to comply with treatment expectations or has been imprisoned for a new violation (and thus is unavailable for community-based treatment). Depending upon the original charges, a participant may face months or years of incarceration following expulsion rather than the day or two in jail he or she might receive as a Drug Court sanction. Thus, prompt access to adversary counsel is especially critical when a participant faces either an expulsion hearing or a sentencing hearing following expulsion.

ATTORNEY FULFILLING DUAL ROLES IN DRUG COURT

In some jurisdictions, the same attorney may simultaneously serve as adversary counsel and as the defense representative on the Drug Court team. For many Drug Court hearings (particularly for clients in compliance with the court's requirements), the client's wishes and the team's treatment goals for the client are identical. In this common situation, the dual roles do not present a challenge for the attorney. However, because many clients relapse or commit other infractions during the difficult treatment process, the potential exists for conflict between the two roles.

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counsel are consistent with the role of defense representative described in this report. *See id.*, pp. 11–12.

[55] In addition to the efforts of the defense representative to improve court processes or to discourage further referrals to the court, adversary counsel may pursue litigation on behalf of clients aggrieved by actions of the Drug Court.

The attorney's adversarial role, ethically required for direct client representation, may be counterproductive for the therapeutic goals of the Drug Court.[56] Therefore, when the attorney is required as an advocate to argue against sanctions, he or she may be jeopardizing the collaborative approach that is widely accepted as integral to the effectiveness of Drug Courts.[57]

The different roles impact how the defense attorney perceives the direct conversations that regularly occur between the Drug Court judge and the individual participants. The success of Drug Courts stems in part from this interaction, which increases participants' belief that they are being treated fairly.[58] However, an attorney providing adversary representation does not ordinarily encourage a client to

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[56] *See Defining Drug Courts: The Key Components*, p. 6 (NADCP 1997) (observing that the traditional role of defense counsel may contribute to alcohol or drug abuse by reinforcing the client's denial of the underlying problem). *See also Critical Issues for Defense Attorneys in Drug Court*, p. 3 (National Drug Court Institute 2003) ("desires of the treatment team are, at times, conflicting and seemingly put the defense attorney in a box"). For example, despite believing that a client needs long-term or intensive treatment to achieve and maintain sobriety, adversary counsel will ordinarily advocate for a lesser treatment dosage if consistent with the client's wishes. *See* K. Weibrecht, *Evidence-Based Practices and Criminal Defense: Opportunities, Challenges, and Practical Considerations*, p. 31 (National Institute of Corrections 2008) (interpreting ethical standards for defense counsel to presume that counsel should advocate for the dispositional result preferred by the client)

[57] *See, e.g.*, *Defining Drug Courts: The Key Components*, p. 3 (NADCP 1997) (after the participant is accepted into the Drug Court, the team's focus is "on the participant's recovery and law-abiding behavior"); J. Miller and D. Johnson, *Problem Solving Courts: New Approaches to Criminal Justice,* p. 158 (Rowman & Littlefield 2009) (stating that Drug Court team members must step outside their ordinary professional roles to work collaboratively).

[58] *See, e.g.*, D.C. Gottfredson, B.W. Kearley, S.S. Najaka, and C.M. Rocha, *How Drug Treatment Courts Work: An Analysis of Mediators*, p. 26, 44:1 Journal of Research in Crime and Delinquency (2007) (number of judicial hearings increases participants' perceptions of procedural fairness, which in turn reduces drug usage and criminal activity); *Defining Drug Courts: The Key Components*, p. 15 (NADCP 1997) (Key Component # 7 addresses ongoing judicial interaction with each participant to demonstrate that the judge cares about the participant and is keeping track of his or her progress).

communicate directly with the judge, particularly if the attorney does not know in advance the substance of the client's statements.[59]

Another challenge for a dual-role attorney is the simultaneous representation of all or most of the Drug Court participants. For example, if multiple participants face sanctions during the same review session, it may be difficult for the attorney to present a credible argument that each one has a unique mitigating circumstance.[60]

If a Drug Court consistently follows fair procedures and relies more heavily on incentives than on sanctions, many participants will become comfortable with direct and candid conversations with the presiding judge. Thus, the conflicts between the adversary role and the defense representative role may be relatively infrequent during the court's staffing meetings and review hearings. Nonetheless, when possible, an individual attorney should refrain from serving simultaneously in both roles.

MAJOR ISSUES FOR THE DEFENSE ATTORNEY IN DRUG COURT

Eligibility for Participation

A critical and difficult issue for a Drug Court is the eligibility criteria. A Drug Court that limits eligibility to defendants charged with minor offenses may not provide sufficient incentives for many defendants to complete a long period of intense treatment and supervi-

[59] *Cf.* ABA Standards for Criminal Justice, Defense Function, § 4–6.2 (Commentary) (3rd ed. 1993) (because statements made by the defendant during plea negotiations may be used against the defendant in future proceedings, "the accused should be cautioned by counsel against making any statements that have not been carefully explored in advance with counsel").

[60] ABA Model Rules of Professional Conduct 1.7(a)(2) prohibits representation of a client when a substantial risk exists that the representation will be materially limited by obligations to another client. For example, in the context of arguing against sanctions that the Drug Court generally imposes, an attorney might have to argue on behalf of one client that her brief time in the court is a mitigating factor (she is still under the powerful effects of addiction) and then to have to argue that another client's substantial time in the court without a violation is a mitigating factor. Arguably, both clients would be better served by separate attorneys who would not have to argue seemingly inconsistent positions before the same judge.

sion.[61] Conversely, a Drug Court that accepts defendants charged with serious offenses (and defendants with prior records) may achieve a higher rate of program completion because defendants are motivated to complete the program instead of serving a substantial term of imprisonment.[62] A defense representative, through familiarity with research regarding this risk–reward principle, may influence other members of the Drug Court team regarding eligibility criteria.

A defense representative is expected, as a member of the Drug Court team, to support agreed-upon eligibility criteria (particularly if he or she participated in establishing them). Therefore, a conflict of interest may arise if the defense representative (or a colleague in the same defender organization) acts as adversary counsel for clients seeking admission to the Drug Court.[63] The defense representative has an institutional interest in supporting the agreed-upon admission criteria, which support successful treatment outcomes and favorable dis-

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[61] *See, e.g.*, Michael O'Hear, Rethinking Drug Courts: Restorative Justice as a Response to Racial Injustice, 20 *Stan. L. & Policy Rev.* 463, 480 (2009) (a Drug Court is "less a diversion from prison than a diversion from other alternatives" if it focuses on possession offenses and on defendants without serious prior records); G.F. Roper, Roadblocks to Success, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 348 (Springer Science and Business Media 2007) (some defense attorneys recommend a straight sentence of "weeks or months" to their clients instead of a longer period of participation in Drug Court).

Furthermore, the Drug Court should take into account the risk level and risk factors (needs) of participants to determine the appropriate level and type of treatment. *See* L. Gutierrez and G. Bourgon, *Drug Treatment Courts: A Quantitative Review of Study and Treatment Quality 2009-04*, p. 3 (Public Safety Canada 2009). Low-risk individuals do not need (and should not receive) the same treatment programming as high-risk individuals. *Id.*

[62] *See Drug Courts: The Second Decade*, p. 2 (National Institute of Justice 2006) (Drug Courts have moved from "low-level first-time offenders to focusing on those whose substance abuse and criminal activity may be more serious"). *See also* R. Warren, *Evidence-Based Practices to Reduce Recidivism: Implications for State Judiciaries*, pp. 21–22 (Crime and Justice Institute, National Institute of Corrections and National Center for State Courts 2007) ("Effective recidivism-reduction programs target moderate- and high-risk offenders"; participation of low-risk offenders in intensive treatment can actually increase their risk of reoffending).

[63] ABA Model Rules of Professional Conduct 1.7(a)(2) prohibits representation of a client when a substantial likelihood exists that the attorney's ability to represent the client will be materially limited by the attorney's other responsibilities. *See supra* n. 11 and accompanying text.

positions for participants. However, adversary counsel for an individual client has an obligation to advocate for admission to the Drug Court, if the client wishes to participate, even if the circumstances of the client's case do not appear to meet the admission criteria.[64]

Regardless of the specific eligibility criteria and screening procedures, the defense representative should communicate to other Drug Court personnel that defense attorneys are ethically required to seek admission for clients on a case-by-case basis. By learning about practices and outcomes in other jurisdictions, the defense representative may persuade the team to expand the eligibility criteria or to apply them more flexibly. If other members of the Drug Court team respect the defense representative's duty to individual clients, he or she may be effective in advocating for their admission to the Drug Court.

The defense representative may also seek to persuade policy makers to allocate additional resources to the Drug Court, which may expand its capacity to accept new applicants. The court's track record in reducing recidivism can be used to show whether that jurisdiction should support the Drug Court as a viable option to traditional prosecution and punishment.

Cultural Competency in Drug Court

Drug Courts should provide services that effectively meet the needs of all participants, regardless of race, gender, age, or ethnicity. By collecting demographic information of participants and by track-

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[64] *See generally* ABA Model Rules of Professional Conduct 1.2(a) (lawyer shall generally abide by decisions of the client regarding the objectives of the representation, including whether to settle a case or proceed to trial). As an adversary attorney, an attorney may be ethically required to seek admission to Drug Court for a low-risk client, if the client prefers that disposition. Thus, if the same attorney also serves as the court's defense representative, he or she may be precluded from advocating for the best practice regarding the population served by the treatment court. *See supra* nn. 61–62 and accompanying text regarding the reasons for accepting moderate-risk and high-risk defendants as participants in Drug Court.

A jurisdiction with a Drug Court may also provide other diversion options for low-risk defendants. If so, adversary counsel may seek a favorable disposition that does not require the intensive treatment and the frequent court appearances characteristic of Drug Courts.

ing outcomes, a Drug Court team can assess whether it is providing services that lead to success for participants from all cultural backgrounds.

NADCP has recognized that Drug Court teams should continually review their programs for evidence of racial or ethnic disparity and, if necessary, take corrective action to address such disparity.[65] In recommending that Drug Courts focus on this issue, NADCP noted the disproportionate incarceration of racial and ethnic minorities nationwide.[66] NADCP also noted lower success rates reported for minority participants in some Drug Courts[67] and the importance of training Drug Court personnel "on how to identify and administer evidence-based, culturally sensitive and culturally competent interventions and assessment tools."[68]

Incentives and Sanctions for Drug Court Participants

Drug Courts generally use incentives and sanctions to shape participants' behavior, rewarding compliance and imposing negative consequences for noncompliance. The defense representative can help temper the tendency that other team members may have to recommend or impose unnecessarily harsh sanctions. Familiarity with research regarding incentives and sanctions can help in ensuring that the Drug Court does not overreact to the inevitable instances of noncompliance. This knowledge of the research can also help other team members to understand the importance of incentives to provide positive reinforcement.

Defense attorneys, whether serving as a defense representative on a Drug Court team or as adversary counsel, should be aware of the likely consequences for participants for conduct occurring after they enter the Drug Court. Negative consequences can occur either as sanctions (within the framework of the Drug Court) or as a sentence

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[65] NADCP, *Resolution of Board of Directors on the Equivalent Treatment of Racial and Ethnic Minority Participants in Drug Courts*, p. 2 (June 2010).

[66] *Id.*, p. 1.

[67] *Id.*, p. 2.

[68] *Id.*, p. 3.

following expulsion from the Drug Court. Both types of consequences need to be considered in light of the dispositional alternatives other than Drug Court (for example, a participant might face short periods of incarceration as a sanction in Drug Court, but might face a prison sentence for the underlying offense if expelled).

Incentives

Not all justice professionals instinctively embrace the idea of a court providing tangible incentives such as gift cards or movie passes to a participant for having a clean urine test and appearing in court as scheduled. After all, millions of people obey the law every day without receiving these rewards. However, to counteract the power of chemical addiction and dependency, immediate and tangible rewards are important ways for a Drug Court to show some benefits of abstinence.[69]

Sanctions

Four general principles for effective sanctions within a treatment program are certainty, promptness, magnitude, and fairness.[70] Certainty and promptness of sanctions are the most important principles.[71] Therefore, the Drug Court's ability to identify and to respond

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[69] M. Stitzer, Motivational Incentives in Drug Courts, *reprinted in Quality Improvement for Drug Court: Evidence-Based Practices,* p. 99 (National Drug Court Institute 2008). *See also* Strategies for Administering Rewards and Sanctions, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* pp. 326–328 (Springer Science and Business Media 2007) (discussing the value of tangible rewards for Drug Court participants, particularly to help new participants before they begin to experience intrinsic rewards of sobriety and other prosocial behaviors).

[70] D. Marlowe, Strategies for Administering Rewards and Sanctions, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* pp. 319–324 (Springer Science and Business Media 2007).

[71] *Id*., pp. 319–322. Frequent and random drug tests for participants create a high degree of certainty that the Drug Court will discover a participant's drug usage. Conversely, if testing is conducted infrequently or on a predictable schedule, the certainty of a sanction for drug usage is greatly reduced. The promptness principle reflects that the more quickly a sanction occurs, the greater likelihood that the participant recognizes that connection between the sanction and the underlying conduct. Conversely, when a criminal defendant is sentenced months or years after an offense, "the effects of sanctions should be expected to be minimal." *Id*., p. 321.

quickly to misconduct is more critical than the severity of the sanctions imposed.

The magnitude of the response, in a Drug Court environment, should take into account the strength of the participant's drug or alcohol dependency and the expectation that relapse is a common occurrence during treatment. During the early phase of treatment, "clients might receive verbal reprimands or writing assignments for providing drug-positive urine samples but might receive community service or brief jail detention for failing to show up for counseling sessions or failing to provide urine samples."[72] The fourth principle, fairness, calls for fair procedures and professional, respectful communication with participants when imposing sanctions.[73]

Indiscriminate use of incarceration as a sanction can result in substantial incarceration for participants in a Drug Court, even for those who successfully complete the treatment program.[74] In advising a client regarding potential participation in a Drug Court, defense counsel should be aware not only of the range of sanctions generally used, but also the likelihood that most participants will experience some setbacks during their time in the court-sponsored program.

Conversely, counsel should consider and discuss with the client the likely outcome if he or she receives a traditional sentence. This

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[72] *Id.*, p. 326; *see also* T.J. Kelly, J.M. Gaither, and L.J. King, Relapse, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 386 (Springer Science and Business Media 2007) ("it is not necessary or desirable that a participant be incarcerated for every drug use episode"). The harsher sanctions during the early phase of treatment should be reserved for intentional violations of court procedures, such as skipping an appointment, rather than for succumbing to a powerful addiction of dependency.

[73] D. Marlowe, Strategies for Administering Rewards and Sanctions, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 324 (Springer Science and Business Media 2007). A Drug Court's failure to follow fair procedures, including the opportunity to respond to alleged violations, may adversely affect the commitment of participants to their treatment programs. *Id.* If participants perceive that they have been treated fairly and respectfully, they are likely to accept sanctions for misconduct. *Id.*

[74] *See, e.g.*, M. O'Hear, Rethinking Drug Courts: Restorative Justice as a Response to Racial Injustice, 20 *Stan. L. & Policy Rev.* 463, 481 (2009) (citing studies from Santa Clara and Baltimore that showed an average time in excess of 50 days' incarceration for sanctions).

consideration should encompass not only the length of the initial period of incarceration, but also whether the client is likely to comply with probation or parole requirements. Most clients eligible for a Drug Court have a history of court involvement that suggests, absent an intensive and successful course of treatment, the potential for future legal difficulties.

Confidentiality of Information Disclosed in Drug Court

Participants may have concerns not only about use of information within the justice system (e.g., in a future sentencing or revocation proceeding), but also about public access to information stemming from their participation in a Drug Court. Local law and procedures may differ regarding specific practices such as whether review hearings are transcribed, whether members of the public may attend the review hearings, whether records are accessible under local law on public records, and whether the judge orders attendees not to disclose information communicated in these hearings.

Although members of the Drug Court team need to receive information about participants, such as treatment records and results of drug tests, the defense representative should seek to protect confidentiality through adoption of procedures limiting access to information, disclosure of information, and use of information.

When a defendant agrees to participate in a Drug Court, he or she is required to sign release forms to allow members of the court team to review treatment records. Despite the legitimate purpose for requiring this consent to disclosure of records, the defense representative should ensure that disclosure is no broader than is necessary. A policy manual, written contract, or memorandum of understanding can be a valuable resource to document the limits on disclosure of treatment records.[75]

The frequency of treatment sessions, tests for alcohol and drug use, and review hearings results in members of the treatment court

[75] *See, e.g.*, *La Crosse County (Wisconsin) Drug Court Manual*, p. 10 (2009) ("Drug Court files are separate and distinct from Circuit Court files…All Drug Court files are confidential and are not open to the general public").

team learning when participants relapse. Members of the team thus commonly encounter evidence of positive drug tests and incriminating statements during the participant's gradual and uneven path to recovery. "Defenders will want to ensure that such evidence is used for the limited purpose of treatment and cannot be used against the client" in other contexts.[76]

Criteria and Procedures for Expulsion from Drug Court

The criteria for expulsion from Drug Court contribute to the completion rate for participants. The therapeutic model anticipates relapse and uses a range of sanctions and incentives to enhance the chances for successful completion of treatment. If a Drug Court is impatient with the uneven progress of participants and expels them after a specified number of violations, the court will likely have a lower completion rate. Because the length of time that a person participates in treatment is directly related to the likelihood of future success,[77] Drug Courts should use the motivational tools of incentives and sanctions to retain participants and to optimize their chances for success.

The success of an individual participant depends in large part upon his or her conduct while in the Drug Court. A participant who regularly adheres to the court's expectations will ordinarily complete the program; a participant who regularly skips court sessions, who is imprisoned for a new crime, or who is unable to benefit from treatment is much less likely to succeed. Nonetheless, the court's overall completion rate and its general policies regarding expulsion are pertinent information for defense attorneys in advising their clients regarding participation in a Drug Court.

Expulsion from Drug Court may result in substantial incarceration. Depending upon the stage of the criminal proceeding at which the participant entered Drug Court, he or she may face sentencing in an adjourned felony case or may face revocation of parole. Further-

[76] M. Judge, Critical Issues for Defenders in the Design and Operation of a Drug Court, *Indigent Defense,* p. 4 (National Legal Aid and Defender Association 1997).

[77] *See, e.g.,* W. Meyer, *Developing and Delivering Incentives and Sanctions*, p. 1 (National Drug Court Institute, April 2007).

more, the postexpulsion decision of the sentencing court or parole board may be influenced by the participant's failure to complete the treatment court program successfully. Therefore, the Drug Court should provide the participant with the right to appointment of adversary counsel in an expulsion hearing.[78]

Sentence Following Expulsion from Drug Court

Although Drug Courts have shown success at reducing recidivism,[79] not all participants successfully complete the court program. The unsuccessful participant typically faces a sentencing hearing on the original charge (or faces imprisonment in the revocation proceeding) that precipitated the referral to the treatment court. In some jurisdictions, an unsuccessful participant may face a greater penalty than if he or she had never participated in the Drug Court.[80] However, absent a new conviction, a participant's failure to complete the program should not be a basis for an increased sentence.[81] The defense repre-

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[78] Some Drug Courts have adopted specific policies to notify participants of the right to counsel in this type of hearing. *See, e.g.*, *Brown County (Wisconsin) Drug Court Program Manual*, p. 13 (2009) (expulsion hearing, if requested, occurs on the record, "and the participant is entitled to legal representation"); *La Crosse County (Wisconsin) Drug Court Participant Handbook,* p. 10 (2009) (attorney may appear both for initial hearing before Drug Court team and, if the matter proceeds further, for judicial hearing on expulsion).

[79] *See supra* nn. 4, 14, and accompanying text.

[80] *See, e.g.*, M. O'Hear, Rethinking Drug Courts: Restorative Justice as a Response to Racial Injustice, 20 *Stan. L. & Policy Rev.* 463, 481& n. 100 (2009) (citing studies from New York that showed failing participants receiving longer sentences than nonparticipants receive).

[81] The defense representative may wish to consider whether unsuccessful participants should have the option of having their cases transferred from the Drug Court judge to another judge for sentencing. In some jurisdictions, cases may routinely be returned to another judge when the defendant (whether successful or unsuccessful) has ended his or her participation in Drug Court. If the defendant has the option of remaining before the Drug Court judge or having the case transferred, the decision is a tactical one to make in consultation with adversary counsel.

Another potential safeguard is to let the defendant know, before he or she enters Drug Court, what the sentence will be if the defendant does not complete the court program. This alternative depends on local sentencing law and practices, as well as the phase of the proceedings at which the participant enters the Drug Court (for example, if the participant enters Drug Court in lieu of revocation of parole, the potential in-

sentative (and the defense bar in general) should advise judges and prosecutors that increased sentences for noncompletion may deter many defendants from participation in Drug Court.

Defense Representative's Role in Decisions about Individual Participants

The defense representative on a Drug Court team should ordinarily refrain from voting to admit to the court clients represented by attorneys working in his or her office. Similarly, the defense representative should not vote on sanctions or expulsion of these clients. If the defense representative intends to vote (or otherwise advocate) regarding these decisions, the clients should be notified that the defense representative is acting as a representative of the Drug Court and will vote according to the court's applicable standards and policies. Present or former clients of the public defender agency should be given the same access and consideration as clients of the private bar.

In general, the interests of indigent defendants are better served if a defense representative participates in admission decisions. The defense representative may be more receptive than other team members to accepting defendants with serious charges or significant criminal records. Also, the defense representative may advocate for criteria and policies that provide access regardless of financial status (for example, procedures to waive or defer fees that might otherwise preclude participation by indigent persons). However, when the defense representative's colleagues are serving as adversary counsel for defendants seeking admission to the Drug Court, ethical and practical concerns make the defense representative's recusal preferable to voting on the admission decision.

If the defense representative opposes admission into the Drug Court of a colleague's client, ethical issues arise regarding conflict of interest and confidentiality. A conflict of interest arguably exists between the defense representative's responsibility as part of the Drug Court team (which may include adherence to specified admission cri-

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carceration time may be predetermined by the sentence originally imposed and the local parole law.

teria) and his or her responsibility to take no action adverse to a colleague's client (this responsibility exists whenever attorneys work together in the same office).[82] The confidentiality issue arises because attorneys in the same office generally have access to information regarding all clients of the office,[83] and the defense representative may not ethically use client-related information adversely in the decision regarding admission to the Drug Court.[84]

The ethical issues are magnified if the defense representative supervises the attorney providing the adversary representation. The defense representative must not discourage adversary counsel from seeking admission to the Drug Court on behalf of his or her clients (even for clients who may appear not to meet the stated admission).

Practical considerations also support the recommendation that the defense representative has a policy of not voting on the admission of a colleague's client. If the representative invariably votes in favor of admission, he or she will lose credibility with other members of the Drug Court team. However, if the representative votes against admission (or abstains) only in some cases when the prospective participant is a client of a colleague, others on the Drug Court team may believe that the representative has confidential and negative information about the client derived from working in the same office with adver-

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[82] ABA Model Rules of Professional Conduct 1.10(a) provides that for attorneys "associated in a firm," a conflict of interest precluding representation by one attorney is generally imputed to his or her colleagues. An exception exists, however, that allows other attorneys in the firm to represent the client if the conflict "is based on a personal interest of the prohibited lawyer and does not present a significant risk of materially limiting the representation of the client by the remaining members of the firm. *Id.* 1.10(a)(1). Thus, whether other public defenders may represent a client in Drug Court (or seeking admission to the court) despite a conflict affecting their colleague depends on the interpretation of this rule on imputed disqualification (some states have adopted the ABA Model Rules with changes, so attorneys should review local rules and opinions).

In analyzing this ethical issue and others, attorneys must be familiar with the specific rules and ethics opinions applicable in their respective jurisdictions.

[83] *Id.*, 1.6, Comment ("Lawyers in a firm may, in the course of the firm's practice, disclose to each other information relating to a client of the firm," unless the client has given contrary instructions).

[84] *Id.*, 1.6(a) (general rule of confidentiality, which broadly prohibits a lawyer from revealing "information relating to the representation of a client").

sary counsel. Furthermore, multiple clients of the office may be applying for a single place in the Drug Court.[85]

Participation in decisions on expulsion or sanctions can be similarly problematic. The defense representative can support the therapeutic goals of the Drug Court by reminding other team members that overcoming addiction or dependence is generally an uneven journey, interrupted by relapse.[86] However, voting on potential expulsion or sanction for each individual creates the same dilemma as with admission decisions. The defense representative may lose credibility by opposing all negative consequences for violations.[87] Conversely, if the

[85] Because of limited resources (e.g., staff, treatment providers, or funding), Drug Courts may have a maximum number of participants at a given time. Therefore, if the number of applicants exceeds the court's capacity, the team may need to make admission decisions from among a pool of applicants all of whom meet the eligibility requirements. Ethical issues related to admission decisions may be minimized if the court uses criteria such as a diagnosis of addiction and a risk determination (from a standardized assessment instrument) to select participants. Another possible approach to address these ethical issues is to screen the defense representative from confidential information about treatment court applicants represented by colleagues (other members of the Drug Court team should then be informed of this screening procedure, so that they do not draw any inferences from the statements or votes of the defense representative).

The defense representative may also work with other team members to seek additional resources to expand the Drug Court's capacity. If the court can document its success in reducing recidivism, policymakers may increase funding to allow the court to serve additional participants.

[86] *See* T.J. Kelly, J.M. Gaither, and L.J. King, Relapse, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 386 (Springer Science and Business Media 2007) (stating that Drug Court judge "should carefully consider the consequences of incarceration and not allow traditional notions of 'tough on crime' to interfere with the effective use of treatment."); *see also* K.R. Lay and L.J. King, Counseling Strategies, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 170 (Springer Science and Business Media 2007) ("Relapse is an expected part of recovery in Drug Courts and might or might not occur at any stage and require return to an earlier stage").

[87] For example, the defense representative might be called upon to vote on potential sanctions for misconduct that occurred during a treatment session or for failure to show up to provide a urine sample. Members of the Drug Court team may reasonably conclude that the failure to impose some sanctions for violations potentially undermines not only the court's ability to promote participant compliance, but also the court's relationship with the service provider (for example, an agency providing treatment or drug testing). *See* D.A. Reilly, Building Supportive Services in Drug

defense representative votes for such consequences in selected cases, other team members may infer that the representative has confidential and negative information about the client.

In a jurisdiction in which the local public defender staff represent a large percentage of defendants, this issue can be difficult. The defense representative should consider reasonable alternatives to preserve a defense voice in these decisions without creating the ethical and practical issues discussed above. The participation of a private defense attorney in admission decisions may be an option in some Drug Courts. Another option may be that the applicant's adversary counsel, after having reviewed the eligibility criteria, presents the application to other members of the team, with the defense representative refraining from any formal vote.

In sum, the defense representative can advocate generally for fair criteria in all aspects of Drug Court's operations without formally advocating for specific actions requested by a client (or colleague's client). If participants have been fully informed of and agreed to the Drug Court's procedures, the defense representative can ethically, collaboratively, and effectively support the court's evidence-based practices.

CONCLUSION

Drug Courts provide a potentially beneficial option to persons who would otherwise be at high risk of substantial incarceration and recidivism. By addressing underlying risk factors such as addiction or a mental disorder, Drug Courts can benefit both the individual participants and the public safety of the broader community. Public defenders (and other representatives of the defense bar) can and should play an important role in ensuring the fairness and effectiveness of Drug Courts.

> *Points of view, opinions, and conclusions in this paper do not necessarily reflect those of the NADCP, National Legal Aid and Defender Association (NLADA,) or the Office of the Wisconsin State Public Defender.*

Courts, *reprinted in Drug Courts: A New Approach to Treatment and Rehabilitation,* p. 212 (Springer Science and Business Media 2007).

Michael Tobin *is the deputy director of the Wisconsin State Public Defender and previously served this agency as a staff attorney, a supervising attorney, and a division director. He has taught law school courses at the University of Puget Sound and the University of Wisconsin. He coauthored the Wisconsin Criminal Defense Manual and Thomson West's treatise on Wisconsin Criminal Practice and Procedure. He earned his undergraduate degree at Swarthmore College and law degree at the University of Texas.*

Direct correspondence to Michael Tobin, Deputy Director, State Public Defender, 315 N. Henry Street, Madison, WI 53704. (608) 266-8259. tobinm@opd.wi.gov

THE PREVALENCE OF HIV RISK BEHAVIORS AMONG FELONY DRUG COURT PARTICIPANTS

David S. Festinger — Karen L. Dugosh
David S. Metzger — Douglas B. Marlowe

[15] HIV Risk Behaviors in Drug Court—*A small percentage of participants in a large metropolitan felony Drug Court engaged in high-risk injection drug use, but a large percentage engaged in high-risk sexual behaviors.*

[16] HIV Risk Factors in Drug Court—*HIV risk behaviors were associated with being male, African–American, and younger.*

[17] Geographic Risk for HIV—*A large proportion of Drug Court participants resided in areas of the city with a high prevalence of persons living with HIV/AIDS, thus heightening the probability of exposure to the virus.*

ACCORDING TO RECENT ESTIMATES from the Centers for Disease Control and Prevention (CDC; Hall et al., 2008), approximately 1.2 million adults and adolescents in the United States are HIV positive, representing approximately 0.4% of the total population. An estimated 56,300 adolescents and adults were newly infected with the HIV virus in 2006. Seventy-three percent of these new infections occurred among males, 45% among African–Americans, and 17% among Hispanics. Over half of the new infections occurred among males who have sex with males (MSM).

The relationship between drug use and HIV risk is well documented. According to CDC estimates, injection drug use (22%) was the third most common high-risk behavior among individuals living with HIV [after male-to-male sexual contact (45%) and high-risk heterosexual contact (27%)]. In addition to risks of direct and indirect transmission associated with injection drug use, noninjection substance users are also disproportionately at risk for contracting HIV through sexual transmission. Substance use has been frequently linked to sexual risk behaviors and viral

transmission among both heterosexuals and MSM. Clearly, drug and alcohol use can affect economic status, social network membership, and decision making with respect to partner selection and condom use. These factors often lead to unsafe sexual practices (e.g., Brewer et al., 2007; Celentano, Latimore, & Mehta, 2008; Cheng et al., 2010; Kwiatkowski & Booth, 2000; Molitor, Bautista, & Choi; Royce et al., 1997). Finally, research has demonstrated that the biological effects of drug abuse can affect a person's susceptibility to HIV infection and the progression of AIDS (e.g., Bagby et al., 2006; Samet et al., 2003, 2004).

The high rates of drug use put substance-abusing offenders at a high risk for contracting HIV infection and for transmitting the virus to others. It is estimated that approximately 80% of prison and jail inmates were under the influence of drugs or alcohol at the time of their arrest (Belenko & Peugh, 2005; James, 1988; Teplin, 1994). Of those in jail who are HIV positive, intravenous drug use is among the most predominant methods of transmission (Dean, Lansky, & Fleming, 2002; Hammett et al., 1994, as cited in Swartz, Lurigio, & Weiner, 2004). In fact, early estimates (Vlahov et al., 1989) indicated that 85% of these infections were linked to intravenous drug use. More recent estimates identify this rate to be closer to one-half (Dean et al., 2002). In addition, other factors are likely to contribute to the elevated HIV risk in incarcerated individuals including poverty, unemployment, lack of health care access (Hammet, Harmon, & Maruschak, 1999), and social networks that include high-risk associates (Friedman et al., 1999).

Individuals in the criminal justice system have been found to be at a particularly high risk for HIV/AIDS infection and transmission. The relatively high prevalence rate for HIV infection has been well established in incarcerated populations. Nationwide, an estimated 22,144 HIV positive inmates were in state and federal prisons at the end of December 2008, accounting for 1.5% of the total prison population (Maruschak, 2009), almost four times higher than in the total U.S. population. Among them were 5,113 confirmed AIDS cases accounting for 0.4% of the total prison population. Furthermore, it has been estimated that 17%–25% of HIV-infected individuals pass through the prison system annually (Braithwaite & Arriola, 2003; Spalding et al., 2009).

Although the primary focus of HIV prevention efforts for the criminal justice system has been on incarcerated populations (e.g., Braithwaite & Arriola, 2003; Hammet et al., 1999), the majority of offenders are actually not incarcerated but rather are under community supervision, with over five million offenders on probation or parole (Glaze & Bonczar, 2009). Rates of drug involvement are particularly high in this population, putting them at higher risk for HIV infection. At the end of 2008, 30% of probationers had been charged with drug offenses and another 17% had been charged with driving while impaired (DWI). Approximately 37% of parolees had served a sentence for a drug offense. Belenko et al. (2004) examined the prevalence of HIV and risk behaviors in a sample of offenders who were under community supervision. They reported HIV/AIDS prevalence rates that mirrored those observed in inmates, rates of injection drug use that were slightly higher, and a high prevalence of risky sex behaviors.

Little research has focused on the rates of engagement in HIV risk behaviors in other types of community corrections settings. For instance, Drug Courts are one of the most empirically supported approaches for successfully diverting drug using offenders from incarceration to drug treatment and case management in the community (e.g., Aos et al., 2001; Latimer, Morton-Bourgon, & Chretien, 2006; Lowenkamp, Holsinger, & Latessa, 2005; Marlowe, DeMatteo, & Festinger, 2003; Marlowe, Festinger, & Lee, 2004; Wilson, Mitchell, & MacKenzie; Schaffer, 2006). Drug Courts are special criminal court dockets that provide a judicially supervised regimen of substance abuse treatment and other needed services for nonviolent, substance-abusing offenders in lieu of criminal prosecution or incarceration (Marlowe et al., 2008). The first Drug Court was established in 1989, and there are now more than 2,500 Drug Courts in the United States and its territories (National Association of Drug Court Professionals, 2011). Given the rapid expansion of Drug Courts to serve the needs of drug-involved offenders and the high prevalence of HIV risk behaviors that have been identified among other substance-abusing criminal justice populations, it is important to understand the prevalence of HIV risk behaviors among this growing population.

The purpose of this descriptive paper is to examine the prevalence of HIV drug and sex risk behaviors in a sample of participants from one felony Drug Court located in Philadelphia, Pennsylvania. Nearly two-thirds of all people living with HIV/AIDS in the city of Philadelphia are African–American, 75% are males, and almost two-thirds are under the age of 40 (Philadelphia Department of Public Health, 2009). Given these demographic disparities in HIV/AIDS rates in the city of Philadelphia, we also examined the relationship between race, gender, and age and engagement in high-risk behaviors. Findings from the study may provide an important first step in establishing the need for evidence-based HIV risk reduction interventions as a standard part of the Drug Court curriculum.

METHOD

Participants

A total of 269 participants were recruited from a felony preadjudication Drug Court located in the urban City of Philadelphia. To be eligible for the Drug Court program, participants are required to (1) be at least 18 years of age; (2) be charged with a nonviolent felony offense; (3) have no more than two prior nonviolent convictions, juvenile adjudications, or diversionary opportunities; (4) be in need of treatment for drug abuse or dependence as assessed by a clinical case manager employed by the court; and (5) be willing to participate in the Drug Court program for at least twelve months. Consecutive admissions over a 22-month period were approached at entry about their willingness to participate in the study, and the consent rate was 75% (269 of 360).

The study participants were primarily male (80%) and most self-identified as African–American (61%), Caucasian (18%), or Hispanic (24%). Their mean age was 24.31 years (SD = 7.55) and their mean educational attainment was 11.25 years (SD = 1.57). Less than one-half (44%) were regularly employed full or part time. Virtually all of the participants were unmarried (98%) and many lived in the homes of family or friends (61%) or in a controlled environment such as recovery housing (8%). They reported an average annual legal income of $7,040 ($SD$ = $9,077) with a range of $0–$55,000. Approximately 73% reported

marijuana as their primary drug of abuse, and 13% had a history of prior substance abuse treatment.

Nearly all of the participants (97%) were currently charged with delivery of a controlled substance or possession with the intent to deliver a controlled substance. In addition, 28% were charged with conspiracy related to a drug offense, and small proportions were charged with forgery (1%), felony retail theft (1%), or prostitution (1%) (participants could have multiple charges). They had an average history of 1.15 ($SD = 0.71$) criminal arrests prior to their current charge. Most participants were represented by a public defender (84%).

To monitor potential selection bias, demographic data and criminal records were obtained for individuals who did not participate in the study. These data were received in aggregate batches from the Drug Court and were de-identified. Individuals who did not participate in the study were more likely to be male (91% vs. 80%), $X^2(1) = 7.76$, $p < .005$, African–American (75% vs. 61%), $X^2(1) = 6.78$, $p < .01$, and represented by private defense counsel (22% vs. 16%), $X^2(1) = 3.57$, $p = .06$.

Procedures

Study procedures were approved by the Institutional Review Boards of the Treatment Research Institute and the City of Philadelphia. After participants provided informed consent to participate in the study, a research assistant administered a battery of instruments to the participants in a private room. The battery included a health behavior survey that contained six items designed to evaluate the extent to which participants engaged in drug use and sexual behaviors in the past six months that increased their risk for HIV infection. Three items were related to intravenous drug use (i.e., number of times injected drugs, number of people shared needles with, frequency of needle cleaning rated on a five-point Likert-type scale), and three items were related to high-risk sexual behavior (i.e., number of sexual partners, number of same-gender partners, frequency of condom use rated on a five-point Likert-type scale). Importantly, these items were adapted from the well-validated Risk Assessment Battery (RAB) (Metzger, Navaline, & Woody, 2001) and were selected to measure rates of engagement in HIV risk behaviors that are

directly responsible for viral transmission. The 6-month time frame was selected to capture a representative sample of recent risk behavior and is standard for the RAB.

Data Analyses

Response frequencies were calculated for each item, and the results of these descriptive analyses are presented in the section that follows. In addition, chi-square analyses were used to examine differences in the rates of engagement in high-risk behaviors as a function of race (African–American vs. other) and gender. Correlation analyses were performed to examine the relationship between engagement in these behaviors and age among sexually active study participants. Finally, we used participant zip codes to map our study sample to the population-adjusted geographic concentration of HIV/AIDS in Philadelphia in order to identify their risk of coming into contact with the virus.

RESULTS

Drug-Use Risk Behaviors

Only two people in the sample (0.7%) reported injection drug use in the past six months. Both of these individuals indicated sharing needles with one person in the past six months and that they had cleaned their needles prior to use.

Sexual Risk Behaviors

Approximately 54% of participants reported having sex with multiple partners in the past six months, while 41% reported having only one partner and 6% reported not being sexually active during this time period. The average number of partners for those reporting multiple partners was 6.12 ($SD = 11.20$). Three percent of participants reported having sexual relations with same-gender partners.

Frequency of condom use among those who were sexually active ($N = 244$) is presented in Figure 1 following. Almost two-thirds (62%) reported engaging in unprotected sex at least once in the past six months, and 26% reported never using a condom during sexual activity. Among

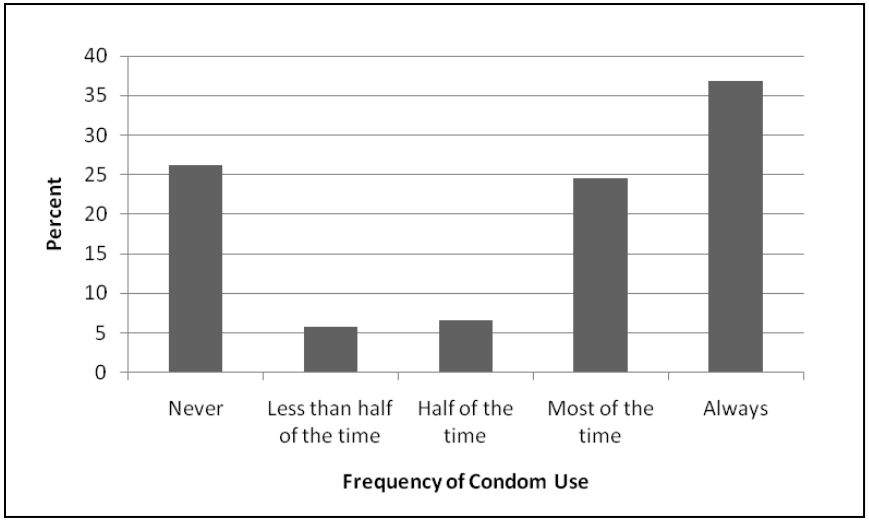

Figure 1. Frequency of Condom Use in Sexually Active Sample (*N* = 244)

those who had multiple partners ($N = 139$), 52% reported engaging in unprotected sex at least once in the past six months. Within the small sample of participants with same-gender partners ($N = 9$), 56% reported never using a condom and 44% reported always using a condom.

Gender Differences in Sexual Risk Behaviors

Within the sexually active sample, males were significantly more likely to report having multiple sexual partners in the past six months (63% vs. 30%, $X^2(1) = 16.28$, $p < .0001$). On average, men reported 4.51 ($SD = 9.69$) sexual partners and females reported 1.37 ($SD = 0.61$). There was a trend for males to be more likely to report having sex without a condom than females (74% vs. 61%, $p < .10$). While the overall rate was low, females were more likely than males to report having same-gender sexual partners (17% vs. 1%, $p < .0001$, Fisher's exact test).

Racial Differences in Sexual Risk Behaviors

Within the sexually active sample, African–Americans were significantly more likely to report having multiple sexual partners than members of other racial groups (63% vs. 47%, $X^2(1) = 5.92$, $p < .05$. There

were no significant differences in the reporting of sexual activity without a condom (60% vs. 67%, $p = .19$) or having same-gender sexual partners (4% vs. 3%, $p = 1.0$, Fisher's exact test).

Age Differences in Sexual Risk Behaviors

Within the sexually active sample, age was significantly related to reporting multiple sexual partners ($r = -.15$, $p < .05$). The likelihood of reporting multiple sexual partners decreased as a function of age. There was a nonsignificant trend for condom use to decrease as a function of age ($r = .11$, $p < .10$). Age was not related to having same-gender sexual partners ($p = .21$).

Zip Code Mapping

As displayed in Figure 2, over one-third of the Drug Court participants in this study resided in Philadelphia zip code areas with the highest prevalence (1%–4%) of the adult population currently living with AIDS.

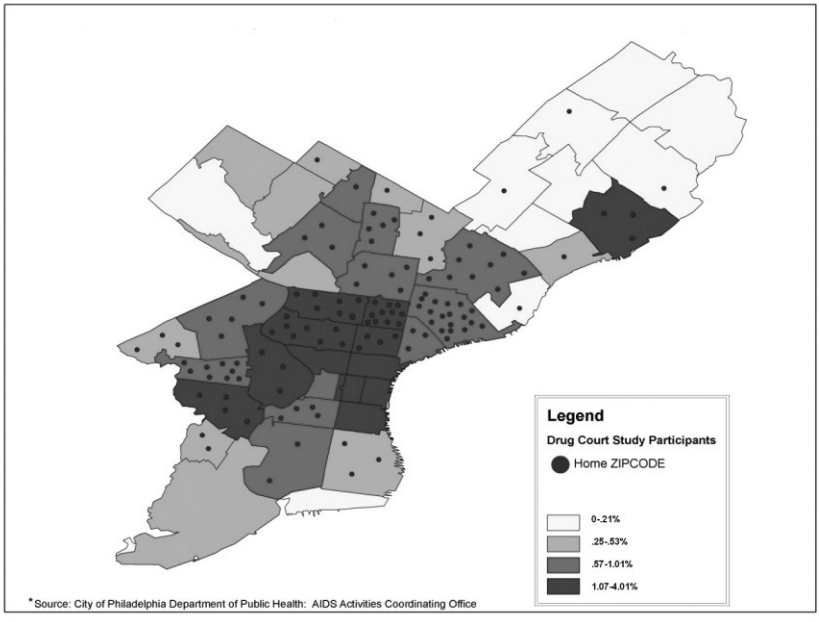

Figure 2. Prevalence of Persons Living with AIDS in Philadelphia by Participant Zip Code

Fully 80% were from zip code areas with over 0.5% prevalence of adults living with AIDS.

DISCUSSION

The current study is among the first to provide estimates of the prevalence of HIV risk behaviors in a Drug Court population. Understanding the extent to which Drug Court participants engage in behaviors that put them at risk for contracting HIV infection is important for a number of reasons. First, research has demonstrated that individuals who are involved in the criminal justice system are at high risk of contracting HIV. In addition, criminally involved offenders who are under supervision in the community have more opportunities to engage in risky behaviors than persons in prison, which may increase their risk of contracting HIV infection. Finally, Drug Courts are becoming an increasingly popular diversion strategy for criminally involved substance abusers. The size of this population is expected to increase exponentially as more and more Drug Courts are established. Understanding the prevalence of HIV risk behaviors among Drug Court participants will help us to determine the extent of the need for HIV risk reduction interventions in Drug Court programs.

Rates of HIV drug risk behaviors were low in the current sample. The rate of injection drug use was 0.7%, only slightly higher than the rate reported for probationers and parolees (0.15%) (Belenko et al., 2004) and in the general population (0.17% in the past year) (Substance Abuse and Mental Health Services Administration, 2009). Importantly, the rate of injection drug use in the Drug Court sample is significantly lower than the rates reported among prisoners (e.g., Abiona et al., 2009; Swartz, Lurigio, & Weiner, 2004; Fox et al., 2005). Of the two people who reported any injection drug use in the past six months, both indicated that they cleaned their needles prior to use. Of course, we cannot verify the effectiveness of their cleaning methods or needle sharing behaviors. While one may have expected higher rates of IV drug use in this felony Drug Court, this rate is not surprising given the fact that almost three-fourths of the sample reported marijuana as their primary drug of abuse.

Conversely, Drug Court participants engaged in a number of sexual behaviors that may increase their risk of contracting HIV. Over half of the sample indicated they had sex with multiple partners in the past six month, and two-thirds of the sexually active sample reported having sex without a condom at least once during the past six months. About half of participants who reported having multiple partners indicated that they had sex without a condom at least once during the past six months. These rates are slightly higher than those reported in a sample of probationers and parolees (Belenko et al., 2004). Among probationers and parolees, about half (48%) of individuals reported having vaginal sex with casual partners in the past six months. Of those with casual partners, a little more than a third (38%) reported having sex without a condom at least once in the past six months. Among the general population, estimates of the percentage of people who have had sex with multiple partners during the past year range from 9% to 13% (Holtzman, Bland, Lansky, & Mack, 2001; Leigh, Temple, & Trocki, 1993).

Consistent with the disparities in the rate of HIV transmission in the U.S. (CDC, 2008) and in line with data specific to the City of Philadelphia (Philadelphia Department of Public Health, 2009), significantly higher rates of engagement in risky behaviors were associated with being African–American and male. Results related to age were mixed. While younger people were significantly more likely to have multiple partners, there was a nonsignificant trend for them to be more likely to use condoms every time they had sex. The results related to age are consistent with those observed in other studies (e.g., Binson et al., 1993; Dolcini et al., 1993; Leigh, Temple, & Trocki, 1993; Reece et al.; Sanders et al., 2010).

Perhaps the most striking finding comes from the results of the zip code mapping analysis. Over a third of Drug Court participants resided in areas of Philadelphia with the highest density of persons living with AIDS (i.e., 1%–4%). According to the World Health Organization, an epidemic is considered generalized when greater than 1% of the population is infected. This designation not only provides a measure of prevalence but also indicates the increased potential for individuals to come in contact with the virus. In high-prevalence settings, most unprotected sex

can be considered high risk. In the current sample, the great majority of participants come from high prevalence neighborhoods, and all have a history of substance use, which is associated with sexual risk and infection among heterosexuals and MSM (Metzger, Woody, & O'Brien, 2010).

This study has several limitations. First, the study relies on self-reported data that were collected during a face-to-face interview. Participants may have felt embarrassed or uncomfortable answering questions of such a personal nature and, for this reason, may have under-reported their engagement in drug and sexual risk behaviors. Second, the risk instrument had a limited number of items and was intended to be a survey rather than a risk scale. For this reason, we could not calculate composite risk scores. Future studies should evaluate HIV risk using validated risk measures that provide composite scores and that can be self-administered to help reduce self-presentation concerns (e.g., Audio Computer Assisted Self Interview RAB) (Metzger et al., 2000). Third, 25% of those approached refused to participate in the study. Because participants who refused were more likely to be male and African–American, the prevalence rates of high-risk behaviors cited in the present study may be an underestimate of rates in the Drug Court population as a whole. Finally, the study examines the prevalence of HIV risk behaviors in a single felony Drug Court in Philadelphia. Future research should be conducted in other settings in order to evaluate the generalizability of the current findings.

Despite their proven efficacy in addressing substance abuse and criminal recidivism, Drug Courts have yet to be evaluated with respect to HIV and sexually transmitted infection (STI) risk reduction. Given the prevalence of high-risk behaviors (e.g., Belenko at al., 2004) and the alarming rates of HIV infection and STIs among criminal offenders (14%–26%) (Hammet, Harmon, & Rhodes, 2002; Spaulding et al., 2009) along with the rates of high-risk behaviors found in the current study, Drug Courts may represent an important yet unexplored opportunity to deliver risk reduction interventions, HIV testing, and referral to HIV care. Research should be expanded to further document the prevalence of high-risk behaviors among Drug Court participants and to identify useful strategies for reducing risk.

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REFERENCES

Abiona, T., Balogun, J., Adefuye, A., & Sloan, P. (2009). Pre-incarceration HIV risk behaviours of male and female inmates. *International Journal of Prisoner Health, 5*(2), 59–70.

Aos, S., Phipps, P., Barnoski, R., & Lieb, R. (2001). The comparative costs and benefits of programs to reduce crime. *Costs and Benefits of Preventing Crime,* 3–19.

Bagby, G.J., Zhang, P., Purcell, J.E., Didier, P.J., & Nelson, S. (2006). Chronic binge ethanol consumption accelerates progression of simian immunodeficiency virus disease. *Alcoholism: Clinical and Experimental Research, 30*(10), 1781–1790.

Belenko, S., Langley, S., Crimmins, S., & Chaple, M. (2004). HIV risk behaviors, knowledge, and prevention education among offenders under community supervision: A hidden risk group. *AIDS Education and Prevention, 16*(4), 367–385.

Belenko, S., & Peugh, J. (2005). Estimating drug treatment needs among state prison inmates. *Drug and Alcohol Dependence, 77*(3), 269–281.

Binson, D., Dolcini, M.M., Pollack, L.M. & Catania, J.A. (1993). Multiple sexual partners among young adults in high-risk cities. *Family Planning Perspectives, 25*(6), 268–272.

Braithwaite, R., & Arriola, K. (2003). Braithwaite and Arriola respond. *American Journal of Public Health, 93*(10), 1617.

Brewer, T.H., Zhao, W., Metsch, L.R., Coltes, A., & Zenilman, J. (2007). High-risk behaviors in women who use crack: Knowledge of HIV serostatus and risk behavior. *Annals of Epidemiology, 17*(7), 533–539.

Celentano, D.D., Latimore, A.D., & Mehta, S.H. (2008). Variations in sexual risks in drug users: Emerging themes in a behavioral context. Current *HIV/AIDS Reports, 5*(4), 212–218.

Center for Disease Control and Prevention. (2008). Subpopulation estimates from the HIV Incidence Surveillance System—United States, 2006. *Morbidity*

and Mortality Weekly Report, 57(36), 985–989.

Cheng, W.S., Garfein, R.S., Semple, S.J., Strathdee, S.A., Zians, J.K., & Patterson, T.L. (2010). Binge use and sex and drug use behaviors among HIV(-), heterosexual methamphetamine users in San Diego. *Substance Use & Misuse, 45*(1–2), 116–133.

Dean, H.D., Lansky, A., & Fleming, P.L. (2002). HIV surveillance methods for the incarcerated population. *AIDS Education and Prevention, 14*(5 Supplement), 65–74.

Dolcini, M.M., Catania, J.A., Coates, T.J., Stall, R., Hudes, E.S., Gagnon, J.H. & Pollack, L.M. (1993). Demographic characteristics of heterosexuals with multiple partners: The National AIDS Behavioral Surveys. *Family Planning Perspectives, 25*(5), 208–214.

Fox, R.K., Currie, S.L., Evans, J., Wright, T.L., Tobler, L., Phelps, B., & Page-Shafer, K.A. (2005). Hepatitis C virus infection among prisoners in the California state correctional system. *Clinical Infectious Diseases, 41*(2), 177–186.

Friedman, S.R., Curtis, R., Neaigus, A., Jose, B., & Des Jarlais, D.C. (1999). *Social networks, drug injectors' lives, and HIV/AIDS*. New York: Kluwer Academic.

Glaze, L.E., & Bonczar, T.P. (2009). *Probation and parole in the United States, 2008* (NCJ 228230). Retrieved from U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics website: http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=1764.

Hall, H.I., Song, R., Rhodes, P., Prejean, J., An, Q., Lee, L.M., et al. (2008). Estimation of HIV incidence in the United States. *JAMA: Journal of the American Medical Association, 300*(5), 520–529.

Hammett, T., Harmon, P., & Maruschak, L. (1999). 1997 update: HIV/AIDS, STDs, and TB in correctional facilities. *Issues and practices in criminal justice.* Washington, DC: National Institute of Justice, U.S. Department of Justice.

Hammett, T.M., Harmon, M.P., & Rhodes, W. (2002). The burden of infectious disease among inmates of and releasees from U.S. correctional facilities, 1997. *American Journal of Public Health, 92*(11), 1789–1794.

Hammett, T.M., Harold, L., Gross, M., & Epstein, J. (1994). *HIV AIDS in correctional facilities: Issues and options.* Washington, DC: National Institute of Justice.

Holtzman, D., Bland, S.D., Lansky, A., & Mack, K.A. (2001). HIV-related behaviors and perceptions among adults in 25 states: 1997 Behavioral Risk Factor Surveillance System. *American Journal of Public Health, 91*(11), 1882–1888.

James, D. (1988). Prison, mental illness, and identity. *Lancet, 2*(8624), 1371.

Kwiatkowski, C.F., & Booth, R.E. (2000). Differences in HIV risk behaviors among women who exchange sex for drugs, money, or both drugs and money. *AIDS and Behavior, 4*(3), 233–240.

Latimer, J., Morton-Bourgon, K., & Chretien, J. (2006). *A meta-analytic examination of drug treatment courts: Do they reduce recidivism?* Retrieved from Department of Justice Canada, Research and Statistics Division website: http://www.justice.gc.ca/eng/pi/rs/rep-rap/2006/rr06_7/rr06_7.pdf.

Leigh, B.C., Temple, M.T., & Trocki, K.F. (1993). The sexual behavior of U.S. adults: Results from a national survey. *American Journal of Public Health, 83*(10), 1400–1408.

Lowenkamp, C.T., Holsinger, A.M., & Latessa, E.J. (2005). Are drug courts ef-

fective: A meta-analytic review. *Journal of Community Corrections, Fall,* 5–28.

Marlowe, D.B., DeMatteo, D.S., & Festinger, D.S. (2003). A sober assessment of drug courts. *Federal Sentencing Reporter. 16,* 153–157.

Marlowe, D.B., Festinger, D.S., Dugosh, K.L., Arabia, P.L., & Kirby, K.C. (2008). An effectiveness trial of contingency management in a felony preadjudication drug court. *Journal of Applied Behavior Analysis, 41*(4), 565–577.

Marlowe, D.B., Festinger, D.S., & Lee, P.A. (2004). The judge is a key component of drug court. *Drug Court Review, 4*(2), 1–34.

Maruschak, L.M., & Beavers, R. (2009). *HIV in prisons,* 2007–08 (NCJ 228307). Retrieved from U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics website: http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=1747.

Metzger, D.S., Koblin, B., Turner, C., Navaline, H., Valenti, F., Holte, S., et al. (2000). Randomized controlled trial of audio computer-assisted self-interviewing: utility and acceptability in longitudinal studies. American *Journal of Epidemiology, 152*(2), 99–106.

Metzger, D.S., Navaline, H.A., & Woody, G.E. (2001). Assessment of substance abuse: HIV risk assessment battery (RAB). In R. Carson-DeWitt (Eds.), *Encyclopedia of drugs, alcohol, and addictive behavior, 2nd Ed.* Macmillan-Thompson/Gale.

Metzger, D.S., Woody, G.E., & O'Brien, C.P. (2010). Drug treatment as HIV prevention: A research update. *Journal of Acquired Immune Deficiency Syndromes, 55*(Suppl. 1)*,* S32–S36.

Molitor, T.W., Bautista, E.M.. & Choi, C.S. (1997). Immunity to PRRSV: double-edged sword. *Veterinary Microbiology 55,* 265–276.

National Association of Drug Court Professionals. (2011). *The facts on drugs and crime in America.* Washington, DC: Office of Justice Programs, U.S. Department of Justice.

Philadelphia Department of Public Health. (2009). *Philadelphia AIDS demographics, 2002–2008.* Retrieved from Philadelphia Department of Public Health Web site: http://www.phila.gov/health/AACO/AACODataResearch.html.

Reece, M., Herbenick, D., Schick, V., Sanders, S.A., Dodge, B., & Fortenberry, J.D. (2010). Condom use rates in a national probability sample of males and females ages 14 to 94 in the United States. *Journal of Sexual Medicine, 7*(Suppl. 5), 266–276.

Royce, R.A., Sena, A., Cates Jr., W., & Cohen, M.S. (1997). Sexual transmission of HIV. *New England Journal of Medicine, 336*(15), 1072–1078.

Samet, J.H., Horton, N.J., Meli, S., Freedberg, K.A., & Palepu, A. (2004). Alcohol consumption and antiretroviral adherence among HIV-infected persons with alcohol problems. *Alcoholism: Clinical and Experimental Research, 28*(4), 572–577.

Samet, J.H., Horton, N.J., Traphagen, E.T., Lyon, S.M., & Freedberg, K.A. (2003). Alcohol consumption and HIV disease progression: Are they related? *Alcoholism: Clinical and Experimental Research, 27*(5), 862–867.

Sanders, S.A., Reece, M., Herbenick, D., Schick, V., Dodge, B., & Fortenberry, J.D. (2010). Condom use during most recent vaginal intercourse event among a probability sample of adults in the United States. *Journal of Sexual Medicine, 7*(Suppl. 5), 362–373.

Shaffer, D.K. (2006). *Reconsidering drug court effectiveness: A meta-analytic review*. Las Vegas, NV: Dept. of Criminal Justice, University of Nevada.

Spaulding, A.C., Seals, R.M., Page, M.J., Brzozowski, A.K., Rhodes, W., & Hammet, T.M. (2009). HIV/AIDS among inmates of and releasees from U.S. correctional facilities, 2006: Declining share of epidemic but persistent public health opportunity. *PLoS One, 4*(11).

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (October 29, 2009). *The NSDUH Report: Injection drug use and related risk behaviors.* Rockville, MD.

Swartz, J.A., Lurigio, A.J., & Weiner, D.A. (2004). Correlates of HIV-risk behaviors among prison inmates: Implications for tailored AIDS prevention programming. *The Prison Journal, 84*(4), 486.

Teplin, L.A. (1994). Psychiatric and substance abuse disorders among male urban jail detainees. *American Journal of Public Health, 84*(2), 290–293.

Vlahov D., Brewer, T.F., Munoz A., Taylor E., Hall D., & Polk B.F. (1989). Temporal trends of (HIV-1) infection among inmates entering a statewide prison system, 1985–1987. *Journal of Acquired Immune Deficiency Syndrome, 1,* 283–290.

Wilson, D.B., Mitchell, O., & MacKenzie, D.L. (2006). A systematic review of drug court effects on recidivism. *Journal of Experimental Criminology, 2*(4), 459–487.

David S. Festinger, *PhD, is a senior scientist and director of TRI's Section on Law and Ethics Research, as well as a faculty member in the Department of Psychiatry at the University of Pennsylvania School of Medicine. His research focuses primarily on empirically isolating the active mechanisms of Drug Courts, developing empirically based dispositional procedures for substance-abusing offenders, and bringing experimental research methods to bear on major ethical questions involving human subjects in substance abuse research.*

Karen L. Dugosh, *PhD, is a research scientist in TRI's Section on Law and Ethics. She has been involved in Drug Court research for almost a decade and has recently begun to examine ethical issues surrounding research participation and informed consent in vulnerable populations. Her current research focuses on the development of an assessment to measure coercive pressures to participate in research that is tailored to the doubly vulnerable population of substance-abusing offenders.*

David S. Metzger, PhD, *is director of the Behavioral and Social Science Core at the Center for AIDS Research, Director of the HIV Prevention Research Division in the University of Pennsylvania's Department of Psychiatry, and the scientific liaison for TRI and the University of Pennsylvania's Department of Psychiatry. Currently, his work involves testing the safety and efficacy of behavioral and biomedical prevention interventions including HIV vaccines, social network interventions, and agonist drug treatments.*

Douglas B. Marlowe, *JD., PhD, is chief of Science, Law and Policy at the National Association of Drug Court Professionals and senior scientist in TRI's Section on Law and Ethics. He is a lawyer and research psychologist with expertise in evaluating substance abuse interventions for criminal offenders. Dr. Marlowe has published over 150 scientific papers related to Drug Courts and other interventions for drug abusers and criminal offenders.*

Direct correspondence to David S. Festinger, PhD, Treatment Research Institute, University of Pennsylvania, 600 Public Ledger Bldg., 150 S. Independence Mall West, Philadelphia, PA 19106. (215) 399-0980 x126. dfestinger@tresearch.org

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