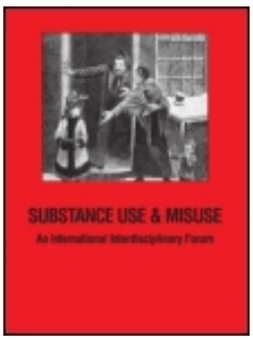

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A DECADE OF DRUG TREATMENT COURT RESEARCH

Dr. Susan Turner Ph.D., Douglas Longshore Ph.D., Suzanne Wenzel Ph.D., Elizabeth Deschenes Ph.D., Peter Greenwood Ph.D., Terry Fain M.A., Adele Harrell Ph.D., Andrew Morral Ph.D., Faye Taxman Ph.D., Martin Iguchi Ph.D., Judith Greene & Duane McBride Ph.D.

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A DECADE OF DRUG TREATMENT COURT RESEARCH

Susan Turner, Ph.D.,[1,*] Douglas Longshore, Ph.D.,[1,2] Suzanne Wenzel, Ph.D.,[1] Elizabeth Deschenes, Ph.D.,[3] Peter Greenwood, Ph.D.,[4] Terry Fain, M.A.,[1] Adele Harrell, Ph.D.,[5] Andrew Morral, Ph.D.,[6] Faye Taxman, Ph.D.,[7] Martin Iguchi, Ph.D.,[1] Judith Greene,[8] and Duane McBride, Ph.D.[9]

[1]RAND, Santa Monica, California, USA
[2]UCLA, Los Angeles, California, USA
[3]California State University, Long Beach, California, USA
[4]Greenwood and Associates, Agoura Hills, California, USA
[5]Urban Institute, Washington, DC, USA
[6]RAND, Arlington, Virginia, USA
[7]University of Maryland, College Park, Maryland, USA
[8]Brooklyn, New York, USA
[9]Andrews University, Berrien Springs, Michigan, USA

ABSTRACT

As drug treatment courts have multiplied over the past decade, so too have research evaluations conducted on their implementation and effectiveness. This article explores the decade of drug treatment court research conducted at

*Corresponding author. Dr. Susan Turner, RAND Corporation, 1700 Main St., Santa Monica, CA 90407-2138, USA. E-mail: susan_turner@rand.org

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RAND, starting with the experimental field evaluation of Maricopa's drug testing and treatment options to the most current 14-site national evaluation of courts funded in 1995–96 by the Drug Court Program Office. The article presents summaries of findings, a brief description of a drug treatment court typology, and suggestion of where future research might focus.

Key Words: Drug treatment court; Compliance; Noncompliance; Collaborative linkages; Evaluability; Restorative justice; Therapeutic jurisprudence; Management information systems

INTRODUCTION

In 1991, RAND began its first drug treatment court evaluation—a randomized experiment of the Maricopa County First Time Drug Offender (FTDO) Program. The evaluation began as a National Institute of Justice-sponsored-study of drug abstinence testing in probation; the drug treatment court component was added by Maricopa County Adult Probation because they were interested in a postadjudication program for first-time drug user offenders.[1,2] The second phase of the study, a 36-month follow-up of recidivism, including interviews with drug treatment court and drug abstinence testing participants, was funded by the National Institute on Drug Abuse (NIDA).[3] This body of work still stands as one of the most methodologically sound evaluations conducted on drug treatment courts. More than a decade later, we find ourselves with many of the same challenges we faced in 1991:

- how to describe the processes and activities that occur in drug treatment courts
- how to identify the key ingredients of their success, and
- how to determine the short- and longer-term outcomes on offenders and public safety.[4]

In this article, we describe the line of research colleagues at RAND have undertaken during this past decade, highlighting key findings, discussing why we don't know more than we do, and suggesting ways in which we may begin to know more.

DRUG TREATMENT COURT MOVEMENT

Drug treatment courts emerged in 1989 as a distinctly different way of dealing with drug user offenders and represented a response to the growing

numbers of drug-involved offenders in U.S. jails and prisons.[5,6] As of May 2001, almost 700 courts had become operational.[7] An impetus for these courts was the Violent Crime Control and Enforcement Act of 1994, which called for federal dollars to be spent on planning, implementing, and enhancing drug treatment courts.[8,9]

Drug treatment courts use active and intensive judicial supervision coupled with drug user treatment and sanctions;[6,10–12] thus there is greater emphasis on rehabilitation relative to case processing and punishment in these courts. This rehabilitation emphasis can be framed in terms of the legal philosophies of *restorative justice*[13,14] and *therapeutic jurisprudence*,[15] in which criminal justice is viewed more as a therapeutic tool and less as a formalistic and essentially punitive one.[16]

The implications for court procedures are substantial. In the traditional adversarial legal system, defendants (through their attorneys) and the state (through prosecutors) follow an objective set of rules. The defendant and the state defend their positions and interests; there are clear-cut winners and losers, and the outcome is determined by a neutral judge on the basis of the facts they present concerning specific criminal acts. In drug treatment courts, the attorneys, while observing the ethical obligations requiring zealous representation of their clients, work within the structure of the drug treatment court to achieve the optimal recovery plan. The court is the prime mover, ensuring that the goals and objectives of the plan are achieved through the consistent application of appropriate rewards and sanctions. Judicial interest is particularly strong because drug treatment courts place much of the case management control back into the hands of judges—a function that has eroded over the years.

Consistent with a public safety interest, prosecutors reserve the right to exclude selected cases (''high-risk'' offenders; cases linked to other cases; cases with high public visibility, such as drug dealing on school grounds), but generally agree to structure plea offers that allow the drug treatment court to apply a combination of treatment and penalties to achieve drug desistance with most defendants. Defense attorneys usually allow their clients to enter drug treatment court if they view their clients as seriously addicted and thus at ''high risk'' of recidivism and/or believe that the client is very likely to be convicted on the basis of the evidence (see Hora et al.[12] for a thorough discussion of the unconventional roles of criminal justice ''actors'' in the drug treatment court).

Effective drug treatment court programs are based on an understanding of the physiological, psychological, and behavioral realities of ''drug abuse'' and are implemented with those realities in mind.[20] Drug treatment courts recognize that addiction is a relapsing disease and attempt to moderate inflexible accountability rules in light of this

understanding. An effort is made to keep even noncompliant offenders in the program, using encouragement (such as praise from the judge) and graduated sanctions (such as increased urinalysis testing, short stays in jail). Efforts are made to match interventions to the needs of clients based on the results of individualized assessments, although services and treatments vary by location, type of drugs used, and client characteristics.[21]

At the same time, defendants are held accountable for their actions. Drug treatment court defendants enter into a "contingency contract" with the court that makes them accountable for participating in treatment and complying with a known set of rules. The rules offer sanctions and incentives that offenders can control through their behavior.[25–27] These arrangements offer offenders the chance for a better "deal," but include the risk of severe consequences, possibly more severe than might otherwise be incurred, for failure to comply with treatment conditions.

Although drug treatment courts are not all the same, they share a number of common characteristics. The best known conceptualization of key elements may be the "ten components" specified by the National Association of Drug Court Professionals.[31] These include, for example, frequent drug/alcohol use testing, ongoing interaction between the judge and participant, and prompt identification and placement of eligible offenders. More generally, compared with traditional dockets, drug treatment court offenders:

- appear more frequently in front of judges
- are required to enter into an intensive treatment program
- undergo frequent, random urinalysis, undergo sanctions for failure to comply with program requirements
- are encouraged to become drug-free, develop vocational and other skills to promote re-entry into the community.[32,33]

DRUG TREATMENT COURT EFFECTIVENESS

The impact of drug treatment courts on the criminal justice system has been varied. Some courts report a reduction in judicial dockets, probation caseloads, and jail bed days, savings in police overtime, and general savings in system costs.[32–34] Many report reductions in offender drug use during program participation. The most comprehensive reviews of the findings from drug treatment court evaluations have been conducted by Belenko.[7,8,35] Findings include:

- Drug treatment courts are treating more complex offenders than previously known. Offenders have more serious criminal

histories, previous self-reported exposure to treatment without success, and complex physical and mental health needs such as dual diagnosis, HIV, and homelessness.

- Drug treatment court participants' drug use while in programs remains low compared to similar offenders not in drug treatment court.
- Drug treatment court participants' retention and graduation rates remain high compared with other outpatient treatment programs (an average of 47%, ranging from 36% to 60% graduation rates reported by Belenko;[7] 67% reported by American University.[36]
- Compared with similar offenders not in drug treatment court, drug treatment court re-arrest rates are lower during the drug treatment court program (drug treatment court re-arrest rates were 12% to 45% reported by Belenko[7]).
- Drug treatment court participants experience lower recidivism rates postprogram than comparison groups, although longer-term outcomes on recidivism and other measures are often not available (studies with longer follow-up periods include the Peters and Murrin[37] 30-month follow-up in Escambia and Okloosa Counties, Florida, and Turner et al.'s[3] 36-month follow-up in Maricopa County, Arizona).
- Drug treatment court programs generate cost savings primarily to law enforcement, probation and jail, although few studies conduct comprehensive cost analyses (see Finigan[38] and Harrell, Cavanagh and Roman[39] for detailed methodologies).

The quality and comprehensiveness of studies on which these generalizations are based vary greatly. Many evaluations do not measure postdrug treatment court outcomes, others do not include comparison groups against which one can measure the relative success of the drug treatment courts, others do not provide detailed information on the type, intensity, and quality of treatment, and other services provided.[7–9,35]

RAND STUDIES

Just how does the RAND research fit in with these key findings above? We turn next to the set of studies conducted over the past decade, starting with the Maricopa County First Time Drug Offender (FTDO) program.

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An Experimental Evaluation of Maricopa County's Drug Treatment Court

The Maricopa County First Time Drug Offender (FTDO) program was developed by probation staff in Maricopa County, with design assistance from Alameda Department of Probation, as well as RAND staff. The FTDO consisted of a larger experiment of drug abstinence testing and treatment funded by the National Institute of Justice; one condition of which was the drug treatment court program. The FTDO drug treatment court is an unusual version of a drug treatment court model because it is a postadjudication program for offenders sentenced to probation for a felony drug-related offense.[40] As a postadjudication program (as opposed to pre-adjudication), the FTDO was sometimes criticized as not being a "real" drug treatment court. The program, however, incorporates the traditional components of drug treatment courts and shares goals in common with drug treatment courts (provision of treatment to reduce substance use and recidivism in an environment of offender accountability). Probationers who successfully completed the program were terminated early from supervision—thus supplying the "carrot" to accompany the "stick."

The FTDO drug treatment court targeted first-time felony drug user offenders with treatment needs (defendants convicted of drug sales or transportation were excluded). The program was designed to last a minimum of six months and a maximum of 12 months, and consisted of an orientation session and monthly status reports in front of the drug treatment court judge. Specific treatment and contacts were specified for each of the three, two-month phases. Offenders earned points for clean urines and program component completion, allowing them to earn rewards (movement to the next phase, reduction in probation sentence, etc.). The treatment component combined drug education and process group counseling with intensive case management and aftercare.[41–43]

The evaluation of FTDO consisted of a four-cell randomized design. Three tracks varied the intensity of drug abstinence testing (none, monthly, bi-weekly); the fourth was the drug user treatment court program. Potential participants were screened for eligibility by the drug treatment court probation officer and sentenced by the judge to FTDO.[44] Once sentenced, they were randomly assigned to one of the four tracks by probation staff. A total of 630 offenders sentenced in 1992 and 1993 were randomly assigned to either the drug user treatment court or one of the testing conditions and tracked for a period of 12 months using official record data on outcomes including employment, drug use, and recidivism. The majority of offenders in the drug treatment court program were single males (77%), about half were white, about a quarter were Hispanic, and one-fifth were African-

American. Over half did not have a high-school diploma, and just less than half were unemployed at the time of their current arrest. Almost one-third were under age 21 at the time of their first felony, but the average age at current conviction was 30 years old. Offenders averaged four prior arrests, but less than one prior probation term. Nearly one-third of the offenders had been convicted of possession or use of marijuana, and another third with drug paraphernalia, with one-quarter being convicted of narcotics possession, and about 10% convicted of possession of dangerous drugs. On average, they had started using drugs at age 16 and were dependent on drugs by their early twenties.

Table 1 below presents the characteristics of the drug abstinence testing and drug user treatment court participants.

Data collection for all study participants was based on official record files. The number and types of services received and nature of the case management based on treatment, court, and probation contacts were abstracted from probation files. Outcome data were also extracted from probation files, as well as the local automated criminal history system.

Findings showed that 40% of the drug treatment court participants successfully completed the program within 12 months. Sixty-one percent of offenders assigned to drug treatment court either completed the program or were still enrolled at 12 months. In contrast to offenders on the drug testing tracks, drug treatment court participants were more active in treatment For example, 85% of drug treatment court participants participated in drug education and treatment and attended outpatient counseling, and less than half of those on standard probation received any drug user treatment. However, drug treatment court participants had fewer drug use tests per month (one every two months versus once a month for those on standard probation), were less likely to fulfill conditions of probation, such as community service and payment of fees, and were less active in other activities such as employment (55% vs. 65%) and school. Almost half of all probationers, both those in drug treatment court and those on probation, tested positive for drugs at least once during the 12-month follow-up. Although drug treatment court offenders were more likely to appear before the judge for positive urine tests, in the vast majority of instances, the sanction was a warning by the judge. More frequent testing among standard probation conditions resulted in a higher number of technical violations being filed by the probation officer for dirty urine tests and a shorter time to the first violation.

About 30% of all offenders were arrested for a new offense within the first 12 months on probation, but there were no significant differences in re-arrest rates between those on the drug use testing tracks and those in the drug treatment court. Of those arrested, a smaller percent of drug treatment

Table 1. Selected Background Characteristics of FTDO Participants

	Drug Abstinence Testing Tracks ($N = 454$)	Drug Treatment Court ($N = 176$)
Demographic/individual		
% Male	78.6	76.1
% African-American	18.7	21.6
% Hispanic	23.3	27.8
% Anglo-American	55.7	48.3
% Less than H.S. education	46.7	56.3
% Married	17.2	18.2
% Unemployed at arrest	41.0	46.6
Type of occupation		
% Prof. clerical, service	27.5	32.0
% Skilled, semi-skilled	31.3	39.0
% Unskilled, never worked	19.4	18.6
% Unemployed	18.1	10.5
Drug history		
Age at first drug use	15.5	15.7
Age at first "drug abuse"	23.7	24.1
% Prior drug treatment	38.2	39.4
% Drug dealer	19.2	17.6
History of use/"abuse"		
% Alcohol	81.8	84.4
% Marijuana	59.2	51.2
% Methamphetamines	20.2	14.2
% Cocaine	41.0	37.6
% Crack	5.1	2.9
% Heroin	7.8	4.0
% Other drugs	7.5	6.9
Polydrug use	84.1	72.2*
% Alcohol and marijuana	48.9	43.8
% Alcohol and cocaine	36.1	32.4
% Marijuana and cocaine	18.7	15.9
% Marijuana and heroin	3.1	1.1
% Cocaine and heroin	5.3	2.8
Prior criminal record		
Age at first conviction	24.2	23.2
Mean no. of prior arrests	4.2	4.5
Mean no. prior prob. terms	.6	.6
Mean no. prior jail terms	.8	.9
Mean no. prior prison terms	.1	.1

(*continued*)

Table 1. Continued

	Drug Abstinence Testing Tracks ($N = 454$)	Drug Treatment Court ($N = 176$)
% No priors	21.1	22.4
% Prior arrests only	23.7	20.0
% Prior probation terms	12.9	17.0
% Prior jail	33.0	32.1
% Prior prison	9.4	8.5
% Low risk (0–9 on scale)	27.8	27.8
% Medium risk (10–14)	48.5	44.3
Average risk score	12.0	12.6
Average need score	16.5	16.1
Ave. age current conviction	30.1	29.2
Type of current offense		
% Possession of narcotics	20.5	26.1
% Possession dangerous drugs	11.0	10.2
% Possession of marijuana	31.9	29.5
% Poss. drug paraphernalia	36.6	34.1
Type of current sentence		
% Probation only	81.3	75.6
% Probation and jail/prison	18.7	24.5
Length term imposed (mos.)	34.2	35.0

Source: Deschenes, Turner, Greenwood, and Chiesa.[2]
Drug Treatment Court and Drug Abstinence Testing Tracks significantly different, pc .05.

court participants were sentenced to prison. Technical violations were reduced somewhat for drug treatment court participants, particularly for drug and alcohol use violations and for nonappearance. These findings suggested that (1) increasing levels of drug abstinence testing provides a quick measure of substance use and increases technical violations, and (2) the drug treatment court program had been successful in providing treatment for drug user offenders but had little impact on officially-recorded recidivism.[2]

Three-Year Follow-Up of Maricopa County's Drug Treatment Court Participants

The findings from the initial 12-month follow-up were disappointing to some; however, they left a number of questions unanswered.

- What would have been the outcomes had the offenders been tracked for longer than 12 months? In the original study, over 40% of the drug treatment court participants were still enrolled in the program at the conclusion of the data collection period.
- What if offenders were interviewed regarding their drug treatment court experiences, drug use, and criminal behaviors? Data collection in the original study was restricted to official-record information only—documentation from treatment, the court, and probation on the nature and extent of services provided, drug use testing, and subsequent contacts with the criminal justice system. No self-reported information on actual drug use behaviors, crimes committed, drug-related knowledge, attitudes, intentions, or other psychosocial indicators of program impact was assessed. In order to address these and other questions, we conducted a 36-month follow-up of the original study participants, funded by the National Institute on Drug Abuse.

The 36-month follow-up study tracked the original 630 drug user offenders using official records and interviews. Official record information was gathered from probation and treatment program files (for the drug treatment court participants) on the number of drug use tests performed, results of drug tests, and court responses to positive urine tests. A range of outcome measures were captured, including drug use, involvement in drug user treatment, re-arrest record, drug-related criminal activity, processing burdens on the justice system, employment, and other socially-productive behavior. Data collection for this aspect was similar to that used for the 12-month follow-up, except information was gathered for a full three years, which allowed a minimum of 12-month follow-up following program graduation or termination.

Interviews were conducted with offenders at approximately 36 months after assignment to the original study. Participants in the original study were contacted by study staff to take part in a personal interview, for which they received a nominal incentive payment. The interview gathered self-report information on offender demographics, drug use, and crime on a monthly basis over the 36-month period, HIV risk behaviors, offenders' attitudes and perceptions regarding crime, drug treatment, and HIV risk, the nature of treatment services received, their frequency, and duration. In addition, drug treatment court participants were asked a series of questions about their drug treatment court participation, including items on their completion of the drug treatment court program, perceptions of the difficulty of completing drug treatment court requirements (e.g., attending treatment, submitting to urinalysis tests), perceptions of the strengths and weaknesses

of the drug treatment court program (e.g., providing drug user treatment, providing education), whether the offenders would recommend the program to other first-time drug offenders. Interviews followed a format used successfully in prior studies by NIDA, UCLA, and RAND.[45,46]

The official records for approximately 80% of the study participants were located.[47] Analyses of the differences between the full sample of 630 and those for whom follow-up data were available suggested that the follow-up sample was slightly less "serious" than the original sample, however, absolute differences were not large. Relative to those whose files could not be located, the follow-up sample:

- had significantly more whites (56% of the follow-up sample, compared to 45% of the unlocated offenders) and fewer Hispanics (22% of the follow-up sample compared with 36% of the unlocated offenders)
- were less likely to be polydrug users (79% of the follow-up sample vs. 88% of the unlocated offenders)
- contained a higher percentage of divorced, separated, or widowed persons (27% vs. 18% of the unlocated offenders)
- had fewer prior arrests (4.1 for the follow-up sample vs. 5.0 for the unlocated offenders)
- were more likely to have had no prior arrests (23% of the follow-up sample vs. 15% of the unlocated offenders).

At 36 months after assignment to the study, results showed fewer than 50% of drug treatment court participants had completed the program successfully; nearly one-quarter had been revoked from probation to prison. At the same time, however, participation in drug treatment court significantly reduced the length of time under probation supervision. Drug treatment court participants averaged about 21 months on probation, compared with about 26 months for the drug use testing conditions (difference is statistically different, $p < .05$). Drug use, as measured by urinalysis testing, revealed few differences between offenders in the drug treatment court and those in testing conditions. Similar percentages tested positive at least once during the follow-up (67% of testing condition offenders, compared with 59% of the drug treatment court participants); although drug treatment court participants were significantly less likely to test positive for cocaine and heroin than were testing condition offenders. As would be expected, significantly higher percentages of drug treatment court participants engaged in counseling (generally group) and drug treatment (often AA/NA) than offenders in the drug use testing conditions (84% of drug treatment court participants participated in counseling compared with 14%

of testing conditions; 77% of drug treatment court participants participated in drug treatment contrasted with 56% of testing offenders).[48]

In the original 12-month follow-up, few significant differences emerged between the drug use testing tracks and drug treatment court program in terms of officially-recorded recidivism measures. In that study, between 40% and 55% of all probationers in the different conditions had a technical violation during the 12 months; drug treatment court participants were less likely to incur a technical violation for a drug-related condition, but were not significantly less likely to incur a technical violation of any kind. In terms of arrests, drug treatment court and testing conditions were equally likely to be arrested, with slightly under one-third of both groups having an arrest for a new criminal offense during the 12-month follow-up.

At 36 months, the picture is different. Drug treatment court participants were less likely to receive a technical violation (particularly drug-related) than the testing conditions combined (64% vs. 75.2%). In addition, significantly fewer drug treatment court participants were arrested in the 36 months after initial assignment than those in the testing conditions (33.1% vs. 43.7%). The differences for arrests do not appear to be the result of fewer arrests for any particular offense category, but across person, property, and drug-related offenses, drug treatment court participants were arrested less often (although the differences did not reach statistical significance for any particular offender type).

Interviews were conducted with a subsample of the offenders for whom we were able to gather official record information. Of the 506 offenders for whom we gathered probation records, only 111 (or 21.9%) were interviewed.[49]

Due to the low response rate, the self-report information forms more of a case study of offenders' experiences than an analysis parallel to the officially-recorded information. With such small numbers (approximately 30 per condition), comparisons across the drug use testing tracks and drug treatment court is problematic. For this reason, we concentrate on the drug treatment court participants and their insights and perceptions of the drug treatment court program, specifically in terms of its difficulty, helpfulness, strengths, and weaknesses (see Turner et al.[3] for more complete findings).

The perceptions come from a small group of 29 offenders, the majority of whom (62%) completed the drug treatment court program successfully—the other 38% were unsuccessful. The most frequently reported reasons for unsuccessful completion were testing positive on urinalysis tests and violating the drug treatment court contract. None of the sample reported being arrested for a new offense either during or following drug treatment court participation. Despite the low follow-up rate, those interviewed were not different on many official record background characteristics from the larger

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Table 2. Selected Background Characteristics—Self-Report Drug Treatment Court Sample

	Drug Treatment Court Participants ($N = 31$)*
Demographic/individual	
% Male	74.2
% African-American	9.7
% Hispanic	29.0
% Anglo-American	61.3
% Less than H.S. education	48.4
% Married	25.8
% Unemployed at arrest	60.0
Type of occupation	
% Prof. clerical, service	43.3
% Skilled, semi-skilled	26.7
% Unskilled, never worked	16.7
% Unemployed	13.3
Drug history	
Age at first drug use	16.0
Age at first "drug abuse"	26.1
% Prior drug treatment	54.8
% Drug dealer	16.1
History of use/"abuse"	
% Alcohol	77.4
% Marijuana	38.7
% Methamphetamines	9.7
% Cocaine	41.9
% Crack	3.2
% Heroin	6.4
% Other drugs	9.7
Polydrug use	71.0
% Alcohol and marijuana	32.3
% Alcohol and cocaine	38.7
% Marijuana and cocaine	12.9
% Marijuana and heroin	3.2
% Cocaine and heroin	3.2
Prior criminal record	
Age at first conviction	23.9
Mean no. of prior arrests	5.8
Mean no. prior prob. terms	.9
Mean no. prior jail terms	.7
Mean no. prior prison terms	.2

(*continued*)

Table 2. Continued

	Drug Treatment Court Participants ($N = 31$)*
% No priors	20.0
% Prior arrests only	16.7
% Prior probation terms	20.0
% Prior jail	20.0
% Prior prison	23.3
% Low risk (0–9 on scale)	35.5
% Medium risk (10–14)	32.3
Average risk score	12.4
Average need score	16.6
Ave. age current conviction	31.7
Type of current offense	
% Possession of narcotics	35.5
% Possession dangerous drugs	6.4
% Possession of marijuana	19.4
% Poss. drug paraphernalia	38.7
Type of current sentence	
% Probation only	64.5
% Probation and jail/prison	35.5
Length term imposed (months)	36.8

*Of the 31 offenders in drug treatment court who were interviewed, 29 provided their perceptions of the drug treatment court.

group who were not.[50] Table 2 presents selected the background characteristics of those drug treatment court participants who were interviewed.

Offenders were asked a series of questions concerning key requirements of the drug treatment courts and were asked to indicate how difficult they were to complete. The vast majority (over 86%) of offenders felt that the drug use testing was ''not at all difficult'' to complete; over half felt that attending AA/NA meetings and attending treatment groups were ''not at all difficult.'' Fewer than 5% felt that submitting to urinalysis testing and weekly treatment groups was hard. Interestingly, this is in contrast to their perceptions of terms and conditions not directly related to drug user treatment aspects of their supervision. Offenders felt that some are more difficult to complete than conditions specifically related to drug user treatment and testing. For example, over 20% of offenders felt it was ''very difficult'' to pay financial conditions (which included the payment of

monthly probation fees, fines, and a mandatory assessment for virtually all drug treatment court participants); another 20% felt that the conditions were "difficult" to complete. Similarly, almost 30% of offenders felt that it was "very difficult" to complete community service. Contrary to the financial obligations and community service, over 80% felt that it was "not at all" difficult to maintain phone contact with their probation officer.

Drug treatment court participants were asked to indicate the extent to which they felt that the drug treatment court experience was helpful to them in a number of areas.[51] Overall, drug treatment court offender perceptions were split. Almost 40% of participants felt that the drug treatment court was "very helpful;" however, slightly over 30% felt that it was either "not at all" or "not very" helpful. Perceptions regarding the impact of drug treatment court on criminal behavior were more positive than those regarding drug use. Approximately three-quarters of offenders felt that drug treatment court was "somewhat" or "very helpful" in remaining crime free—only about 40% were as favorable when it came to assessing how helpful drug treatment court was for remaining "drug free." Perceptions regarding the impact of drug treatment court for other life areas were somewhat negative. Over 65% felt that drug treatment court was "not at all" or "not very" helpful; over 50% felt it was "not at all" helpful in maintaining a job.

The difficulty of completing program components revealed some unexpected findings. One might expect that the focus on drug use abstinence monitoring provided by urinalysis testing and the intensity of the treatment program requirements would serve as tough sanctions. However, the monitoring and treatment components were perceived as relatively easy to complete. The requirements that were perceived as difficult to complete were probation conditions completely unrelated to the drug treatment court program, such as payment of financial conditions and, to a lesser extent, completion of community service.

Nationwide Evaluation of 14 Drug Treatment Court Programs

The Drug Courts Program Office (DCPO), established in 1994 with the passage of the Omnibus Crime Control Act by Congress, provides federal funding for planning, implementation and enhancement of local drug treatment courts. In 1995 and 1996, 14 programs received DCPO implementation grant funding (see Table 3).

These sites were asked to cooperate with a national evaluation funded by the National Institute of Justice (NIJ) and conducted by RAND. The RAND evaluation was to describe program implementation of the drug treatment courts, to develop a conceptual framework of the 14 drug treat-

Table 3. Sites Involved in National Evaluation

Region	State	Award Year
Birmingham	Alabama	1996
Tuscaloosa	Alabama	1995
Sacramento	California	1995
Santa Barbara	California	1995
Riverside	California	1996
Tampa	Florida	1996
Atlanta	Georgia	1996
Chicago	Illinois	1995
Kankakee	Illinois	1996
Omaha	Nebraska	1996
Brooklyn	New York	1995
San Juan	Puerto Rico	1996
Roanoke	Virginia	1996
Spokane	Washington	1996

Source: Turner et al. 2001.

ment courts, and to determine each program's evaluability for a subsequent evaluation effort. We describe below our findings on the implementation of the programs. We discuss the conceptual framework and evaluability later on in this article.

Our analysis of program implementation—the types of models implemented, eligibility requirements, court and treatment requirements, and program implementation difficulties—reads surprising like findings from the surveys conducted by American University[34,36] and National TASC.[52] These 14 programs are in many ways, typical of drug treatment court programs across the county.

To a large degree, programs meet many of the key components of effective drug treatment court programs. Drug treatment courts integrate alcohol and other drug user treatment services with justice system case processing; they use a nonadversarial approach, prosecution and defense counsel promote public safety while protecting due process rights of participants; eligible offenders are identified early; drug treatment courts provide access to a continuum of alcohol, drug, and other treatment related services; abstinence is monitored by frequent testing; a coordinated strategy governs drug treatment court responses to participants' compliance; and ongoing judicial interaction with each participant is maintained. It appeared that the most difficult component to meet was the monitoring and evaluation for the achievement of program goals and effectiveness. In the 14 sites we examined,

this clearly was not implemented to the degree of other key elements (discussed later in more detail).

However, even with the other nine key elements, the 14 sites experienced success to varying degrees. Access to a continuum of alcohol and drug user treatment services and other related rehabilitative services was often difficult, reflecting funding issues, as well as close coordination and information flow issues between treatment providers and other drug treatment court staff. Although drug treatment courts may specify protocols and graduated sanctions for noncompliance, in some instances a more individually tailored response is used.

Collaborative Linkages

The issue of collaborative linkages between the drug treatment courts and service providers is being studied more thoroughly in an ongoing study, funded by the National Institute on Drug Abuse. This study builds upon the findings on linkages in the NIJ-funded nationwide evaluation and investigates the role of drug treatment courts as a bridge between criminal justice and health services in the community for the drug user offender. The project uses a conceptual model in which 11 linkages are studied:

- sharing of information about clients, such as through a management information system
- joint planning of service goals
- interagency referrals of clients
- documentation of relationships through memoranda of understanding (MOUs), contracts, or other means
- joint assessment of clients
- presence and extent of case management and liaisons
- favorable (flexible) funding situations and sharing of monetary resources
- sensitivity to the concerns of other agencies and organizations providing services to clients
- cross-training of staff
- shared philosophies in services provision and administrative structure
- regular meetings (e.g., boards) among program leaders.

Discussions in the health services and substance user treatment literatures have described linkages in a number of different ways, but not consistently or definitively. Generally, the concept implies "working together"[53] to meet a common goal. Drawing from existing literature, we

view a collaborative linkage among provider agencies and organizations as one evidenced by a variety of characteristics that can occur at differing levels of quantity and quality.[45,54–62]

The NIDA-funded project is investigating the extent to which these collaborative linkages across organizations could affect clients' access to needed services.

Preliminary findings suggest that, with few exceptions, the relationships between drug treatment courts and providers of services to offenders in the 14 drug treatment courts were characterized by informality (see Wenzel et al.[63] for a more complete description of preliminary findings). Although informality is not necessarily a harmful characteristic, and in fact may serve small jurisdictions well, it remains to be seen how such an approach can be maintained in an increasingly complicated era of funding and service provision. To the extent that relationships are well-documented and formal, they appear to be occurring with substance user treatment providers. Other services are provided on a more informal basis, often through referral. Communication, in the sense of getting information about changes in the drug treatment court program process, appears to occur informally. Communication "as needed" appears to characterize the transmission of information to involved parties. Although meetings provide a somewhat more formal vehicle at some sites, it is not clear whether communication is sufficient from the perspective of the treatment providers. Lack of efficiency and regularity in sharing of information were cited as problems. In some instances, information is shared sparingly in an effort to protect the confidentiality of clients

Some ideas can be entertained regarding why these linkages appear, at least based on the present information, to be less solid than would be expected for such an intensive criminal justice and health service endeavor as drug treatment court. Lack of resources may be key; some of these programs subsist on a tenuous foundation of funding. Due to stretched resources, staff are sometimes performing multiple roles (e.g., a supervising probation officer may be the drug treatment court coordinator, administrator, and case manager). It was not uncommon for sites to speak regretfully about not having sufficient funding for residential treatment, a full-time case manager devoted to client case management, and nursing staff.

Apart from current resource limitations, there is the additional problem of having no assurance of long-term funding and the disincentive such instability may prove to building bridges. The instabilities and shortages of funding not only make purchase of services and formalization of provider relationships difficult for the short term, there may reasonably be less incentive or capacity for the hard work of developing interagency arrangements when the very future of the drug treatment court is in ques-

tion. Informal, as-needed, contacts in the community may be the best that can be expected in some cases.

Also noteworthy is that there may be tension between the supervision and rehabilitation objectives of drug treatment courts that may interfere with building bridges and access to services. Some of the drug treatment courts visited under the sponsorship of the National Institute of Justice were under pressures from various sources to process a large number of cases, in some situations exceeding their capacity. In such circumstances, particularly in a climate of limited resources, a rehabilitation focus and thus delivery of a fuller range of services may assume a lower level of priority.

Extending the Drug Treatment Court Model to DUI Courts

The drug treatment court model is being expanded to other courts, including juvenile and family courts, tribal courts, as well as driving under the influence (DUI) courts.[7] RAND is currently conducting an experimental evaluation of a DUI court for second- and third-time DUI offenders in Los Angeles, funded by the National Institute on Alcohol Abuse and Alcoholism. Offenders are randomly assigned to the DUI court, or a routine sentence (state mandated sentence consisting generally of DUI school, fines, and incarceration). In the DUI conditions, offenders serve a portion of their jail sentence on electronic monitoring, are required to obtain an alcohol assessment/treatment, and appear more frequently in front of the DUI court judge for status hearings.[64] Thus the DUI court follows the drug treatment court model in terms of treatment and increased accountability for offenders. The project is currently recruiting volunteer study participants who are interviewed at baseline and again 24 months later in order to determine the impact that the DUI court has on subsequent DUI and other criminal behavior.

WHY DO WE NOT KNOW MORE ABOUT DRUG TREATMENT COURT EFFECTIVENESS?

Drug treatment courts are immensely popular across the country and many believe they are effective in reducing offender drug use and subsequent recidivism. Reviews of drug treatment court effectiveness have shown that drug treatment courts are able to accomplish many of the goals they set out to achieve, such as targeting drug-using offenders and getting them into treatment.[7,8,32,35] However, process evaluations dominate the field; few studies provide methodologically strong findings on longer-term

recidivism and other outcomes. Weak, or nonexistent, comparison groups, short follow-up periods, limited outcome measures focused on available officially-recorded recidivism outcomes and urinalysis tests (as opposed to psychosocial measures of family reintegration, job skills attainment, actual drug use, etc.) are typical. As Belenko[7] points out, this situation may be changing as more rigorous studies are being funded, national efforts at training researchers and practitioners teams in research methods are being made, and the federal funding agency is requiring drug treatment court sites to conduct both process and outcome studies.

Based on our national evaluation, a major reason for poor quality studies may be the relatively poor "evaluability" of the programs themselves, coupled with inadequate or nonexistent management information systems that routinely record process and outcome data for individual participants. As part of the national evaluation of 14 drug treatment courts, we examined the "evaluability" of each of the 14 sites based upon information gathered from site visits made to each program by study staff that included program documents and manuals; interviews with drug treatment court staff, judges, prosecutors, defense attorneys, treatment providers; examination of paper and computerized records; and observation of drug treatment court proceedings.

Ideally, each drug treatment court would have been able to meet the requirements of process and outcome collection specified in the DCPO "Program Guidelines and Application Information."[65] These include the collection of information on drug treatment court participants (and to the fullest extent, nonparticipants) including: demographic characteristics, "substance abuse" history, vocational and educational status; mental health history, criminal justice history, treatment needs, etc.; measures of program implementation and process, including program intervention received, participation in treatment (including motivation as measured by the Addiction Severity Index or clinical interview and actual attendance records for each program component), status at completion of a drug treatment court program, service needs at discharge from program, etc. Programs were strongly urged to design, implement, and maintain an automated database for recording these variables.

In addition, programs were alerted to the requirements of a national evaluation. Drug treatment court programs were instructed to anticipate providing the following additional information for a national evaluator: substance user treatment and support services completion rates, counselor ratings of extent of participant attendance and engagement in treatment, program components, and improvement over time in life skills acquisition, psychological, and emotional functioning, educational and employment status, participant satisfaction with the treatment program,

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reports of "substance abuse," results of urinalysis, date and nature of violations and arrests, positive social adjustment, counselor ratings, extent of participant attendance and engagement in aftercare components, and referrals services following completion of the drug treatment court program.

Site visits as part of the national evaluation revealed that none of the 14 programs had gathered the full range of measures specified by DCPO in a single database for both the drug treatment court and a comparison group of offenders. This is not to say that sites were uninterested in gathering information or in evaluation or their drug treatment courts. To the contrary, all were keenly interested in determining whether or not their programs were effective. However, it appeared that a great deal of staff time was devoted to the day-to-day operations, coordination among agencies, provision of services, etc., leaving little time for staff to develop database systems and record a vast array of measures for participants.

In terms of classic process and outcomes studies, most sites could offer the following types of data using quasi-experimental evaluation designs.

Background Characteristics

Often computerized, sometimes paper and pencil screening and/or treatment files provide these characteristics for drug treatment court participants; generally less complete paper and pencil data would be available for comparison groups.

Process Data

Urinalysis results were generally available and often computerized (particularly if TASC was part of the team); services received were computerized in about half the sites. In many sites, detailed information about treatment participation and activities would need to be gathered from individual treatment program files—not necessarily kept by the drug treatment court itself.

For process measures, virtually all information currently available was official record; no data on participants' self-reported satisfaction, perceptions, or other behaviors were available; information on counselor perceptions was also not available. In general, self-reported process variables were not being collected by the sites. These measures are necessary for testing theoretical hypotheses about *why* the drug treatment courts may be effective. Without them, we can't tell why the drug treatment court did or did not produce the effects it desired.

Outcome Data

All sites were able to report the termination status of drug treatment court participants, although this was not automated at all sites. The most frequently used outcomes were officially-recorded recidivism, gathered from criminal history databases or probation files. Remaining drug-free, as measured by negative urine tests, was another commonly used outcome measure. Referral to and completion of programs after drug treatment court termination were not available.

HOW CAN WE KNOW MORE?

Clearly, one way in which we can learn more about drug treatment courts is to improve the collection of information. Beyond the methodological problems discussed above, however, we also need to address basic concerns regarding the ''concept'' of drug treatment court and our understanding of the ''black box'' of treatment.[66,67] We do not know enough about how drug treatment courts work—which components are the most influential.[68] In fact, drug treatment court offenders themselves may perceive the components differently than expected, as evidenced by the Maricopa County drug treatment court offenders' perceptions of fines and court payments as more onerous than treatment requirements. Research must delve deeper into understanding the conceptual ingredients necessary for drug user treatment court success,[24] as well as how treatment and deterrent sanctions interact.[6] We turn next to our proposal for a framework that might help guide efforts into understanding the ''black box'' of drug treatment courts.

Our work in drug treatment courts suggests that no unifying perspective now exists regarding structural and process characteristics implied in the concept of the drug treatment court. In our review, limitations were found in a number of efforts. Literature reviews collate and synthesize information on drug treatment courts with specific questions regarding structure and process in mind. But structure and process are not described fully, if at all, in many drug treatment court evaluations, and the information they do provide is often not amenable to comparison.[11] An alternative to relying on finished evaluations is to use the raw data being compiled by the Drug Court Clearinghouse and Technical Assistance Project at American University. Although the database provides an extensive and useful listing of program characteristics, it has no organizing conceptual scheme. The best-known conceptualization of drug treatment courts may be the ''ten

components'' specified by the National Association of Drug Court Professionals.[31] These components offer a systematic view of drug treatment court structure and process. However, their purpose is prescriptive; they are a minimum set of precepts that any drug treatment court should follow. They are not a framework for assessing alternative drug treatment court models when each model is (or in principle could be) congruent with the ten components. Similarly, Goldkamp[11] has specified a ''descriptive typology'' based on seven dimensions of a drug treatment court. These include, for example, the target problem (e.g., heroin addiction or misdemeanor property crime), processing focus and adaptation, and the extent of system-wide support for the drug treatment court in criminal justice, health, and social service agencies. This typology cannot be straightforwardly applied in analyses of drug treatment court structure and process, especially for hypothesis testing.

Our framework was developed to define structure and process in ways that are measurable and amenable to hypothesis testing (see Longshore et al.[69] for more detailed presentation of the framework and possible indicators). The framework has five dimensions: *leverage*, *population severity*, *intensity*, *predictability*, and *rehabilitation emphasis*. See Table 4 for examples of empirical indicators by which each dimension might be measured.

The first two dimensions are structural characteristics of a drug user treatment court.

- *Leverage* refers to the nature of consequences faced by incoming participants if they later fail to meet program requirements and are discharged from the drug treatment court.
- *Population severity* refers to characteristics of offenders deemed eligible to enter drug treatment court.

The other three dimensions are process characteristics. They describe what happens to participants as they proceed through the drug treatment court program.

- *Intensity* refers to requirements for participating in and completing the drug treatment court. These always include urine testing, court appearances, and drug user treatment.
- *Predictability* reflects the degree to which participants know how the court will respond if they are compliant or noncompliant. Courts with less variability in responses to each positive test are more predictable; participants are more likely to know what will probably happen to them if they test positive once, twice, and so on.

Table 4. Conceptual Framework

Dimensions of Drug Treatment Court Structure and Process	Indicators (Examples)
Leverage	Percent of preplea and postplea participants
	Perceived aversiveness of discharge
Population severity	Severity of drug use
	Severity of criminal involvement (current charge and prior charges)
Program intensity	Required frequency of urine testing
	Required frequency of court appearances
	Required hours of treatment
Predictability	Consistency of rewards and sanctions
	Conformance of rewards/sanctions with protocol
	Time elapsed between noncompliance and response
	Perceived predictability
Rehabilitative emphasis	Collaborative decision-making
	Attention to multiple needs
	Flexibility in procedure
	Re-entry
	Drug treatment court dynamics (observed)

Source: Longshore et al.[69]

- The final dimension in our framework is the *emphasis placed on rehabilitation* as against other court functions, including case processing and punishment.

A straightforward set of hypotheses about drug treatment court structure and process can be tested in a dataset of drug treatment courts ranked low to high on these dimensions. For example, we expect more positive outcomes in drug treatment courts high on leverage, intensity, predictability, and rehabilitation emphasis. Hypotheses regarding population severity may be interactive ones, as outcomes associated with population severity may depend on other dimensions of the framework. Hypotheses might also be derived regarding the relative importance of these dimensions in affecting drug treatment court outcomes, the predictive value of absolute or threshold levels as distinct from the relative rankings (low to high) specified here, and the importance of the stability of each dimension over time. However, there is no empirical literature to support derivation of such hypotheses at this time. Our purpose in classifying drug treatment courts along these dimen-

sions is simply to begin to conceptualize, in a standard and testable way, the aspects of drug treatment court that may account for success.

RAND's next line of research is to gather offender- and program-level data from multiple drug treatment courts and to analyze such data with hierarchical linear modeling (HLM) techniques.[70,71] Data from multiple jurisdictions will be analyzed to help understand characteristics that are associated with better outcomes, including completion of drug treatment court, reductions in drug use, and reduction of subsequent criminal behavior. The HLM approach will allow us to consider both offender- and program-level data in the same models. Thus, information on the five dimensions of our framework can also be included as predictors to help understand the impact of these program and client characteristics on outcomes, thus unpacking the "black box" of drug treatment court programs.

CONCLUSIONS

A decade of research on drug treatment courts finds us at a crossroads. Available information to date suggests that programs deliver more intensive services with positive outcomes for recidivism and drug use, at least in the short term. However, many of these results come from weak evaluation designs. Conducting additional weak evaluations may add little to our knowledge. Recently, researchers and observers in the field have been calling for more sophisticated research into testing the theory behind how drug treatment courts achieve their results;[66] evaluating the treatment component using principals of effective intervention;[22] untangling the drug treatment court "package" to determine which components make a difference;[24,72,73] and conducting cost-benefit analyses in a rigorous manner.[39] For example, the National Institute on Drug Abuse has recently funded a set of program evaluations to answer questions about specific components of drug treatment court programs. Projects currently underway include a clinical trial of Multi Systemic Therapy for juveniles; the use of vouchers in drug treatment courts; and a randomized design that varies the nature of judicial hearings in five jurisdictions. Johnson, Hubbard, and Latessa[22] argue that many treatment programs utilized by drug treatment court programs may not be delivering the best treatment to clients. They suggest more attention be paid to the type and quality of treatment services, including the application of the principles of effective intervention.[74]

Central to any future evaluations, however, is the development of management information systems that capture the required background,

process, and outcome measures important to all research designs. Our national study of the 14 drug treatment court programs revealed that many did not have MIS in place, despite the availability of several (e.g., Jacksonville and Buffalo Drug Court MIS, Washington/Baltimore High Intensity Drug Trafficking Area Treatment Tracking System). It may be that the available systems do not provide full-service drug treatment court management information capability.[75] Or the difficulties involved in establishing systems (costs, coordinating agencies) are too great for many jurisdictions, particularly smaller ones.

In addition to providing useful information on process and outcome measures, comprehensive MIS have implications for the timeliness of client information-sharing and thus clients' access to services. Linkages can be more readily made, and referrals more prompt and appropriate, if the drug treatment court's MIS includes data on a full array of client needs and if the assessment tools are suitably rigorous.

The importance of drug treatment court evaluation cannot be overstated. The drug treatment court model has been adopted in a variety of other areas, including mental health, domestic violence, and DUI sentencing. It is imperative that we gain a better understanding of overall impact, theoretical underpinnings, and key components if the drug treatment court model is to be widely disseminated as a successful approach for treating a variety of criminal behaviors and associated illnesses.

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REFERENCES

1. Deschenes, E.; Petersen, B. Experimenting with the Drug Court Model: Implementation and Change in Maricopa County, Arizona. In *The Early Drug Courts: Case Studies in Judicial Intervention*; Terry, W.C., Ed.; Sage: Thousand Oaks, CA, 1999; 139–165.
2. Deschenes, E.; Turner, S.; Greenwood, P.W.; Chiesa, J. *An Experimental Evaluation of Drug Testing and Treatment Interventions*

for Probationers in Maricopa County, Arizona; (DRU-1387-NIJ); RAND: Santa Monica, CA, 1996.

3. Turner, S.; Greenwood, P.W.; Fain, T.; Deschenes, E. Perceptions of Drug Court: How Offenders View Ease of Program Completion, Strengths and Weaknesses, and the Impact on Their Lives. National Drug Court Inst. Rev. **1999**, *II* (1), 61–86.
4. In this paper we concentrate on processes and outcomes relevant to individual offenders. Drug treatment courts also affect other individuals as well as local system operations. The latter are not addressed in this article.
5. Terry, W.C. Judicial Change and Dedicated Treatment Courts: Case Studies in Innovation. In *The Early Drug Courts: Case Studies in Judicial Intervention*; Terry, W.C., Ed.; Sage: Thousand Oaks, CA, 1999; 1–18.
6. Goldkamp, J. The Drug Court Response: Issues and Implications for Justice Change. *Albany Law Rev*. **2000**, *63* (3), 923–961.
7. Belenko, S. *Research on Drug Courts: A Critical Review 2001 Update*; The National Center on Addiction and Substance Abuse at Columbia University: New York, 2001.
8. Belenko, S. Research on Drug Courts: A Critical Review. National Drug Court Inst. Rev. **1998**, *I* (1), 1–43.
9. U.S. General Accounting Office. *Drug Courts: Overview of Growth, Characteristics, and Results*; U.S. General Accounting Office: Washington, DC, 1997.
10. Goldkamp, J. *Justice and Treatment Innovation: The Drug Court Movement: A Working Paper of the First National Drug Court Conference*; Crime and Justice Research Institute: Philadelphia, 1994.
11. Goldkamp, J. When is a Drug Court Not a Drug Court? In *The Early Drug Courts: Case Studies in Judicial Intervention*; Terry, W.C., Ed.; Sage: Thousand Oaks, CA, 1999; 166–177.
12. Hora, P.; Schma, W.; Rosenthal, J. Therapeutic Jurisprudence and the Drug Treatment Court Movement: Revolutionizing the Criminal Justice System's Response to Drug Abuse and Crime in America. Notre Dame Law Rev. **1999**, *74* (2), 439–538.
13. Braithwaite, J. Restorative Justice: Assessing Optimistic and Pessimistic Accounts. In *Crime and Justice: Review of Research*; Tonry, M., Ed.; University of Chicago Press: Chicago, 1999; 1–127.
14. Kurki, L. *Incorporating Restorative and Community Justice into American Sentencing and Corrections*; (NCJ 175723); National Institute of Justice, U.S. Department of Justice: Washington, DC, 1999.
15. Wexler, D.B.; Winick, B.J. Therapeutic Jurisprudence as a New Approach to Mental Health Law Policy Analysis and Research. Univ. Miami Law Rev. **1991**, *45*, 979.

16. Despite the fact that drug treatment courts are more therapeutic than routine processing, they are coercive in nature.[17] Research generally shows positive effects for coercion;[17,18] however, some have found mixed results.[19]
17. Satel, S. Drug Treatment: The Case for Coercion. National Drug Court Inst. Rev. **2000**, *III* (1), 1–56.
18. Anglin, M.D.; Hser, I. Treatment of Drug Abuse. In *Drugs and Crime*; Tonry, M., Wilson, J.Q., Eds.; University of Chicago Press: Chicago, 1990; 393–460.
19. Farabee, D.; Predergast, M.; Anglin, M.D. The Effectiveness of Coerced Treatment for Drug Abusing Offenders. Fed. Prob. **1998**, *62* (1), 3–10.
20. National Institute on Drug Abuse. *Principles of Drug Addiction Treatment: A Research-Based Guide*; National Institute on Drug Abuse: Rockville, MD, 1999.
21. Treatment *access* and *quality* have relatively little received attention in drug treatment court research. Johnson, Hubbard and Latessa [22] argue that drug treatment courts need to incorporate the principles of effective intervention into treatment programs if drug treatment courts are to be successful. These principles, relevant to drug treatment courts, include: client should be classified according to a posited ''risk'' level; treatment should be based in a behavioral model and use cognitive techniques; treatment should be intensive; a continuum of care should be provided, including aftercare. Treatment referrals should follow the principles of effective intervention.[23] See Belenko[24] for a more general discussion of barriers to treatment access for criminal justice clients.
22. Johnson, S.; Hubbard, D.J.; Latessa, E. Drug Courts and Treatment: Lessons to be Learned from the 'What Works' Literature. Corrections Management Q. **2000**, *4* (4), 70–77.
23. Gendreau, P. The Principles of Effective Interventions with Offenders. In *Choosing Correctional Options that Work: Defining the Demand and Evaluating the Supply*; Harland, A., Ed.; Sage: Thousand Oaks, CA, 1996.
24. Belenko, S. The Challenges of Integrating Drug Treatment into the Criminal Justice System. Albany Law Rev. **2000**, *63* (3), 833–876.
25. Inciardi, J.; McBride, D.; Rivers, J.E. *Drug Control and the Courts*; Sage: Thousand Oaks, CA, 1996.
26. Prendergast, M.; Anglin, M.D.; Wellish, J. Up to Speed: Treatment for Drug-Abusing Offenders Under Community Supervision. Fed. Prob. **1995**, *59* (4), 66–75.
27. Graduated sanctions are assumed to be one of the keys to drug treatment court success, although the concept has been rarely tested.[28–30]

28. Marlowe; D.O.; Kirby, K.C. Effective Use of Sanctions in Drug Courts: Lessons from Behavioral Research. National Drug Court Inst. Rev. **1999**, *II* (1), 1–32.
29. Harrell, A.; Cavanagh, S.; Roman. *Evaluation of the D.C. Superior Court Drug Intervention Programs*, *Research in Brief*; National Institute of Justice, Office of Justice Programs: Washington, DC, 2000.
30. Harrell, A.; Kleiman, M. Drug Testing in Criminal Justice Settings. Treatment of Drug Offenders: Policies and Issues. Leukefeld, C.G., Tims, F., Eds.; Springer: New York, **2000**, 149–171.
31. Drug Courts Program Office. *Defining Drug Courts: The Key Components*; U.S. Department of Justice, Office of Justice Programs: Washington, DC, 1997.
32. Cooper, C. *1997 Drug Court Survey Report: Executive Summary*; American University and Justice Programs Office: Washington, DC, 1997.
33. Drug Courts Program Office. *Looking at a Decade of Drug Courts*; U.S. Department of Justice, Office of Justice Programs: Washington, DC, 1998.
34. American University. *Cost Benefits Reported by Drug Court Programs*; OJP Drug Court Clearinghouse and Technical Assistance Project: Washington, DC, 2001.
35. Belenko, S. Research on Drug Courts: A Critical Review 1999 Update. National Drug Court Inst. Rev. **1999**, *II* (2), 1–58.
36. American University. *Drug Court Activity Update: Summary Information on All Programs and Detailed Information on Adult Drug Courts*; OJP Drug Court Clearinghouse and Technical Assistance Project: Washington, DC, 2001.
37. Peters, R.; Murrin, M.R. Effectiveness of Treatment-Based Drug Courts in Reducing Criminal Recidivism. Crim. Justice Behav. **2000**, *27* (1), 72–96.
38. Finigan, M. Assessing Cost Off-sets in a Drug Court Setting. National Drug Court Inst. Rev. **1999**, *15* (1), 41–51.
39. Harrell, A.; Cavanagh, S.; Roman, J. *Final Report: Findings from the Evaluation of the District of Columbia Superior Court Drug Intervention Program*; Urban Institute: Washington, DC, 1999.
40. First-time felony offenders convicted of drug possession (including marijuana) were sentenced to 36 months probation with a special condition of 60 days suspended jail time. If randomly assigned to the drug treatment court condition, offenders were placed in the 12-month program. Otherwise offenders were placed on standard probation for 36 months with either no drug use testing, random testing once a month, or scheduled drug use testing twice a week.

41. Deschenes, E.; Greenwood, P.W. Maricopa County's Drug Court: An Innovative Program for First-time Drug Offenders on Probation. Justice System J. **1994**, *17* (1), 99–115.
42. Deschenes, E.; Turner, S.; Greenwood, P.W. Drug Court or Probation? An Experimental Evaluation of Maricopa County's Drug Court. Justice System J. **1995**, *18* (1), 55–73.
43. For each phase participants signed a contract with the judge, specifying the expectations for program compliance and the number of points required to progress to the next phase or repeat the phase and the amount of reduction in probation term or jail time. The original program indicated that in the first orientation phase participants were expected to attend one drug education class, one treatment process group and one 12-step meeting per week. The focus of the second phase, stabilization, is on relapse prevention and participants were expected to attend one treatment process group and one 12-step meeting per week. Requirements for the third and final phase were similar. Throughout the program, participants were to have phone contact with probation officers, varying from biweekly during the first phase to monthly contact during the final phase. The FTDO program requirements have changed since the end of the evaluation and now include other components such as community service, payment of fees, and relapse prevention groups.
44. Eligible offenders were those sentenced on drug use or possession with no prior felony drug-related offenses and no more than one prior felony offense who had a minimal substance use history and appeared to be in need of drug education, substance user outpatient counseling, and drug use monitoring. A positive answer to any of the following four questions exclude the defendant from eligibility for the drug treatment court program: (a) Is there a need for inpatient counseling? (b) Does the case require Community Punishment Program counseling? (c) Is there a need for specialized case supervision? and (d) Is the defendant appropriate for FARE (a day fines probation) probation?
45. Anglin, M.D.; Longshore, D.; Turner, S.; McBride, D.; Inciardi, J.; Prendergast, M. *Studies of the Functioning and Effectiveness of Treatment Alternatives to Street Crime (TASC) Programs: Final Report to the National Institute on Drug Abuse*; Drug Abuse Research Center: Los Angeles, CA, 1996.
46. Anglin, D.; Longshore, D.; Turner, S. Treatment Alternatives to Street Crime: An Evaluation of Five Programs. Crim. Just. Behav. **1999**, *26* (2), 168–195.

47. One of the problems with locating records was that files had been sent to long-term storage following dismissal from probation and it was difficult to retrieve the files.
48. The structured treatment program for drug treatment court participants was implemented by professional M.S.W.s and trained therapists and included drug education classes, group counseling, case management, and aftercare sessions.
49. The low follow-up rate was the result of several factors, the major one being that no initial baseline interview had been conducted prior to the 36-month follow-up. Initial baselines lay the foundation for good follow-up tracking information and participant ''buy-in'' to the study. Extensive follow-up information was generally not available in probation files, many of which did not contain recent information on the offender's whereabouts. In many instances, offenders indicated that they did not want to be interviewed; they preferred to put the criminal experience behind them and move on with their lives.
50. Respondents in the self report data are more likely to be white than those not interviewed (65% of interviewees, compared to 51% of noninterviewees); higher educated (41% of interviewees had less than a high school education, compared to 51% of those not interviewed); more likely to report prior drug user treatment (47% of interviewees, compared to 37% of noninterviewees); more likely to have served time in prison (14% of interviewees and 8% of noninterviewees); and older at the time of the current conviction (interviewees were, on average, 31.5 years, compared to 29.6 years for noninterviewees).
51. Only one judge served as the drug treatment court judge during the evaluation.
52. Turner, S., Longshore, D., Wenzel, S., Fain, T., Morral, A., Deschenes, E., Harrell, A., Greene, J., Iguchi, M., McBride, D., and Taxman. F. ''A National Evaluation of 14 Drug Courts.'' (2001). Final Report submitted to the National Institute of Justice. RAND: Santa Monica, CA.
53. Peyton, E.A.; Gossweiller, R. *Treatment Services in Adult Drug Courts*; Drug Courts Program Office, Office of Justice Programs, Washington, D.C.: 2001.
54. Vigdal, G.L. *Planning for Alcohol And Other Drug Abuse Treatment for Adults in the Criminal Justice System*; Center for Substance Abuse Treatment TIP Series 17; US DHHS: Rockville, MD, 1995.
55. Baker, F. *Coordination of Alcohol, Drug, and Mental Health Services*; Alcohol, Drug Abuse, and Mental Health Services Administration, Office for Treatment Improvement: Rockville, MD, 1991.

56. D'Aunno, T.; Zuckerman, H.S. The Emergence of Hospital Federations: An Integration of Perspective from Organizational Theory. Med. Care Rev. **1987**, *44*, 323–343.
57. Hammett, T.M. *Public Health/Corrections Collaborations: Prevention and Treatment of HIV/AIDS, STDs, and TB*; National Institute of Justice, Centers for Disease Control and Prevention: Washington, DC, 1998.
58. Marsden, M.E. *Organizational Structure and the Environmental Context of Drug Abuse Treatment*; Issue Paper; National Institute on Drug Abuse: Rockville, MD, 1998.
59. Mathias, R. Linking Medical Care with Drug Abuse Treatment Stems Tuberculosis Among HIV-Infected Drug Users. NIDA Notes **1998**, *13* (3).
60. National Association of State Alcohol and Drug Abuse Directors (NASADAD)/National Association of State Mental Health Program Directors (NASMHPD). *Substance Abuse and Mental Health Services Links With Primary Care*; The Bureau of Primary Health Care, Health Resources and Services Administration: Washington, DC, 1998.
61. Ridgely, M.S.; Lambert, D.; Goodman, A.; Chichester, K.; Ralph, R. Maine's Dual Diagnosis Collaborative: A Model for Interagency Collaboration in the Treatment and Support of People With Co-Occurring Mental and Substance Abuse Disorders. Psychiatric Serv. **1998**, *49*, 236–238.
62. Substance Abuse and Mental Health Services Administration (SAMHSA). *National Treatment Improvement Evaluation Study*; Substance Abuse and Mental Health Services Administration: Rockville, MD, 1997.
63. Taxman, F. *Reducing Recidivism Through a Seamless System of Care: Components of Effective Treatment, Supervision, and Transition Services in the Community*; Report to the Office of National Drug Control Policy, Treatment and Criminal Justice System Conference, 1998.
64. Wenzel, S.; Longshore, D.; Turner, S.; Ridgely, M.S. Drug Courts: A Bridge Between Criminal Justice and Health Services. J. Crim. Justice **2001**, *29* (3), 2441–2454.
65. Compared to a regular sentence for a second offense DUI, DUI court study offenders are able to reduce fines and associated fees by over $600; discharge their four day jail term by serving 2 weeks of electronic monitoring; reduce AA/NA attendance from 3 to 2 times per week. However, they must obtain an alcohol assessment that costs $150 and appear 5–7 times in front of the judge, compared with 3–4 times during the first six months after sentencing.

66. Drug Courts Program Office. *Drug Court Grant Program Fiscal year 1996—Program Guidelines and Application Kit*; U.S. Department of Justice, Office of Justice Programs: Washington, DC, 1996.
67. Harrell, A. Understanding the Impact of Drug Courts. Unpublished paper, 1999.
68. Taxman, F. Unraveling "What Works" for Offenders in Substance Abuse Treatment Services. National Drug Court Inst. Rev. **1999**, *II* (2), 93–134.
69. As indicated earlier, another major area of uncertainty is the treatment process itself, particularly issues related to *quality* and *appropriateness* of treatment. Of course, these issues are not exclusive to drug treatment court programs—they affect drug user treatment programs for offenders and nonoffenders as well. See *Substance Use and Misuse* special issue on Program Quality in Substance Dependency Treatment (2000) for a series of papers addressing program quality.
70. Longshore, D.; Turner, S.; Wenzel, S.; Morral, A.; Harrell, A.; McBride, D.; Deschenes, E.; Iguchi, M. Drug Courts: A Conceptual Framework. J. Drug Issues **2001**, *31* (1), 7–26.
71. Byrk, A.S.; Raudenbush, S.W. *Hierarchical Linear Models: Applications and Data Analysis Methods*; Sage: Thousand Oaks, CA, 1992.
72. Goldstein, H. *Multilevel Statistical Models*, 2nd Ed.; Edward Arnold: London, 1995.
73. Marlowe, D.B.; Festinger, D.S. Research on Drug Courts: Do the Ns Justify the Means. *Connections* **2000**, 5–6.
74. Goldkamp, J.; White, M.D.; Robinson, J.B. Do Drug Courts Work? Getting Inside the Drug Court Black Box. J. Drug Issues **2001**, *31* (1), 27–72.
75. These include, but are not limited to, behavioral approaches that use cognitive strategies; include services located in the offenders' natural environment; are multimodal; intensive enough to be effective; include rewards for prosocial behavior; target high-risk and high-criminogenic need individuals; and matched with the learning styles and abilities of the offender (Johnson et al.[22] p. 73).
76. Mahoney, B.; Carver, J.A.; Cooper, C.; Polansky, L.; Weinstein, S.; Wells, J.D.; Westfield, T. *Drug Court Monitoring*, *Evaluation and Management Information Systems*; Drug Courts Program Office: Washington, DC, 1998.

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THE AUTHORS

Susan Turner, Ph.D., is Associate Director for Research and head of the Criminal Justice Center for RAND Public Safety and Justice. She has conducted studies on racial disparity, private sector alternatives for juvenile offenders, work release, day fines, 14-site nationwide evaluation of intensive probation supervision, drug courts, and sentencing and correction alternatives for drug-involved offenders.

Douglas Longshore, Ph.D., is Senior Behavioral Scientist in the Health and Public Safety and Justice programs at RAND and a Principal Investigator at the UCLA Integrated Substance Programs. Among his current interests are motivation for drug user treatment and psychosocial factors in crime, drug use, and FHV risk behavior among drug users. He has been principal or co-principal investigator in evaluations of intensive interventions for crime-involved drug users, studies of HIV incidence and risk behavior trends in injection drug users, and prospective multivariate tests of psychosocial models of HIV risk behavior among injection and noninjection drug users.

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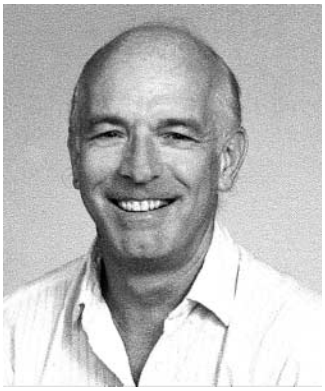
Suzanne Wenzel, Ph.D., is a Behavioral Scientist in the RAND Health Program and Drug Policy Research Center. A community psychologist and health services researcher, her work focuses on domestic violence, drug use, and HIV risk among impoverished women; collaborations between drug court programs and providers of substance use treatment and other services; and access to health services.

Elizabeth "Libby" Deschenes, Ph.D., is a Professor and Graduate Advisor in the Criminal Justice Department at California State University, Long Beach where she teaches courses in Research Methods and Advanced Statistics. She received her BA in Sociology from Colby College, and her MA and Ph.D. in Criminology from the University of Pennsylvania. Dr. Deschenes was previously employed by URSA Institute, worked with Dr. Anglin at UCLA on studies of narcotic addict offenders, and is a consultant at RAND. Her research interests are varied as she has conducted studies of violent offenders, gangs, and gender differences. Most of her research has focused on evaluations of juvenile and adult correctional programs. During the last decade Dr. Deschenes has conducted several process and impact evaluations of drug courts, including the Maricopa County (Phoenix Arizona) First Time Drug Offender Program, Los Angeles County's Adult and Juvenile Drug Court Programs, and most recently the Drug Court Program of the Orange County (CA) Superior Court. As a consultant to RAND she worked on the NIJ-funded national evaluation of 14 drug courts that were implemented in 1994–95. Her publications concerning drug courts have appeared in the *National Drug Court Institute Review*, *Journal of Drug Issues* and the *Justice System Journal*. She has a chapter on the Maricopa drug court in *The Early Drug Courts*, and her most recent chapter on drug courts is forthcoming in *Research to Practice*, *Practice to Research*

Promoting Scientific-Clinical Interchange in Drug Abuse Treatment. Dr. Deschenes is a member of several organizations, including the American Society of Criminology, the Academy of Criminal Justice Sciences, the Western Society of Criminology, and the National Association of Drug Court Professionals. She is currently the Vice President of the Western Society of Criminology.

Peter Greenwood, Ph.D., is the President and CEO of Greenwood & Associates and the former Director of RAND's Criminal Justice Program. He has published widely in the areas of violence prevention, juvenile justice, criminal careers, sentencing, corrections, and law enforcement policy. He and his RAND colleagues have recently published several studies comparing the costs and benefits of alternative violence prevention strategies, and he is currently directing several evaluations of prevention programs for "high-risk" youth. In 1998 Dr. Greenwood was recognized by the American Society of Criminology for his contributions to the field of practice with the August Volmer Award. He is also a member of the Homicide Research Working Group and is a past president of the California Association of Criminal Justice Research. He has served on the faculties of the University of Southern California, The RAND Graduate School, the Claremont Graduate School, and on the California Attorney General's Panel on Research and Statistics. He is a graduate of the U.S. Naval Academy and holds M.S. and Ph.D. degrees from Stanford University in Industrial Engineering.



Terry Fain, M.A., is Senior Research Programmer, RAND Public Safety and Justice Program, has extensive experience in management, analysis, and interpretation of criminal justice data for numerous NU- and NIDA-sponsored research projects. He is also a licensed Marriage and Family Therapist with extensive clinical experience in treating substance users and criminal justice clients.

Adele Harrell, Ph.D., is Director of the Justice Policy Center at the Urban Institute. She has been actively engaged in studies of "drug abuse" since 1975. Her research includes an evaluation of Breaking the Cycle, a program linking court and treatment services for drug-involved defendants, evaluation of the Brooklyn Treatment Court services for female offenders, and evaluation of the DC Superior Court Drug Intervention Program. She also evaluated the Children at Risk Program, a comprehensive drug use prevention program for youth 11 to 13, and has studied the relationship between arrestee urinalysis results and community indicators of drug-use-related problems among adults and juveniles.

Andrew Morral, Ph.D., is Associate Director of RAND's Public Safety and Justice Program and a Behavioral Scientist in its Drug Policy Research Center. His research examines behavioral treatments for adolescent and adult substance users. He has worked closely with criminal justice agencies and community treatment providers to develop program evaluation strategies and treatment planning instruments.

Faye S. Taxman, Ph.D., is Director of the Bureau of Governmental Research (BGR) at the University of Maryland—College Park, and an associate research professor in the Department of Criminology and Criminal Justice at the University of Maryland—College Park. The Recidivism Reduction Laboratory at BGR is devoted to improving practice in the field of corrections and substance use. Dr. Taxman has conducted studies in supervision, jail-based programming, intermediate sanctions, pretrial supervision, diversion, and treatment in the criminal justice system. She is currently completing a multi-site study on the Reentry Partnership Initiatives.

Martin Y. Iguchi, Ph.D., is a Senior Behavioral Scientist and Director of the Drug Policy Research Center at RAND, located in Santa Monica, CA. Dr. Iguchi received his A.B. in liberal arts from Vassar College, his M.A. and Ph.D. in Experimental Psychology from Boston University, and he completed 2 years post-doctoral training in drug abuse and behavioral pharmacology at the Johns Hopkins University School of Medicine. He is a member of CSAT's National Advisory Council, a member of the Board of Directors of the College on Problems of Drug Dependence, a member of the Editorial Board for Drug and Alcohol Dependence, and a Principal Investigator on several NIDA treatment grants.

Judith Greene is a criminal justice policy analyst. A 1999 recipient of a Soros Senior Justice Fellowship, she has recently been working as a consultant to the RAND Corporation and Human Rights Watch. Over the past decade she served as a Senior Research Fellow at the University of Minnesota Law School, and directed the State-Centered Program for the Edna McConnell Clark Foundation. From 1985 to 1993 she served as the Director of Court Programs at the Vera Institute of Justice. Ms. Greene's articles on criminal sentencing issues, police practices, and correctional policy have appeared in numerous publications, including *The American Prospect*, *The Index on Censorship*, *Crime and Delinquency*, *Current Issues in Criminal Justice*, *Overcrowded Times*, *The Wake Forest Law Review*, *The Rutgers Law Journal*, *The Justice Systems Journal*, *and Judicature*. She has presented papers and addresses to scores of organizations and conferences, including the Open Society Institute, the British Columbia Provincial Court Judicial Conference, the Freidrich Ebert Stiftung's International Conference on Police Policy, the Academy of Criminal Justice Sciences, the Minnesota Sentencing Commission, the Maryland Commission on Criminal Sentencing Policy, and the Youth Law Center. She has presented legislative testimony on sentencing and corrections policy in California, Michigan, New Mexico, and Georgia.

Duane McBride, Ph.D., is Professor of Sociology and Chair of the Behavioral Sciences Department at Andrews University, as well as the Director of the University's Institute for the Prevention of Addictions.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In addition he is an Adjunct Professor in the Department of Epidemiology and Public Health in the University of Miami School of Medicine. He received his doctorate in Sociology from the University of Kentucky in 1976. His research interests include, drug policy, consequences of drug use, drug use etiology and prevention, health service research and drug user treatment program evaluation. Dr. McBride has published approximately 80 articles, chapters, books, and monographs in these research areas as well as making frequent presentations at scientific and professional meetings. He is also currently the Principal Investigator on the Illicit Drug Team of the Robert Wood Johnson Foundation-supported ImpacTeen initiative and Co-Principal Investigator of a Health Services Research Center funded by the National Institute on Drug Abuse. In addition he is a frequent member or chair of NIH grant peer review committees.

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