

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

**Document Title: The Multi-Site Adult Drug Court Evaluation:
Executive Summary**

**Author: Shelli B. Rossman, John K. Roman, Janine M.
Zweig, Michael Rempel, Christine H. Lindquist**

Document No.: 237108

Date Received: December 2011

Award Number: 2003-DC-BX-1001

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.

**Opinions or points of view expressed are those
of the author(s) and do not necessarily reflect
the official position or policies of the U.S.
Department of Justice.**

THE MULTI-SITE ADULT DRUG COURT EVALUATION: EXECUTIVE SUMMARY

Shelli B. Rossman, The Urban Institute
John K. Roman, The Urban Institute
Janine M. Zweig, The Urban Institute
Michael Rempel, Center for Court Innovation
Christine H. Lindquist, RTI International

Contributors:

The Urban Institute
Janeen Buck Willison
P. Mitchell Downey
Jennifer Yahner

Center for Court Innovation
Dana Kralstein
Mia Green
Kelli Henry

RTI International
Kristine Fahrney

With Avinash S. Bhati, Donald J. Farole Jr., Erica Lagerson, Joshua Markman, and Courtney Schafer





URBAN INSTITUTE
Justice Policy Center
2100 M STREET, NW

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders.

WASHINGTON, DC 20037

www.urban.org

© 2011 Urban Institute

This project was supported by Award No. 2003-DC-BX-1001, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect those of the Department of Justice.

Acknowledgments

The National Institute of Justice’s (NIJ) Multi-Site Adult Drug Court Evaluation (MADCE) entailed multi-site, multi-year process, impact, and cost-benefit data collection, analysis, and reporting that required the collaboration of numerous individuals and organizations to whom we extend our appreciation for their contributions to the successful completion of this study.

In particular, we thank the Office of Justice Programs for its support through the Drug Court Discretionary Grant Program, and for other support from the Bureau of Justice Assistance. We also are deeply indebted to the judges, drug court coordinators, and staff of drug courts, as well as the administrators and staff of the comparison jurisdictions, whose efforts form the foundation without which this research would not have been possible:

Florida

Osceola County Drug Court—Kissimmee, FL
Volusia County Adult Drug Court Program—Deland, FL

Georgia

Fulton County Drug Court—Atlanta, Georgia
Hall County Drug Court—Gainesville, GA

Illinois

Cook County Drug Court Rehabilitation Alternative Program (R.A.P.)—Chicago, IL
Kane County Rehabilitation Court—St. Charles, IL

New York

Auburn Drug and Alcohol Treatment Court—Auburn, NY
Batavia City Drug Treatment Court—Batavia, NY
City of Niagara Falls Drug Treatment Court—Niagara Falls, NY
Finger Lakes Drug Court (Canandaigua City)—Canandaigua, NY
Finger Lakes Drug Court, Felony Division (Ontario County)—Canandaigua, NY
Lackawanna City Drug Court—Lackawanna, NY
Syracuse Community Treatment Court—Syracuse, NY
Wayne County Drug Treatment Court—Lyons, NY

Pennsylvania

Chester County Drug Court—West Chester, PA
Philadelphia Treatment Court—Philadelphia, PA

South Carolina

York County Drug Treatment Court—York, SC

Washington

CHART Court (Snohomish County)—Everett, WA
King County Drug Diversion Court—Seattle, WA
Kitsap County Adult Drug Court—Port Orchard, WA
Pierce County Felony Drug Court—Tacoma, WA
Thurston County Drug Court Program—Olympia, WA

Comparison Sites

Human Services Associates, Inc.—Orlando, FL
Stewart-Marchman Center for Chemical Independence—Daytona Beach, FL
Illinois TASC—Chicago, IL
Judicial Division 3, North Carolina Probation—NC
Judicial Division 4, North Carolina Probation—NC
Pierce County Drug Offender Sentencing Alternative and Breaking the Cycle—Tacoma, WA

We further acknowledge the contributions and assistance of the National Crime Information Center at the Federal Bureau of Investigation for providing data from the Interstate Identification Index (III) System. Similarly, we thank the Florida Department of Law Enforcement (FDLE), Georgia Bureau of Investigation, Illinois Criminal Justice Information Authority (ILCJIA), New York State Division of Criminal Justice Services (DCJS), North Carolina Department of Justice, North Carolina Department of Correction, Pennsylvania Commission on Crime and Delinquency (PCCD), Pennsylvania Department of Corrections, South Carolina Office of Research and Statistics (SCORS), Washington Department of Corrections, and the State of Washington Administrative Office of the Courts for the provision of state-level official records data. We are also grateful to the county jails and state departments of corrections and their staffs that facilitated our ability to perform follow-up survey data collection with respondents who were incarcerated at the time their interviews were scheduled. The authors are solely responsible for any errors in the use of these data.

During the course of this study, we had the good fortune to be guided by Janice Munsterman, our initial NIJ technical monitor and subsequently Director of the State Justice Institute; Christopher Innes, former Chief of the Justice Systems Research Division at NIJ and currently Chief of Research and Evaluation at the National Institute of Corrections; and Linda Truitt, who ably served as our NIJ technical monitor throughout most years of MADCE. We convened three working group meetings with public and private substantive and technical experts in April 2004, February 2006, and May 2009. We greatly appreciate the assistance and support we received from

- Jennifer Columbel, formerly with the Bureau of Justice Assistance and currently at the National Association of Drug Court Professionals
- Donald J. Farole, Jr., Bureau of Justice Statistics
- Michael Finigan, NPC Research
- Gerald Gaes, Florida State University

- Adele Harrell, former director of the Justice Policy Center at The Urban Institute
- Pamela Lattimore, RTI International
- Akiva Liberman, formerly with NIJ and currently at The Urban Institute
- Douglas Marlowe, Treatment Research Institute at the University of Pennsylvania
- Antonio-Morgan Lopez, RTI International
- Ruby Qazilbash, Bureau of Justice Assistance
- David B. Wilson, Criminology, Law, and Society at George Mason University
- Philip Wirtz, School of Business and Public Management at The George Washington University
- Douglas Wissoker, The Urban Institute

Aside from the authors, many staff of UI, RTI, and CCI supported this effort. We thank Nancy LaVigne, Director of the UI Justice Policy Center, and Terry Dunworth, former center director, for supporting this project from initiation through completion of the final report. We thank Ritahdi Chakravarti, Aaron Chalfin, Dionne Davis, Douglas Gilchrist-Scott, Rayanne Hawkins, Shalyn Johnson, Michael Kane, Carly Knight, Aaron Morrissey, Kevin Roland, and David D’Orio for their respective contributions in providing data collection, analytic, and administrative assistance to this effort. Lastly, we extend our thanks to the field coordinators and field supervisors, whose dedication to conducting baseline and follow-up interviews was critical to the research effort.

The Multi-Site Adult Drug Court Evaluation: Executive Summary

Introduction

Drug courts emerged spontaneously during the late 1980s and early 1990s in response to burgeoning drug offender arrests and prosecutions that overwhelmed the capacity of numerous courts to expeditiously process such cases. In 2002, the National Institute of Justice (NIJ) commissioned the first adult drug court evaluation that would select multiple sites from across the country. In 2003, researchers from the Urban Institute's Justice Policy Center (UI-JPC), RTI International (RTI), and the Center for Court Innovation (CCI) teamed to conduct *NIJ's Multi-Site Adult Drug Court Evaluation*. The main objectives were as follows:

- Test whether drug courts reduce drug use, crime, and multiple other problems associated with drug abuse, in comparison with similar offenders not exposed to drug courts.
- Address how drug courts work and for whom by isolating key individual and program factors that make drug courts more or less effective in achieving their desired outcomes.
- Explain how offender attitudes and behaviors change when they are exposed to drug courts and how these changes help explain the effectiveness of drug court programs.
- Examine whether drug courts generate cost savings.

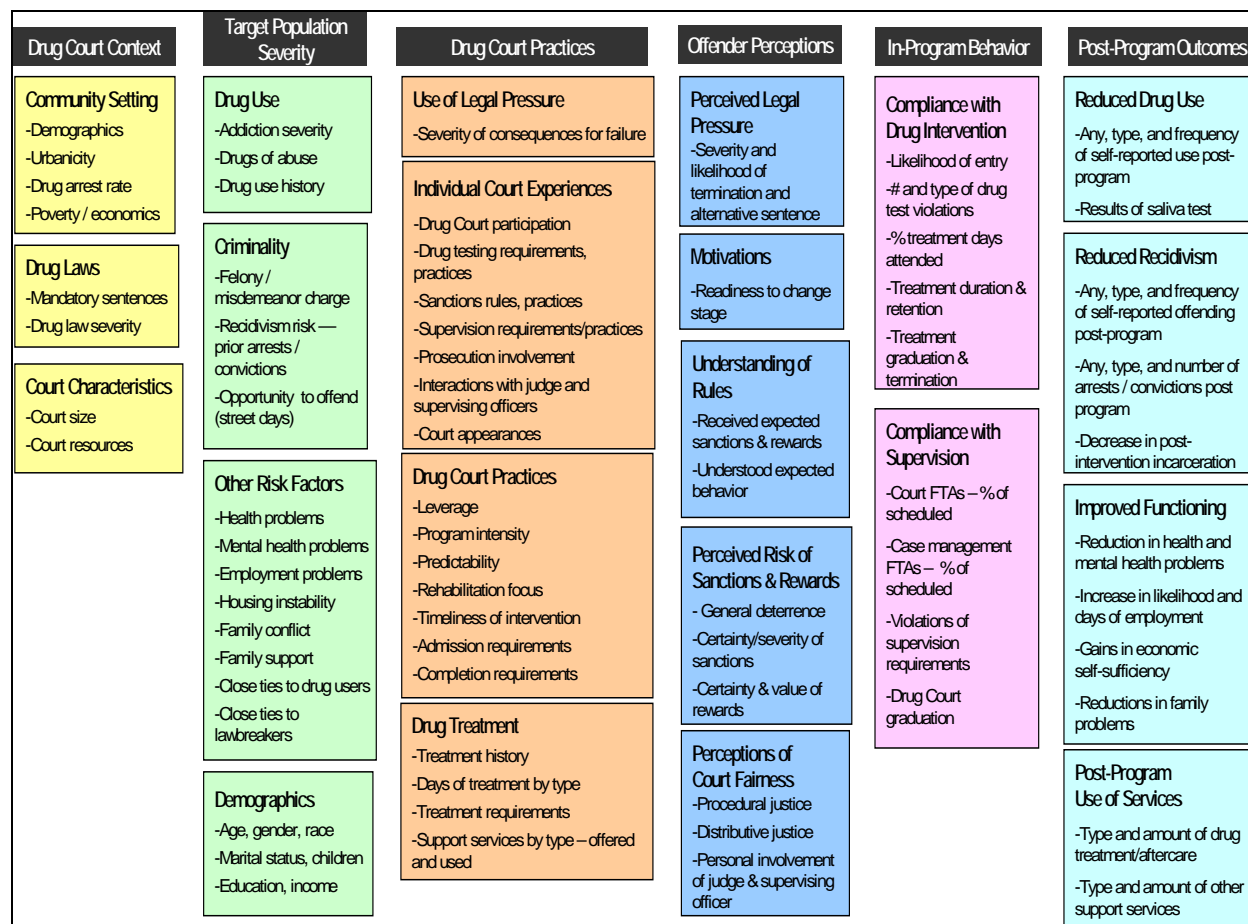
This report provides an overview of the research design and key findings from the process, impact, and cost-benefit evaluations, and identifies implications for policy and practice.

The MADCE Research Design

Despite the centrality of reducing drug use, most prior drug court evaluations relied on recidivism as the sole measure of impact. The MADCE, however, was planned to measure multiple outcomes (crime, drug use, socioeconomic outcomes, family functioning, and mental health) and to capture the intervening role of court policies and practices, offender perceptions, and interim compliance with program requirements (see Figure ES-1).

The MADCE used a quasi-experimental design for which we conducted an extensive site selection process to identify drug court and comparison sites that met basic evaluability criteria and collectively reflected substantial variation in key drug court policies and practices.

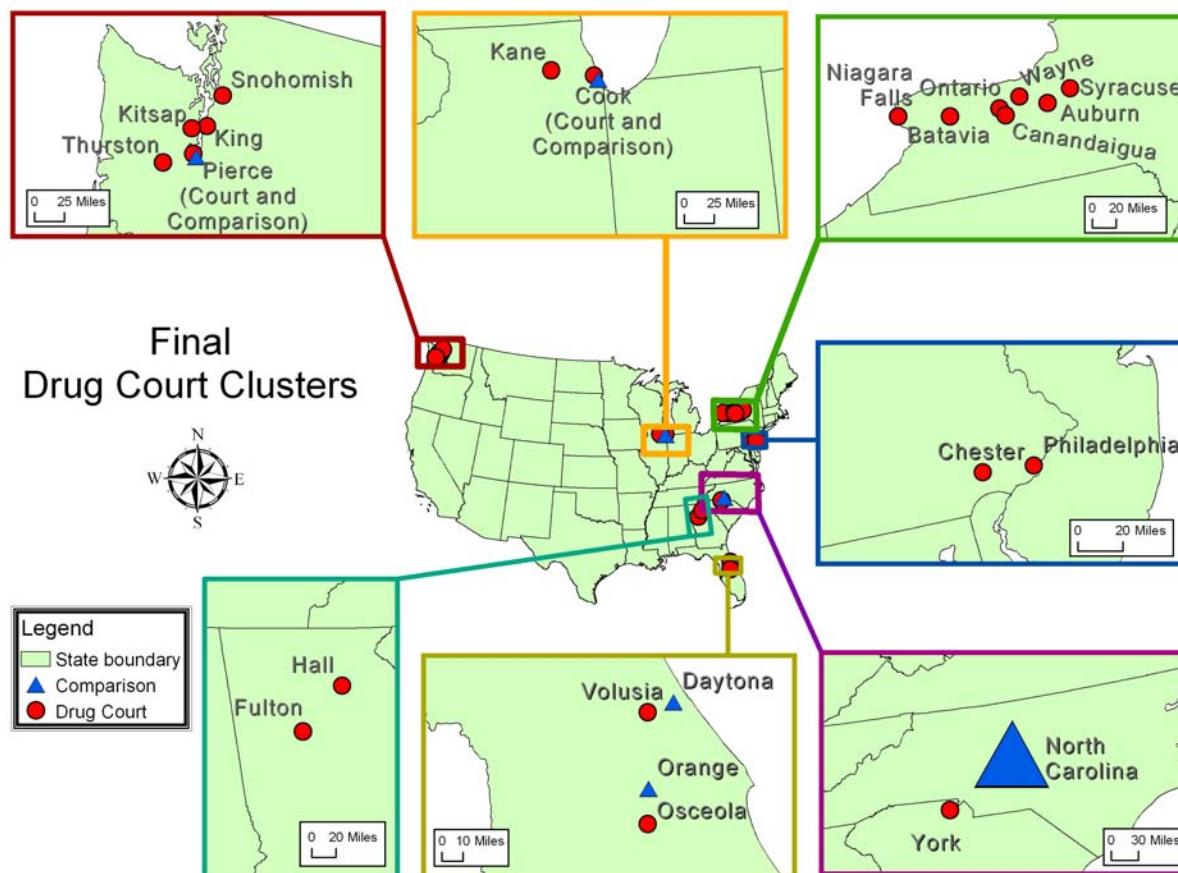
Figure ES-1. MADCE Conceptual Framework



Between February and June 2004, we administered a web-based survey to every active adult drug court in operation for at least one year at that time (593), of which 380 courts (64 percent) responded (see Final Report, Volume 2). We used the survey data to choose 23 drug courts and 6 “comparison” sites from the same geographic areas in 8 states. Rather than including strict “no treatment” conditions, we sought comparison sites that reflect the diverse array of activities that are employed to assist drug-involved offenders in jurisdictions without drug courts. These sites included several Treatment Alternatives for Safer Communities (TASC) programs, a Breaking the Cycle program, and standard probation supervision with referral to treatment. Figure ES-2 presents the locations of the 29 total sites.

The research comprises three major components: *process* and *impact evaluations*, and a *cost-benefit analysis*. The **process evaluation** describes how the 23 drug court sites vary in program eligibility, supervision, treatment, team collaboration, and other key policies and practices (see Final Report, Volume 3). The **impact evaluation** examines whether drug courts produce better outcomes than comparison sites and tests which court policies and offender attitudes might explain those effects (see Final Report, Volume 4). The **cost-benefit analysis** (see Final Report, Volume 4) evaluates drug court costs and benefits.

Figure ES-2. MADCE Drug Court Clusters and Comparison Sites



*The comparison court in North Carolina is enlarged because it represents the entire state and not a single jurisdiction.

The MADCE research used a variety of data sources, including:

- *Field Visits.* We conducted multiple site visits to all 29 drug court and comparison locations to document program characteristics and operations. These visits included interviews with key stakeholders and structured observations of courtroom proceedings.
- *Self-Report Surveys.* A sample of 1,781 offenders (1,156 drug court participants and 625 comparison group members) was interviewed at three intervals: (1) baseline, (2) 6 months after baseline, and (3) 18 months after baseline. The interviews lasted between 1.5 and 2 hours and covered a wealth of domains spanning background characteristics, offender perceptions, in-program experiences and compliance, and outcomes.
- *Oral Fluids Test.* A Buccal swab oral fluids drug test was administered during the 18-month interview for respondents who were not incarcerated or in residential treatment at that time. Ninety-five percent of eligible respondents consented to the oral fluids test.

- *Administrative Records.* Official criminal history and recidivism data were obtained from state administrative data sources and the National Crime Information Center (NCIC) of the Federal Bureau of Investigation (FBI) at 24 months after study enrollment.
- *Costs and Benefits.* The self-report surveys and official recidivism records were used to estimate the amount of each program activity in which each offender participated (*quantities*), which were then multiplied by the price of each activity (*prices*). The prices were developed from a combination of stakeholder interviews, review of official budget and other administrative records, and national estimates of prices.

The Rationale for the MADCE Design

The design described above has several advantages. First, it drew upon a conceptual framework spelling out the linkages between policies, practices, perceptions, and behavior change (see Figure ES-1). Second, although the study does not involve a random sample of drug courts nationwide, it does include multiple sites from across the country, making the results more generalizable than prior single-site studies or statewide evaluations that focus on multiple sites within a single state court system. Third, the large size of the pooled sample and collection of extensive offender attitudinal and process data allowed us to open the “black box” of effective drug court practices far beyond most prior studies. Fourth, we were able to include many small- to medium-sized courts among our sites; the resulting diverse range of community contexts is likely to yield more generalizable results than if we had only used courts in the largest urban centers, as has been the case in most prior drug court evaluations. Finally, we included many more drug courts—23 in total—than was originally planned given our ability to geographically cluster sites and pool data across them. Many of these advantages could not have been obtained had we instead conducted a randomized experiment in a small number of sites.

Given the use of a quasi-experimental design, the impact study had to address three important threats to validity: (1) selection bias, (2) attrition bias, and (3) clustering of outcomes within sites. The first two problems—selection and attrition—were handled simultaneously with *propensity score modeling* and a strategy that we refer to as *super weighting* (adjusting simultaneously for baseline differences between drug court and comparison group members and between those who were retained and not retained at follow-up). We note there was relatively little attrition, as 86 percent of the baseline sample was interviewed at the 6-month follow-up, and 83 percent was interviewed at the 18-month follow-up. We handled the third problem—site-level clustering—with *hierarchical modeling* (which adjusts statistically for differences in outcomes from community-specific contexts in our 23 drug court and 6 comparison sites).

Overview of Findings

The following sections highlight key findings from the MADCE process, impact, and cost-benefit evaluations, and are presented according to the evaluation’s four main research questions.

Do Drug Courts Reduce Substance Use, Crime, and Other Problems?

- ***Substance Use:*** *Drug courts produce significant reductions in drug relapse.* Drug court participants were significantly less likely than the comparison group to report using any drugs (56 vs. 76 percent) in the year prior to the 18-month interview, and also less likely to report using “serious” drugs (41 vs. 58 percent), which omit marijuana and “light” alcohol use (fewer than four drinks per day for women or less than five drinks per day for men). As shown in Figure ES-3’s trajectory of change in drug use, drug court participants were significantly less likely to report using any drugs at both the six- and 18-month follow-up interviews. On the 18-month oral fluids drug test, significantly fewer drug court participants tested positive for illegal drugs (29 vs. 46 percent). Further, among those who tested positive or self-reported using drugs, drug court participants used drugs *less frequently* than the comparison group.
- ***Crime:*** *Drug courts produce significant reductions in criminal behavior.* Drug court participants were significantly less likely than the comparison group to report committing crimes (40 vs. 53 percent) in the year prior to the 18-month interview. As shown in Figure ES-4’s trajectory of change in criminal behavior, drug court participants were significantly less likely to report committing any crime at both the six- and 18-month follow-up interviews. Also, of those who reported criminal activity at the 18-month follow-up, drug court participants reported about half as many criminal acts (43.0 vs. 88.2), on average, in the year prior. Among specific offenses, drug court participation reduced drug possession, drug sales offenses, driving while intoxicated, and property-related crime. Finally, drug courts reduced the probability of an official re-arrest over 24 months (52 vs. 62 percent), but this last effect was not statistically significant.
- ***Other Psychosocial Outcomes:*** *Drug court participants experience select benefits in other areas of their lives besides drug use and criminal behavior.* At 18 months, drug court participants were significantly less likely than comparison offenders to report a need for employment, educational, and financial services, suggesting that drug court participation addressed those needs. Further, drug court participants reported significantly less family conflict than comparison offenders. However, there were only modest, non-significant differences in 18-month employment rates, income, and family emotional support; and the samples did not differ in reported symptoms of depression or in experiencing homelessness.
- ***Durability of the Drug Court Impact:*** With respect to substance use and crime, improved outcomes at the 6-month interviews were nearly identical to improvements reported at the 18-month interviews, which includes at least some *post-program* time for 72 percent of the drug court sample. For instance, drug court participants were significantly less likely to report drug use in the prior six months (41 percent) than the comparison group (62 percent), a gap that was then largely sustained in the six months prior to the subsequent 18-month interview (46 vs. 68 percent).

Figure ES-3. Trajectory of Change in Drug Use

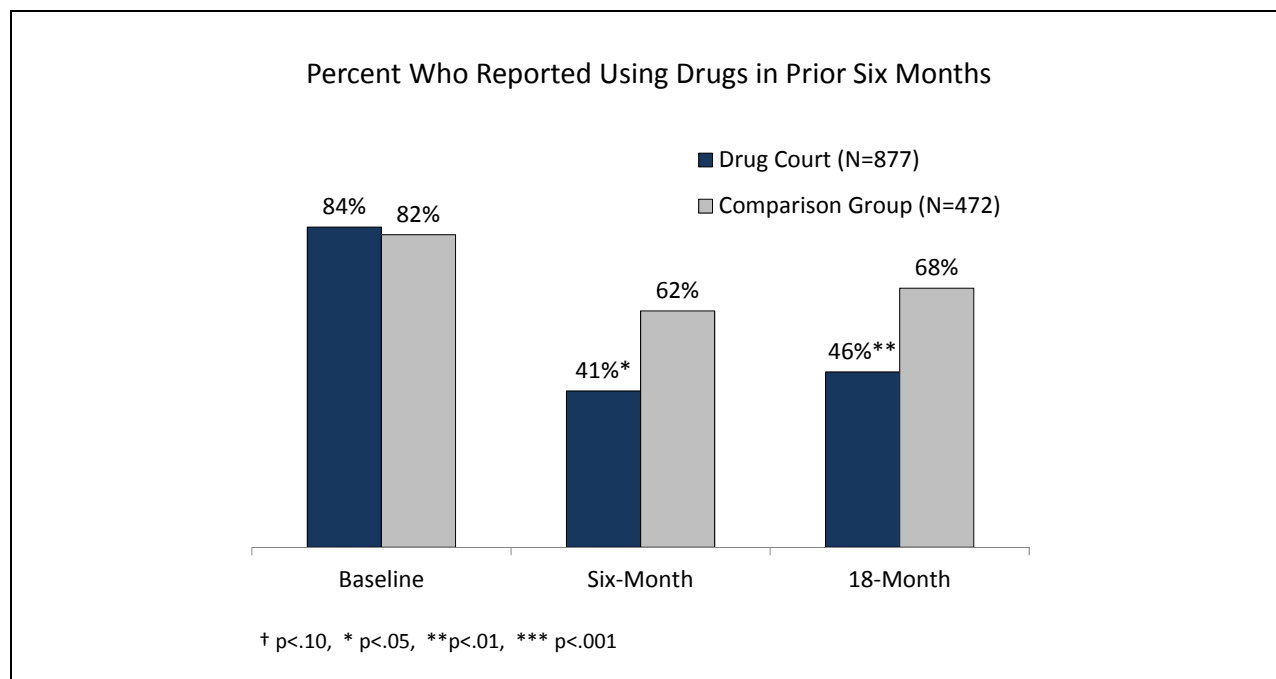
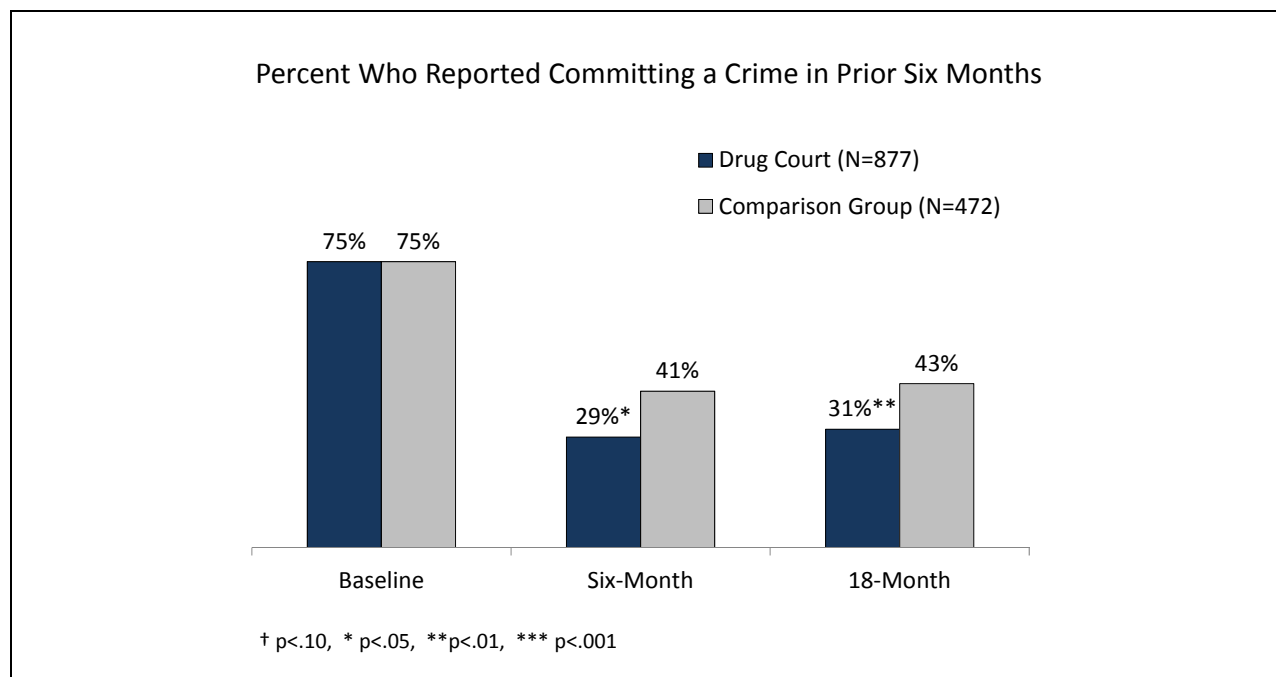


Figure ES-4. Trajectory of Change in Criminal Behavior



For Whom Do Drug Courts Have Their Greatest Effects?

Since we found that drug courts produce substantial reductions in substance use and crime, we next tested whether these effects are especially pronounced among some, but not other categories of offenders, defined by demographics, social ties, prior drug use, criminality, or mental health.

- ***Few Subgroup Differences:*** *Across multiple categories of offenders, we found extremely few differences in the magnitude of the drug court impact.* Our findings indicate that nearly all categories of offenders benefit comparably from the drug court intervention, suggesting that widespread drug court policies to restrict eligibility to a narrow subpopulation may be counterproductive. Specifically, there were not any subgroup-based differences in the rate of positive drug tests, and only 3 of 17 subgroups self-reported less drug use at 18 months. Drug courts also impacted criminal behavior similarly across most subgroups.
- ***Exceptions:*** *A small number of subgroups experienced differential effect.* Relative to similar offenders in the comparison group, those reporting more frequent drug use at baseline showed a particularly large reduction in drug use at the 18-month follow-up. Concerning criminal behavior, offenders with violent histories showed a greater reduction in crime than others at follow-up. We also found that those showing symptoms of mental health problems (narcissism and depression, but not antisocial personality disorder) evidenced a smaller reduction in drug use and crime than those without these problems.

What Are the Mechanisms Through Which Drug Courts Work?

We used multiple methods to determine which drug court policies and practices, and which offender attitudes, *explain* the drug court impact on drug use and crime. Major findings include:

- ***Role of the Judge:*** *The primary mechanism by which drug courts reduce substance use and crime is through the judge.* Drug court offenders believe that their judge treated them more fairly than the comparison group, including demonstrating greater respect and interest in them as individuals and greater opportunities to express their own voice during the proceedings. Furthermore, when offenders have more positive attitudes toward the judge, they have better outcomes. This was true across all offender subgroups when examining demographics, drug use history, criminality, and mental health. A separate analysis drawing upon the results of structured courtroom observations found, similarly, that drug courts whose judge was rated by members of the research team as exhibiting a more positive judicial demeanor (e.g., respectful, fair, attentive, enthusiastic, consistent/predictable, caring, and knowledgeable) produced better outcomes than other drug courts. Both analyses reaffirmed the central role of the judge.
- ***Role of Other Offender Attitudes:*** *Greater perceptions of legal leverage produced a reduction in substance use and crime, whereas perceptions related to sanctions did not have an effect.* Among drug court offenders, those who perceived the consequences of

failing the program as more undesirable (“extremely bad”) engaged in fewer in-program infractions and demonstrated less substance use and crime at the 18-month follow-up. However, perceptions related to the certainty, severity, or undesirability of intermediate sanctions were *not* generally associated with outcomes across several analyses. Offender scores on several instruments designed to measure motivation to change also did not predict subsequent outcomes, suggesting that the construct of “motivation” may not necessarily be a good predictor of who will ultimately succeed in drug court.

- ***Role of Court Policies and Practices:*** *Practices that appear most related to reductions in crime and substance use are judicial status hearings, judicial praise, drug testing, substance abuse treatment, and greater leverage.* Across multiple methods, among the most consistent findings were that offenders who received higher levels of judicial supervision and drug testing, and who attended more than a month of substance abuse treatment, reported fewer crimes and fewer days of drug use. Regarding leverage, individuals who rated the alternative sentence for drug court failure as more severe were more likely to have reduced days of drug use at 18 months. Also, courts rated by the research team as having high leverage over clients reduced crime at 18 months. As previously noted, where the judge exhibits a more positive judicial demeanor, outcomes are improved.

Do Drug Courts Generate Cost Savings?

- ***Program Investments:*** *Drug courts invest more money than the comparison sites in community-based services and in court supervision.* Drug court costs are higher than business-as-usual case processing due to larger program investments, including significantly more drug tests, judicial status hearings, time with case managers, and substance abuse treatment.
- ***Outcomes:*** *Drug courts save money through improved outcomes.* Drug courts save money through improved outcomes, primarily savings to victims from significantly fewer crimes, re-arrests, and days incarcerated (whereas a slight increase in participant wages relative to the comparison group was not statistically significant).
- ***Net Impact:*** *Overall, the net benefit of drug courts is an average of \$5,680 to \$6,208 per participant, returning \$2 for every \$1 of cost, but these findings are not statistically significant.¹* Rather, in this study, findings were driven by a reduction in the most serious offending by relatively few individuals, not by a widespread reduction of serious offending. Drug courts prevent a great deal of crime, but the majority of crimes have small costs to society. An important implication is that drug courts are especially likely to save money if they enroll serious offenders (who, in the absence of drug court, are particularly likely to engage in serious future offending).

¹ Net benefits were calculated in two ways, based on two different assumptions about individual earnings. The more conservative approach relied on minimum wage, probably an underestimate, while the alternative relied on the average wage reported in the U.S. Census, likely an overestimate. Readers are encouraged to rely on the confidence interval of net benefits (\$5,680 to \$6,208) and not a single estimate.

Conclusions

The MADCE has shown that drug courts prevent crime and substance use, work equally well for most subgroups of participant populations, are effective through the role of the judge, and can increase effectiveness if they implement program practices in particular ways (e.g., with high leverage; medium predictability of sanctions based on flexibility in applying sanctioning schedules known to participants; and enrolling participants either pre-plea or post-plea, but not mixing individuals drawn from both entry points in the same drug court population). Below is a brief summary of the most salient implications that have further explanation in Volume 4, Chapter 10 of the Final Report.

Implications for Policy and Practice

The Role of the Judge

- *Hold frequent judicial status hearings; in light of previous research on this topic, consider increasing the frequency of status hearings for “high risk” participants in particular.*
- *If the jurisdiction allows it, choose drug court judges carefully. Drug courts will be best served if administrators intentionally assign judges to the drug court who are committed to the model and interested in serving in this role.*
- *Monitor “client satisfaction” with the judge. By periodically conducting brief participant surveys assessing client attitudes toward the judge, drug courts can identify where and when corrective action is needed.*
- *Train judges on best practices regarding judicial demeanor and how to communicate effectively with program participants.*

Drug Court Eligibility Requirements

- *Consider broadening drug court eligibility requirements, since there is little evidence that drug courts work particularly well with one or another narrowly defined category of offenders.*
- *Consider including violent offenders with substance use issues.*

Leverage

- *Increase participants’ perceptions of the court’s leverage (i.e., authority to impose undesirable consequences in the event of program failure).*

Drug Testing

- *Provide drug tests frequently, more than once per week during the initial phase of the program.*

Federal and State Policy

- *Drug courts work, so ensure that provisions are made to fund their existence.*
- *In keeping with the emphasis on evidence-based practices, develop standards to guide drug court practice.*
- *Encourage programs to include more serious offenders to achieve greater returns on drug court investments.*
- *Encourage programs to serve greater numbers of participants, so that positive impacts are not limited to small numbers of offenders.*