Nebraska Adult Drug Court and DUI Court Best Practice Standards

Nebraska Supreme Court
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Introduction

In 2012, the Nebraska Problem-Solving Court Leadership Group developed a strategic plan to identify the goals and policies required to ensure Nebraska's problem-solving courts operate effectively and efficiently. The establishment of statewide standards is central to this effort, expanding the capacity of the courts and ensuring the establishment of best practices and quality assurance. The Nebraska Administrative Office of the Courts/Probation was awarded a grant from the Bureau of Justice Administration in 2013 to support the development of the standards and facilitate the implementation of the standards by providing a supporting information infrastructure along with statewide training and technical assistance to DUI and drug court teams. The development of the proposed standards was a collaborative effort among practitioners from all of the Nebraska Drug and DUI courts, the Nebraska Administrative Office of the Courts/Probation, and the National Center for State Courts.

The development of the draft standards was completed over the course of two separate meetings held in December 2013 and July 2014. An extensive review of Volume I of NADCP's Adult Drug Court Best Practice Standards was conducted at the onset of the project. The national standards and other research findings serve as the foundation for the proposed standards contained in this document.

In September 2014, the draft standards were vetted through an online survey that was distributed to representatives from each drug and DUI courts in Nebraska and other key stakeholders. Survey respondents were asked to respond to three questions: 1) Feasible - Is it feasible to conform to the standard if given a 6 to 12 month period to implement?, 2) Clear - Are the requirements clearly worded?, and 3) Include - Should this measure be included in Nebraska's Standards for Adult Drug and DUI Courts? Following the survey, additional refinements were made to the standards to improve clarity and the supporting research documentation was added to further support implementation. The final standards were presented in the document along with supporting evidence.

In June 2015, the Nebraska Supreme Court approved and required all Adult Drug and DUI Courts in Nebraska to adhere to the standards. In July 2015, the National Association of Drug Court Professionals released Volume II of the Adult Drug Court Best Practice Standards. The new standards consisted of a comprehensive collection of research-based and practitioner focused Drug Court guidance. As a result of the newly released national standards, Nebraska's Adult Drug and DUI Court standards were reviewed and updated by the National Center for State Courts. The adjustments to the standards were reviewed by the Nebraska Problem Solving Court Coordinators group and the Nebraska Supreme Court Committee on Problem-Solving Courts. After thorough review and consideration, the following updated standards were presented in this document along with supporting evidence.

In 2019, a 25-member strategic planning committee representing many key stakeholders in the state's problem-solving court system was convened. Following the strategic planning workshop, the 2020-2025 Strategic Plan for Nebraska Problem-Solving Courts was developed to guide the state's problem-solving courts for the next 5 years, with a special emphasis on preparing courts for

the future and using data to enhance court operations. The plan was approved by the Nebraska Supreme Court Committee on Problem-Solving Courts on April 6, 2020 and the Nebraska Supreme Court on April 22, 2020.

In collaboration with the National Center for State Courts, a committee appointed by the Supreme Court Committee on Problem-Solving Courts was formed and a process was developed in order to accomplish the 2020-2025 Problem-Solving Court Strategic Plan Focus Area 1, Goal 1: Design and implement processes for development of Best Practice Standards and the regular review of adopted standards to ensure they remain in line with evidence-based practices and national standards. This process was approved by the Supreme Court Committee on Problem-Solving Courts on April 14, 2021, and the Supreme Court on June 2, 2021.

In 2020, prior to the approval of this process and at the direction of the Nebraska Supreme Court Committee on Problem-Solving Courts, the approved Nebraska Adult Drug and DUI Court Standards were updated to ensure the current standards were consistent with best practices for the operation of DUI Courts. Assistance was provided by the National Center for DWI Courts.

As part of the processes of reviewing and updating the best practice standards, the Statewide Director of Problem-Solving Courts convened a committee of the Nebraska Problem-Solving Court coordinators to review the most recently updated National Problem-Solving Court Standards (2018) and compare such new national standards to the current Nebraska Standards. The Coordinator Committee recommended the adoption of the National Standards where there was a material variance between the National Standards and the Nebraska Standards or where a National Standard was stated without a corresponding Nebraska Standard. The Coordinator Committee believed because the National Standards were grounded on the analyses of more recent research and effectiveness evidence, the National Standards should replace Nebraska Standards where there were material differences.

In April of 2022, the recommendations of the Coordinators Committee were given to the Nebraska Supreme Court Committee on Problem-Solving Courts and a committee was appointed charged with the task of reviewing and comparing the Nebraska Standards and the National Standards and recommending (1) adoption of the National Standards were applicable; (2) keeping the Nebraska standard; or (3) adoption of a hybrid by modifying a National Standard to address a specific Nebraska circumstance.

The subcommittee completed its work and prepared the following report.

I. Target Population

A. Objective Eligibility and Exclusion Criteria

Eligibility and exclusion criteria are defined objectively, specified in writing, and communicated to potential referral sources including judges, law enforcement, defense attorneys, prosecutors, treatment professionals, and community supervision officers. The Drug Court team does not apply subjective criteria or personal impressions to determine participants' suitability for the program.

B. High-Risk and High-Need Participants

The Drug Court targets *individuals* for admission who have *substance use disorder* and are at substantial risk for reoffending or failing to complete a less intensive disposition, such as standard probation or pretrial supervision. These individuals are commonly referred to as high-risk and high-need *individuals*. If a Drug Court is unable to target only high-risk and high-need *individuals*, the program develops alternative tracks with services that are modified to meet the risk and need levels of its participants. If a Drug Court develops alternative tracks, it does not mix participants with different risk or need levels in the same counseling groups, residential treatment milieu, or housing unit.

C. Validated Eligibility Assessments

Candidates for the Drug Court are assessed for eligibility using validated risk-assessment and clinical-assessment tools prior to program entry. The risk-assessment tool has been demonstrated empirically to predict criminal recidivism or failure on community supervision and is equivalently predictive for women and racial or ethnic minority groups that are represented in the local arrestee population. The clinical-assessment tool evaluates the formal diagnostic symptoms of severe substance use disorder or addiction. Evaluators are trained and proficient in the administration of the assessment tools and interpretation of the results.

Staff who conduct screening and assessments shall be trained and proficient in the Standardized Model for the Delivery of Substance Use Services, administration of the assessment tools, and interpretation of the results.

D. Criminal History Disqualifications

Current or prior offenses may disqualify candidates from participation in the Drug Court if empirical evidence demonstrates offenders with such records cannot be managed safely or effectively in a Drug Court. Barring legal prohibitions, offenders charged with drug dealing or those with violence histories are not excluded automatically from participation in the Drug Court.

E. Clinical Disqualifications

If adequate treatment is available, candidates are not disqualified from participation in the Drug Court because of co-occurring mental health or medical conditions or because they have been legally prescribed psychotropic or addiction medication.

F. Time to Program Entry

Programs shall minimize the time between the precipitating event (arrest or probation violation) and entrance into the drug or DUI court and the time between the drug or DUI court entry and first treatment episode.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume 1, pages 5-10.

Supporting Evidence for Target Population can also be found on pages 33-38 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

II. Equity and Inclusion

A. Equivalent Access

Eligibility criteria for the Drug Court are nondiscriminatory in intent and impact. If an eligibility requirement has the unintended effect of differentially restricting access for members of a group that has historically experienced discrimination, the requirement is adjusted to increase the representation of such persons unless doing so would jeopardize public safety or the effectiveness of the Drug Court. The assessment tools that are used to determine candidates' eligibility for the Drug Court are valid for use with members of groups that have historically experienced discrimination who are represented in the respective arrestee population.

B. Equivalent Retention

The Drug Court regularly monitors whether members of groups that have historically experienced discrimination complete the program at equivalent rates to other participants. If completion rates are significantly lower for members of a group that has historically experienced discrimination, the Drug Court team investigates the reasons for the disparity, develops a remedial action plan, and evaluates the success of the remedial actions.

C. Equivalent Treatment

Members of groups that have historically experienced discrimination receive the same levels of care and quality of treatment as other participants with comparable clinical needs. The Drug Court administers evidence-based treatments that are effective for use with members of groups that have historically experienced discrimination who are represented in the Drug Court population.

D. Equivalent Incentives and Sanctions

Except where necessary to protect a participant from harm, members of groups that have historically experienced discrimination receive the same incentives and sanctions as other participants for comparable achievements or infractions. The Drug Court regularly monitors the delivery of incentives and sanctions to ensure they are administered equivalently to all participants.

E. Equivalent Dispositions

Members of groups that have historically experienced discrimination receive the same legal dispositions as other participants for completing or failing to complete the Drug Court program.

F. Team Training

Each member of the Drug Court team attends up-to-date training events on recognizing implicit cultural biases and correcting disparate impacts for members of groups that have historically experienced discrimination.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume 1, pages 11-19.

Supporting Evidence for Equity and Inclusion can also be found on pages 39-46 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

III. Roles and Responsibilities of the Judge

A. Professional Training

The Drug Court judge attends current training events on legal and constitutional issues in Drug Courts, judicial ethics, evidence-based substance use disorder and mental health treatment, behavior modification, and community supervision. Attendance at annual training conferences and workshops ensures contemporary knowledge about advances in the Drug Court field.

Prior to presiding over a Problem-Solving Court, or as soon thereafter as practical, the Judge shall complete Problem-Solving Court Orientation, as approved by Judicial Branch Education.

B. Length of Term

The judge presides over the Drug Court for no less than two consecutive years to maintain the continuity of the program and ensure the judge is knowledgeable about Drug Court policies and procedures.

C. Consistent Docket

Participants shall appear before the same judge or judges throughout their enrollment in Drug or DUI Court. If more than one judge serves as a primary judge, the judges shall maintain consistency and accountability through frequent communication and status updates regarding participants.

D. Participation in Pre-Court Staff Meetings

The judge regularly attends pre-court staff meetings during which each participant's progress is reviewed and potential consequences for performance are discussed by the Drug Court team.

E. Frequency of Status Hearings

Participants appear before the judge for status hearings no less frequently than every two weeks during the first phase of the program.[1] The frequency of status hearings may be reduced gradually after participants have initiated abstinence from alcohol and illicit drugs[2] and are regularly engaged in treatment. Status hearings are scheduled no less frequently than every four weeks until participants are in the last phase of the program.

F. Length of Court Interactions

The judge spends sufficient time during status hearings to review each participant's progress in the program. Evidence suggests judges should spend a minimum of approximately three minutes interacting with each participant in court.

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[1] This assumes the Drug Court is treating the appropriate target population of high-risk and high-need participants [see Standard I, Target Population].

[2] Illicit drugs include addictive or intoxicating prescription medications taken for a nonprescribed or nonmedically indicated purpose.

G. Judicial Demeanor

The judge offers supportive comments to participants, stresses the importance of their commitment to treatment and other program requirements, and expresses optimism about their abilities to improve their health and behavior. The judge does not humiliate participants or subject them to foul or abusive language. The judge allows participants a reasonable opportunity to explain their perspectives concerning factual controversies and the imposition of sanctions, incentives, and therapeutic adjustments [see also Standard IV].

H. Judicial Decision Making

The judge is the ultimate arbiter of factual controversies and makes the final decision concerning the imposition of incentives or sanctions that affect a participant's legal status or liberty. The judge makes these decisions after taking into consideration the input of other Drug Court team members and discussing the matter in court with the participant or the participant's legal representative. The judge relies on the expert input of duly trained treatment professionals when imposing treatment-related conditions.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume 1, pages 20-25.

Supporting Evidence for Roles and Responsibilities of the Judge can also be found on pages 47-51 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

IV. Incentives[3], Sanctions, and Therapeutic Adjustments

A. Advance Notice

Policies and procedures concerning the administration of incentives, sanctions, and therapeutic adjustments are specified in writing and communicated in advance to Drug Court participants and team members. The policies and procedures provide a clear indication of which behaviors may elicit an incentive, sanction, or therapeutic adjustment; the range of consequences that may be imposed for those behaviors; the criteria for phase advancement, graduation, and termination from the program; and the legal and collateral consequences that may ensue from graduation and termination. The Drug Court team reserves a reasonable degree of discretion to modify a presumptive consequence in light of the circumstances presented in each case.

B. Opportunity to Be Heard

Participants are given an opportunity to explain their perspectives concerning factual controversies and the imposition of incentives, sanctions, and therapeutic adjustments. If a participant has difficulty expressing him or herself because of such factors as a language barrier, nervousness, or cognitive limitation, the judge permits the participant's attorney or legal representative to assist in providing such explanations. Participants receive a clear justification for why a particular consequence is or is not being imposed.

C. Equivalent Consequences

Participants receive consequences that are equivalent to those received by other participants in the same phase of the program who are engaged in comparable conduct[4]. Unless it is necessary to protect the individual from harm, participants receive consequences without regard to their gender, race, ethnicity, nationality, socioeconomic status, or sexual orientation [see Standard II, Equity and Inclusion].

D. Professional Demeanor

Interactions with participants from all service providers and team members shall always be professional in nature. Sanctions are delivered without expressing anger or ridicule. Participants are not shamed or subjected to foul or abusive language.

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[3] Herein, incentives refer to consequences for behavior that are desired by participants, such as verbal praise, phase advancement, social recognition, tangible rewards, or graduation. Sanctions refer to consequences that are disliked by participants, such as verbal reprimands, increased supervision requirements, community service, jail detention, or termination. Therapeutic adjustments refer to alterations to participants' treatment requirements that are intended to address unmet clinical or social service needs, and are not intended as an incentive or sanction. The generic term consequence encompasses incentives, sanctions and therapeutic adjustments.

[4] This assumes all participants have been assessed comparably as high-risk and high-need [see Standard I, Target Population].

E. Progressive Sanctions

The Drug Court has a range of sanctions of varying magnitudes that may be administered in response to infractions in the program. For goals that are difficult for participants to accomplish, such as abstaining from substance use[5] or obtaining employment, the sanctions increase progressively in magnitude over successive infractions. For goals that are relatively easy for participants to accomplish, such as being truthful or attending counseling sessions, higher magnitude sanctions may be administered after only a few infractions.

F. Licit Addictive or Intoxicating Substances

Consequences are imposed for the nonmedically indicated use of intoxicating or addictive substances, including alcohol, cannabis (marijuana) and prescription medications, regardless of the licit or illicit status of the substance. The Drug Court team relies on expert medical input to determine whether a prescription for an addictive or intoxicating medication is medically indicated and whether nonaddictive, nonintoxicating, and medically safe alternative treatments are available.

G. Therapeutic Adjustments

Participants do not receive punitive sanctions if they are otherwise compliant with their treatment and supervision requirements but are not responding to the treatment interventions. Under such circumstances, the appropriate course of action may be to reassess the individual and adjust the treatment plan accordingly. Adjustments to treatment plans are based on the recommendations of duly trained treatment professionals.

H. Incentivizing Productivity

Phase promotion is predicated on the achievement of realistic and defined behavioral objectives, such as completing a treatment regimen or remaining drug-abstinent for a specified period of time. As participants advance through the phases of the program, sanctions for infractions may increase in magnitude, rewards for achievements may decrease, and supervision services may be reduced. Treatment is reduced only if it is determined clinically that a reduction in treatment is unlikely to precipitate a relapse to substance use. The frequency of drug and alcohol testing is not reduced until after other treatment and supervisory services have been reduced and relapse has not occurred. If a participant must be returned temporarily to the preceding phase of the program because of a relapse or related setback, the team develops a remedial plan together with the participant to prepare for a successful phase transition.

[5] This assumes participants are addicted to or dependent on illicit drugs or alcohol [see Standard I, Target Population]. Individuals who do not have a serious drug or alcohol addiction have less difficulty achieving abstinence, and may receive higher magnitude sanctions for substance use during the early phases of the program.

I. Phase Promotion

Phase promotion is predicated on the achievement of realistic and defined behavioral objectives, such as completing a treatment regimen or remaining drug-abstinent for a specified period of time. As participants advance through the phases of the program, sanctions for infractions may increase in magnitude, rewards for achievements may decrease, and supervision services may be reduced. Treatment is reduced only if it is determined clinically that a reduction in treatment is unlikely to precipitate a relapse to substance use. The frequency of drug and alcohol testing is not reduced until after other treatment and supervisory services have been reduced and relapse has not occurred. If a participant must be returned temporarily to the preceding phase of the program because of a relapse or related setback, the team develops a remedial plan together with the participant to prepare for a successful phase transition.

J. Jail Sanctions

Jail sanctions are imposed judiciously and sparingly, unless a participant poses an immediate risk to public safety, jail sanctions are administered after less severe consequences have been ineffective at deterring infractions. Jail sanctions are definite in duration and typically last no more than three to five days. Participants are given access to counsel and a fair hearing if a jail sanction might be imposed because a significant liberty interest is at stake.

K. Termination

Participants may be terminated from the Drug Court if they no longer can be managed safely in the community or if they fail repeatedly to comply with treatment or supervision requirements. Participants are not terminated from the Drug Court for continued substance use if they are otherwise compliant with their treatment and supervision conditions, unless they are nonamenable to the treatments that are reasonably available in their community. If a participant is terminated from the Drug Court because adequate treatment is not available, the participant does not receive an augmented sentence or disposition for failing to complete the program.

L. Consequences of Graduation and Termination

Graduates of the Drug Court avoid a criminal record, avoid incarceration, or receive a substantially reduced sentence or disposition as an incentive for completing the program. Participants who are terminated from the Drug Court receive a sentence or disposition for the underlying offense that brought them into the Drug Court. Participants are informed in advance of the circumstances under which they may receive an augmented sentence for failing to complete the Drug Court program.

For DUI Courts, dismissal of charges shall not be used as a means to encourage entry into the program or as a result of successful completion.

M. Graduation Requirements

Participants shall meet specified graduation requirements in order to "successfully complete" the drug or DUI Court program. Programs shall define graduation requirements to include those that focus on long-term recovery. These requirements should be an extension of the participants' progress in the program and shall incorporate a written long-term recovery plan that focuses on skills to maintain the behavioral changes each participant accomplished during program participation. This written long-term recovery plan should be implemented prior to program exit to allow the participant to practice learned behaviors and skills during participation.

1. *Period of Time Abstinent Prior to Program Exit- Participants shall have a minimum of 90 day of continuous sobriety prior to graduation; however, each Drug or DUI Court may establish its own minimum standard that exceeds the established minimum.*

2. *Stable and Pro-social Activities and Environment- Programs shall require participants to be involved in pro-social activities prior to graduation. If professional housing services are not available to the Drug or DUI Court, clinical case managers or other staff members help participants find safe and sober housing with pro-social and drug-free relatives, friends or other suitable persons. Participants, who are able, shall be required to have employment or be enrolled in an educational program prior to graduation.*

3. *Written Long-Term Recovery Plan- Programs shall work with the participant to develop a written long-term recovery plan that is implemented prior to graduation. Programs should require participants to demonstrate ability to comply with the long-term recovery plan in preparation for transition out of the program. If a participant is unable to follow the long-term recovery plan while still engaged in the program, the plan shall be modified to ensure the plan can be followed by the participant after program exit.*

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume 1, pages 26-37.

Supporting Evidence for Incentives, Sanctions and Therapeutic Adjustments can also be found on pages 52-61 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

V. Substance Use Disorder Treatment

A. Continuum of Care

The Drug Court offers a continuum of care for substance use disorder treatment, *consistent with the Standardized Model for the Delivery of Substance Use Services*, including detoxification, residential, sober living, day treatment, intensive outpatient and outpatient services. Standardized patient placement criteria govern the level of care that is provided. Adjustments to the level of care are predicated on each participant's response to treatment and are not tied to the Drug Court's programmatic phase structure. Participants do not receive punitive sanctions or an augmented sentence if they fail to respond to a level of care that is substantially below or above their assessed treatment needs.

B. In-Custody Treatment

Participants are not incarcerated to achieve clinical or social service objectives such as obtaining access to detoxification services or sober living quarters.

C. Team Representation

One or two treatment agencies are primarily responsible for managing the delivery of treatment services for Drug Court participants. Clinically trained representatives from these agencies are core members of the Drug Court team and regularly attend team meetings and status hearings. If more than two agencies provide treatment to Drug Court participants, communication protocols are established to ensure accurate and timely information about each participant's progress in treatment is conveyed to the Drug Court team.

D. Treatment Dosage and Duration

Drug and DUI Courts shall prioritize referrals to services for those needs associated with an increased risk to reoffend and incorporate compliance with these services into the Drug or DUI Court requirements. The Drug and DUI Courts shall match the dosage, duration and intensity of services to the individual's level of criminogenic risk and need as determined by a validated assessment instrument.

Drug and DUI Courts shall assess and document changes in needs in conjunction with responsivity factors at regular intervals using a validated assessment tool. The Drug or DUI Court shall revise case plans to respond to changes in participants' needs and responsivity factors.

Participants receive a sufficient dosage and duration of substance use disorder treatment to achieve long-term sobriety and recovery from addiction. Participants ordinarily receive six to ten hours of counseling per week during the initial phase of treatment and approximately 200 hours of counseling over nine to twelve months; however, the Drug Court allows for flexibility to accommodate individual differences in each participant's response to treatment.

E. Treatment Modalities

Participants meet with a treatment provider or clinical case manager for at least one individual session per week during the first phase of the program. The frequency of individual sessions may be reduced subsequently if doing so would be unlikely to precipitate a behavioral setback or relapse. Participants are screened for their suitability for group interventions, and group membership is guided by evidence-based selection criteria including participants' gender, trauma histories and co-occurring psychiatric symptoms. Treatment groups ordinarily have no more than twelve participants and at least two leaders or facilitators.

F. Evidence-Based Treatments

Treatment providers administer behavioral or cognitive-behavioral treatments that are documented in manuals and have been demonstrated to improve outcomes for persons *with substance use disorder* involved in the criminal justice system. Treatment providers are proficient at delivering the interventions and are supervised regularly to ensure continuous fidelity to the treatment models.

G. Medications

Participants are prescribed psychotropic or addiction medications based on medical necessity as determined by a treating physician with expertise in addiction psychiatry, addiction medicine, or a closely related field.

H. Provider Training and Credentials

Treatment providers shall be a Registered Service Provider with the Administrative Office of the Courts and Probation. Treatment providers are licensed or certified to deliver substance use disorder treatment, have substantial experience working with criminal justice populations, and are supervised regularly to ensure continuous fidelity to evidence-based practices.

I. Peer Support Groups

Participants regularly attend self-help or peer support groups in addition to professional counseling. The peer support groups follow a structured model or curriculum such as the 12-step or Smart Recovery models.[6] Before participants enter the peer support groups, treatment providers use an evidence-based preparatory intervention, such as 12-step facilitation therapy, to prepare the participants for what to expect in the groups and assist them to gain the most benefits from the groups.

J. Continuing Care

[see Standard IV, Incentives, Sanctions, and Therapeutic Adjustments, M].

[6] Drug Courts must offer a secular alternative to 12-step programs such as Narcotics Anonymous because appellate courts have interpreted these programs to be deity-based, thus implicating the First Amendment (Meyer, 2011).

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume 1, pages 38-53.

Supporting Evidence for Substance Use Disorder Treatment can also be found on pages 62-65 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

VI. Complementary Treatment and Social Services[7]

A. Scope of Complementary Services

The Drug Court provides or refers participants for treatment and social services to address conditions that are likely to interfere with their response to substance use disorder treatment or other Drug Court services (responsivity needs), to increase criminal recidivism (criminogenic needs), or to diminish long-term treatment gains (maintenance needs). Depending on participant needs, complementary services may include housing assistance, mental health treatment, trauma-informed services, criminal-thinking interventions, family or interpersonal counseling, vocational or educational services, and medical or dental treatment. Participants receive only those services for which they have an assessed need.

B. Sequence and Timing of Services

In the first phase of Drug Court, participants receive services designed primarily to address responsivity needs such as deficient housing, mental health symptoms, and substance-related cravings, withdrawal, or anhedonia (diminished ability to experience pleasure). In the interim phases of Drug Court, participants receive services designed to resolve criminogenic needs that co-occur frequently with substance use disorder, such as criminal-thinking patterns, delinquent peer interactions, and family conflict. In the later phases of Drug Court, participants receive services designed to maintain treatment gains by enhancing their long-term adaptive functioning, such as vocational or educational counseling.

C. Clinical Case Management

Participants meet individually with a clinical case manager or comparable treatment professional at least weekly during the first phase of Drug Court. The clinical case manager administers a validated assessment instrument to determine whether participants require complementary treatment or social services, provides or refers participants for indicated services, and keeps the Drug Court team apprised of participants' progress.

D. Housing Assistance

Where indicated, participants receive assistance finding safe, stable, and drug-free housing beginning in the first phase of Drug Court and continuing as necessary throughout their enrollment in the program. If professional housing services are not available to the Drug Court, clinical case managers or other staff members help participants find safe and sober housing with prosocial and drug-free relatives, friends, or other suitable persons. Participants are not excluded from participation in Drug Court because they lack a stable place of residence.

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[7] The term complementary treatment and social services refers to interventions other than substance use disorder treatment that ameliorate symptoms of distress, provide for participants' basic living needs, or improve participants' long-term adaptive functioning. The term does not include restorative-justice interventions such as victim restitution, supervisory interventions such as probation home visits, or recovery-oriented services such as peer mentoring.

E. Mental Health Treatment

Participants are assessed using a validated instrument for major mental health disorders that co-occur frequently in Drug Courts, including major depression, bipolar disorder (manic depression), posttraumatic stress disorder (PTSD), and other major anxiety disorders. Participants suffering from mental illness receive mental health services beginning in the first phase of Drug Court and continuing as needed throughout their enrollment in the program. Mental illness and addiction are treated concurrently using an evidence-based curriculum that focuses on the mutually aggravating effects of the two conditions. Participants receive psychiatric medication based on a determination of medical necessity or medical indication by a qualified medical provider. Applicants are not denied entry to Drug Court because they are receiving a lawfully prescribed psychiatric medication [see Standard I, Target Population], and participants are not required to discontinue lawfully prescribed psychiatric medication as a condition of graduating from Drug Court [see Standard V, Substance Use Disorder Treatment].

F. Trauma-Informed Services

Participants are assessed using a validated instrument for trauma history, trauma-related symptoms, and posttraumatic stress disorder (PTSD). Participants with PTSD receive an evidence-based intervention that teaches them how to manage distress without resorting to substance use or other avoidance behaviors, desensitizes them gradually to symptoms of panic and anxiety, and encourages them to engage in productive actions that reduce the risk of retraumatization. Participants with PTSD or severe trauma-related symptoms are evaluated for their suitability for group interventions and are treated on an individual basis or in small groups when necessary to manage panic, dissociation, or severe anxiety. Female participants receive trauma-related services in gender-specific groups. All Drug Court team members, including court personnel and other criminal justice professionals, receive formal training on delivering trauma-informed services.

G. Criminal Thinking Interventions

Participants receive an evidence-based criminal-thinking intervention after they are stabilized clinically and are no longer experiencing acute symptoms of distress such as cravings, withdrawal, or depression. Staff members are trained to administer a standardized and validated cognitive-behavioral criminal-thinking intervention such as Moral Reconation Therapy, the Thinking for a Change program, or the Reasoning & Rehabilitation program.

H. Family and Interpersonal Counseling

When feasible, at least one reliable and prosocial family member, friend, or daily acquaintance is enlisted to provide firsthand observations to staff about participants' conduct outside of the program, to help participants arrive on time for appointments, and to help participants satisfy other reporting obligations in the program. After participants are stabilized clinically, they receive an evidence-based cognitive-behavioral intervention that focuses on improving their interpersonal communication and problem-solving skills, reducing family conflicts, and eliminating associations with substance-abusing and antisocial peers and relatives.

I. Vocational and Educational Services

Participants with deficient employment or academic histories receive vocational or educational services beginning in a late phase of Drug Court. Vocational or educational services are delivered after participants have found safe and stable housing, their substance use disorder and mental health symptoms have resolved substantially, they have completed a criminal-thinking intervention, and they are spending most or all of their time interacting with pro-social and sober peers. Vocational interventions are standardized and cognitive-behavioral in orientation and teach participants to find a job, keep a job, and earn a better or higher-paying job in the future though continuous self-improvement. Participants are required to have a stable job, be enrolled in a vocational or educational program, or be engaged in comparable pro-social activity as a condition of graduating from Drug Court. Continued involvement in work, education, or comparable pro-social activity is a component of each participant's continuing-care plan.

J. Medical and Dental Treatment

Participants receive immediate medical or dental treatment for conditions that are life-threatening, cause serious pain or discomfort, or may lead to long-term disability or impairment. Treatment for nonessential or nonacute conditions that are exacerbated by substance use may be provided in a late phase of Drug Court or included in the participant's continuing-care plan.

K. Prevention of Healthy-Risk Behaviors

Participants complete a brief evidence-based educational curriculum describing concrete measures they can take to reduce their exposure to sexually transmitted and other communicable diseases.

L. Overdose Prevention and Reversal

Participants complete a brief evidence-based educational curriculum describing concrete measures they can take to prevent or reverse drug overdose.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume II, pages 5-25.

Supporting Evidence for Complementary Treatment and Social Services can also be found on pages 76-94 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

VII. Drug and Alcohol Testing

A. Frequent Testing

Drug and alcohol testing is performed frequently enough to ensure substance use is detected quickly and reliably. Urine testing is performed at least twice per week until participants are in the last phase of the program and preparing for graduation. Tests that measure substance use over extended periods of time, such as ankle monitors, are applied for at least 90 consecutive days followed by urine or other intermittent testing methods. Tests that have short detection windows, such as breathalyzers or oral fluid tests, are administered when recent substance use is suspected or when substance use is more likely to occur, such as during weekends or holidays.

For DUI Courts, continuous alcohol monitoring shall be completed for a minimum of 90 days upon program entry. Alcohol testing shall occur on a daily basis through the first three phases (approximately 240 days). All testing for alcohol is in addition to twice weekly drug testing through the first three phases of DUI Court. Testing for alcohol in phases four and five is combined with the twice weekly drug testing.

Teams shall consider different technologies based upon the population/individual, cost, purpose/goal, and resources available to the team. In addition to Preliminary Breath Tests (PBTs), teams should consider ignition interlock, transdermal devices, Bluetooth/smartphone devices, EtG/EtS, and other remote monitoring devices.

B. Random Testing

The schedule of drug and alcohol testing is random and unpredictable. Testing may occur at any time, but shall also include during non-traditional work hours, in evenings, and on weekends and holidays. The probability of being tested on weekends and holidays is the same as on other days. Participants are required to deliver a test specimen as soon as practicable after being notified that a test has been scheduled. Urine specimens are delivered no more than eight hours after being notified that a urine test has been scheduled. For tests with short detection windows, such as oral fluid tests, specimens are delivered no more than four hours after being notified that a test was scheduled.

C. Duration of Testing

Drug and alcohol testing continues uninterrupted to determine whether relapse occurs as other treatment and supervision services are adjusted.

D. Breadth of Testing

Test specimens are examined for all unauthorized substances that are suspected to be used by Drug Court participants. Randomly selected specimens are tested periodically for a broader range of substances to detect new substances that might be emerging in the Drug Court population.

E. Witnessed Collection

Collection of test specimens is witnessed directly by a staff person who has been trained to prevent tampering and substitution of fraudulent specimens. Barring exigent circumstances, participants are not permitted to undergo independent drug or alcohol testing in lieu of being tested by trained personnel assigned to or authorized by the Drug Court.

F. Valid Specimens

Test specimens are examined routinely for evidence of dilution and adulteration.

G. Accurate and Reliable Testing Procedures

The Drug Court uses scientifically valid and reliable testing procedures and establishes a chain of custody for each specimen. If a participant denies substance use in response to a positive screening test, a portion of the same specimen is subjected to confirmatory analysis using an instrumented test, such as gas chromatography/mass spectrometry (GC/MS) or liquid chromatography/mass spectrometry (LC/MS). Barring staff expertise in toxicology, pharmacology, or a related discipline, drug or metabolite concentrations falling below industry- or manufacturer-recommended cutoff levels are not interpreted as evidence of new substance use or changes in participants' substance use patterns.

I. Participant Contract

Upon entering the Drug Court, participants receive a clear and comprehensive explanation of their rights and responsibilities related to drug and alcohol testing. This information is described in a participant contract or handbook and reviewed periodically with participants to ensure they remain cognizant of their obligations.

J. Written Policies and Staff Training

All programs shall have written drug and alcohol testing policies and procedures that address: chain of custody protocols (including direct observation of sample collection); protocols for determination of sample validity, addressing dilution, tampering and adulteration; the process of contesting a sample; and measures to ensure that all testing is scientifically reliable and valid.

Programs shall have a policy that addresses training requirements for all staff administering drug and alcohol testing.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume II, pages 26-37.

Supporting Evidence for Drug and Alcohol Testing can also be found on pages 95-106 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

VIII. Multidisciplinary Team

A. Team Composition

The Drug Court team comprises representatives from all partner agencies involved in the creation of the program, including but not limited to a judge or judicial officer, program coordinator, prosecutor, defense counsel representative, treatment representative, community supervision officer, and law enforcement officer.

B. Pre-Court Staff Meetings

Team members consistently attend pre-court staff meetings to review participant progress, determine appropriate actions to improve outcomes, and prepare for status hearings in court. Pre-court staff meetings are presumptively closed to participants and the public unless the court has a good reason for a participant to attend discussions related to that participant's case.

C. Sharing Information

Team members share information as necessary to appraise participants' progress in treatment and compliance with the conditions of the Drug Court. Partner agencies execute memoranda of understanding (MOUs) specifying what information will be shared among team members. Participants provide voluntary and informed consent permitting team members to share specified data elements relating to participants' progress in treatment and compliance with program requirements. Defense attorneys make it clear to participants and other team members whether they will share communications from participants with the Drug Court team.

D. Team Communication and Decision Making

Team members contribute relevant insights, observations, and recommendations based on their professional knowledge, training, and experience. The judge considers the perspectives of all team members before making decisions that affect participants' welfare or liberty interests and explains the rationale for such decisions to team members and participants [see Standard III, Roles and Responsibilities of the Judge].

Programs shall have written formal and informal procedures for information communication among team members that outline the frequency, timely and accurate dissemination of information. Team members shall regularly communicate with each other and the judge outside of pre-court staffing meetings. All team members shall follow confidentiality policy and procedure for all instances and means of communication.

E. Status Hearings

Team members attend status hearings on a consistent basis. During the status hearings, team members contribute relevant information or recommendations when requested by the judge or as necessary to improve outcomes or protect participants' legal interests.

F. Team Training

Before starting a Drug Court, team members attend a formal preimplementation training to learn from expert faculty about best practices in Drug Courts and develop fair and effective policies and procedures for the program. Subsequently, team members attend continuing education workshops on at least an annual basis to gain up-to-date knowledge about best practices on topics including substance use disorder and mental health treatment, complementary treatment and social services, behavior modification, community supervision, drug and alcohol testing, team decision making, and constitutional and legal issues in Drug Courts. New staff hires receive a formal orientation training on the Drug Court model and best practices in Drug Courts as soon as practicable after assuming their position and attend annual continuing education workshops thereafter.

G. Program Planning and Oversight

Initial planning and implementation shall be conducted by representatives from a wide range of agencies and disciplines. The steering committee or advisory board shall represent all aspects of the criminal justice system, treatment and ancillary service providers, funding entities, and the community at large. All programs shall have a written procedure for modifying program policies and procedures.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume II, pages 38-50.

Supporting Evidence for Multidisciplinary Team can also be found on pages 107-119 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

IX. Census and Caseloads

A. Drug Court Census

The Drug Court does not impose arbitrary restrictions on the number of participants it serves. The Drug Court census is predicated on local need, obtainable resources, and the program's ability to apply best practices. When the census reaches 125 active[8] participants, program operations are monitored carefully to ensure they remain consistent with best practice standards. If evidence suggests some operations are drifting away from best practices, the team develops a remedial action plan and timetable to rectify the deficiencies and evaluates the success of the remedial actions.

B. Supervision Caseloads

Caseloads for probation officers or other professionals responsible for community supervision of participants must permit sufficient opportunities to monitor participant performance, apply effective behavioral consequences, and report pertinent compliance information during pre-court staff meetings and status hearings. When supervision caseloads exceed 30 active participants per supervision officer, program operations are monitored carefully to ensure supervision officers can evaluate participant performance accurately, share significant observations with team members, and complete other supervisory duties as assigned. Supervision caseloads do not exceed 50 active participants per supervision officer.

C. Clinician Caseloads

Caseloads for clinicians must permit sufficient opportunities to assess participant needs and deliver adequate and effective dosages of substance use disorder treatment and indicated complementary services. Program operations are monitored carefully to ensure adequate services are delivered when caseloads exceed the following thresholds:

- 50 active participants for clinicians providing clinical case management[9]
- 40 active participants for clinicians providing individual therapy or counseling
- 30 active participants for clinicians providing both clinical case management and individual therapy or counseling

[8] Cases are considered to be active if participants are receiving treatment or supervision services from the Drug Court. Participants who have absconded from the program or are continuing on probation but no longer receiving Drug Court services are not considered active.

[9] Clinical case management includes assessing participant needs, brokering referrals for indicated services, coordinating care between partner agencies, and reporting progress information to the Drug Court team (Braude, 2005; Monchick et al., 2006; Rodriguez, 2011). Clinical case managers may also represent treatment concerns during pre-court staff meetings and status hearings. Some court personnel or criminal justice professionals may be referred to as case managers or court case managers to be distinguished from clinical case managers. Court case managers may screen participants and refer them, when indicated, for more in-depth clinical assessments. These professionals do not provide clinical case management because they are not trained or qualified to administer clinical assessments, interpret assessment results, coordinate treatment delivery, or gauge treatment progress.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume II, pages 51-58.

Supporting Evidence for Census and Caseloads can also be found on pages 120-127 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

X. Monitoring[10] and Evaluation

A. Adherence to Best Practices

The Drug Court monitors its adherence to best practice standards on at least an annual basis, develops a remedial action plan and timetable to rectify deficiencies, and examines the success of the remedial actions. Outcome evaluations describe the effectiveness of the Drug Court in the context of its adherence to best practices.

B. In-Program Outcomes

The Drug Court continually monitors participant outcomes during enrollment in the program, including attendance at scheduled appointments, drug and alcohol test results, graduation rates, lengths of stay, and in-program technical violations[11] and new arrests.

C. Criminal Recidivism

Where such information is available, new arrests, new convictions, and new incarcerations are monitored for at least three years following each participant's entry into the Drug Court. Offenses are categorized according to the level (felony, misdemeanor, or summary offense) and nature (e.g., person, property, drug, or traffic offense) of the crime involved.

D. Independent Evaluations

A skilled and independent evaluator examines the Drug Court's adherence to best practices and participant outcomes no less frequently than every five years. The Drug Court develops a remedial action plan and timetable to implement recommendations from the evaluator to improve the program's adherence to best practices.

E. Historically Discriminated Against Groups

The Drug Court continually monitors admission rates, services delivered, and outcomes achieved for members of groups that have historically experienced discrimination who are represented in the Drug Court population. The Drug Court develops a remedial action plan and timetable to correct disparities and examines the success of the remedial actions [see also Standard II, Equity and Inclusion].

F. Electronic Database

Information relating to the services provided and participants' in-program performance is entered into an electronic database. Statistical summaries from the database provide staff with real-time information concerning the Drug Court's adherence to best practices and in-program outcomes.

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[10] Herein, monitoring refers to periodic descriptions of the services delivered and outcomes achieved in a Drug Court without inferring a causal relationship between the services and outcomes. An evaluation includes a comparison condition and other scientific procedures designed to attribute outcomes to the effects of the Drug Court. Most Drug Courts are capable of monitoring their services and outcomes but may require expert consultation to evaluate the causal effects of their program.

[11] A technical violation refers to a violation of a court order that does not constitute a crime per se. For example, drinking alcohol is legal for most adults but is usually a technical violation in a Drug Court.

G. Timely and Reliable Data Entry

Staff members are required to record information concerning the provision of services and in-program outcomes within forty-eight hours of the respective events. Timely and reliable data entry is required of each staff member and is a basis for evaluating staff job performance.

H. Intent-to-Treat Analyses

Outcomes are examined for all eligible participants who entered the Drug Court regardless of whether they graduated, withdrew, or were terminated from the program.

I. Comparison Groups

Outcomes for Drug Court participants are compared to those of an unbiased and equivalent comparison group. Individuals in the comparison group satisfy legal and clinical eligibility criteria for participation in the Drug Court, but did not enter the Drug Court for reasons having no relationship to their outcomes. Comparison groups do not include individuals who refused to enter the Drug Court, withdrew or were terminated from the Drug Court, or were denied entry to the Drug Court because of their legal charges, criminal history, or clinical assessment results.

J. Time at Risk

Participants in the Drug Court and comparison groups have an equivalent opportunity to engage in conduct of interest to the evaluation, such as substance use and criminal recidivism. Outcomes for both groups are examined over an equivalent time period beginning from a comparable start date. If participants in either group were incarcerated or detained in a residential facility for a significantly longer period of time than participants in the other group, the length of time participants were detained or incarcerated is accounted for statistically in outcome comparisons.

K. Using Data and Evaluation Results to Program Manage

Programs shall use the results of independent program evaluations and regular reviews of programmatic data and performance measure reports as the basis for program change. As policy changes are made, data and performance measure reports and evaluations shall be used to examine effectiveness of the policy change and make further adjustments when necessary.

NOTE: Items in *italics* are deviations from the Adult Drug Court Best Practice Standards endorsed by the National Association of Drug Court Professionals. This standard, and the supporting evidence, can be found in the Adult Drug Court Best Practice Standards, Volume II, pages 59-74.

Supporting Evidence for Monitoring and Evaluation can also be found on pages 128-143 of this document.

Whenever Drug Court or the Drug Court team is referenced, unless otherwise noted, the standard also applies to DUI Courts and/or the DUI Court teams.

Appendix I

Supporting Evidence for Target Population

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume I, pages 6-10.

A. Objective Eligibility and Exclusion Criteria

Studies have found that the admissions process in many Drug Courts included informal or subjective selection criteria, multiple gatekeepers, and numerous opportunities for candidates to be rejected from the programs (Belenko et al., 2011). Removing subjective eligibility restrictions and applying evidence-based selection criteria significantly increases the effectiveness and cost-effectiveness of Drug Courts by allowing them to serve the most appropriate target population (Bhati et al., 2008; Sevigny et al., 2013).

Some Drug Courts may screen candidates for their *suitability* for the program based on the team's subjective impressions of the offender's motivation for change or readiness for treatment. Suitability determinations have been found to have no impact on Drug Court graduation rates or postprogram recidivism (Carey & Perkins, 2008; Rossman et al., 2011). Because they have the potential to exclude individuals from Drug Courts for reasons that are empirically invalid, subjective suitability determinations should be avoided.

B. High-Risk and High-Need Participants

A substantial body of research indicates which types of offenders are most in need of the full range of interventions embodied in the *Ten Key Components of Drug Courts* (NADCP, 1997). These are the offenders who are (1) addicted to or dependent on illicit drugs or alcohol and (2) at high risk for criminal recidivism or failure in less intensive rehabilitative dispositions. Drug Courts that focus their efforts on these individuals— commonly referred to as high-risk/high-need offenders — reduce crime approximately twice as much as those serving less serious offenders (Cissner et al., 2013; Fielding et al., 2002; Lowenkamp et al., 2005) and return approximately 50% greater cost savings to their communities (Bhati et al., 2008; Carey et al., 2008, 2012; Downey & Roman, 2010).

It may not always be feasible for Drug Courts to target high-risk and high-need offenders. To gain the cooperation of prosecutors or other stakeholders, some Drug Courts may need to begin by treating less serious offenders and then expand their eligibility criteria after they have proven the safety and effectiveness of their programs. In addition, some Drug Courts may not have statutory authorization or adequate resources to treat high-risk or high-need offenders. Under such circumstances, research indicates the programs should modify their services to provide a lower intensity of supervision, substance use disorder treatment, or both.

Otherwise, the programs risk wasting resources or making outcomes worse for some of their participants (Lowenkamp & Latessa, 2004). Providing substance use disorder treatment for nonaddicted substance users can lead to higher rates of reoffending or substance use or a greater likelihood of these individuals eventually becoming addicted (Lovins et al., 2007; Lowenkamp & Latessa, 2005; Szalavitz, 2010; Wexler et al., 2004). In particular, mixing participants with different risk or need levels together in treatment groups or residential facilities can make outcomes worse for the low-risk or low-need participants by exposing them to antisocial peers or interfering with their engagement in productive activities, such as work or school (DeMatteo et al., 2006; Lowenkamp & Latessa, 2004; McCord, 2003; Petrosino et al.,

2000). A free publication from the NDCI provides evidence-based recommendations for developing alternative tracks in Drug Courts for low-risk and low-need participants.[12]

Some evidence suggests Drug Courts may have better outcomes if they target offenders either on a pre- or postadjudication basis and do not mix these populations (Shaffer, 2006). Other studies have found no differences in outcomes regardless of whether these populations were served alone or in combination (Carey et al., 2012). It is premature to conclude whether it is appropriate to mix pre- and postadjudication populations in Drug Courts; however, Drug Courts must be mindful of the fact that the populations may differ significantly in terms of their risk or need levels. They should not be treated in the same counseling groups or residential facilities if their treatment needs or criminal propensities are significantly different.

C. Validated Eligibility Assessments

Standardized assessment tools are significantly more reliable and valid than professional judgment for predicting success in correctional supervision and matching offenders to appropriate treatment and supervision services (Andrews et al., 2006; Miller & Shutt, 2001; Wormith & Goldstone, 1984). Drug Courts that employ standardized assessment tools to determine candidates' eligibility for the program have significantly better outcomes than Drug Courts that do not use standardized tools (Shaffer, 2010).

Eligibility assessments should be performed along the dimensions of both risk and need to match offenders to appropriate levels of criminal justice supervision and treatment services, respectively (Andrews & Bonta, 2010; Casey et al., 2011; Marlowe, 2009). Most substance use screening tools are not sufficient for this purpose because they do not accurately differentiate more severe substance use disorder or addiction from lesser degrees of substance use or substance involvement (Greenfield & Hennessy, 2008; Stewart, 2009). A structured psychiatric interview is typically required to make a valid diagnosis of severe substance use disorder or addiction and thus to ensure that a Drug Court is serving the target population. Appendix A provides information on how to obtain risk and need assessment tools that have been validated for use with addicted individuals in substance use disorder treatment or the criminal justice system.

D. Criminal History Disqualifications

Some Drug Courts serve only individuals charged with drug-possession offenses or may disqualify offenders who are charged with or have a history of a serious felony. Research reveals, however, that Drug Courts yielded nearly twice the cost savings when they served addicted individuals charged with felony theft and property crimes (Carey et al., 2008, 2012). Drug Courts that served only drug-possession cases typically offset crimes that did not involve high victimization or incarceration costs, such as petty theft, drug possession, trespassing, and traffic offenses (Downey & Roman, 2010). As a result, the investment costs of the programs were not recouped by the modest cost savings that were achieved from reduced recidivism. The most cost-effective Drug Courts focused their efforts on reducing serious felony offenses that are most costly to their communities.

Mixed outcomes have been reported for violent offenders in Drug Courts. Several studies found that participants who were charged with violent crimes or had histories of violence performed as well or better than nonviolent participants in Drug Courts (Carey et al., 2008, 2012; Saum & Hiller, 2008; Saum et al., 2001). However, two meta-analyses reported significantly smaller effects for Drug Courts that admitted violent offenders (Mitchell et al., 2012; Shaffer, 2010). The most likely explanation for this discrepancy is that some of the Drug Courts might not have provided adequate services to meet the need

[12] Alternative Tracks in Adult Drug Courts: Matching Your Program to the Needs of Your Clients. Available at http://www.ndci.org/sites/default/files/nadcp/AlternativeTracksInAdultDrugCourts.pdf.

and risk levels of violent offenders. If adequate treatment and supervision are available, there is no empirical justification for routinely excluding violent offenders from participation in Drug Courts.

Although research is sparse on this point, there also appears to be no justification for routinely excluding individuals charged with drug dealing from participation in Drug Courts, providing they are drug addicted. Evidence suggests such individuals can perform as well (Marlowe et al., 2008) or better (Cissner et al., 2013) than other participants in Drug Court programs. An important factor to consider in this regard is whether the offender was dealing drugs to support an addiction or solely for purposes of financial gain. If drug dealing serves to support an addiction, the participant might be a good candidate for a Drug Court.

E. Clinical Disqualifications

Appellate cases in some jurisdictions permit Drug Courts to exclude offenders who require more intensive psychiatric or medical services than the program is capable of delivering (Meyer, 2011). Assuming, however, that adequate services are available, there is no empirical justification for excluding addicted offenders with co-occurring mental health or medical problems from participation in Drug Courts. A national study of twenty-three adult Drug Courts, called the Multisite Adult Drug Court Evaluation (MADCE), found that Drug Courts were equivalently effective for a wide range of participants regardless of their mental health conditions (Rempel et al., 2012; Zweig et al., 2012). Another study of approximately seventy Drug Courts found that programs that excluded offenders with serious mental health issues were significantly less cost-effective and had no better impact on recidivism than Drug Courts that did not exclude such individuals (Carey et al., 2012). Because mentally ill offenders are likely to cycle in and out of the criminal justice system and to utilize expensive emergency room and crisis-management resources, intervening with these individuals in Drug Courts (assuming they are drug addicted and at high risk for treatment failure) has the potential to produce substantial cost savings (Rossman et al., 2012; Skeem et al., 2011).

It is unclear how severe the mental health problems were in the above-referenced studies because psychiatric diagnoses were not reported. A Mental Health Court, Co-Occurring Disorder Court or other psychiatric specialty program might be preferable to a Drug Court for treating an individual with a major psychiatric disorder, such as a psychotic or bipolar disorder. Research does not provide a clear indication of how to make this determination. The best course of action is to carefully assess offenders along the dimensions of risk and need and match them to the most suitable programs that are available in their community. It is not justifiable to have an across-the-board exclusion from Drug Court for addicted offenders who are suffering from mental health problems or conditions.

Finally, numerous controlled studies have reported significantly better outcomes when addicted offenders received medically assisted treatments including opioid antagonist medications such as naltrexone, opioid agonist medications such as methadone, and partial agonist medications such as buprenorphine (Chandler et al., 2009; Finigan et al., 2011; National Institute of Drug Abuse, 2006). Therefore, a valid prescription for such medications should not serve as the basis for a blanket exclusion from a Drug Court (Parrino, 2002). A unanimous resolution of the NADCP Board of Directors[13] provides that Drug Courts should engage in a fact- sensitive inquiry in each case to determine whether and under what circumstances to permit the use of medically assisted treatments. This inquiry should be guided in large measure by input from physicians with expertise in addiction psychiatry or addiction medicine [see also Standard V, Substance Use Disorder Treatment].

[13] Available at http://www.nadcp.org/sites/default/files/nadcp/NADCP%20Board%20Statement%20on %20MAT.pdf.

F. Time to Program Entry

Carey et al. (2012) also found that programs in which the time between arrest and program entry was 50 days or less had a 63% greater reduction in recidivism when compared to programs in which the time between arrest and program entry was longer. A study of eighteen drug courts found that a shorter time between arrest and entry into the program was associated with lower recidivism rates and greater cost savings (Carey et al., 2008). Due to the significant public safety issue impaired driving poses, DWI courts should strive to achieve 30 days or less between arrest and program entry.

SAMHSA's Treatment Improvement Protocol 44 (Center for Substance Abuse Treatment, 2005) recommends providing screening and assessment at the earliest point possible and moving defendants into treatment as soon as possible.

References

Andrews, D.A., & Bonta, J. (2010). *The Psychology of Criminal Conduct* (5th ed.). New Providence, NJ: Anderson.

Andrews, D.A., Bonta, J., & Wormith, J.S. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency, 52*(1), 7–27.

Belenko, S., Fabrikant, N., & Wolff, N. (2011). The long road to treatment: Models of screening and admission into Drug Courts. *Criminal Justice & Behavior*, *38*(12), 1222–1243.

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

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes and costs*. Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/NIJ_Cross-site_Final_Report_0308.pdf.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review*, *8*(1), 6–42.

Carey, S.M., & Perkins, T. (2008). *Methamphetamine users in Missouri Drug Courts: Program elements associated with success* (Final report). Submitted to the Missouri Office of the State Court Administrator.

Casey, P.M., Warren, R.K., & Elek, J.K. (2011). *Using offender risk and needs assessment information at sentencing*. Williamsburg, VA: National Center for State Courts. *Available at* http://ncsc.contentdm.oclc.org/cgi-bin/showfile.exe?CISOROOT=/criminal&CISOPTR=196.

Center for Substance Abuse Treatment. (2005). *Substance Abuse Treatment for Adults in the Criminal Justice System.* Treatment Improvement Protocol (TIP) Series 44. DHHS Publication No. (SMA) 05-4056. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Chandler, R.K., Fletcher, B.W., & Volkow, N.D. (2009). Treating drug abuse and addiction in the criminal justice system: Improving public health and safety. *Journal of the American Medical Association, 301*,(2) 183–190.

Cissner, A., Rempel, M., Franklin, A.W., Roman, J.K., Bieler, S., Cohen, R., & Cadoret, C.R. (2013, March). *A statewide evaluation of New York's adult drug courts: Testing which policies work best*. Paper presented at the New York Association of Drug Treatment Court Professionals Training. *Available at* http://www.nyadtcp.org/userfiles/file/presentation/The%202012%20New%20York%20State%20Drug%20Court%20Evaluation.pdf.

DeMatteo, D.S., Marlowe, D.B., & Festinger, D.S. (2006). Secondary prevention services for clients who are low risk in drug court: A conceptual model. *Crime & Delinquency, 52*(1), 114–134.

Downey, P.M., & Roman, J.K. (2010). *A Bayesian meta-analysis of drug court cost-effectiveness*. Washington, DC: Urban Institute.

Fielding, J.E., Tye, G., Ogawa, P.L., Imam, I.J., & Long, A.M. (2002). Los Angeles County drug court programs: Initial results. *Journal of Substance Abuse Treatment, 23*(3), 217–224.

Finigan, M.W., Perkins, T., Zold-Kilbourn, P., Parks, J., & Stringer, M. (2011). Preliminary evaluation of extended-release naltrexone in Michigan and Missouri drug courts. *Journal of Substance Abuse Treatment, 41*(3), 288–293.

Greenfield, S.F., & Hennessy, G. (2008). Assessment of the patient. In M. Galanter & H.D. Kleber (Eds.)., *Textbook of substance abuse treatment* (4th ed., pp. 55–78). Washington, DC: American Psychiatric Publishing.

Lovins, L.B., Lowenkamp, C.T., Latessa, E.J., & Smith, P. (2007). Application of the risk principle to female offenders. *Journal of Contemporary Criminal Justice, 23*(4), 383–398.

Lowenkamp, C.T., Holsinger, A.M., & Latessa, E.J. (2005). Are drug courts effective: A meta-analytic review. *Journal of Community Corrections, 15*(1), 5–28.

Lowenkamp, C.T., & Latessa, E.J. (2004). Understanding the risk principle: How and why correctional interventions can harm low-risk offenders. *Topics in Community Corrections, 2004,* 3–8.

Lowenkamp, C.T., & Latessa, E.J. (2005). Increasing the effectiveness of correctional programming through the risk principle: Identifying offenders for residential placement. *Criminology & Public Policy, 4*(2), 263–290.

Marlowe, D.B. (2009). Evidence-based sentencing for drug offenders: An analysis of prognostic risks and criminogenic needs. *Chapman Journal of Criminal Justice, 1*(1), 167–201.

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

McCord, J. (2003). Cures that harm: Unanticipated outcomes of crime prevention programs. *Annals of the American Academy of Political & Social Science, 587*(1), 16–30.

Meyer, W.G. (2011). Constitutional and legal issues in drug courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 159–180). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Miller, J.M., & Shutt, J.E. (2001). Considering the need for empirically grounded drug court screening mechanisms. *Journal of Drug Issues, 31*(1), 91–106.

Mitchell, O., Wilson, D.B., Eggers, A., & MacKenzie, D.L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and nontraditional drug courts. *Journal of Criminal Justice, 40*(1), 60–71.

National Association of Drug Court Professionals (1997). *Defining drug courts: The key components* (NCJ No. 205621). Washington, DC: Author.

National Institute on Drug Abuse. (2006). *Principles of drug abuse treatment for criminal justice populations* [NIH Pub. No. 06-5316]. Bethesda, MD: Author.

Parrino, M.W. & McNicholas, L. (2002). Methadone maintenance and other pharmacotherapeutic interventions in the treatment of opioid dependence. *NDCI Drug Court Practitioner Fact Sheet 3*(1), 1–4.

Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J.O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight. *Crime & Delinquency, 46*(3), 354–379.

Rempel, M., Green, M., & Kralstein, D. (2012). The impact of adult drug courts on crime and incarceration. *Journal of Experimental Criminology, 8*(3), 165–192.

Rossman, S.B., Rempel, M., Roman, J.K., Zweig, J.M., Lindquist, C.H., Green, M., Downey, P.M., Yahner, J., Bhati, A.S., & Farole, D.J. (2011). *The multisite adult drug court evaluation: The impact of drug courts, vol. 4.* Washington, DC: Urban Institute Justice Policy Center. *Available at* https://www.ncjrs.gov/pdffiles1/nij/grants/237112.pdf.

Rossman, S.B., Willison, J.B., Mallik-Kane, K., Kim, K., Debus-Sherrill, S., & Downey, P.M. (2012). *Criminal justice interventions for offenders with mental illness: Evaluation of mental health courts in Bronx and Brooklyn, New York.* Washington, DC: Urban Institute.

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

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

Sevigny, E. L., Pollack, H. A., & Reuter, P. (2013). Can drug courts help to reduce prison and jail populations? *Annals of the American Academy of Political & Social Science, 647*, 190-212.

Shaffer, D.K. (2006). Reconsidering drug court effectiveness: A meta-analytic review (Doctoral dissertation, University of Cincinnati, 2006). *Dissertation Abstracts International*, 67, 09A (AAT No. 3231113).

Shaffer, D.K. (2010). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly, 28*(3), *493–521.*

Skeem, J.J., Manchak, S., & Peterson, J.K. (2011). Correctional policy for offenders with mental illness: Creating a new paradigm for recidivism reduction. *Law & Human Behavior, 35*(2), 110–126.

Stewart, S.H. (2009). Dependence and diagnosis. In P.M. Miller (Ed.), *Evidence-based addiction treatment* (pp. 77–88). New York: Elsevier.

Szalavitz, M. (2010, July 16). Does teen drug rehab cure addiction or create it? *Time Magazine: On-Line. Available at* http://time.com/time/printout/0,8816,2003160,00.html.

Wexler, H.K., Melnick, G., & Cao, Y. (2004). Risk and prison substance abuse treatment outcomes: A replication and challenge. *The Prison Journal, 84*(1), 106–120.

Wormith, J.S., & Goldstone, C.S. (1984). The clinical and statistical prediction of recidivism. *Criminal Justice & Behavior, 11*(1), 3–34.

Zweig, J.M., Lindquist, C., Downey, P.M., Roman, J., & Rossman, S.B. (2012). Drug court policies and practices: How program implementation affects offender substance use and criminal behavior outcomes. *Drug Court Review*, 8(1), 43–79.

Appendix II

Supporting Evidence for Equity and Inclusion

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume I, pages 12-19.

Drug Courts are first and foremost courts, and the fundamental principles of due process and equal protection apply to their operations (Meyer, 2011). Drug Courts have an affirmative legal and ethical obligation to provide equal access to their services and equivalent treatment for all individuals.

In June of 2010, the Board of Directors of the NADCP passed a unanimous resolution (hereafter minority resolution)[14] directing Drug Courts to examine whether unfair disparities exist in their programs for racial or ethnic minority[15] participants; and if so, to take reasonable corrective measures to eliminate those disparities (NADCP, 2010). The minority resolution places an affirmative obligation on Drug Courts to continually monitor whether minority participants have equal access to the programs, receive equivalent services in the programs, and successfully complete the programs at rates equivalent to nonminorities. It further instructs Drug Courts to adopt evidence-based assessment tools and clinical interventions, where they exist, that are valid and effective for use with minority participants and requires staff members to attend up-to-date training events on the provision of culturally sensitive and culturally proficient services.

The NADCP minority resolution focuses on racial and ethnic minority participants for two reasons. First, these groups are *suspect classes* pursuant to constitutional law and therefore receive heightened scrutiny and protections from the courts. Second, most of the available research on disproportionate impacts in Drug Courts has focused on African-American and Hispanic or Latino individuals because these individuals were represented in sufficient numbers in the studies for the evaluators to conduct separate analyses on their behalf. Nevertheless, the same principles of fundamental fairness apply to all groups that have experienced sustained periods of discrimination or reduced social opportunities. As a practical matter, Drug Courts can only be required to take remedial actions based on characteristics of participants that are readily observable or have been brought to the attention of the court. Such observable characteristics will typically include participants' gender, race or ethnicity.

A. Equivalent Access

Evidence suggests African-American and Hispanic or Latino individuals may be underrepresented by approximately 3% to 7% in Drug Courts. National studies have estimated that approximately 21% of Drug Court participants are African-American and 10% are Hispanic or Latino (Bureau of Justice Assistance, 2012; Huddleston & Marlowe, 2011). In contrast, approximately 28% of arrestees and probationers were African-American and approximately 13% of probationers were Hispanic or Latino. Additional research is needed to examine the representation of other groups that have historically experienced discrimination in Drug Courts.

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[14] Resolution of the Board of Directors on the Equivalent Treatment of Racial and Ethnic Minority Participants in Drug Courts, available at http://www.nadcp.org/sites/default/files/nadcp/NADCP%20Board%20Resolution%20-%20The%20Equivalent%20Treatment%20of%20Racial%20and%20Ethnic%20Minority%20Participants%20in%20Drug%20Courts%2006-01-10.pdf.

[15] The term *minority* refers here to racial or ethnic groups that historically were numerically in the minority within the U.S. population. Some of these racial or ethnic groups currently constitute a majority in certain communities and may be approaching a plurality of the U.S. population.

Some commentators have suggested that unduly restrictive eligibility criteria might be partly responsible for the lower representation of minority persons in Drug Courts (Belenko et al., 2011; O'Hear, 2009). It has been suggested, for example, that African-Americans or Hispanics may be more likely than Caucasians to have prior felony convictions or other entries in their criminal records that disqualify them from participation in Drug Court (National Association of Criminal Defense Lawyers [NACDL], 2009; O'Hear, 2009). Although there is no empirical evidence to confirm this hypothesis, Drug Courts must ensure that their eligibility criteria do not unnecessarily exclude minorities or members of groups that have historically experienced discrimination. If an eligibility criterion has the unintended impact of differentially restricting access to the Drug Court for such persons, then extra assurances are required that the criterion is necessary for the program to achieve effective outcomes or protect public safety. If less restrictive adjustments can be made to an eligibility requirement to increase the representation of members of groups that have historically experienced discrimination without jeopardizing public safety or efficacy, the Drug Court is obligated to make those adjustments. Although an unintended discriminatory impact may not always be constitutionally objectionable (Washington v. Davis, 1976), it is nevertheless inconsistent with best practices in Drug Courts and with the NADCP minority resolution.

Drug Courts cannot assume that the assessment tools they use to determine candidates' eligibility for the program—which are often validated on samples comprising predominantly Caucasian males—are valid for use with minorities, females, or members of other demographic subgroups (Burlew et al., 2011; Huey & Polo, 2008). Studies have found that women and racial or ethnic minorities interpreted test items differently than other test respondents, making the test items less valid for the women or minorities (Carle, 2009; Perez & Wish, 2011; Wu et al., 2010). Therefore, where available, Drug Courts have a responsibility to select tools that have been validated for use with members of groups that have historically experienced discrimination that are represented among the candidates for the program. If such tools do not exist, then at a minimum the Drug Court should elicit feedback from the participants about the clarity, relevance, and cultural sensitivity of the tools it is using. Ideally, the Drug Court should engage an evaluator to empirically validate the tools among the candidates for the program.

The Alcohol and Drug Abuse Institute Library at the University of Washington has an online catalog of screening and assessment tools created for use in substance use disorder treatment.[16] Each instrument can be searched for research studies, if any, that have examined its validity and reliability among women and racial or ethnic minorities.

B. Equivalent Retention

Numerous studies have reported that a significantly smaller percentage of African-American or Hispanic participants graduated successfully from Drug Court as compared to non-Hispanic Caucasians (Finigan, 2009; Marlowe, 2013). In several of the studies, the magnitude of the discrepancy was as high as 25% to 40% (Belenko, 2001; Sechrest & Shicor, 2001; Wiest et al., 2007). These findings are not universal, however. A smaller but growing number of evaluations has found no differences in outcomes or even superior outcomes for racial minorities as compared to Caucasians (Brown, 2011; Cissner et al., 2013; Fulkerson, 2012; Saum et al., 2001; Somers et al., 2012; Vito & Tewksbury, 1998). Nevertheless, African-Americans appear less likely to succeed in a plurality of Drug Courts as compared to their nonracial minority peers.

To the extent such disparities exist, evidence suggests they might not be a function of race or ethnicity per se, but rather might be explained by broader societal burdens that are often borne disproportionately by

[16] Available at http://lib.adai.washington.edu/instruments/.

minorities, such as lesser educational or employment opportunities or a greater infiltration of crack cocaine into some minority communities (Belenko, 2001; Dannerbeck et al., 2006; Fosados, et al., 2007; Hartley & Phillips, 2001; Miller & Shutt, 2001). When evaluators accounted statistically for these confounding factors, the influence of race or ethnicity disappeared (Dannerbeck et al., 2006). Interviews and focus groups conducted with racial minority participants have suggested that Drug Courts may be paying insufficient attention to employment and educational problems that are experienced disproportionately by minority participants (Cresswell & Deschenes, 2001; DeVall & Lanier, 2012; Gallagher, 2013; Leukefeld et al., 2007).

These findings require Drug Courts to determine whether racial or ethnic minorities or members of other groups that have historically experienced discrimination are experiencing poorer outcomes in their programs as compared to other participants and to investigate and remediate any disparities that are detected. One low-cost and effective strategy is to confidentially survey participants and staff members about their perceptions of disparate treatment and outcomes in the program (Casey et al., 2012; Sentencing Project, 2008). Programs that continually solicit feedback about their performance in the areas of cultural competence and cultural sensitivity learn creative ways to address the needs of their participants and produce better outcomes as a result (Szapocznik et al., 2007). Drug Courts are further encouraged to engage independent evaluators to objectively identify areas requiring improvement to meet the needs of minorities and members of other groups that have historically experienced discrimination (Carey et al., 2012; Rubio et al., 2008).

C. Equivalent Treatment

Racial and ethnic minorities often receive lesser quality treatment than nonminorities in the criminal justice system (Brocato, 2013; Janku & Yan, 2009; Fosados et al., 2007; Guerrero et al., 2013; Huey & Polo, 2008; Lawson & Lawson, 2013; Marsh et al., 2009; Schmidt et al., 2006). A commonly cited example of this phenomenon relates to California Proposition 36, the Substance Abuse and Crime Prevention Act of 2000, a statewide diversion initiative for nonviolent drug possession offenders. A several-year study of Proposition 36 (Nicosia et al., 2012; Integrated Substance Abuse Programs, 2007) found that Hispanic participants were significantly less likely than Caucasians to be placed in residential treatment for similar patterns of drug use, and African-Americans were less likely to receive medically assisted treatment for addiction. To date, no empirical studies have determined whether there are such disparities in the quality of treatment in Drug Courts. The NADCP minority resolution directs Drug Courts to remain vigilant to potential differences in the quality or intensity of services provided to minority participants and to institute corrective measures where indicated.

Drug Courts must also ensure that the treatments they provide are valid and effective for members of groups that have historically experienced discrimination in their programs. Because women and racial minorities are often underrepresented in clinical trials of addiction treatments, the treatments are frequently less beneficial for these individuals (Burlew et al., 2011; Calsyn et al., 2009). The Substance Abuse and Mental Health Services Administration (SAMHSA) maintains an internet directory of evidence-based treatments called the National Registry of Evidence-Based Programs and Practices (NREPP). The NREPP Web site may be searched specifically for interventions that have been evaluated among substantial numbers of racial and ethnic minority participants, women, and members of other groups that have historically experienced discrimination.[17]

[17] NREPP, Find an Intervention: http://www.nrepp.samhsa.gov/AdvancedSearch.aspx.

A small but growing number of treatments have been tailored specifically to meet the needs of women or racial minority participants in Drug Courts. In one study, outcomes were improved significantly for young African-American male participants when an experienced African-American clinician delivered a curriculum that addressed issues commonly confronting these young men, such as negative racial stereotypes (Vito & Tewksbury, 1998). Efforts are underway to examine the intervention used in that study—habilitation, empowerment & accountability therapy (HEAT)—in a controlled experimental study.

Substantial evidence shows that women, particularly those with histories of trauma, perform significantly better in gender-specific substance use disorder treatment groups (Dannerbeck et al., 2002; Grella, 2008; Liang & Long, 2013; Powell et al., 2012). This gender-specific approach has been demonstrated to improve outcomes for female Drug Court participants in at least one randomized controlled trial (Messina et al., 2012). Similarly, a study of approximately seventy Drug Courts found that programs offering gender-specific services reduced criminal recidivism significantly more than those that did not (Carey et al., 2012).

Studies indicate the success of culturally tailored treatments depends largely on the training and skills of the clinicians delivering the services (Castro et al., 2010; Hwang, 2006). Unless the clinicians attend comprehensive training workshops and receive ongoing supervision on how to competently deliver the interventions, outcomes are unlikely to improve for women and minority participants.

D. Equivalent Incentives and Sanctions

Some commentators have questioned whether racial or ethnic minority participants are sanctioned more severely than nonminorities in Drug Courts for comparable infractions. Anecdotal observations have been cited to support this concern (NACDL, 2009) and minority participants in at least one focus group did report feeling more likely than other participants to be ridiculed or laughed at during court sessions in response to violations (Gallagher, 2013). No empirical study, however, has borne out the assertion. To the contrary, what little research has been conducted suggests Drug Courts and other problem-solving courts appear to administer sanctions in a racially and ethnically even-handed manner (Arabia et al., 2008; Callahan et al., 2013; Frazer, 2006; Guastaferro & Daigle, 2012; Jeffries & Bond, 2012). Considerably more research is required to study this important issue in a systematic manner and in a representative range of Drug Courts. The NADCP minority resolution places an affirmative obligation on Drug Courts to continually monitor whether sanctions and incentives are being applied equivalently for minority participants and to take corrective actions if discrepancies are detected.

E. Equivalent Dispositions

Concerns have similarly been expressed that racial or ethnic minority participants might be sentenced more harshly than nonminorities for failing to complete Drug Court (Drug Policy Alliance, 2011; Justice Policy Institute, 2011; O'Hear, 2009). This is an important matter because, as discussed previously, minorities may be more likely than nonminorities to be terminated from Drug Courts. Although the matter is far from settled, evidence from at least one study suggests that participants who were terminated from Drug Court did receive harsher sentences than traditionally adjudicated defendants who were charged with comparable offenses (Bowers, 2008). There is no evidence, however, to indicate whether this practice differentially impacts minorities or members of other groups that have historically experienced discrimination. In fact, one study in Australia found that indigenous minority Drug Court participants were *less* likely than nonminorities to be sentenced to prison (Jeffries & Bond, 2012). Nevertheless, due process and equal protection require Drug Courts to remain vigilant to the possibility of sentencing disparities in their programs and to take corrective actions where indicated.

F. Team Training

One of the most significant predictors of positive outcomes for racial and ethnic minority participants in substance use disorder treatment is culturally sensitive attitudes on the part of the treatment staff, especially managers and supervisors (Ely & Thomas, 2001; Guerrero, 2010). When managerial staff value diversity and respect their clients' cultural backgrounds, the clients are retained significantly longer in treatment and services are delivered more efficiently (Guerrero & Andrews, 2011). Cultural-sensitivity training can enhance counselors' and supervisors' beliefs about the importance of diversity and the need to understand their clients' cultural backgrounds and influences (Cabaj, 2008; Westermeyer, & Dickerson, 2008).

Effective cultural-sensitivity curricula focus, in part, on identifying and examining the (often implicit or unconscious) biases that may be held by staff members about their clients (Greenwald & Banaji, 1995; Kang, 2005). Although the issue of implicit bias has not been studied in Drug Courts, it has been shown to negatively affect judicial decision-making in traditional criminal courts (Marsh, 2009; Rachlinski et al., 2009; Seamone, 2009). Cultural-sensitivity training can assist court staff to recognize and resolve prejudicial thoughts or beliefs they might hold but might not be aware of.

Merely sensitizing court staff to cultural concerns is not sufficient. Drug Courts need to go considerably further and teach staff concrete strategies to correct any problems that are identified and remediate disparities in services and outcomes. This includes teaching staff members how to apply research-based performance- monitoring procedures to identify and rectify disparate impacts (Casey et al., 2012; Rubio et al., 2008; Yu et al., 2009). One goal of cultural-sensitivity training is to underscore the importance of recognizing implicit bias; however, unless Drug Courts focus equally on finding concrete and feasible solutions to biases that are identified, little positive change is likely to occur.

References

Arabia, P.L., Fox, G., Caughie, J., Marlowe, D.B., & Festinger, D.S. (2008). Sanctioning practices in an adult felony drug court. *Drug Court Review, 6*(1), 1–31.

Belenko, S. (2001). *Research on drug courts: A critical review: 2001 update*. New York: National Center on Addiction and Substance Abuse at Columbia University.

Belenko, S., Fabrikant, N., & Wolff, N. (2011). The long road to treatment: Models of screening and admission into Drug Courts. *Criminal Justice & Behavior, 38(1)*, 1222–1243.

Bowers, J. (2008). Contraindicated drug courts. *UCLA Law Review, 55 (4)*, 783–833.

Brocato, J. (2013). The impact of acculturation, motivation, and the therapeutic alliance on treatment retention and outcomes for Hispanic drug-involved probationers. *Journal of Ethnicity in Criminal Justice, 11*, 150-180.

Brown, R. (2011). Drug court effectiveness: A matched cohort study in the Dane County Drug Treatment Court. *Journal of Offender Rehabilitation, 50*(4), 191–201.

Bureau of Justice Assistance. (2012). *Program performance report: Enhancement grantees of the Adult Drug Court Discretionary Grant Program*. Washington, DC: Author. *Available at* https://www.bja.gov/Publications/DrugCt Enhancement_PPR_06-12.pdf.

Burlew, A.K., Weekes, J.C., Montgomery, L., Feaster, D.J., Robbins, M.S. Rosa, C.L., Ruglass, L.M., Venner, K.L., & Wu, L. (2011). Conducting research with racial/ethnic minorities: Methodological lessons from the NIDA Clinical Trials Network. *American Journal of Drug & Alcohol Abuse, 37*(5), 324–332.

Cabaj, R.P. (2008). Gay men and lesbians. In M. Galanter & H.D. Kleber (Eds), *Textbook of Substance Abuse Treatment* (4th Ed.; pp. 623–638). Arlington, VA: American Psychiatric Publishing.

Callahan, L., Steadman, H.J., Tillman, S., & Vesselinov, R. (2013). A multisite study of the use of sanctions and incentives in mental health courts. *Law & Human Behavior, 37*(1), 1–9.

Calsyn, D.A., Hatch-Maillette, M., Tross, S., Doyle, S.R., Crits-Christoph, P., Song, Y.S., Harrer, J.M., Lalos, G., & Berns, S.B. (2009). Motivational and skills training HIV/STI sexual risk reduction groups for men. *Journal of Substance Abuse Treatment, 37*(1), 138–150.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of Drug Court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Carle, A.C. (2009, February). Assessing the adequacy of self-reported alcohol abuse measurement across time and ethnicity: Cross-cultural equivalence across Hispanics and Caucasians in 1992, nonequivalence in 2001–2002. *BioMed Central Public Health, 9*, 60. *Available at* http://www.biomedcentral.com/1471-2458/9/60.

Casey, P., Warren, R., Cheesman, F., & Elek, J. (2012). *Helping courts address implicit bias: Resources for education.* Williamsburg, VA: National Center for State Courts.

Castro, F.G., Barrera, M., & Steiker, L.K.H. (2010). Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology, 6*, 213–239.

Cissner, A., Rempel, M., Franklin, A.W., Roman, J.K., Bieler, S., Cohen, R., & Cadoret, C.R. (2013, March). *A statewide evaluation of New York's adult drug courts: Testing which policies work best*. Paper presented at the New York Association of Drug Treatment Court Professionals Training. *Available at http://www.nyadtcp.org/userfiles/file/presentation/The%* 202012%20New%20York%20State%20Drug%20Court%20Evaluation.pdf.

Cresswell, L.S., & Deschenes, E.P. (2001). Minority and nonminority perceptions of drug court program severity and effectiveness. *Journal of Drug Issues, 31*(1), 259–291.

Dannerbeck, A., Harris, G., Sundet, P., & Lloyd, K. (2006). Understanding and responding to racial differences in drug court outcomes. *Journal of Ethnicity in Substance Abuse, 5*(2), 1–22.

Dannerbeck, A., Sundet, P., & Lloyd, K. (2002). Drug courts: Gender differences and their implications for treatment strategies. *Corrections Compendium 27*(12), 1–26.

DeVall, K.E., & Lanier, C.L. (2012). Successful completion: An examination of factors influencing drug court completion for white and nonwhite male participants. *Substance Use & Misuse, 47*(10), 1106–1116.

Drug Policy Alliance. (2011). *Drug courts are not the answer: Toward a health-centered approach to drug use*. Los Angeles: Author.

Ely, R.J., & Thomas, D.A. (2001). The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly 46*(2), 229–273.

Finigan, M.W. (2009). Understanding racial disparities in drug courts. *Drug Court Review, 6*(2), 135–142.

Fosados, R., Evans, E., & Hser, Y. (2007). Ethnic differences in utilization of drug treatment services and outcomes among Proposition 36 offenders in California. *Journal of Substance Abuse Treatment, 33*(4), 391–399.

Frazer, M.S. (2006). *The Impact of the community court model on defendant perceptions of fairness*. New York: Center for Court Innovation.

Fulkerson, A. (2012). Drug treatment court versus probation: An examination of comparative recidivism rates. *Southwest Journal of Criminal Justice, 8*(2), 30–45.

Gallagher, J.R. (2013). African American participants' views on racial disparities in drug court outcomes. *Journal of Social Work Practice in the Addictions, 13*(2), 143–162.

Greenwald, A., & Banaji, M. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*(1), 4–27.

Grella, C. (2008). Gender-responsive drug treatment services for women: A summary of current research and recommendations for drug court programs. In C. Hardin & J.N. Kushner (Eds.), *Quality improvement for drug courts: Evidence-based practices* (Monograph Series No. 9; pp. 63–74). Alexandria, VA: National Drug Court Institute.

Guastaferro, W.P., & Daigle, L.E. (2012). Linking noncompliant behaviors and programmatic responses: The use of graduated sanctions in a felony-level drug court. *Journal of Drug Issues, 42*(4), 396–419.

Guerrero E. (2010). Managerial capacity and adoption of culturally competent practices in outpatient substance abuse treatment organizations. *Journal of Substance Abuse Treatment, 39*(4), 329–339.

Guerrero E., & Andrews C.M. (2011). Cultural competence in outpatient substance abuse treatment: Measurement and relationship to wait time and retention. *Drug & Alcohol Dependence 119*(1), 13–22.

Guerrero, E.G., Marsh, J.C., Duan, L., Oh, C., Perron, B., & Lee, B. (2013). Disparities in completion of substance abuse treatment between and within racial and ethnic groups. *Health Services Research* (Online). doi: 10.1111/1475-6773.12031

Hartley, R.E., & Phillips, R.C. (2001). Who graduates from drug courts? Correlates of client success. *American Journal of Criminal Justice, 26*(1), 107–119.

Huddleston, W., & Marlowe, D.B. (2011). *Painting the current picture: A national report on drug courts and other problem-solving court programs in the United States.* Alexandria, VA: National Drug Court Institute.

Huey, S.J., & Polo, A.J. (2008). Evidence-based psychosocial treatments for ethnic minority youth. *Journal of Clinical Child & Adolescent Psychology, 37*(1), 262–301.

Hwang, W. (2006). The psychotherapy adaptation and modification framework: Application to Asian Americans. *American Psychologist, 61*(7), 702–715.

Integrated Substance Abuse Programs. (2007, April 13). *Evaluation of the Substance Abuse and Crime Prevention Act: Final report*. Los Angeles, CA: UCLA. *Available at* http://www.uclaisap.org/Prop36/documents/SACPAEvaluationReport.pdf.

Janku, A.D., & Yan, J. (2009). Exploring patterns of court-ordered mental health services for juvenile offenders: Is there evidence of systematic bias? *Criminal Justice & Behavior, 36*(4), 402–419.

Jeffries, S., & Bond, C.E. W. (2012). Does a therapeutic court context matter? The likelihood of imprisonment for indigenous and nonindigenous offenders sentenced in problem-solving courts. *International Journal of Law, Crime & Justice, 41*(1), 100–114. *Available at* http://dx.doi.org/10.1016/j.ijlcj.2012.11.006.

Justice Policy Institute. (2011). *Addicted to courts: How a growing dependence on drug courts impacts people and communities.* Washington, DC: Author.

Kang, J. (2005). The Trojan horses of race. *Harvard Law Review, 118*(5), 1489–1593.

Lawson, W.B., & Lawson, A. (2013). Disparities in mental health diagnosis and treatment among African Americans: Implications for the correctional systems. In B. Sanders, Y. Thomas, & B. Deeds (Eds.), *Crime, HIV and health: Intersections of criminal justice and public health concerns.* New York: Springer.

Leukefeld, C., Webster, J.M., Staton-Tindall, M., & Duvall, J. (2007). Employment and work among drug court clients: 12-month outcomes. *Substance Use & Misuse, 42*(7), 1109–1126.

Liang, B., & Long, M.A. (2013). Testing the gender effect in drug and alcohol treatment: Women's participation in Tulsa County drug and DUI programs. *Journal of Drug Issues, 43*(3), 270-288.

Marlowe, D.B. (2013). Achieving racial and ethnic fairness in drug courts. *Court Review, 49*(1), 40–47.

Marsh, S. (2009, summer). The lens of implicit bias. *Juvenile & Family Justice Today, 18*, 16–19.

Marsh, J.C., Cao, D., Guerrero, E., & Shin, H.C. (2009). Need-service matching in substance abuse treatment: Racial/ethnic differences. *Evaluation & Program Planning, 32*(1), 43–51.

Messina, N., Calhoun, S., & Warda, U. (2012). Gender-responsive drug court treatment: A randomized controlled trial. *Criminal Justice & Behavior, 39*(12), 1539–1558.

Meyer, W.G. (2011). Constitutional and legal issues in drug courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 159–180). Alexandria, VA: National Drug Court Institute. Available at http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Miller, J.M., & Shutt, J.E. (2001). Considering the need for empirically grounded drug court screening mechanisms. *Journal of Drug Issues, 31*(1), 91–106.

National Association of Criminal Defense Lawyers. (2009). *America's problem-solving courts: The criminal costs of treatment and the case for reform*. Washington, DC: Author.

National Association of Drug Court Professionals (1997). *Defining drug courts: The key components* (NCJ No. 205621). Washington, DC: Author.

National Association of Drug Court Professionals. (2010). *Resolution of the board of directors on the equivalent treatment of racial and ethnic minority participants in drug courts*. Alexandria, VA: Author. *Available at* http://www.nadcp.org/learn/positions-policy-statements-and-resolutions/board-resolutions.

Nicosia, N., MacDonald, J.M., & Pacula, R.L. (2012). *Does mandatory diversion to drug treatment eliminate racial disparities in the incarceration of drug offenders? An examination of California's Proposition 36*. Cambridge, MA: National Bureau of Economic Research. *Available at* http://www.nber.org/papers/w18518.

O'Hear, M.M. (2009). Rethinking drug courts: Restorative justice as a response to racial injustice. *Stanford Law & Policy Review, 20*(2), 101–137.

Perez, D.M., & Wish, E.D. (2011). Gender differences in the validity of the Substance Abuse Subtle Screening Inventory—3 (SASSI-3) with a criminal justice population. *International Journal of Offender Therapy & Comparative Criminology, 55*(3), 476–491.

Powell, C., Stevens, S., Dolce, B.L., Sinclair, K.O., & Swenson-Smith, C. (2012). Outcomes of a trauma-informed Arizona family drug court. *Journal of Social Work Practice in the Addictions, 12*(3), 219–241.

Rachlinski, J., Johnson, S., Wistrich, A., & Guthrie, C. (2009). Does unconscious racial bias affect trial court judges? *Notre Dame Law Review, 84*(3), 1195–1246.

Rubio, D., Cheesman, F., & Webster, L. (2008). *Kentucky Drug Court statewide technical assistance project: Development of statewide adult drug court performance measures*. Denver, CO: National Center for State Courts.

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

Schmidt, L., Greenfield, T., & Mulia, N. (2006). *Unequal treatment: Racial and ethnic disparities in alcoholism treatment services*. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism. *Available at* http://pubs.niaaa.nih.gov/publications/arh291/49-54.htm.

Seamone, E. (2006). Understanding the person beneath the robe: Practical methods for neutralizing harmful judicial bias. *Willamette Law Review*, 42(1), 1–76.

Sechrest, D.K., & Shicor, D. (2001). Determinants of graduation from a day treatment drug court in California: A preliminary study. *Journal of Drug Issues, 31*(1), 129–147.

Sentencing Project. (2008). *Reducing racial disparity in the criminal justice system: A manual for practitioners and policymakers*. Washington, DC: Author.

Somers, J.M., Rezansoff, S.N., & Moniruzzaman, A. (2012). *Mediators of drug treatment court outcomes in Vancouver Canada*. British Columbia, Canada: Simon Fraser University.

Szapocznik, J., Prado, G., Burlew, A.K., Williams, R.A., & Santisteban, D.A. (2007). Drug abuse in African-American and Hispanic adolescents: Culture, development, and behavior. *Annual Review of Clinical Psychology, 3,* 77–105.

Vito, G., & Tewksbury, R. (1998). The impact of treatment: The Jefferson County (Kentucky) Drug Court program. *Federal Probation, 62*(2), 46–51.

Washington v. Davis, 426 U.S. 229 (1976).

Westermeyer, J., & Dickerson, D. (2008). Minorities. In M. Galanter & H.D. Kleber (Eds.), *Textbook of Substance Abuse Treatment* (4th Ed.; pp. 639–651). Washington, DC: American Psychiatric Publishing.

Wiest, K., Carey, S.M., Martin, S., Waller, M.S., Cox, A.A., Linhares, W., Compton, D., & Finigan, M. (2007). *Indiana drug courts: Vanderburgh County day reporting drug court, Process, outcome and cost evaluation* (Final Report). Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/Vanderburgh_Adult_Eval_Final.pdf.

Wu, L.T., Pan, J.J., Blazer, D.G., Tai, B., Stitzer, M.L., & Woody, G.E. (2010). Using a latent variable approach to inform gender and racial/ethnic differences in cocaine dependence: A National Drug Abuse Treatment Clinical Trials Network Study. *Journal of Substance Abuse Treatment, 38*(Suppl. 1), S70–S79.

Yu, J., Clark, L.P., Chandra, L., Dias, A., & Lai, T.F. (2009). Reducing cultural barriers to substance abuse treatment among Asian Americans: A case study in New York City. *Journal of Substance Abuse Treatment 37*(4), 398–406.

Appendix III

Supporting Evidence Roles and Responsibilities of the Judge

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume I, pages 22-25.

A. Professional Training

All team members in Drug Courts should attend annual training workshops on best practices in Drug Courts. The importance of training is emphasized specifically for judges because research indicates the judge exerts a unique and substantial impact on outcomes in Drug Courts (Carey et al., 2012; Jones, 2013; Jones & Kemp, 2013; Marlowe et al., 2006; Zweig et al., 2012).

Judges in Drug Courts have a professional obligation to remain abreast of legal, ethical and constitutional requirements related to Drug Court practices (Meyer, 2011; Meyer & Tauber, 2011). In addition, outcomes are significantly better when the Drug Court judge attends annual training conferences on evidence-based practices in substance use disorder and mental health treatment and community supervision (Carey et al., 2008, 2012; Shaffer, 2010). A national study of twenty-three adult Drug Courts, called the Multisite Adult Drug Court Evaluation (MADCE), found that Drug Courts produced significantly greater reductions in crime and substance use when the judges were rated by independent observers as being knowledgeable about substance use disorder treatment (Zweig et al., 2012). Similarly, a statewide study in New York reported significantly better outcomes when Drug Court judges were perceived by the participants as being open to learning about the disease of addiction (Farole & Cissner, 2007).

The increasing availability of webinars and other distance-learning programs has made it considerably more affordable and feasible for judges to stay abreast of evidence-based practices. Organizations including the NDCI, Center for Court Innovation, National Center for State Courts, and American University offer, free of charge, live and videotaped webinars on various topics related to best practices in Drug Courts. Appendix B provides further information about these webinars.

B. Length of Term

A study of approximately seventy Drug Courts found nearly three times greater cost savings and significantly lower recidivism when the judges presided over the Drug Courts for at least two consecutive years (Carey et al., 2008, 2012). Significantly greater reductions in crime were also found when the judges were assigned to the Drug Courts on a voluntary basis and their term on the Drug Court bench was indefinite in duration (Carey et al., 2012). Evidence suggests many Drug Court judges are significantly less effective at reducing crime during their first year on the Drug Court bench than during ensuing years (Finigan et al., 2007). Presumably, this is because judges, like most professionals, require time and experience to learn how to perform their jobs effectively. For this reason, annually rotating assignments appear to be contraindicated for judges in Drug Courts.

C. Consistent Docket

Drug Courts that rotated their judicial assignments or required participants to appear before alternating judges had the poorest outcomes in several research studies (Finigan et al., 2007; National Institute of Justice, 2006). Participants in Drug Courts commonly lead chaotic lives, and they often require substantial structure and consistency in order to change their maladaptive behaviors. Unstable staffing

patterns, especially when they involve the central figure of the judge, are apt to exacerbate rather than ameliorate the disorganization in participants' lives.

D. Participation in Pre-Court Staff Meetings

Studies have found that outcomes were significantly better in Drug Courts where the judges regularly attended pre-court staff meetings (Carey et al., 2008, 2012). Pre-court staff meetings are where team members share their observations and impressions about each participant's performance in the program and propose consequences for the judge to consider (McPherson & Sauder, 2013). The judge's presence at the staff meetings ensures that each team member's perspective is taken into consideration when important decisions are made in the case. Observational studies suggest that when judges do not attend pre-court staff meetings, they are less likely to be adequately informed or prepared when they interact with the participants during court hearings (Baker, 2012; Portillo et al., 2013).

E. Frequency of Status Hearings

A substantial body of experimental and quasi-experimental research establishes the importance of scheduling status hearings no less frequently than every two weeks (biweekly) during the first phase of a Drug Court. In a series of experiments, researchers randomly assigned Drug Court participants to either appear before the judge every two weeks for status hearings or to be supervised by their clinical case managers and brought into court only in response to repetitive rule violations. The results revealed that high-risk participants[18] had significantly better counseling attendance, drug abstinence, and graduation rates when they were required to appear before the judge every two weeks (Festinger et al., 2002). This finding was replicated in misdemeanor and felony Drug Courts serving urban and rural communities (Jones, 2013; Marlowe et al., 2004a, 2004b). It was subsequently confirmed in prospective matching studies in which the participants were assigned at entry to biweekly hearings if they were determined to be high risk (Marlowe et al., 2006, 2007, 2008, 2009, 2012).

Similarly, a meta-analysis involving ninety-two adult Drug Courts (Mitchell et al., 2012) and another study of nearly seventy Drug Courts (Carey et al., 2012) found significantly better outcomes for Drug Courts that scheduled status hearings every two weeks during the first phase of the program. Scheduling status hearings at least once per month until the last phase of the program was also associated with significantly better outcomes and nearly three times greater cost savings (Carey et al., 2008, 2012).

F. Length of Court Interactions

In a study of nearly seventy adult Drug Courts, outcomes were significantly better when the judges spent an average of at least three minutes, and as much as seven minutes, interacting with the participants during court sessions (Carey et al., 2008, 2012). Shorter interactions may not allow the judge sufficient time to gauge each participant's performance in the program, intervene on the participant's behalf, impress upon the participant the importance of compliance with treatment, or communicate that the participant's efforts are recognized and valued by staff.

G. Judicial Demeanor

Studies have consistently found that Drug Court participants perceived the quality of their interactions with the judge to be among the most influential factors for success in the program (Farole & Cissner, 2007; Goldkamp et al., 2002; Jones & Kemp, 2013; National Institute of Justice, 2006; Satel, 1998; Saum et al., 2002; Turner et al., 1999). The MADCE study found that significantly greater reductions in crime and substance use were produced by judges who were rated by independent observers as being more

[18] See Standard I indicating that high-risk offenders are the appropriate target population for Drug Court.

respectful, fair, attentive, enthusiastic, consistent and caring in their interactions with the participants in court (Zweig et al., 2012). Similarly, a statewide study in New York reported significantly better outcomes for judges who were perceived by the participants as being fair, sympathetic, caring, concerned, understanding and open to learning about the disease of addiction (Farole & Cissner, 2007). In contrast, outcomes were significantly poorer for judges who were perceived as being arbitrary, jumping to conclusions, or not giving participants an opportunity to explain their sides of the controversies (Farole & Cissner, 2007; Zweig et al., 2012). Program evaluations have similarly reported that supportive comments from the judge were associated with significantly better outcomes in Drug Courts (Senjo & Leip, 2001) whereas stigmatizing, hostile, or shaming comments from the judge were associated with significantly poorer outcomes (Miethe et al., 2000).

These findings are consistent with a body of research on procedural fairness or procedural justice. The results of those studies indicated that criminal defendants and other litigants were more likely to have successful outcomes and favorable attitudes towards the court system when they were treated with respect by the judge, given an opportunity to explain their sides of the controversies, and perceived the judge as being unbiased and benevolent in intent (Burke, 2010; Burke & Leben, 2007; Frazer, 2006). This in no way prevents judges from holding participants accountable for their actions, or from issuing stern warnings or punitive sanctions when they are called for. The dispositive issue is not the outcome of the judge's decision, but rather how the decision was reached and how the participant was treated during the interaction.

H. Judicial Decision Making

Due process and judicial ethics require judges to exercise independent discretion when resolving factual controversies, administering sanctions or incentives that affect a participant's fundamental liberty interests, or ordering the conditions of supervision (Meyer, 2011). A Drug Court judge may not delegate these responsibilities to other members of the Drug Court team. For example, it is not permissible for a Drug Court team to vote on what consequences to impose on a participant unless the judge considers the results of the vote to be merely advisory. Judges are, however, required to consider probative evidence or relevant information when making these determinations. Because judges are not trained to make clinical diagnoses or select treatment interventions, they ordinarily require expert input from treatment professionals to make treatment-related decisions. The collaborative nature of the Drug Court model brings together experts from several professional disciplines, including substance use disorder treatment, to share their knowledge and observations with the judge, thus enabling the judge to make rational and informed decisions (Hora & Stalcup, 2008).

References

Baker, K.M. (2012). Decision making in a hybrid organization: A case study of a southwestern drug court treatment program. *Law & Social Inquiry, 38*(1), 27–54.

Burke, K.S. (2010). Just what made drug courts successful? *New England Journal on Criminal & Civil Confinement, 36*(1), 39–58.

Burke, K., & Leben, S. (2007). Procedural fairness: A key ingredient in public satisfaction [White paper]. *Court Review, 44*, 4–24.

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes and costs*. Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/NIJ_Cross-site_Final_Report_0308.pdf.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Farole, D.J., & Cissner, A.B. (2007). Seeing eye to eye: Participant and staff perspectives on drug courts. In G. Berman, M. Rempel & R.V. Wolf (Eds.), *Documenting Results: Research on Problem-Solving Justice* (pp. 51–73). New York: Center for Court Innovation.

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

Finigan, M., Carey, S.M., & Cox, A. (2007). *The impact of a mature drug court over 10 years of operation: Recidivism and costs*. Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/10yr_STOP_Court_Analysis_Final_ Report.pdf.

Frazer, M.S. (2006). *The impact of the community court model on defendant perceptions of fairness: A case study at the Red Hook Community Justice Center*. New York: Center for Court Innovation. *Available at* http://www.courtinnovation.org/sites/default/files/Procedural_Fairness.pdf.

Goldkamp, J.S., White, M.D., & Robinson, J.B. (2002). An honest chance: Perspectives on drug courts. *Federal Sentencing Reporter, 14*(6), 369–372.

Hora, P.F., & Stalcup, T. (2008). Drug Treatment Courts in the twenty-first century: The evolution of the revolution in problem-solving courts. *Georgia Law Review, 42*(3), 717–811.

Jones, C. G. (2013). Early-phase outcomes from a randomized trial of intensive judicial supervision in an Australian drug court. *Criminal Justice & Behavior, 40*, 453-468.

Jones, C.G., & Kemp, R.I. (2013). The strength of the participant-judge relationship predicts better drug court outcomes. *Psychiatry, Psychology and Law* (Online). doi: 10.1080/13218719.2013.798392.

Marlowe, D.B. (2006). Judicial supervision of drug-abusing offenders. *Journal of Psychoactive Drugs, 38*(Suppl. 3), 323–331.

Marlowe, D.B., Festinger, D.S., Arabia, P.L., Dugosh, K.L., Benasutti, K.M., & Croft, J.R. (2009). Adaptive interventions may optimize outcomes in drug courts: A pilot study. *Current Psychiatry Reports, 11*(5), 370–376.

Marlowe, D.B., Festinger, D.S., Arabia, P.L., Dugosh, K.L., Benasutti, K.M., Croft, J.R., & McKay, J.R. (2008). Adaptive interventions in drug court: A pilot experiment. *Criminal Justice Review, 33*(3), 343–360.

Marlowe, D.B., Festinger, D.S., Dugosh, K.L., Benasutti, K.M., Fox, G. & Croft, J.R. (2012). Adaptive programming improves outcomes in drug court: An experimental trial. *Criminal Justice & Behavior, 39*(4), 514–532.

Marlowe, D.B., Festinger, D.S., Dugosh, K.L., Lee, P.A., & Benasutti, K.M. (2007). Adapting judicial supervision to the risk level of drug offenders: Discharge and six-month outcomes from a prospective matching study. *Drug & Alcohol Dependence, 88*(Suppl. 2), S4–S13.

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

Marlowe, D.B., Festinger, D.S., & Lee, P.A. (2004b). The role of judicial status hearings in drug court. In K. Knight & D. Farabee (Eds.), *Treating addicted offenders: A continuum of effective practices* (pp. 11-1–11-8). Kingston, NJ: Civic Research Institute.

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

McPherson, C. M., & Sauder, M. (2013). Logics in action: Managing institutional complexity in a drug court. *Administrative Science Quarterly, 58*(2), 165-196.

Meyer, W.G. (2011). Ethical obligations of judges in drug courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 195–215). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/publications/more-publications/-drug-court-judicial-benchbook.

Meyer, W.G., & Tauber, J. (2011). The roles and responsibilities of the drug court judge. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 45–61). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/publications/more-publications/-drug-court-judicial-benchbook.

Miethe, T.D., Lu, H., & Reese, E. (2000). Reintegrative shaming and recidivism risks in Drug Court: Explanations for some unexpected findings. *Crime & Delinquency, 46*(4), 522–541.

Mitchell, O., Wilson, D.B., Eggers, A., & MacKenzie, D.L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and nontraditional drug courts. *Journal of Criminal Justice, 40*(1), 60–71.

National Institute of Justice. (2006, June). *Drug courts: The second decade* [Special report, NCJ 211081]. Washington, DC: Office of Justice Programs, U.S. Dept. of Justice.

Portillo, S., Rudes, D.S., Viglione, J., & Nelson, M. (2013). Front-stage stars and backstage producers: The role of judges in problem-solving courts. *Victims & Offenders, 8* (1), 1–22.

Satel, S. (1998). Observational study of courtroom dynamics in selected drug courts. *National Drug Court Institute Review, 1*(1), 43–72.

Saum, C.A., Scarpitti, F.R., Butzin, C.A., Perez, V.W., Jennings, D., & Gray, A.R. (2002). Drug court participants' satisfaction with treatment and the court experience. *Drug Court Review, 4*(1), 39–83.

Senjo, S.R., & Leip, L.A. (2001). Testing and developing theory in drug court: A four-part logit model to predict program completion. *Criminal Justice Policy Review, 12*(1), 66–87.

Shaffer, D.K. (2010). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly, 28*(3), *493–521.*

Turner, S., Greenwood, P. Fain, T., & Deschenes, E. (1999). Perceptions of drug court: How offenders view ease of program completion, strengths and weaknesses, and the impact on their lives. *National Drug Court Institute Review, 2*(1), 61–85.

Zweig, J.M., Lindquist, C., Downey, P.M., Roman, J., & Rossman, S.B. (2012). Drug court policies and practices: How program implementation affects offender substance use and criminal behavior outcomes. *Drug Court Review, 8*(1), 43–79.

Appendix IV

Supporting Evidence Incentives and Sanctions

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume I, pages 29-37.

A. Advance Notice

Numerous studies reported significantly better outcomes when Drug Courts developed a coordinated sanctioning strategy that was communicated in advance to team members and participants. A national study of twenty-three adult Drug Courts, called the Multisite Adult Drug Court Evaluation (MADCE), found significantly better outcomes for Drug Courts that had a written schedule of predictable sanctions that was shared with participants and staff members (Zweig et al., 2012). Another study of approximately forty-five Drug Courts found 72% greater cost savings for Drug Courts that shared their sanctioning regimen with all team members (Carey et al., 2008a, 2012). A meta-analysis of approximately sixty studies involving seventy Drug Courts found significantly better outcomes for Drug Courts that had a formal and predictable system of sanctions (Shaffer, 2010). Finally, statewide studies of eighty-six adult Drug Courts in New York (Cissner et al., 2013) and twelve adult Drug Courts in Virginia (Cheesman & Kunkel, 2012) found significantly better outcomes for Drug Courts that provided participants with written sanctioning guidelines and followed the procedures in the guidelines.

Meta-analyses of voucher-based positive reinforcement programs have similarly reported superior outcomes for programs that communicated their policies and procedures to participants and staff members (Griffith et al., 1999; Lussier et al., 2006). To be most effective, Drug Courts should describe to participants the expectations for earning positive reinforcement and the manner in which rewards will be administered (Burdon et al., 2001; Stitzer, 2008).

Evidence from the MADCE also suggests that Drug Courts should remind participants frequently about what is expected of them in the program and the likely consequences of success or failure (Zweig et al., 2012). Significantly higher retention rates were produced in another study when staff members in Drug Courts consistently reminded participants about their responsibilities in treatment and the consequences that would ensue from graduation or termination (Young & Belenko, 2002).

Drug Courts should not, however, apply a rigid template when administering sanctions and incentives. Two of the above studies reported significantly better outcomes when the Drug Court team reserved a reasonable degree of discretion to modify a presumptive consequence in light of the facts presented in each case (Carey et al., 2012; Zweig et al., 2012). This empirical finding is consistent with legal and ethical requirements that Drug Court judges must exercise independent discretion when resolving factual controversies and imposing punitive consequences [See Standard III, Roles and Responsibilities of the Judge].

Because certainty is a critical factor in behavior modification programs (Marlowe & Kirby, 1999), discretion should generally be limited to modifying the magnitude of the consequence as opposed to withholding a consequence altogether. Drug Courts that intermittently failed to impose sanctions for infractions had significantly poorer outcomes in at least one large statewide study (Cissner et al., 2013). Withholding a consequence is appropriate only if subsequent information suggests an infraction or achievement did not in fact occur. For example, a sanction should be withheld if a participant's absence from treatment had been excused in advance by staff.

B. Opportunity to Be Heard

A substantial body of research on procedural justice or procedural fairness reveals that criminal defendants are most likely to react favorably to an adverse judgment or punitive sanction if they believe fair procedures were followed in reaching the decision. The best outcomes were achieved when defendants were (1) given a reasonable opportunity to explain their side of the dispute, (2) treated in an equivalent manner to similar people in similar circumstances and (3) accorded respect and dignity throughout the process (Burke & Leben, 2007; Frazer, 2006; Tyler, 2007).

In the MADCE study, outcomes were significantly better when participants perceived the judge as fair and when independent observers rated the judge's interactions with the participants as respectful, fair, consistent, and predictable (Rossman et al., 2011). In contrast, outcomes were significantly poorer for judges who were rated as being arbitrary or not giving participants an opportunity to explain their side of the controversy (Farole & Cissner, 2007; Rossman et al., 2011). Stigmatizing, hostile, and shaming comments from the judge have also been associated with significantly poorer outcomes in Drug Courts (Gallagher, 2013; Miethe et al., 2000).

C. Equivalent Consequences

See Commentary B above.

D. Professional Demeanor

See Commentary B above.

E. Progressive Sanctions

Sanctions are less effective at low and high magnitudes than in the intermediate range (Marlowe & Kirby, 1999; Marlowe & Wong, 2008). Sanctions that are weak in magnitude can cause *habituation* in which the individual becomes accustomed, and thus less responsive, to punishment. Sanctions that are severe in magnitude can lead to *ceiling effects* in which the program runs out of sanctions before treatment has had a chance to take effect. The most effective Drug Courts develop a wide and creative range of intermediate-magnitude sanctions that can be ratcheted upward or downward in response to participants' behaviors (Marlowe, 2007). The NDCI publishes, free of charge, lists of sanctions and incentives of varying magnitudes that have been collected from hundreds of Drug Courts around the country.[19]

Significantly better outcomes are achieved when the sanctions for failing to meet difficult goals increase progressively in magnitude over successive infractions (Harrell & Roman, 2001; Harrell et al., 1999; Hawken & Kleiman, 2009; Kilmer et al., 2012; National Institute on Drug Abuse, 2006). Providing gradually escalating sanctions for difficult goals gives treatment a chance to take effect and prepares participants to meet steadily increasing responsibilities in the program. In contrast, applying high-magnitude sanctions for failing to meet easy goals avoids habituation (Marlowe, 2011).

F. Licit Addictive or Intoxicating Substances

Consequences should be imposed for the nonmedically indicated use of intoxicating and addictive substances, including alcohol, cannabis (marijuana), and prescription medications, regardless of the licit or illicit status of the substance. Ingestion of alcohol and cannabis gives rise to further criminal activity (Bennett et al., 2008; Boden et al., 2013; Friedman et al., 2001; Pedersen & Skardhamar, 2010; Reynolds et al., 2011), precipitates relapse to other drugs (Aharonovich et al., 2005), increases the likelihood that participants will fail out of Drug Court (Sechrest & Shicor, 2001), and reduces the efficacy of rewards and

[19] List of Incentives and Sanctions, available at http://www.ndcrc.org/content/list-incentives-and-sanctions.

sanctions that are used in Drug Courts to improve participants' behaviors (Lane et al., 2004; Thompson et al., 2012). Permitting the continued use of these substances is contrary to evidence-based practices in substance use disorder treatment and interferes with the central goals of a Drug Court. The use of any addictive or intoxicating substance should be authorized only if it is determined by competent medical evidence to be medically indicated, if safe and effective alternative treatments are not reasonably available, and if the participant is carefully monitored by a physician with training in addiction psychiatry or addiction medicine. There is a serious risk of morbidity, mortality, or illegal diversion of medications when addiction medications are prescribed by general medical practitioners for addicted patients (Bazazi et al., 2011; Bohnert et al., 2011; Daniulaityte et al., 2012; Johanson et al., 2012).

G. Therapeutic Adjustments

Individuals who are addicted to alcohol or other drugs commonly experience severe cravings to use the substance and may suffer from painful or uncomfortable withdrawal symptoms when they discontinue use (American Psychiatric Association, 2000; American Society of Addiction Medicine, 2011). These symptoms often reflect neurological or neurochemical impairment in the brain (Baler & Volkow, 2006; Dackis & O'Brien, 2005; NIDA, 2006). If a Drug Court imposes substantial sanctions for substance use early in treatment, the team is likely to run out of sanctions and reach a ceiling effect before treatment has had a chance to take effect. Therefore, Drug Courts should ordinarily adjust participants' treatment requirements in response to positive drug tests during the early phases of the program. Participants might, for example, require medication, residential treatment, or motivational-enhancement therapy to improve their commitment to abstinence (Chandler et al., 2009). Because judges are not trained to make such decisions, they must rely on the expertise of duly trained clinicians when adjusting treatment conditions [see also Standard III, Roles and Responsibilities of the Judge]. After participants have received adequate treatment and have stabilized, it becomes appropriate to apply progressively escalating sanctions for illicit drug or alcohol use.

The question might arise about what to do for a participant who is complying with most of his or her obligations in the program, but is continuing to use substances over an extended period. If multiple adjustments to the treatment plan have been inadequate to initiate abstinence, it is possible the participant might not be amenable to the treatments that are available in the Drug Court. Under such circumstances, it may become necessary to discharge the participant; however, the participant should not be punished or receive an augmented sentence for trying, but failing, to respond to treatment (see subsection K below). Alternatively, the team might discover that the participant was willfully failing to apply him or herself in treatment. Under those circumstances, it would be appropriate to apply punitive sanctions for the willful failure to comply with treatment.

H. Incentivizing Productivity

Drug Courts achieve significantly better outcomes when they focus as much on incentivizing productive behaviors as they do on reducing undesirable behaviors. In the MADCE, significantly better outcomes were achieved by Drug Courts that offered higher and more consistent levels of praise and positive incentives from the judge (Zweig et al., 2012). Several other studies found that a 4:1 ratio of incentives to sanctions was associated with significantly better outcomes among drug offenders (Gendreau, 1996; Senjo & Leip, 2001; Wodahl et al., 2011). Support for the 4:1 ratio must be viewed with caution because it was derived from post hoc (after the fact) correlations rather than from controlled studies. By design, sanctions are imposed for poor performance and incentives are provided for good performance; therefore, a greater proportion of incentives might not have caused better outcomes, but rather better outcomes might have elicited a greater proportion of incentives. Nevertheless, although this correlation does not

prove causality, it does suggest that Drug Courts are more likely to be successful if they make positive incentives readily available to their participants.

It is essential to recognize that punishment and positive reinforcement serve different, but complementary, functions. Punishment is used to reduce undesirable behaviors, such as substance use and crime, whereas positive reinforcement is used to increase desirable behaviors, such as treatment attendance and employment. Therefore, they are most likely to be effective when administered in combination (DeFulio et al., 2013). The effects of punishment typically last only as long as the sanctions are forthcoming, and undesirable behaviors often return precipitously after the sanctions are withdrawn (Marlowe & Kirby, 1999; Marlowe & Wong, 2008). For this reason, Drug Courts that rely exclusively on punishment to reduce drug use and crime will rarely produce lasting gains after graduation.

Treatment gains are most likely to be sustained if positive reinforcement is used to increase participant involvement in productive activities, such as employment or recreation, which can compete against drug use and crime after graduation. Studies have revealed that Drug Courts achieved significantly greater reductions in recidivism and greater cost savings when they required their participants to have a job, enroll in school, or live in sober housing as a condition of graduation from the program (Carey et al., 2012). How high a Drug Court should set the bar for graduation depends on the level of functioning of its participants. For seriously impaired participants, finding a safe place to live might be the most that can reasonably be expected after only a year or so of treatment. Other participants, however, might be capable of obtaining a job or a GED after a year. At a minimum, Drug Courts must ensure that their participants are engaged in a sufficient level of pro-social activities to keep them stable and abstinent after they have left the structure of the Drug Court program. The community reinforcement approach (CRA; Budney et al., 1998; Godley & Godley, 2008) is one example of an evidence-based counseling intervention that Drug Courts can use to incentivize participant involvement in prosocial activities.

I. Phase Promotion

Drug Courts have significantly better outcomes when they have a clearly defined phase structure and concrete behavioral requirements for advancement through the phases (Carey et al., 2012; Shaffer, 2006; Wolfer, 2006). The purpose of phase advancement is to reward participants for their accomplishments and put them on notice that the expectations for their behavior have been raised accordingly (Marlowe, 2011). Therefore, phase advancement should be predicated on the achievement of clinically important milestones that mark substantial progress towards recovery. Phase advancement should not be based simply on the length of time that participants have been enrolled in the program.

As participants make progress in treatment, they become better equipped to resist illicit drugs and alcohol and to engage in productive activities. Therefore, as they move through the phases of the program, the consequences for infractions should increase accordingly and supervision services may be reduced. Because addiction is a chronic and relapsing medical condition (McLellan et al., 2000), treatment must be reduced only if it is determined clinically that doing so would be unlikely to precipitate a relapse. Finally, a basic tenet of behavior modification provides that the effects of treatment should be assessed continually until all components of the intervention have been withdrawn (Rusch & Kazdin, 1981). Therefore, drug and alcohol testing should be the last supervisory obligation that is lifted to ensure relapse does not occur as other treatment and supervision services are withdrawn.

Reducing treatment or supervision before participants have been stabilized sufficiently puts the participants at serious risk for relapse or other behavioral setbacks. A relapse occurring soon after a phase promotion is often a sign that services were reduced too abruptly. The appropriate course of action is to return the participant temporarily to the preceding phase and plan for a more effective phase transition.

Returning the participant to the beginning of the first phase of treatment is usually not appropriate because this may exacerbate what is referred to as the *abstinence violation effect* (AVE) (Marlatt, 1985). When addicted individuals experience a lapse after an extended period of abstinence, they may conclude, wrongly, that they have accomplished nothing in treatment and will never be successful at recovery. This counterproductive all-or-nothing thinking may put them at further risk for a full relapse or for dropping out of treatment (Collins & Lapp, 1991; Marlatt & Witkiewitz, 2005; Stephens et al., 1994). Returning the participant to the first phase of treatment could be misinterpreted as corroborating this erroneous thinking. The goal of the Drug Court should be to counteract the AVE and help the participant learn from the experience and avoid making the same mistake again.

J. Jail Sanctions

The certainty and immediacy of sanctions are far more influential to outcomes than the magnitude or severity of the sanctions (Harrell & Roman, 2001; Marlowe et al., 2005; Nagin & Pogarsky, 2011). As was noted earlier, sanctions that are too high in magnitude can lead to ceiling effects in which outcomes may become stagnant or may even be made worse.

Drug Courts are significantly more effective and cost-effective when they use jail sanctions sparingly (Carey et al., 2008b; Hepburn & Harvey, 2007). Research in Drug Courts indicates that jail sanctions produce diminishing returns after approximately three to five days (Carey et al., 2012; Hawken & Kleiman, 2009). A multisite study found that Drug Courts that had a policy of applying jail sanctions of longer than one week were associated with increased recidivism and negative cost-benefits (Carey et al., 2012). Drug Courts that relied on jail sanctions of longer than two weeks were two and a half times less effective at reducing crime and 45% less cost-effective than Drug Courts that tended to impose shorter jail sanctions.

Because jail sanctions involve the loss of a fundamental liberty interest, Drug Courts must ensure that participants receive a fair hearing on the matter (Meyer, 2011). Given that many controversies in Drug Courts involve uncomplicated questions of fact, such as whether a drug test was positive or whether the participant missed a treatment session, truncated hearings can often be held on the same day and provide adequate procedural due process protections.

K. Termination

Participants may be terminated from the Drug Court if they pose an immediate risk to public safety, are unwilling or unable to engage in treatment, or are too impaired to benefit from the treatments that are available in their community. If none of these conditions are met, then in most cases the most effective course of action will be to adjust a nonresponsive participant's treatment or supervision requirements or apply escalating sanctions.

Drug Courts have significantly poorer outcomes and are considerably less cost-effective when they terminate participants for drug or alcohol use. In a multisite study, Drug Courts that had a policy of terminating participants for positive drug tests or new arrests for drug possession offenses had 50% higher criminal recidivism and 48% lower cost savings than Drug Courts that responded to new drug use by increasing treatment or applying sanctions of lesser severity (Carey et al., 2012). The results of another meta-analysis similarly revealed significantly poorer outcomes for Drug Courts that had a policy of terminating participants for positive drug tests (Shaffer, 2010). Because termination from Drug Court for continued substance use is costly and does not improve outcomes, participants should be terminated only when necessary to protect public safety or if continued efforts at treatment are unlikely to be successful.

If a participant is terminated from Drug Court because adequate treatment was unavailable to meet his or her clinical needs, fairness dictates the participant should receive credit for the efforts in the program and should not receive an augmented sentence or disposition for the unsuccessful termination. To do otherwise is likely to dissuade addicted offenders and their defense attorneys from choosing the Drug Court option. Defense attorneys are understandably reluctant to advise their clients to enter Drug Court when there is a serious risk their client could receive an enhanced sentence despite his or her best efforts in treatment (Bowers, 2007; Justice Policy Institute, 2011; National Association of Criminal Defense Lawyers, 2009).

L. Consequences of Graduation and Termination

Studies consistently find that Drug Courts have better outcomes when they exert *leverage* over their participants, meaning the participants can avoid a serious sentence or disposition if they complete the program (Cissner et al., 2013; Goldkamp et al., 2001; Longshore et al., 2001; Mitchell et al., 2012; Rempel & DeStefano, 2001; Rossman et al., 2011; Shaffer, 2010; Young & Belenko, 2002). Conversely, outcomes are typically poor if minimal consequences are enacted for withdrawing from or failing to complete the program (Cissner et al., 2013; Burns & Peyrot, 2008; Carey et al., 2008b; Gottfredson et al., 2003; Rempel & DeStefano, 2001; Rossman et al., 2011; Young & Belenko, 2002). If it is the policy of a Drug Court to resume traditional legal proceedings as if terminated participants had never attempted Drug Court, the odds are substantially diminished that the program will be successful.

Legal precedent and empirical research offer little guidance for deciding when to impose more than the presumptive sentence for the underlying offense if an offender fails a diversion program such as a Drug Court. At a minimum, participants and their legal counsel must be informed of the possibility that an augmented sentence could be imposed when they execute a waiver to enter the Drug Court (Meyer, 2011). Drug Courts should make every effort to spell out in the waiver agreement what factors the judge is likely to take into account when deciding whether to augment the presumptive sentence if a participant is terminated or withdraws from the program.

M. Graduation Requirements

1. Period of Time Abstinent Prior to Program Exit In a study of 69 drug courts, programs in which participants were required to have at least 90 days of negative drug tests prior to successfully exiting the program had 164% greater reduction in recidivism and 50% greater cost savings than programs that required fewer days clean (Carey et al., 2012).

2. Stable and Pro-social Activities and Environment Carey et al. (2012) also found that programs which require participants to have sober housing prior to graduation have 48% greater cost savings than programs which do not. In addition, programs which require participants to have a job or be in school prior to graduation have an 83% greater cost-savings than programs that do not. Andrews and Bonta (2010), when defining their new widely applied Risk-Needs-Responsivity (RNR) model identified "pro-social recreational activities" as a criminogenic need that, if not met, is associated, if weakly, with recidivism.

3. Written Long-Term Recovery Plan The provision of after care services is associated with reduced recidivism (Van Voorhis & Hurst, 2000). In a random-assignment study of 453 veterans receiving substance abuse treatment, Seigal et al. (2002) found that engagement in aftercare with continued supervision and case management after completing treatment significantly reduced negative behavior.

References

Aharonovich, E., Liu, X., Samet, S., Nunes, E., Waxman, R., & Hasin, D. (2005). Postdischarge cannabis use and its relationship to cocaine, alcohol, and heroin use: A prospective study. *American Journal of Psychiatry, 162*(8), 1507–1514.

Andrews, D. A., & Bonta, J. (2010). The psychology of criminal conduct (5th ed.). Newark, NJ: LexisNexis/Matthew Bender.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disor*ders (4th ed., text rev.). Washington, DC: American Psychiatric Press.

American Society of Addiction Medicine. (2011). *Public policy statement: Definition of addiction*. *Available at* http://www.asam.org/for-the-public/definition-of-addiction.

Baler, R.D., & Volkow, N.D. (2006). Drug addiction: The neurobiology of disrupted self-control. *Trends in Molecular Medicine, 12*(12), 559–566.

Bazazi, A.R., Yokell, M., Fu, J.J., Rich, J.S., & Zaller, N.D. (2011). Illicit use of buprenorphine/naloxone among injecting and noninjecting opioid users. *Journal of Addiction Medicine, 5*(3), 175–180.

Bennett, T., Holloway, K., & Farrington, D. (2008). The statistical association between drug misuse and crime: A meta-analysis. *Aggression & Violent Behavior, 13*(2), 107–118.

Boden, J.M., Fergusson, D.M., & Horwood, L.J. (2013). Alcohol misuse and criminal offending: Findings from a 30-year longitudinal study. *Drug & Alcohol Dependence, 128*(1–2), 30–36.

Bohnert, A.S., Valenstein, M., Bair, M.J., Ganoczy, D., McCarthy, J.F., Ilgen, M.A., & Blow, F.C. (2011). Association between opioid prescribing patterns and opioid overdose-related deaths. *Journal of the American Medical Association, 305*(13), 1315-1321.

Bowers, J. (2007). Contraindicated drug courts. *UCLA Law Review, 55*, 783-831.

Budney, A.J., Higgins, S.T., Mercer, D.E., & Carpenter, G. (1998). *A community reinforcement approach: Treating cocaine addiction* [NIH Pub. No. 98-4309]. In series *Therapy manuals for drug abuse: Manual 2.* Rockville, MD: National Institute on Drug Abuse. *Available at* http://archives.drugabuse.gov/TXManuals/CRA/CRA1.html.

Burdon, William M., John M. Roll, Michael L. Prendergast, & Richard A. Rawson. (2001). Drug courts and contingency management. *Journal of Drug Issues, 31*(1), 73–90.

Burke, K., & Leben, S. (2007). Procedural fairness: A key ingredient in public satisfaction [White paper]. *Court Review, 44*(1–2), 4–25.

Burns, S.L., & Peyrot, M. (2008). Reclaiming discretion: Judicial sanctioning strategy in court-supervised drug treatment. *Journal of Contemporary Ethnography, 37*(6), 720–744.

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008a). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes and costs*. Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/NIJ_Cross-site_Final_Report_0308.pdf.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of Drug Court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Carey, S.M., Pukstas, K., Waller, M.S., Mackin, R.J., & Finigan, M.W. (2008b). *Drug courts and state mandated drug treatment programs: Outcomes, costs and consequences*. Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/Prop36_Drug_Court_Executive_Summary_0308.pdf.

Chandler, R.K., Fletcher, B.W., & Volkow, N.D. (2009). Treating drug abuse and addiction in the criminal justice system: Improving public health and safety. *Journal of the American Medical Association, 301*(2), 183–190.

Cheesman, F.L., & Kunkel, T.L. (2012). *Virginia Adult Drug Treatment Courts: Cost benefit analysis*. Williamsburg, VA: National Center for State Courts.

Cissner, A., Rempel, M., Franklin, A.W., Roman, J.K., Bieler, S., Cohen, R., & Cadoret, C.R. (2013, March). *A statewide evaluation of New York's adult drug courts: Testing which policies work best*. Paper presented at the New York Association of Drug Treatment Court Professionals Training. *Available at* http://www.nyadtcp.org/userfiles/file/presentation/The%202012%20New%20York%20State%20Drug%20Court%20Evaluation.pdf.

Collins, L.R., & Lapp, W.M. (1991). Restraint and attributions: Evidence of the abstinence violation effect in alcohol consumption. *Cognitive Therapy & Research, 15*(1), 69–84.

Dackis, C., & O'Brien, C. (2005). Neurobiology of addiction: Treatment and public policy ramifications. *Nature Neuroscience, 8*(11), 1431–1436.

Daniulaityte, R., Falck, R., & Carlson, R. G. (2012). Illicit use of buprenorphine in a community sample of young adult non-medical users of pharmaceutical opioids. *Drug and Alcohol Dependence, 122*(3), 201–207.

DeFulio, A., Stitzer, M., Roll, J., Petry, N., Nuzzo, P., Schwartz, R.P., & Stabile, P. (2013). Criminal justice referral and incentives in outpatient substance abuse treatment. *Journal of Substance Abuse Treatment, 45*(1), 70–75.

Farole, D.J., & Cissner, A.B. (2007). Seeing eye to eye: Participant and staff perspectives on drug courts. In G. Berman, M. Rempel & R.V. Wolf (Eds.), *Documenting Results: Research on Problem-Solving Justice* (pp. 51–73). New York: Center for Court Innovation.

Frazer, M.S. (2006). *The impact of the community court model on defendant perceptions of fairness: A case study at the Red Hook Community Justice Center.* New York: Center for Court Innovation. *Available at* http://www.courtinnovation.org/sites/default/files/Procedural_Fairness.pdf.

Friedman, A.S., Glassman, K., & Terras, A. (2001). Violent behavior as related to use of marijuana and other drugs. *Journal of Addictive Diseases, 20*(1), 49–72.

Gallagher, J.R. (2013). African American participants' views on racial disparities in drug court outcomes. *Journal of Social Work Practice in the Addictions, 13*(2), 143–162.

Gendreau, P. (1996). The principles of effective intervention with offenders. In A. Harland (Ed.), *Choosing correctional options that work* (pp. 117–130). Thousand Oaks, CA: Sage.

Godley, M.D., & Godley, S.H. (2008). *Adolescent Community Reinforcement Approach (A-CRA). Available at* http://nrepp.samhsa.gov/ViewIntervention.aspx?id=41.

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

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

Griffith, J.D., Rowan-Szal, G.A., Roark, R.R., & Simpson, D.D. (1999). Contingency management in outpatient methadone treatment: A meta-analysis. *Drug & Alcohol Dependence, 58*(1), 55–66.

Harrell, A., Cavanagh, S., & Roman, J. (1999). *Findings From the Evaluation of the D.C. Superior Court Drug Intervention Program: Final Report.* Washington, DC: The Urban Institute.

Harrell, A., & Roman, J. (2001). Reducing drug use and crime among offenders: The impact of graduated sanctions. *Journal of Drug Issues, 31*(1), 207–231.

Hawken, A., & Kleiman, M. (2009). *Managing drug involved probationers with swift and certain sanctions: Evaluating Hawaii's HOPE* (NCJRS No. 229023). Washington, DC: National Institute of Justice. *Available at* http://www.ncjrs.gov/pdffiles1/nij/grants/229023.pdf.

Hepburn, J.R., & Harvey, A.N. (2007). The effect of the threat of legal sanction on program retention and completion: Is that why they stay in drug court?. *Crime & Delinquency, 53*(2), 255–280.

Johanson, C., Arfken, C. L., di Menza, S., & Schuster, C. R. (2012). Diversion and abuse of buprenorphine: Findings from national surveys of treatment patients and physicians. *Drug and Alcohol Dependence, 120*(1), 190–195.

Justice Policy Institute. (2011). *Addicted to courts: How a growing dependence on drug courts impacts people and communities.* Washington, DC: Author.

Kilmer, B., Nicosia, N., Heaton, P., & Midgette, G. (2012). Efficacy of frequent monitoring with swift, certain, and modest sanctions for violations: Insights from South Dakota's 24/7 Sobriety Project. *American Journal of Public Health, 103*(1), e37–e43.

Lane, S.D., Cherek, D.R., Pietras, C.J., & Tcheremissine, O.V. (2004). Acute marijuana effects on response–reinforcer relations under multiple variable-interval schedules. *Behavioural Pharmacology, 15*(4), 305–309.

Longshore, D.L., Turner, S., Wenzel, S.L., Morral, A.R., Harrell, A., McBride, D., Deschenes, E., & Iguchi, M.Y. (2001). Drug Courts: A conceptual framework. *Journal of Drug Issues 31*(1), 7–25.

Lussier, J.P., Heil, S.H., Mongeon, J.A., Badger, G.J., & Higgins, S.T. (2006). A meta-analysis of voucher-based reinforcement therapy for substance use disorders. *Addiction, 101*(2), 192–203.

Marlatt, G.A. (1985). Cognitive factors in the relapse process. In G. A. Marlatt & J. R. Gordon (Eds.), *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors* (pp. 128-200). New York: Guilford.

Marlatt, G.A., & Witkiewitz, K. (2005). Relapse prevention for alcohol and drug problems. In G. A. Marlatt & D. M. Donovan (Eds.), *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors* (2nd ed.; pp. 1-44). New York: Guilford.

Marlowe, D.B. (2007). Strategies for administering rewards and sanctions. In J.E. Lessenger & G.F. Roper (Eds.), *Drug courts: A new approach to treatment and rehabilitation* (pp. 317–336). New York: Springer.

Marlowe, D.B. (2011). Applying incentives and sanctions. In B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp.139–157). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Marlowe, D.B., Festinger, D.S., Foltz, C., Lee, P.A., & Patapis, N.S. (2005). Perceived deterrence and outcomes in drug court. *Behavioral Sciences & the Law, 23*(2), 183–198.

Marlowe, D.B., & Kirby, K.C. (1999). Effective use of sanctions in drug courts: Lessons from behavioral research. *National Drug Court Institute Review, 2*(1), 1–31.

Marlowe, D.B., & Wong, C.J. (2008). Contingency management in adult criminal drug courts. In S.T. Higgins, K. Silverman, & S.H. Heil (Eds.), *Contingency management in substance abuse treatment* (pp. 334–354). New York: Guilford Press.

McLellan, A. T., Lewis, D. L., O'Brien, C. P., & Kleber, H. D. (2000). Drug dependence, a chronic medical illness: Implications for treatment, insurance, and outcomes evaluation. *Journal of the American Medical Association, 284*, 1689-1695.

Meyer, W.G. (2011). Constitutional and legal issues in drug courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 159–180). Alexandria, VA: National Drug Court Institute. Available at http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Miethe, T.D., Lu, H., & Reese, E. (2000). Reintegrative shaming and recidivism risks in Drug Court: Explanations for some unexpected findings. *Crime & Delinquency, 46*(4), 522–541.

Mitchell, O., Wilson, D.B., Eggers, A., & MacKenzie, D.L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and nontraditional drug courts. *Journal of Criminal Justice, 40*(1), 60–71.

Nagin, D.S., & Pogarsky, G. (2001). Integrating celerity, impulsivity, and extralegal sanction threats into a general deterrence: Theory and evidence. *Criminology, 39*(4), 865–892.

National Association of Criminal Defense Lawyers. (2009). *America's problem-solving courts: The criminal costs of treatment and the case for reform*. Washington, DC: Author.

National Institute on Drug Abuse. (2006). *Principles of drug abuse treatment for criminal justice populations* (NIH Pub. No. 06–5316). Bethesda, MD: Author.

Pedersen, W., & Skardhamar, T. (2010). Cannabis and crime: Findings from a longitudinal study. *Addiction, 105*(1), 109–118.

Rempel, M., & DeStefano, C.D. (2001). Predictors of engagement in court-mandated treatment: Findings at the Brooklyn Treatment Court, 1996–2000. *Journal of Offender Rehabilitation, 33*(4), 87–124.

Reynolds, M.D., Tarter, R.E., Kirisci, L., & Clark, D.B. (2011). Marijuana but not alcohol use during adolescence mediates the association between transmissible risk for substance use disorder and number of lifetime violent offenses. *Journal of Criminal Justice,* 39(3), 218-223.

Rossman, S.B., Rempel, M., Roman, J.K., Zweig, J.M., Lindquist, C.H., Green, M., Downey, P.M., Yahner, J., Bhati, A.S., & Farole, D.J. (2011). *The multisite adult drug court evaluation: The impact of drug courts, vol. 4.* Washington, DC: Urban Institute Justice Policy Center. *Available at* https://www.ncjrs.gov/pdffiles1/nij/grants/237112.pdf.

Rusch, F.R., & Kazdin, A.E. (1981). Toward a methodology of withdrawal designs for the assessment of response maintenance. *Journal of Applied Behavior Analysis, 14*(2), 131–140.

Sechrest, D.K., & Shicor, D. (2001). Determinants of graduation from a day treatment drug court in California: A preliminary study. *Journal of Drug Issues, 31*, 129–147.

Seigal, H.A.; Li, Li; Rapp, R.C. (2002). Case management as therapeutic enhancement. Journal of Addictive Diseases, 21(4): 37-46.

Senjo, S.R., & Leip, L.A. (2001). Testing and developing theory in Drug Court: A four-part logit model to predict program completion. *Criminal Justice Policy Review, 12*(1), 66–87.

Shaffer, D.K. (2006). Reconsidering drug court effectiveness: A meta-analytic review (Doctoral dissertation, University of Cincinnati, 2006). *Dissertation Abstracts International*, 67, 09A (AAT No. 3231113).

Shaffer, D.K. (2010). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly, 28*(3), 493–521.

Stephens, R.S., Curtin, L., Simpson, E. E., & Roffman, R.A. (1994). Testing the abstinence violation effect construct with marijuana cessation. *Addictive Behaviors, 19*(1), 23–32.

Stitzer, M.L. (2008). Motivational incentives in drug courts. In C. Hardin & J.N. Kushner (Eds.), *Quality improvement for drug courts: Evidence-based practices* (pp. 97–105). Alexandria, VA: National Drug Court Institute.

Thompson, L.L., Claus, E.D., Mikulich-Gilbertson, S.K., Banich, M.T., Crowley, T., Krmpotich, T., Miller, D., & Tanabe, J. (2012). Negative reinforcement learning is affected in substance dependence. *Drug & Alcohol Dependence, 123*(1), 84–90.

Tyler, T.R. (2007). Procedural justice and the courts. *Court Review, 44* (1–2), 26–31.

Van Voorhis, P. & G. Hurst (2000). Treating substance abuse in offender populations. In P. Van Voorhis, M. Braswell, M., & D. Lester (eds.) Correctional Counseling and Rehabilitation, 4th Edition, Cincinnati: Anderson, pp. 265-288.

Wodahl, E.J., Garland, B., Culhane, S.E., & McCarty, W.P. (2011). Utilizing behavioral interventions to improve supervision outcomes in community-based corrections. *Criminal Justice & Behavior, 38*(4), 386–405.

Wolfer, L. (2006). Graduates speak: A qualitative exploration of drug court graduates' views of the strengths and weaknesses of the program. *Contemporary Drug Problems, 33*(2), 303–320.

Young, D., & Belenko, S. (2002). Program retention and perceived coercion in three models of mandatory drug treatment. *Journal of Drug Issues*, 22(1), 297–328.

Zweig, J.M., Lindquist, C., Downey, P.M., Roman, J., & Rossman, S.B. (2012). Drug court policies and practices: How program implementation affects offender substance use and criminal behavior outcomes. *Drug Court Review, 8*(1), 43–79.

Appendix V

Supporting Evidence Substance Use Disorder Treatment

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume I, pages 40-53.

A. Continuum of Care

Outcomes are significantly better in Drug Courts that offer a continuum of care for substance use disorder treatment which includes residential treatment and recovery housing in addition to outpatient treatment (Carey et al., 2012; Koob et al., 2011; McKee, 2010). Participants who are placed initially in residential treatment should be stepped down gradually to day treatment or intensive outpatient treatment and subsequently to outpatient treatment (Krebs et al., 2009). Moving patients directly from residential treatment to a low frequency of standard outpatient treatment has been associated with poor outcomes in substance use disorder treatment studies (McKay, 2009a; Weiss et al., 2008). Broadly speaking, standard outpatient treatment is typically less than nine hours per week of services, intensive outpatient treatment is typically between nine and nineteen hours, and day treatment is typically over twenty hours but does not include overnight stays (Mee-Lee & Gastfriend, 2008).

Significantly better results are achieved when patients with substance use disorder are assigned to a level of care based on a standardized assessment of their treatment needs as opposed to relying on professional judgment or discretion (Andrews & Bonta, 2010; Babor & Del Boca, 2002; Karno & Longabaugh, 2007; Vieira et al., 2009). The most commonly used placement criteria are the *American Society of Addiction Medicine Patient Placement Criteria for the Treatment of Substance-Related Disorders* (ASAM-PPC; Mee- Lee et al., 2001). Studies have confirmed that patients who received the indicated level of care according to the ASAM-PPC had significantly higher treatment completion rates and fewer instances of relapse to substance use than patients who received a lower level of care than was indicated by the ASAM-PPC (for example, patients who received outpatient treatment when the ASAM-PPC indicated a need for residential treatment; De Leon et al., 2010; Gastfriend et al., 2000; Gregoire, 2000; Magura et al., 2003; Mee-Lee & Gastfriend, 2008). Patients who received a higher level of care than was indicated by the ASAM-PPC had equivalent or worse outcomes than those receiving the indicated level of care, and the programs were rarely cost-effective (Magura et al., 2003).

In the criminal justice system, mismatching offenders to a higher level of care than they require has been associated frequently with negative or iatrogenic effects in which outcomes were made worse. In several studies, offenders who received residential treatment when a lower level of care would have sufficed had significantly higher rates of treatment failure and criminal recidivism than offenders with comparable needs who were assigned to outpatient treatment (Lovins et al., 2007; Lowenkamp & Latessa, 2005; Wexler et al., 2004). The negative impact of receiving an excessive level of care appears to be most pronounced for offenders below the age of twenty-five years, perhaps because youthful offenders are more vulnerable to antisocial peer influences (DeMatteo et al., 2006; Lowenkamp & Latessa, 2004; McCord, 2003; Petrosino et al., 2000; Szalavitz, 2010). Particular caution is required, therefore, to ensure younger Drug Court participants are not placed erroneously into residential substance use disorder treatment.

As was discussed earlier, evidence suggests racial and ethnic minority offenders may be more likely than nonminorities to receive a lower level of care than is warranted from their assessment results (Integrated

Substance Abuse Programs, 2007; Janku & Yan, 2009). To prevent this from occurring in Drug Courts, a unanimous resolution of the NADCP Board of Directors requires Drug Courts to monitor whether minorities and members of other groups that have historically experienced discrimination are receiving services equivalent to other participants in the program and to take remedial measures, where indicated, to correct any discrepancies [see Standard II, Equity and Inclusion].

Some Drug Courts may begin all participants in the same level of care, or may routinely taper down the level of care as participants move through the phases of the program. The research cited above shows clearly that such practices are not justified on the bases of clinical necessity or cost. Participants should not be assigned to a level of care without first confirming through a standardized and validated assessment that their clinical needs warrant that level of care.

If a Drug Court is unable to provide adequate levels of care to meet the needs of addicted individuals, then the program might consider adjusting its eligibility criteria to serve a less clinically disordered population, such as offenders who use but are not addicted to drugs or alcohol. At a minimum, participants should not be punished for failing to respond to a level of care that research indicates is insufficient to meet their treatment needs. If a participant is terminated from Drug Court for failing to respond to an inadequate level of treatment, fairness dictates the participant should receive credit for his or her efforts in the program and should not receive an augmented sentence or disposition for the unsuccessful termination. To do otherwise is likely to dissuade addicted offenders and their defense attorneys from choosing the Drug Court option. As was noted earlier, evidence suggests defense attorneys are reluctant to advise their clients to enter Drug Court when there is a serious chance the client could receive an enhanced sentence despite his or her best efforts in treatment (Bowers, 2007; Justice Policy Institute, 2011; National Association of Criminal Defense Lawyers, 2009).

B. In-Custody Treatment

Relying on in-custody substance use disorder treatment can reduce the cost-effectiveness of a Drug Court by as much as 45% (Carey et al., 2012). Most studies have reported minimal gains from providing substance use disorder treatment within jails or prisons (Pearson & Lipton, 1999; Pelissier et al., 2007; Wilson & Davis, 2006). Although specific types of in-custody programs, such as therapeutic communities (TCs), have been shown to improve outcomes for jail or prison inmates (Mitchell et al., 2007), most of the benefits of those programs were attributable to the fact that they increased the likelihood the offenders would complete outpatient treatment after their release from custody (Bahr et al., 2012; Martin et al., 1999; Wexler et al., 1999). The long-term benefits of the TCs were accounted for primarily by the offender's subsequent exposure to community-based treatment. Once an offender has engaged in community-based treatment, rarely will there be a clinical rationale for transferring him or her to in-custody treatment. Placing a participant in custody might be appropriate to protect public safety or to punish willful infractions such as intentionally failing to attend treatment sessions; however, in-custody treatment will rarely serve the goals of treatment effectiveness or cost-effectiveness.

Some Drug Courts may place participants in jail as a means of providing detoxification services or to keep them "off the streets" when adequate treatment is unavailable in the community. Although this practice may be necessary in rare instances to protect participants from immediate self-harm, it is inconsistent with best practices, unduly costly, and unlikely to produce lasting benefits. As soon as a treatment slot becomes available, the participant should be released immediately from custody and transferred to the appropriate level of care in the community.

C. Team Representation

Outcomes are significantly better in Drug Courts that rely on one or two primary treatment agencies to manage the provision of treatment services for participants (Carey et al., 2008, 2012; Shaffer, 2006; Wilson et al., 2006). Criminal recidivism may be reduced by as much as two-fold when representatives from these primary agencies are core members of the Drug Court team and regularly attend staff meetings and court hearings (Carey et al., 2012). This arrangement helps to ensure that timely information about participants' progress in treatment is communicated to the Drug Court team and treatment-related issues are taken into consideration when decisions are reached in staff meetings and status hearings.

For practical reasons, large numbers of treatment providers cannot attend staff meetings and court hearings on a routine basis. Therefore, for Drug Courts that are affiliated with large numbers of treatment agencies, communication protocols must be established to ensure timely treatment information is reported to the Drug Court team. Clinical case managers from the primary treatment agencies are often responsible for ensuring that this process runs efficiently and timely information is conveyed to fellow team members. Particularly when Drug Courts are affiliated with large numbers of treatment providers, outcomes may be enhanced by having those treatment providers communicate frequently with the court via e-mail or similar electronic means (Carey et al., 2012).

D. Treatment Dosage and Duration

The success of Drug Courts is attributable, in part, to the fact that they significantly increase participant exposure to substance use disorder treatment (Gottfredson et al., 2007; Lindquist et al., 2009). The longer participants remain in treatment and the more sessions they attend, the better their outcomes (Banks & Gottfredson, 2003; Gottfredson et al., 2007; Gottfredson et al., 2008; Peters et al., 2002; Shaffer, 2010; Taxman & Bouffard, 2005). The best outcomes are achieved when addicted offenders complete a course of treatment extending over approximately nine to twelve months (270 to 360 days; Peters et al., 2002; Huebner & Cobbina, 2007).[20] On average, participants will require approximately six to ten hours of counseling per week during the first phase of the program (Landenberger & Lipsey, 2005) and 200 hours of counseling over the course of treatment (Bourgon & Armstrong, 2005; Sperber et al., 2013).[21] The most effective Drug Courts publish general guidelines concerning the anticipated length and dosage of treatment; however, they retain sufficient flexibility to accommodate individual differences in each participant's response to treatment (Carey et al., 2012).

E. Treatment Modalities

Outcomes are significantly better in Drug Courts that require participants to meet with a treatment provider or clinical case manager for at least one individual session per week during the first phase of the program (Carey et al., 2012; Rossman et al., 2011). Most participants are unstable clinically and in a state of crisis when they first enter a Drug Court. Group sessions may not provide sufficient time and opportunities to address each participant's clinical and social service needs. Individual sessions reduce the likelihood that participants will fall through the cracks during the early stages of treatment when they are most vulnerable to cravings, withdrawal symptoms, and relapse.

Group counseling may also improve outcomes in Drug Courts, but only if the groups apply evidence-based practices and participants are screened for their suitability for group-based services. Research

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[20] This is a separate matter from the average term of enrollment in a Drug Court, which evidence suggests should be approximately twelve to eighteen months (Cary et al., 2012; Shaffer, 2010).

[21] This assumes the Drug Court is treating individuals who are addicted to drugs or alcohol and at high risk for criminal recidivism or treatment failure [see Standard I, Target Population].

indicates counseling groups are most effective with six to twelve participants and two facilitators (Brabender, 2002; Sobell & Sobell, 2011; Velasquez et al., 2001; Yalom, 2005). Groups with more than twelve members have fewer verbal interactions, spend insufficient time addressing individual members' concerns, are more likely to fragment into disruptive cliques or subgroups, and are more likely to be dominated by antisocial, forceful or aggressive members (Brabender, 2002; Yalom, 2005). Groups with fewer than four members commonly experience excessive attrition and instability (Yalom, 2005). If a Drug Court cannot form stable groups with at least four members, relying on individual counseling rather than groups to deliver treatment services may be preferable.

For groups that are treating externalizing or acting-out behaviors, such as crime and substance use, two facilitators are often needed to monitor and control the group interactions (Sobell & Sobell, 2011). The main facilitator can direct the format and flow of the sessions, while the cofacilitator may set limits on disruptive participants, review participants' homework assignments, or take part in role-plays such as illustrating effective drug-refusal strategies. Although the main facilitator should be a trained and certified treatment professional, the cofacilitator may be a trainee or recent hire to the program. Using trainees or inexperienced staff members as cofacilitators can reduce the costs of having two facilitators and provides an excellent training opportunity for the new staff members.

Evidence reveals group interventions may be contraindicated for certain types of participants, such as those suffering from serious brain injury, paranoia, sociopathy, major depression, or traumatic disorders (Yalom, 2005). Individuals with these characteristics may need to be treated on an individual basis or in specialized groups that can focus on their unique needs and vulnerabilities (Drake et al., 2008; Ross, 2008). Better outcomes have been achieved, for example, in Drug Courts (Messina et al., 2012; Liang & Long, 2013) and other substance use disorder treatment programs (Grella, 2008; Mills et al., 2012) that developed specialized groups for women with trauma histories. Researchers have identified substantial percentages of Drug Court participants who may require specialized group services for comorbid mental illness (Mendoza et al., 2013; Peters, 2008; Peters et al., 2012) or trauma histories (Sartor et al., 2012).

Not all substance use disorder treatment participants may benefit from group counseling. Interviews with participants who were terminated from Drug Courts found that many of them attributed their failure, in part, to their dissatisfaction with group-based services (Fulkerson et al., 2012). This theme has arisen frequently in focus groups with young, African-American, male Drug Court participants (Gallagher, 2013). Although there is no proof that dissatisfaction with group counseling was the actual cause of these individuals' failure in the programs, the findings do suggest that Drug Courts should consider whether participants are suited for group-based services and prepare them for what to expect in the groups before assigning them to the interventions.

F. Evidence-Based Treatments

A substantial body of research spanning several decades reveals that outcomes from correctional rehabilitation are significantly better when (1) offenders receive behavioral or cognitive-behavioral counseling interventions, (2) the interventions are carefully documented in treatment manuals, (3) treatment providers are trained to deliver the interventions reliably according to the manual, and (4) fidelity to the treatment model is maintained through continuous supervision of the treatment providers (Andrews et al., 1990; Andrews & Bonta, 2010; Gendreau, 1996; Hollins, 1999; Landenberger & Lipsey, 2005; Lowenkamp et al., 2006; Lowenkamp et al., 2010; Smith et al., 2009). Adherence to these principles has been associated with significantly better outcomes in Drug Courts (Gutierrez & Bourgon, 2012) and in other substance use disorder treatment programs (Prendergast et al., 2013).

Behavioral treatments reward offenders for desirable behaviors and sanction them for undesirable behaviors. The systematic application of graduated incentives and sanctions in Drug Courts is an example of a behavior therapy technique (Defulio et al., 2013; Marlowe & Wong, 2008). Cognitive-behavioral therapies (CBT) take an active problem-solving approach to managing drug- and alcohol-related problems. Common CBT techniques include correcting participants' irrational thoughts related to substance use (e.g., "I will never amount to anything anyway, so why bother?"), identifying participants' triggers or risk factors for drug use, scheduling participants' daily activities to avoid coming into contact with their triggers, helping participants to manage cravings and other negative affects without recourse to substance use, and teaching participants effective problem-solving techniques and drug-refusal strategies.

Examples of manualized CBT curricula that have been proven to reduce criminal recidivism among offenders include Moral Reconation Therapy (MRT), Reasoning and Rehabilitation (R&R), Thinking for a Change (T4C), relapse prevention therapy (RPT) and the Matrix Model (Cullen et al., 2012; Dowden et al., 2003; Ferguson & Wormith, 2012; Landenberger & Lipsey, 2005; Lipsey et al., 2001; Lowenkamp et al., 2009; Marinelli-Casey et al., 2008; Milkman & Wanberg, 2007; Pearson et al., 2002; Wilson et al., 2005). Some of these CBT curricula were developed to address criminal offending generally and were not developed specifically to treat substance use disorder. However, the Matrix Model and RPT were developed for the treatment of addiction and MRT has been adapted successfully to treat drug-abusing offenders (Bahr et al., 2012; Wanberg & Milkman, 2006) and Drug Court participants (Cheesman & Kunkel, 2012; Heck, 2008; Kirchner & Goodman, 2007). The Substance Abuse and Mental Health Services Administration (SAMHSA) maintains an Internet directory of evidence-based treatments called the *National Registry of Evidence-Based Programs and Practices* (NREPP).[22] Drug Court professionals can search the NREPP Web site, free of charge, to identify substance use disorder treatments that have been demonstrated to improve outcomes for addicted offenders.

Outcomes from CBT are enhanced significantly when counselors are trained to deliver the curriculum in a reliable manner as specified in the manual (Goldstein et al., 2013; Southam-Gerow & McLeod, 2013). A minimum of three days of preimplementation training, periodic booster sessions, and monthly individualized supervision and feedback are required for probation officers and treatment providers to administer evidence-based practices reliably (Bourgon et al., 2010; Edmunds et al., 2013; Robinson et al., 2012; Schoenwald et al., 2013). In addition, outcomes are better when counselors give homework assignments to the participants that reinforce the material covered in the sessions (Kazantzis et al., 2000; McDonald & Morgan, 2013). Examples of homework assignments include having participants keep a journal of their thoughts and feelings related to substance use, requiring participants to develop and follow through with a preplanned activity schedule, or having them write an essay on a drug-related topic (Sobell & Sobell, 2011).

G. Medications

Medically assisted treatment (MAT) can significantly improve outcomes for addicted offenders (Chandler et al., 2009; National Center on Addiction & Substance Abuse, 2012; National Institute on Drug Abuse, 2006). Buprenorphine or methadone maintenance administered prior to and immediately after release from jail or prison has been shown to significantly increase opiate-addicted inmates' engagement in treatment; reduce illicit opiate use; reduce rearrests, technical parole violations, and reincarceration rates; and reduce mortality and hepatitis C infections (Dolan et al., 2005; Gordon et al., 2008; Havnes et al.,

[22] Simply being listed on the NREPP does not guarantee and intervention is effective. Drug Courts need to review the studies and ratings on the Website to determine how reliable and powerful the effects were, and whether the intervention was examined in a similar context to that of a Drug Court. Registry available at http://www.samhsa.gov/newsroom/advisories/1012071342.aspx.

2012; Kinlock et al., 2008; Magura et al., 2009). These medications are referred to as agonists or partial agonists because they stimulate the central nervous system (CNS) in a similar manner to illicit drugs. Because they can be addictive and may produce euphoria in nontolerant individuals, they may be resisted by some criminal justice professionals. Positive outcomes have also been reported for antagonist medications, such as naltrexone, which are nonaddictive and nonintoxicating. Naltrexone blocks the effects of opiates and partially blocks the effects of alcohol without producing psychoactive effects of its own. Studies have reported significant reductions in heroin use and rearrest rates for opiate-addicted probationers and parolees who received naltrexone (Cornish et al., 1997; Coviello et al., 2012; O'Brien & Cornish, 2006). In addition, at least two small-scale studies reported better outcomes in DWI Drug Courts or DWI probation programs for alcohol-dependent participants who received an injectable form of naltrexone called Vivitrol (Finigan et al., 2011; Lapham & McMillan, 2011).

A recent national survey found that nearly half of Drug Courts do not use medications in their programs (Matusow et al., 2013). One of the primary barriers to using medications was reportedly a lack of awareness of or familiarity with medical treatments. For this reason, the NADCP Board of Directors issued a unanimous resolution directing Drug Courts to learn the facts about MAT and obtain expert consultation from duly trained addiction psychiatrists or addiction physicians.[23] Drug Courts should ordinarily discourage their participants from obtaining addictive or intoxicating medications from general medical practitioners, because this practice can pose an unacceptable risk of morbidity, mortality, or illegal diversion of the medications (Bazazi et al., 2011; Bohnert et al., 2011; Daniulaityte et al., 2012; Johanson et al., 2012).

H. Provider Training and Credentials

Treatment providers are significantly more likely to administer evidence-based assessments and interventions when they are professionally credentialed and have an advanced educational degree in a field directly related to substance use disorder treatment (Kerwin et al., 2006; McLellan et al., 2003; National Center on Addiction & Substance Abuse, 2012; Olmstead et al., 2012). Studies have found that clinicians with higher levels of education and clinical certification were more likely to hold favorable views toward the adoption of evidence-based practices (Arfken et al., 2005) and to deliver culturally competent treatments (Howard, 2003). A large-scale study found that clinically certified professionals significantly outperformed noncertified staff members in conducting standardized clinical assessments (Titus et al., 2012). Clinicians are also more likely to endorse treatment philosophies favorable to client outcomes if they are educated about the neuroscience of addiction (Steenbergh et al., 2012).

As was previously discussed, treatment providers must be supervised regularly to ensure continuous fidelity to evidence-based treatments. Providers are better able to administer evidence-based practices when they receive three days of preimplementation training, periodic booster trainings, and monthly individualized supervision and feedback (Bourgon et al., 2010; Edmunds et al., 2013; Robinson et al., 2012). Finally, research suggests treatment providers are more likely to be effective if they have substantial experience working with criminal offenders and are accustomed to functioning in a criminal justice environment (Lutze & van Wormer, 2007).

I. Peer Support Groups

Participation in self-help or peer-support groups is consistently associated with better long-term outcomes following a substance use disorder treatment episode (Kelly et al., 2006; Moos & Timko, 2008; Witbrodt et al., 2012). Contrary to some beliefs, individuals who are court mandated to attend self-help groups

[23] Available at http://www.nadcp.org/sites/default/files/nadcp/NADCP%20Board%20Statement%20on%20MAT.pdf

perform as well or better than nonmandated individuals (Humphreys et al., 1998). The critical variable appears to be how long the participants were exposed to the self-help interventions and not their original level of intrinsic motivation (Moos & Timko, 2008). Many people (more than 40%) drop out prematurely from self-help groups, in part because they are unmotivated or insufficiently motivated to maintain sobriety (Kelly & Moos, 2003). Therefore, Drug Courts need to find effective ways to leverage continued participant involvement in self-help groups.

Simply attending self-help groups is not sufficient to achieve successful outcomes. Sustained benefits are more likely to be attained if participants engage in recovery-relevant activities such as developing a sober-support social network (Kelly et al., 2011a), engaging in spiritual practices (Kelly et al., 2011b; Robinson et al., 2011), and learning effective coping skills from fellow group members (Kelly et al., 2009). Because it is very difficult for Drug Courts to mandate and monitor compliance with these types of recovery activities, they must find other means of encouraging and reinforcing participant engagement in recovery-related exercises. Evidence-based interventions have been developed, documented in treatment manuals, and proven to improve participant engagement in self-help groups and recovery activities. Examples of validated interventions include 12-step facilitation therapy (Ries et al., 2008), which teaches participants about what to expect and how to gain the most benefits from 12-step meetings. In addition, *intensive referrals* improve outcomes by assertively linking participants with support-group volunteers who may escort them to the groups, answer any questions they might have, and provide them with support and camaraderie (Timko & DeBenedetti, 2007).

J. Continuing Care

Vulnerability to relapse remains high for at least three to six months after completion of substance use disorder treatment (Marlatt, 1985; McKay, 2005). One year after treatment, an average of 40% to 60% of treatment graduates will have relapsed to substance use (McLellan et al., 2000). Therefore, preparation for aftercare or continuing care is a critical component of Drug Courts.

In one multisite study, Drug Courts that included a formal phase focusing on relapse prevention and aftercare preparation had more than three times greater cost-benefits and significantly greater reductions in recidivism than those that offered minimal services during the last phase of the program or neglected aftercare preparation (Carey et al., 2008). Drug Courts that required their participants to plan for engaging in prosocial activities after graduation, such as employment or schooling, were found to be more effective and significantly more cost effective than those that did not plan for postgraduation activities (Carey et al., 2012). Another study found that drug-abusing probationers who received aftercare services were nearly three times more likely to be abstinent from all drugs after six months than those who did not receive aftercare services (Brown et al, 2001).

As was described earlier, RPT is a manualized, cognitive-behavioral counseling intervention that has been demonstrated to extend the effects of substance use disorder treatment (Dowden et al., 2003; Dutra et al, 2008). Participants in RPT learn to identify their personal triggers or risk factors for relapse, take measures to avoid coming into contact with those triggers, and rehearse strategies to deal with high-risk situations that arise unavoidably. Drug Courts that teach formal RPT skills are likely to significantly extend the effects of their program beyond graduation (Carey et al., 2012).

Studies have also examined ways to remain in contact with participants after they have been discharged from a treatment program. For example, researchers have extended the benefits of substance use disorder treatment by making periodic telephone calls to participants (McKay, 2009a), although not all studies have reported success with this approach (McKay et al., 2013). In addition, treatment benefits have been extended by inviting participants back to the program for brief recovery management check-ups (Scott &

Dennis, 2012), providing assertive case management involving periodic home visits (Godley et al., 2006), and reinforcing participants with praise or small gifts for continuing to attend aftercare sessions (Lash et al., 2004). The aftercare strategies that have been successful typically continued for at least 90 days and had trained counselors, nurses, or case managers contact the participants briefly to check on their progress, probe for potential warning signs of an impending relapse, offer advice and encouragement, and make suitable referrals if a return to treatment appeared warranted (McKay, 2009b).

Although some of these measures might be cost-prohibitive for many Drug Courts, and participants might be reluctant to remain engaged with the criminal justice system after graduation, research suggests brief telephone calls, letters, or e-mails can be helpful in extending the effects of a Drug Court at minimal cost to the program and with minimal inconvenience to the participants. Anecdotal reports from Drug Court graduates and staff members have also suggested that involving graduates in alumni groups might be another promising, yet understudied, method for extending the benefits of Drug Courts (Burek, 2011; McLean, 2012).

References

Andrews, D.A., & Bonta, J. (2010). *The psychology of criminal conduct* (5th ed.). Waltham, MA: Anderson Publishing.

Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P., & Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology, 28*(3), 369–404.

Arfken C., Agius E., Dickson M., Anderson H., Hegedus A. (2005). Clinicians' beliefs and awareness of substance abuse treatments in research and nonresearch-affiliated programs. *Journal of Drug Issue*s, 35(3), 547–558.

Babor, T., & Del Boca, F. (Vol. Eds.) (2002). *Treatment matching in alcoholism: International research monographs in the addictions.* In G. Edwards (Series Ed.). Cambridge, UK: Cambridge University Press.

Bahr, S.J., Masters, A.L., & Taylor, B.M. (2012). What works in substance abuse treatment programs for offenders? *The Prison Journal, 92*(2), 155–174.

Banks, D., & Gottfredson, D.C. (2003). The effects of drug treatment and supervision on time to rearrest among drug treatment court participants. *Journal of Drug Issues, 33*(2), 385–412.

Bazazi, A.R., Yokell, M., Fu, J.J., Rich, J.S., & Zaller, N.D. (2011). Illicit use of buprenorphine/naloxone among injecting and noninjecting opioid users. *Journal of Addiction Medicine, 5*(3), 175–180.

Bohnert, A.S., Valenstein, M., Bair, M.J., Ganoczy, D., McCarthy, J.F., Ilgen, M.A., & Blow, F.C. (2011). Association between opioid prescribing patterns and opioid overdose-related deaths. *Journal of the American Medical Association, 305*(13), 1315-1321.

Bourgon, G., & Armstrong, B. (2005). Transferring the principles of effective treatment into a "real world" prison setting. *Criminal Justice & Behavior, 32*(1), 3–25.

Bourgon, G., Bonta, J., Rugge, T., Scott, T.L., & Yessine, A. (2010). The role of program design, implementation, and evaluation in evidence-based 'real world' community supervision. *Federal Probation, 74*(1), 2–15.

Bowers, J. (2007). Contraindicated drug courts. *UCLA Law Review, 55*(4), 783–831 Brabender, V. (2002). *Introduction to group therapy*. New York: John Wiley & Sons.

Brown, B.S., O'Grady, K.E., Battjes, R.J., Farrell, E.V., & Smith, N.P., & Nurco, D.N., (2001). Effectiveness of a stand-alone aftercare program for drug-involved offenders. *Journal of Substance Abuse Treatment, 21*(4), 185–192.

Burek, E. (2011, Fall). The importance of Drug Court alumni groups. *All Rise Magazine*, p. 21.

California Substance Abuse and Crime Prevention Act. (2000). 2000 Cal. Legis. Serv. Prop 36 (West), codified in Cal. Penal Code § 1210 *et seq*.

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes, and costs*. Portland, OR: NPC Research. *Available at https://www.ncjrs.gov/pdffiles1/nij/grants/223853.pdf.*

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The 10 key components of Drug Court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Chandler, R.K., Fletcher, B.W., & Volkow, N.D. (2009). Treating drug abuse and addiction in the criminal justice system: Improving public health and safety. *Journal of the American Medical Association, 301*(2), 183–190.

Cheesman, F.L., & Kunkel, T.L. (2012). *Virginia adult drug treatment courts: Cost benefit analysis*. Williamsburg, VA: National Center for State Courts.

Cornish, J.W., Metzger, D., Woody, G.E., Wilson, D., McLellan, A.T., Vandergrift, B., & O'Brien, C.P. (1997). Naltrexone pharmacotherapy for opioid dependent federal probationers. *Journal of Substance Abuse Treatment, 14*(6), 529–534.

Coviello, D.M., Cornish, J.W., Lynch, K.G., Boney, T.Y., Clark, C.A., Lee, J.D., et al. (2012). A multisite pilot study of extended-release injectable naltrexone treatment for previously opioid-dependent parolees and probationers. *Substance Abuse, 33*(1), 48–59.

Cullen, A.E., Clarke, A.Y., Kuipers, E., Hodgins, S., Dean, K., & Fahy, T. (2012). A multisite randomized trial of a cognitive skills program for male mentally disordered offenders: Violence and antisocial behavior outcomes. *Journal of Consulting & Clinical Psychology, 80*(6), 1114–1120.

Daniulaityte, R., Falck, R., & Carlson, R. G. (2012). Illicit use of buprenorphine in a community sample of young adult non-medical users of pharmaceutical opioids. *Drug and Alcohol Dependence, 122*(3), 201–207.

DeFulio, A., Stitzer, M., Roll, J., Petry, N., Nuzzo, P., Schwartz, R.P., & Stabile, P. (2013). Criminal justice referral and incentives in outpatient substance abuse treatment. *Journal of Substance Abuse Treatment, 45*(1), 70–75.

De Leon, G., Melnick, G., & Cleland, C.M. (2010). Matching to sufficient treatment: Some characteristics of undertreated (mismatched) clients. *Journal of Addictive Diseases, 29*(1), 59–67.

DeMatteo, D. S., Marlowe, D. B., & Festinger, D. S. (2006). Secondary prevention services for clients who are low risk in drug court: A conceptual model. *Crime & Delinquency, 52*, 114-134.

Dolan, K.A., Shearer, J., White, B., Zhou, J., Kaldor, J., & Wodak, A.D. (2005). Four-year follow-up of imprisoned male heroin users and methadone treatment: Mortality, reincarceration and hepatitis C infection. *Addiction, 100*(6), 820–828.

Dowden, C., Antonowicz, D., & Andrews, D.A. (2003). The effectiveness of relapse prevention with offenders: A meta-analysis. *International Journal of Offender Therapy & Comparative Criminology, 47*(5), 516–528.

Drake, R.E., O'Neal, E., L., & Wallach, M.A. (2008). A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. *Journal of Substance Abuse Treatment, 34*(1), 123–138.

Dutra, L., Stathopoulou, G., Basden, S.L., Leyro, T.M., Powers, M.B., & Otto, M.W. (2008). A meta-analytic review of psychosocial interventions for substance use disorders. *American Journal of Psychiatry, 165*(2), 179–187.

Edmunds, J.M., Beidas, R.S., & Kendall, P.C. (2013). Dissemination and implementation of evidence-based practices: Training and consultation as implementation strategies. *Clinical Psychology Science and Practice, 20*(2), 152–165.

Ferguson, L.M., & Wormith, S. (2012). A meta-analysis of Moral Reconation Therapy. *International Journal of Offender Therapy & Comparative Criminology: OnlineFirst*. doi: 10.1177/0306624X12447771.

Finigan, M.W., Perkins, T., Zold-Kilbourn, P., Parks, J., & Stringer, M. (2011). Preliminary evaluation of extended-release naltrexone in Michigan and Missouri drug courts. *Journal of Substance Abuse Treatment, 41*(3), 288–293.

Fulkerson, A., Keena, L.D., & O'Brien, E. (2012). Understanding success and nonsuccess in the Drug Court. *International Journal of Offender Therapy & Comparative Criminology: OnlineFirst.* doi: 10.1177/0306624X12447774.

Gallagher, J.R. (2013). African American participants' views on racial disparities in drug court outcomes. *Journal of Social Work Practice in the Addictions, 13*(2), 143–162.

Gastfriend, D.R., Lu, S., & Sharon, E. (2000). Placement matching: Challenges and technical progress. *Substance Use & Misuse, 35*(12–14), 2191–2213.

Gendreau, P. (1996). Offender rehabilitation: What we know and what needs to be done. *Criminal Justice & Behavior, 23*(1), 144–161.

Godley, M.D., Godley, S.H., Dennis, M.L., Funk, R.R., & Passetti, L.L. (2006). The effect of assertive continuing care linkage, adherence, and abstinence following residential treatment for adolescents with substance use disorders. *Addiction, 102*(1), 81–93.

Goldstein, N.E., Kemp, K.A., Leff, S.S., & Lochman, J.E. (2013). Guidelines for adapting manualized interventions for new target populations: A step-wise approach using anger management as a model. *Clinical Psychology: Science & Practice, 19*(4), 385–401.

Gordon, M.S., Kinlock, T.W., Schwartz, R.P., & O'Grady, K.E. (2008). A randomized clinical trial of methadone maintenance for prisoners: Findings at 6 months post-release. *Addiction, 103*(8), 1333–1342.

Gottfredson, D.C., Kearley, B.W., & Bushway, S.D. (2008). Substance use, drug treatment, and crime: An examination of intra-individual variation in a drug court population. *Journal of Drug Issues, 38*(2), 601–630.

Gottfredson, D.C., Kearley, B.W., Najaka, S.S., & Rocha, C.M. (2007). How drug treatment courts work: An analysis of mediators. *Journal of Research on Crime & Delinquency, 44*(1), 3–35.

Gregoire, T.K. (2000). Factors associated with level of care assignments in substance abuse treatment. *Journal of Substance Abuse Treatment, 18*(3), 241–248.

Grella, C. (2008). Gender-responsive drug treatment services for women: A summary of current research and recommendations for drug court programs. In C. Hardin & J.N. Kushner (Eds.), *Quality improvement for drug courts: Evidence-based practices* (Monograph Series No. 9; pp. 63–74). Alexandria, VA: National Drug Court Institute.

Gutierrez, L., & Bourgon, G. (2012). Drug treatment courts: A quantitative review of study and treatment quality. *Justice Research & Policy, 14*(2), 47–77.

Havnes, I., Bukten, A., Gossop, M., Waal, H., Stangeland, P., & Clausen, T. (2012). Reductions in convictions for violent crime during opioid maintenance treatment: A longitudinal national cohort study. *Drug and Alcohol Dependence, 124*(3), 307–310.

Heck, C. (2008). MRT: Critical component of a local drug court program. *Cognitive Behavioral Treatment Review, 17*(1), 1–2.

Hollins, C.R. (1999). Treatment programs for offenders: Meta-analysis, "what works," and beyond. *International Journal of Law & Psychiatry, 22*(3–4), 361–372.

Howard, D.L. (2003). Culturally competent treatment of African American clients among a national sample of outpatient substance abuse treatment units. *Journal of Substance Abuse Treatment, 24*(2), 89–102.

Huebner, B.M., & Cobbina, J. 2007). The effect of drug use, drug treatment participation, and treatment completion on probationer recidivism. *Journal of Drug Issues, 37*(3), 619–641.

Humphreys, K., Kaskutas, L.A., & Weisner, C. (1998). The relationship of pretreatment Alcoholics Anonymous affiliation with problem severity, social resources, and treatment history. *Drug & Alcohol Dependence, 49*(2), 123–131.

Integrated Substance Abuse Programs. (2007, April 13). *Evaluation of the Substance Abuse and Crime Prevention Act: Final report*. Los Angeles, CA: UCLA. *Available at* http://www.uclaisap.org/Prop36/documents/SACPAEvaluationReport.pdf.

Janku, A.D., & Yan, J. (2009). Exploring patterns of court-ordered mental health services for juvenile offenders: Is there evidence of systematic bias? *Criminal Justice & Behavior, 36*(4), 402–419.

Johanson, C., Arfken, C. L., di Menza, S., & Schuster, C. R. (2012). Diversion and abuse of buprenorphine: Findings from national surveys of treatment patients and physicians. *Drug and Alcohol Dependence, 120*(1), 190–195.

Justice Policy Institute. (2011). *Addicted to courts: How a growing dependence on drug courts impacts people and communities*. Washington, DC: Author.

Karno, M.P., & Longabaugh, R. (2007). Does matching matter? Examining matches and mismatches between patient attributes and therapy techniques in alcoholism treatment. *Addiction, 102*(4), 587–596.

Kazantzis, N., Deane, F.P., & Ronan, K.R. (2000). Homework assignments in cognitive and behavioral therapy: A meta-analysis. *Clinical Psychology: Science & Practice, 7*(2), 189–202.

Kelly, J.F., Magill, M., & Stout, R.L. (2009). How do people recover from alcohol dependence? A systematic review of the research on mechanisms of behavior change in Alcoholics Anonymous. *Addiction Research & Theory, 17*(3), 236–259.

Kelly, J.F., & Moos, R. (2003). Dropout from 12-step groups: Prevalence, predictors, and counteracting treatment influences. *Journal of Substance Abuse Treatment, 24*(3), 241–250.

Kelly, J.F., Stout, R.L., Magill, M., & Tonigan, J.S. (2011a). The role of Alcoholics Anonymous in mobilizing adaptive social network changes: A prospective lagged meditational analysis. *Drug & Alcohol Dependence, 114*(2), 119–126.

Kelly, J.F., Stout, R.L., Magill, M., Tonigan, J.S., & Pagano, M.E. (2011b). Spirituality in recovery: A lagged mediational analysis of Alcoholics Anonymous' principal theoretical mechanism of behavior change. *Alcoholism: Clinical & Experimental Research, 35*(3), 454–463.

Kelly, J.F., Stout, R., Zywiak, W., & Schneider, R. (2006). A 3-year study of addiction mutual-help group participation following intensive outpatient treatment. *Alcoholism: Clinical & Experimental Research, 30*(8), 1381–1392.

Kerwin, M.E., Walker-Smith, K., & Kirby, K.C. (2006). Comparative analysis of state requirements for the training of substance abuse and mental health counselors. *Journal of Substance Abuse Treatment, 30*(3), 173–181.

Kinlock, T.W., Gordon, M.S., Schwartz, R.P., & O'Grady, K.E. (2008). A study of methadone maintenance for male prisoners: Three-month postrelease outcomes. *Criminal Justice & Behavior, 35*(1), 34–47.

Kirchner, R.A., & Goodman, E. (2007). Effectiveness and impact of the Thurston County, Washington Drug Court program. *Cognitive Behavioral Treatment Review, 16*(2), 1–4.

Koob, J., Brocato, J., & Kleinpeter, C. (2011). Enhancing residential treatment for drug court participants. *Journal of Offender Rehabilitation, 50*(5), 252–271.

Krebs, C.P., Strom, K.J., Koetse, W.H., & Lattimore, P.K. (2009). The impact of residential and nonresidential drug treatment on recidivism among drug-involved probationers. *Crime & Delinquency, 55*(3), 442–471.

Landenberger, N.A., & Lipsey, N.W. (2005). The positive effects of cognitive-behavioral program for offenders: A meta-analysis of factors associated with effective treatment. *Journal of Experimental Criminology*, 1(4), 451–476.

Lapham, S.C., & McMillan, G.P. (2011). Open-label pilot study of extended-release naltrexone to reduce drinking and driving among repeat offenders. *Journal of Addiction Medicine, 5*(3), 163–169.

Lash, S.J., Burden, J.L., Monteleone, B.R., & Lehmann, L.P. (2004). Social reinforcement of substance abuse treatment aftercare participation: Impact on outcome. *Addictive Behaviors, 29*(2), 337–342.

Liang, B., & Long, M.A. (2013). Testing the gender effect in drug and alcohol treatment: Women's participation in Tulsa County drug and DUI programs. *Journal of Drug Issues, 43*(3), 270–288.

Lindquist, C.H., Krebs, C.P., Warner, T.D., & Lattimore, P.K. (2009). An exploration of treatment and supervision intensity among drug court and non-drug court participants. *Journal of Offender Rehabilitation, 48*(3), 167–193.

Lipsey, M.W., Chapman, G.L., & Landenberger, N.A. (2001). Cognitive-behavioral programs for offenders. *Annals of the American Academy of Political & Social Science, 578*(1), 144–157.

Lovins, L.B., Lowenkamp, C.T., Latessa, E.J., & Smith, P. (2007). Application of the risk principle to female offenders. *Journal of Contemporary Criminal Justice, 23*(4), 383–398.

Lowenkamp, C.T., Flores, A.W., Holsinger, A.M., Makarios, M.D., & Latessa, E.J. (2010). Intensive supervision programs: Does program philosophy and the principles of effective intervention matter? *Journal of Criminal Justice, 38*(4), 368–375.

Lowenkamp, C.T., Hubbard, D., Makarios, M., & Latessa, E. (2009). A quasi-experimental evaluation of Thinking For a Change: A real world application. *Criminal Justice & Behavior*, 36(2), 137–146.

Lowenkamp, C.T., & Latessa, E.J. (2004). Understanding the risk principle: How and why correctional interventions can harm low-risk offenders. *Topics in Community Corrections: Assessment Issues for Managers,* pp. 3–8.

Lowenkamp, C.T., & Latessa, E.J. (2005). Increasing the effectiveness of correctional programming through the risk principle: Identifying offenders for residential placement. *Criminology & Public Policy, 4*(2), 263–290.

Lowenkamp, C.T., Latessa, E.J., & Smith, P. (2006). Does correctional program quality really matter? The impact of adhering to the principles of effective intervention. *Criminology & Public Policy, 5*(3), 575–594.

Lutze, F.E., & van Wormer, J.G. (2007). The nexus between drug and alcohol treatment program integrity and drug court effectiveness: Policy recommendations for pursuing success. *Criminal Justice Policy Review, 18*(3), 226–245.

Magura, S., Lee, J.D., Hershberger, J., Joseph, H., Marsch, L., Shropshire, C., & Rosenblum, A. (2009). Buprenorphine and methadone maintenance in jail and post-release: A randomized clinical trial. *Drug & Alcohol Dependence, 99*(1), 222–230.

Magura, S., Staines, G., Kosanke, N., Rosenblum, A., Foote, J., DeLuca, A., & Bali, P. (2003). Predictive validity of the ASAM patient placement criteria for naturalistically matched vs. mismatched alcoholism patients. *American Journal on Addictions, 12*(5), 386–97.

Marinelli-Casey, P., Gonzales, R., Hillhouse, M., Ang, A., Zweben, J., Cohen, J., Hora, P.F., & Rawson. R.A. (2008). Drug court treatment for methamphetamine dependence: Treatment response and posttreatment outcomes. *Journal of Substance Abuse Treatment*, 34(2), 242–248.

Marlatt, G.A. (1985). Relapse prevention: Theoretical rationale and overview of the model. In G.A. Marlatt & J.R. Gordon (Eds.), *Relapse Prevention* (pp. 3–70). New York: Guilford Press.

Marlowe, D.B., & Wong, C.J. (2008). Contingency management in adult criminal drug courts. In S.T. Higgins, K. Silverman, & S.H. Heil (Eds.), *Contingency management in substance abuse treatment* (pp. 334–354). New York: Guilford Press.

Martin, S.S., Butzin, C.A., Saum, C.A., & Inciardi, J.A. (1999). Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare. *The Prison Journal, 79*(3), 294–320.

Matusow, H., Dickman, S.L., Rich, J.D., Fong, C., Dumont, D.M., Hardin, C., Marlowe, D., & Rosenblum, A. (2013). Medication assisted treatment in U.S. drug courts: Results from a nationwide survey of availability, barriers and attitudes. *Journal of Substance Abuse Treatment*. *44*(5), 473–480.

McCord, J. (2003). Cures that harm: Unanticipated outcomes of crime prevention programs. *Annals of the American Academy of Political & Social Science, 587*(1), 16–30.

McDonald, B. R., & Morgan, R. D. (2013). Enhancing homework compliance in correctional psychotherapy. *Criminal Justice & Behavior, 40*(7), 814–828.

McKay, J.R. (2005). Is there a case for extended interventions for alcohol and drug use disorders? *Addiction, 100*(11), 1594–1610.

McKay, J.R. (2009a). Continuing care research: What we have learned and where we are going. *Journal of Substance Abuse Treatment, 36*(2), 131–145.

McKay, J.R. (2009b). *Treating substance use disorders with adaptive continuing care*. Washington, DC: American Psychological Association.

McKay, J.R., Van Horn, D., Ivey, M., Drapkin, M.L., Rennert, L., & Lynch, K.G. (2013). Enhanced continuing care provided in parallel to intensive outpatient treatment does not improve outcomes for patients with cocaine dependence. *Journal of Studies on Alcohol, 74*, 642-651.

McKee, M. (2010). *San Francisco drug court transitional housing program outcome study*. San Francisco: SF Collaborative Courts. *Available at* http://www.sfsuperiorcourt.org/sites/default/files/pdfs/2676%20Outcome%20on%20SF%20Drug%20Court%20Transitional%20Housing%20Program.pdf.

McLean, A. (2012, Fall). The value of alumni groups: A graduate's viewpoint. *All Rise Magazine*, Fall, p. 27.

McLellan, A.T., Carise, D., & Kleber, H.D. (2003). Can the national addiction treatment infrastructure support the public's demand for quality care? *Journal of Substance Abuse Treatment, 25*(2), 117–121.

McLellan, A.T., Lewis, D.C., O'Brien, C.P., & Kleber, H.D. (2000). Drug dependence, a chronic medical illness: Implications for treatment, insurance, and outcomes evaluation. *Journal of the American Medical Association, 284*(13), 1689–1695.

Mee-Lee, D., & Gastfriend, D.R. (2008). Patient placement criteria. In M. Galanter & H.D. Kleber (Eds.), *Textbook of Substance Abuse Treatment* (4th Ed., pp. 79–91). Arlington, VA: American Psychiatric Publishing.

Mee-Lee, D., Shulman, G.D., Fishman, M., Gastfriend, D.R., & Griffith, J.H. (Eds.). (2001). *ASAM patient placement criteria for the treatment of substance-related disorders* (2nd ed.-revised). Chevy Chase, MD: American Society of Addiction Medicine. *Available at* http://www.asam.org/publications/patient-placement-criteria/ppc-2r.

Mendoza, N.S., Trinidad, J.R., Nochajski, T.H., & Farrell, M.C. (2013). Symptoms of depression and successful drug court completion. *Community Mental Health Journal* (Online). doi: 10.1007/s10597-013-9595-5.

Messina, N., Calhoun, S., & Warda, U. (2012). Gender-responsive drug court treatment: A randomized controlled trial. *Criminal Justice & Behavior, 39*(12), 1539–1558.

Meyer, W.G. (2011). Constitutional and legal issues in Drug Courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 159–180). Alexandria, VA: National Drug Court Institute. Available at http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Milkman, H., & Wanberg, K. (2007). *Cognitive-behavioral treatment: A review and discussion for corrections professionals* (NIC No. 021657). Washington, DC: National Institute of Corrections, U.S. Dept. of Justice.

Mills, K.L., Teesson, M., Back, S.E., Brady, K.T., Baker, A.L., Hopwood, S., Sannibale, C., Barrett, E.L., Merz, S., Rosenfeld, J., & Ewer, P.L. (2012). Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: A randomized controlled trial. *Journal of the American Medical Association, 308*(7), 690–699.

Mitchell, O., Wilson, D.B., & MacKenzie, D.L. (2007). Does incarceration-based drug treatment reduce recidivism? A meta-analytic synthesis of the research. *Journal of Experimental Criminology, 3*(4), 353–375.

Moos, R.H., & Timko, C. (2008). Outcome research on 12-step and other self-help programs. In M. Galanter & H.D. Kleber (Eds.), *Textbook of Substance Abuse Treatment* (4th Ed., pp. 511–521). Arlington, VA: American Psychiatric Publishing.

National Association of Criminal Defense Lawyers. (2009). *America's problem-solving courts: The criminal costs of treatment and the case for reform*. Washington, DC: Author.

National Center on Addiction and Substance Abuse. (2012). *Addiction medicine: Closing the gap between science and practice.* New York: Columbia University.

National Institute on Drug Abuse. (2006). *Principles of drug abuse treatment for criminal justice populations: A research-based guide* (NIH Publication No. 06-5316). Bethesda, MD: Author.

O'Brien, C.P., & Cornish, J.W. (2006). Naltrexone for probationers and parolees. *Journal of Substance Abuse Treatment, 31*(2), 107–111.

Olmstead, T.A., Abraham, A.J., Martino, S., & Roman, P.M. (2012). Counselor training in several evidence-based psychosocial addiction treatments in private US substance abuse treatment centers. *Drug & Alcohol Dependence, 120*(1), 149–154.

Pearson, F.S., & Lipton, D.S. (1999). A meta-analytic review of the effectiveness of corrections-based treatments for drug abuse. *The Prison Journal, 79*(4), 384–410.

Pearson, F.S., Lipton, D.S., Cleland, C.M., & Yee, D.S. (2002). The effects of behavioral/cognitive-behavioral programs on recidivism. *Crime & Delinquency*, 48(3), 476–496.

Pelissier, B., Jones, N., & Cadigan, T. (2007). Drug treatment aftercare in the criminal justice system: A systematic review. *Journal of Substance Abuse Treatment, 32*(3), 311—320.

Peters, R.H. (2008). Co-occurring disorders. In C. Hardin & J.N. Kushner (Eds.), *Quality improvement for drug courts: Evidence-based practices* (Monograph Series No. 9; pp. 51–61). Alexandria, VA: National Drug Court Institute.

Peters, R.H., Haas, A.L., & Hunt, W.M. (2002). Treatment "dosage" effects in drug court programs. *Journal of Offender Rehabilitation*, 33(4), 63–72.

Peters, R.H., Kremling, J., Bekman, N.M., & Caudy, M.S. (2012). Co-occurring disorders in treatment-based courts: Results of a national survey. *Behavioral Sciences & the Law, 30*(6), 800–820.

Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J.O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight. *Crime & Delinquency, 46*(3), 354–379.

Prendergast, M.L., Pearson, F.S., Podus, D., Hamilton, Z.K., & Greenwell, L. (2013). The Andrews' principles of risk, needs, and responsivity as applied in drug treatment programs: Meta-analysis of crime and drug use outcomes. *Journal of Experimental Criminology: Online First*. doi: 10.1007/s11292-013-9178-z.

Ries, R.K., Galanter, M., & Tonigan, J.S. (2008). Twelve-Step Facilitation: An adaptation for psychiatric practitioners and patients. In M. Galanter & H.D. Kleber (Eds.), *Textbook of Substance Abuse Treatment* (4th Ed., pp. 373–386). Arlington, VA: American Psychiatric Publishing.

Robinson, C.R., Lowenkamp, C.T., Holsinger, A.M., VanBenschoten, S., Alexander, M., & Oleson, J.C. (2012). A random study of Staff Training Aimed at Reducing Rearrest (STARR): Using core correctional practices in probation interactions. *Journal of Crime & Justice*. *35*(2) 167–188.

Robinson, E.A., Krentzman, A.R., Webb, J.R., & Bowler, K.J. (2011). Six-month changes in spirituality and religiousness in alcoholics predict drinking outcomes at nine months. *Journal of Studies on Alcohol & Drugs, 72*(4), 660–668.

Ross, S. (2008). The mentally ill substance abuser. In M. Galanter & H.D. Kleber (Eds.), *Textbook of Substance Abuse Treatment* (4th ed., pp. 537–554). Washington, DC: American Psychiatric Publishing.

Rossman, S.B., Rempel, M., Roman, J.K., Zweig, J.M., Lindquist, C.H., Green, M., Downey, P.M., Yahner, J., Bhati, A.S., & Farole, D.J. (2011). *The multisite adult drug court evaluation: The impact of drug courts, vol. 4*. Washington, DC: Urban Institute Justice Policy Center. *Available at* https://www.ncjrs.gov/pdffiles1/nij/grants/237112.pdf.

Sartor, C.E., McCutcheon, V.V., O'Leary, C.C., Van Buren, D.J., Allsworth, J.E., Jeffe, D.B., & Cottler, L.B. (2012). Lifetime trauma exposure and posttraumatic stress disorder in women sentenced to drug court. *Psychiatry Research, 200*(2–3), 602–608.

Schoenwald, S. K., Mehta, T. G., Frazier, S. L., & Shernoff, E. S. (2013). Clinical supervision in effectiveness and implementation research. *Clinical Psychology: Science and Practice, 20*(1), 44–59.

Scott, C.K., & Dennis, M.L. (2012). The first 90 days following release from jail: Findings from the Recovery Management Checkups for Women Offenders (RMCWO) experiment. *Drug & Alcohol Dependence, 125*(1–2), 110–118.

Shaffer, D.K. (2006). Reconsidering drug court effectiveness: A meta-analytic review (Doctoral dissertation, University of Cincinnati, 2006). *Dissertation Abstracts International*, 67, 09A (AAT No. 3231113).

Shaffer, D.K. (2010). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly, 28*(3), *493–521.*

Smith, P., Gendreau, P., & Swartz, K. (2009). Validating the principles of effective intervention: A systematic review of the contributions of meta-analysis in the field of corrections. *Victims & Offenders, 4*(2), 148–169.

Sobell, L.C., & Sobell, M.B. (2011). *Group therapy for substance use disorders: A motivational cognitive-behavioral approach*. New York: Guilford.

Southam-Gerow, M. A., & McLeod, B. D. (2013). Advances in applying treatment integrity research for dissemination and implementation science: Introduction to special issue. *Clinical Psychology: Science & Practice, 20*(1), 113.

Sperber, K.G., Latessa, E., & Makarios, M.D. (2013). Examining the interaction between level of risk and dosage of treatment. *Criminal Justice & Behavior, 40*(3), 338–348.

Steenbergh, T.A., Runyan, J.D., Daugherty, D.A., & Winger, J.G. (2012). Neuroscience exposure and perceptions of client responsibility among addiction counselors. *Journal of Substance Abuse Treatment*, *42*(4), 421–8.

Szalavitz, M. (2010, July 16). Does teen drug rehab cure addiction or create it? *Time Magazine: On-Line. Available at* http://time.com/time/printout/0,8816,2003160,00.html.

Taxman, F.S., & Bouffard, J.A. (2005). Treatment as a part of drug court: The impact on graduation rates. *Journal of Offender Rehabilitation, 42*(1), 23–50.

Timko, C., & DeBenedetti, A. (2007). A randomized controlled trial of intensive referral to 12-step self-help groups: One-year outcomes. *Drug & Alcohol Dependence*, 90(2), 270–279.

Titus, J.C., Smith, D., C., Dennis, M.L., Ives, M., Twanow, L, & White, M.K. (2012). Impact of a training and certification program on the quality of interviewer-collected self-report assessment data. *Journal of Substance Abuse Treatment, 42(*2), 201–212.

Velasquez, M.M., Maurer, G.G., Crouch, C., & DiClemente, C.C. (2001). *Group treatment for substance abuse: A stages-of-change therapy manual.* New York: Guilford.

Vieira, T.A., Skilling, T.A., & Peterson-Badali, M. (2009). Matching court-ordered services with treatment needs: Predicting treatment success with young offenders. *Criminal Justice & Behavior, 36*(4), 385–401.

Wanberg, K.W., & Milkman, H.B. (2006). *Criminal conduct & substance abuse treatment: Strategies for self-improvement and change* (2nd ed.). Thousand Oaks, CA: Sage.

Weiss, R.D., Potter, J.S., & Iannucci, R.A. (2008). Inpatient treatment. In M. Galanter & H.D. Kleber (Eds.), *Textbook of Substance Abuse Treatment* (4th Ed., pp. 445–458). Arlington, VA: American Psychiatric Publishing.

Wexler, H.K., Melnick, G., & Cao, Y. (2004). Risk and prison substance abuse treatment outcomes: A replication and challenge. *The Prison Journal, 84*(1), 106–120.

Wexler, H.K., Melnick, G., Lowe, L., & Peters, J. (1999). Three-year reincarceration outcomes for Amity in-prison therapeutic community and aftercare in California. *The Prison Journal, 79*(3), 321–336.

Wilson, D.B., Bouffard, L.A., & MacKenzie, D.L. (2005). A quantitative review of structured, group-oriented, cognitive-behavioral programs for offenders. *Criminal Justice & Behavior, 32*(2), 172–204.

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

Wilson, J.A., & Davis, R.C. (2006). Good intentions meet hard realities: An evaluation of the Project Greenlight Reentry Program. *Criminology & Public Policy, 5*(2), 303–338.

Witbrodt, J., Mertens, J., Kaskutas, L.A., Bond, J., Chi, F., & Weisner, C. (2012). Do 12-step meeting attendance trajectories over 9 years predict abstinence? *Journal of Substance Abuse Treatment*, *43*(1), 30–43.

Yalom, I.D. (2005). *The theory and practice of group psychotherapy* (5th ed.). New York: Basic Books.

Zweig, J.M., Lindquist, C., Downey, P.M., Roman, J., & Rossman, S.B. (2012). Drug court policies and practices: How program implementation affects offender substance use and criminal behavior outcomes. Drug Court Review, *8*(1), 43–79.

Appendix VI

Supporting Evidence Complementary Services

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume II, pages 8-25.

A. Scope of Complementary Services

Drug Court participants frequently have needs for treatment and social services that extend well beyond substance use disorder treatment. National and statewide studies have found that substantial proportions of Drug Court participants suffered from a serious co-occurring mental health or medical disorder, were chronically unemployed, had low educational achievement, were homeless, or had experienced physical or sexual abuse or other trauma (see Table 1).

Table 1 Complementary Needs Identified in National and Statewide Studies of Drug Courts

Complementary Need	Percentage of Participants
Any mental health problem/disorder	63%
Major depression	16%–39%
Posttraumatic stress disorder (PTSD)	10%
Anxiety disorder other than PTSD	9%
Bipolar disorder	8%
Chronic medical condition	26%
Unemployed	54%–72%
Less than a high school diploma or GED	32%–38%
Homeless	11%–47%
Abuse or trauma history	27%–29%

Sources: Cissner et al. (2013); Green & Rempel (2012); Peters et al. (2012).

Drug Courts are more effective and cost-effective when they offer complementary treatment and social services to address these co-occurring needs. A multisite study of approximately seventy Drug Courts found that programs were significantly more effective at reducing crime when they offered mental health treatment, family counseling, and parenting classes and were marginally more effective when they offered medical and dental services (Carey et al., 2012). The same study determined that Drug Courts were more cost-effective when they helped participants find a job, enroll in an educational program, or obtain sober and supportive housing. Similarly, a statewide study of eighty-six Drug Courts in New York found that programs were significantly more effective at reducing crime when they assessed participants for trauma and other mental health treatment needs, and delivered mental health, medical, vocational, or educational services where indicated (Cissner et al., 2013).

Studies do not, however, support a practice of delivering the same complementary services to all participants. Drug Courts that required all participants to receive educational or employment services were determined in one meta-analysis to be less effective at reducing crime than Drug Courts that matched these services to the assessed needs of the participants (Shaffer, 2006). Requiring participants to receive unnecessary services wastes time and resources and can make outcomes worse by placing excessive demands on participants and interfering with the time they have available to engage in productive activities (Gutierrez & Bourgon, 2012; Lowenkamp et al., 2006; Prendergast et al., 2013; Smith et al., 2009; Vieira et al., 2009; Viglione et al., 2015). Evidence also suggests participants may become resentful, despondent, or anxious if they are sanctioned for failing to meet excessive or unwarranted demands, a phenomenon referred to as learned helplessness or ratio burden (Seligman, 1975). Under such circumstances, behavior fails to improve, and participants may leave treatment prematurely (Marlowe & Wong, 2008). If a Drug Court team cannot articulate a sound rationale for requiring a participant to receive a given service, then the team should reconsider requiring that service.

B. Sequence and Timing of Services

Timing is critical to the successful delivery of complementary treatment and social services. Outcomes are significantly better when rehabilitation programs address complementary needs in a specific sequence. This finding has important implications for designing the phase structure in a Drug Court. The first phase of Drug Court should focus primarily on resolving conditions that are likely to interfere with retention or compliance in treatment (responsivity needs). This process may include meeting participants' basic housing needs, stabilizing mental health symptoms if present, and ameliorating acute psychological or physiological symptoms of addiction, such as cravings, anhedonia, or withdrawal. Subsequently, the interim phases of Drug Court should focus on resolving needs that increase the likelihood of criminal recidivism and substance use (criminogenic needs). This process includes initiating sustained abstinence from drugs and alcohol, addressing dysfunctional or antisocial thought patterns, eliminating delinquent peer associations, and reducing family conflict. Finally, later phases of Drug Court should address remaining needs that are likely to undermine the maintenance of treatment gains (maintenance needs). This process may include providing vocational or educational assistance, parent training, or other interventions designed to enhance participants' activities of daily living (ADL) skills.[24]

Responsivity Needs. When participants first enter Drug Court, one of the most pressing goals is to ensure that they remain in treatment and comply with other reporting obligations. This objective requires Drug Courts to resolve symptoms or conditions that are likely to interfere with attendance or engagement in treatment. Such conditions are commonly referred to as responsivity needs because they interfere with a person's response to rehabilitation efforts (Andrews & Bonta, 2010; Smith et al., 2009). Although responsivity needs do not necessarily cause or exacerbate crime, they nevertheless must be addressed early in treatment to prevent participants from failing or dropping out of treatment prematurely (Hubbard & Pealer, 2009; Karno & Longabaugh, 2007).

Responsivity needs that are commonly encountered in Drug Courts include severe mental illness and homelessness or unstable housing (Cissner et al., 2013; Green & Rempel, 2012; Peters et al., 2012). Although these conditions usually do not cause crime (Andrews & Bonta, 2010; Bonta et al., 1998; Gendreau et al., 1996), they have a marked tendency to undermine the effectiveness of Drug Courts and other correctional rehabilitation programs (Gray & Saum, 2005; Hickert et al., 2009; Johnson et al., 2011;

[24] This phase structure assumes a Drug Court is serving high-risk and high-need participants [see Standard I]. If a Drug Court serves individuals who are not addicted to drugs or alcohol or suffering from a serious mental illness, it may be advisable to deliver vocational, educational or other maintenance interventions beginning in an early phase of the program (Cresswell & Deschenes, 2001; Gallagher, 2013a; Vito & Tewksbury, 1998).

Mendoza et al., 2013; Young & Belenko, 2002). To avoid premature termination from Drug Court, these responsivity needs must be addressed, when present, beginning in the first phase of treatment and continuing as needed throughout participants' enrollment in the program.

Criminogenic Needs. Criminogenic needs refer to disorders or conditions that cause or exacerbate crime (Andrews & Bonta, 2010). Severe substance use disorders are highly criminogenic needs (Bennett et al., 2008; Walters, 2015), which explains why they are the primary focus of most interventions in Drug Courts. Other criminogenic needs that are encountered frequently in Drug Courts include criminal-thinking patterns, impulsivity, family conflict, and delinquent peer affiliations (Green & Rempel, 2012; Hickert et al., 2009; Jones et al., 2015).

Studies have reported improved outcomes when Drug Courts provided services to address these criminogenic needs. For example, superior outcomes have been reported when Drug Court participants learned to apply effective and pro-social decision-making skills, such as learning to think before they act, to consider the potential consequences of their actions, and to recognize their own role in interpersonal conflicts (Cheesman & Kunkel, 2012; Heck, 2008; Kirchner & Goodman, 2007; Lowenkamp et al., 2009; Vito & Tewksbury, 1998). Similarly, studies found that crime and substance use declined significantly when Drug Court participants spent less time interacting with delinquent peers, spent more time interacting with pro-social peers and relatives, and reported fewer conflicts with family members (Green & Rempel, 2012; Hickert et al., 2009; Shaeffer et al., 2010; Wooditch et al., 2013).

Maintenance Needs. Some needs, such as poor job skills, illiteracy, or low self-esteem, are often the result of living a nonproductive or antisocial lifestyle rather than the cause of that lifestyle (Hickert et al., 2009; Wooditch et al., 2013). Treating such noncriminogenic needs before one treats criminogenic needs is associated with increased criminal recidivism, treatment failure, and other undesirable outcomes (Andrews & Bonta, 2010; Andrews et al., 1990; Smith et al., 2009; Vieira et al., 2009). Nevertheless, if these needs are ignored over the long-term, they are likely to interfere with the maintenance of treatment gains. Improvements in certain maintenance needs, such as improved educational achievement or job skills, predict better long-term persistence of treatment effects (Leukefeld et al., 2007).

The important point is that improvements in maintenance needs rarely occur until after the more pressing responsivity and criminogenic needs have been resolved. Participants are unlikely, for example, to improve their job performance until after they have stopped experiencing debilitating symptoms of addiction or mental illness, stopped associating with delinquent peers, and relinquished self-centered attitudes and impulsive behaviors (Guastaferro, 2012; Samenow, 2014). After participants are stabilized clinically and have achieved a reasonable period of sobriety, maintenance services designed to enhance their adaptive functioning and ADL skills help to ensure the gains are sustained. Outcomes are also significantly better when continued involvement in maintenance activities after discharge is a requirement for graduation and a component of each participant's continuing-care plan (Carey et al., 2012).

C. Clinical Case Management

Studies consistently find that Drug Courts are more effective and cost-effective when participants meet individually with a clinical case manager or comparable treatment professional at least weekly during the first phase of the program (Carey et al., 2012; Cissner et al., 2013; Zweig et al., 2012). As described previously, Drug Courts must identify a range of complementary needs among participants, refer participants for indicated services, and ensure the services are delivered in an effective sequence. To do otherwise risks wasting resources and making outcomes worse for some participants. These complicated tasks require input from a professionally trained clinical case manager or clinician who is competent to perform clinical and social service assessments, understands how services should be sequenced and

matched to participant needs, and is skilled at monitoring and reporting on participant progress (Monchick et al., 2006; Rodriguez, 2011).

Typically, clinical case managers are addiction counselors, social workers, or psychologists who have received specialized training to assess participant needs, broker referrals for indicated services, coordinate care between partner agencies, and report progress information to other interested professionals (Monchick et al., 2006; Rodriguez, 2011). In some Drug Courts, probation officers or other criminal justice professionals may serve as court case managers, to be distinguished from clinical case managers. Typically, court case managers administer brief screening instruments designed to identify participants requiring more in-depth clinical assessments. Participants scoring above established thresholds on the screening instruments are referred for further evaluation by a clinically trained treatment professional.

Broadly speaking, there are four basic models of clinical case management (Hesse et al., 2007; Rapp et al., 2014):

- *Brokerage Model*—The least intensive form of case management, the brokerage model involves assessing participants and linking them to indicated services.
- *Generalist or Clinician Model*—In the most common form of case management, the Generalist case manager assesses participant needs and delivers some or all of the indicated services.
- *Assertive Community Treatment (ACT) Model*—The most intensive form of case management, the ACT Model provides around-the-clock access to a multidisciplinary team of professionals that delivers wraparound services in the community designed to meet an array of treatment and social-service needs.
- *Strengths-Based Model*—A strengths-based philosophy may be applied in the context of any of the above models. It focuses on leveraging participants' natural resources and encouraging participants to take an active role in setting treatment goals and selecting treatment options.

Meta-analyses reveal that all four case management models significantly increase referrals for indicated services and retain participants longer in treatment; however, they have relatively small effects on substance use, crime, and other long-term outcomes (Hesse et al., 2007; Rapp et al., 2014). Whether a program produces long-term improvements depends ultimately on the quality and quantity of treatment and social services that are delivered. No evidence suggests any one case management model is superior to another; however, the models were developed for different types of programs serving individuals with different clinical and social service profiles. The generalist model was developed primarily for use in outpatient treatment settings where a primary therapist commonly delivers or coordinates the delivery of various components of a participant's care. Although few Drug Court studies have provided a clear description of the case management services that were provided, the generalist model appears to be used most frequently in adult Drug Courts (Carey et al., 2012; Cissner et al., 2013; Zweig et al., 2012).

The brokerage model was developed for participants who are served by more than one agency or system. For example, some substance use disorder treatment programs may lack the required expertise to deliver mental health treatment or vocational rehabilitation. As a result, participants must be referred to another agency for a portion of their care. A clinical case manager is required to broker the referral, reconcile conflicting demands that may be placed on participants by different agencies, and report on participant progress to the Drug Court team.

A specific model of case management, called Treatment Accountability for Safer Communities or Treatment Alternatives to Street Crime (TASC), was designed to bridge gaps between the substance use, mental health, and criminal justice systems. TASC programs typically apply a brokerage or generalist model depending on whether treatment is available within the criminal justice system or must be brokered through another system or agency. Evidence is convincing that TASC programs increase participants' access to services and retention in treatment; however, impacts on substance use and crime have been mixed (Anglin et al., 1999; Ventura & Lambert, 2004). As was already noted, the key to successful outcomes depends on the quality and quantity of treatment and social services that are delivered (Clark et al., 2013; Cook, 2002; Rodriguez, 2011). Outcomes are more consistently favorable when TASC case management is delivered in conjunction with intensive evidence-based treatment as in Drug Courts (Monchick et al., 2006). Therefore, training on the TASC model or a comparable case management model is important for staff members providing clinical case management services in Drug Courts.

Finally, the ACT model was developed for use with seriously impaired individuals who have a wide range of mental health and social service needs (McLellan et al., 1998, 1999). This intensive model of case management has been applied successfully in the context of a mental health court (Braude, 2005) and a community court serving persons with serious and persistent mental illness or social service needs (Somers et al., 2014). Training on the ACT model of case management is advisable for Drug Courts serving seriously impaired individuals suffering from co-occurring mental illness, chronic homelessness, or other severe functional impairments.

Regardless of which model of case management is applied, outcomes are superior when case managers administer reliable and valid needs-assessment instruments (Andrews & Bonta, 2010; Andrews et al., 2006). [Appendix C provides examples of validated instruments designed to assess clinical and criminogenic needs among persons in substance use disorder treatment and the criminal justice system.] Whether needs assessments should be administered repeatedly during the course of treatment is an open question. Although evidence suggests changes in need scores correlate with progress in treatment (Greiner et al., 2015; Serin et al., 2013; Vose et al, 2013; Wooditch et al., 2013), little guidance is available to determine when or how to alter treatment conditions in light of changing scores (Serin et al., 2013). Until such guidance is available, Drug Courts are advised to rely on objective indices of participant progress, such as drug test results and treatment attendance rates, to make decisions about adjusting treatment and social services.

On a final note, a critical function of case management is linking participants to public benefits and other subsidies to which they are legally entitled. For example, under the Affordable Care Act (ACA), Drug Court participants may be eligible for medical or mental health care benefits pursuant to Medicaid expansion or newly created health-insurance exchanges (Frescoln, 2014). Court case managers or clinical case managers must leverage these financial resources and enroll participants for eligible benefits to meet participants' needs for substance use disorder treatment and other complementary services.

D. Housing Assistance

Participants are unlikely to succeed in treatment if they do not have a safe, stable, and drug-free place to live (Morse et al., 2015; Quirouette et al., 2015). No study was identified that has examined the impact of housing assistance on Drug Court outcomes. However, studies in similar contexts have reported improved outcomes when housing assistance was provided for parolees reentering the community after prison (Clark, 2014; Lutze et al., 2014), in community courts for persons suffering from serious and persistent mental illness (Kilmer & Sussell, 2014; Lee et al., 2013), and in programs serving homeless military veterans (Elbogen et al., 2013; Winn et al., 2014).

Some Drug Courts may have a policy of denying entry to persons who do not have a stable place of residence. Such a policy is likely to have the unintended effect of excluding the highest-risk and highest-need individuals—those who need Drug Court the most—from participation in Drug Court (Morse et al., 2015; Quirouette et al., 2015). The preferable course of action is to provide housing assistance, where indicated, beginning in the first phase of Drug Court and continuing as needed throughout participants' enrollment in the program. If professional housing services are not available to a Drug Court, then clinical case managers or other staff members should make every effort to help participants find safe and stable housing with prosocial and drug-free relatives, friends, or other suitable individuals.

E. Mental Health Treatment

Approximately two-thirds of Drug Court participants report serious mental health symptoms and roughly one-quarter have a diagnosed Axis I psychiatric disorder, most commonly major depression, bipolar disorder, PTSD, or other anxiety disorder (Cissner et al., 2013; Green & Rempel, 2012; Peters et al., 2012). Mental illness, by itself, is ordinarily not a criminogenic need (Bonta et al., 1998; Elbogen & Johnson, 2009; Gendreau et al., 1996; Peterson et al., 2014; Phillips et al., 2005; Prins et al., 2014); however, it is a responsivity need that can interfere significantly with the effectiveness of Drug Courts and other rehabilitation programs (Gray & Saum, 2005; Hickert et al., 2009; Johnson et al., 2011; Manchak et al., 2014; Mendoza et al., 2013; Ritsher et al., 2002; Young & Belenko, 2002). Moreover, when mental illness is combined with substance use disorder, the odds of recidivism increase significantly—although the magnitude of this effect is smaller than for most other criminogenic risk factors, such as a participant's criminal history or association with delinquent peers (Andrews & Bonta, 2010; Peters et al., 2015; Rezansoff et al., 2013).

Mental illness and substance use disorder may co-occur in a given case for several reasons. Substance use may trigger or exacerbate mental illness, mentally ill individuals may use substances in a misguided effort to self-medicate psychiatric symptoms, or the two disorders may emerge independently in a person who has a generalized vulnerability to stress-related illness (Ross, 2008). Causality aside, treating either disorder alone without treating both disorders simultaneously is rarely, if ever, successful. Addiction and mental illness are reciprocally aggravating conditions, meaning that continued symptoms of one disorder are likely to precipitate relapse in the other disorder (Chandler et al., 2004; Drake et al., 2008). For example, a formerly depressed person who continues to use drugs is likely to experience a resurgence of depressive symptoms. Conversely, a person recovering from addiction who continues to suffer from depression is at risk for relapsing to drug use. For this reason, best practice standards for Drug Courts and other treatment programs require mental illness and addiction to be treated concurrently as opposed to consecutively (Drake et al., 2004; Kushner et al., 2014; Mueser et al., 2003; Osher et al., 2012; Peters, 2008; Steadman et al., 2013). Whenever possible, both disorders should be treated in the same facility by the same professional(s) using an integrated treatment model that focuses on the mutually aggravating effects of the two conditions. The Substance Abuse and Mental Health Services Administration (SAMHSA, 2010) has published therapist toolkits to assist in delivering evidence-based integrated treatments for co-occurring substance-use and mental health disorders.

Participants should also have unhindered access to medical providers qualified to prescribe and monitor response to psychiatric medications (Kushner et al, 2014; Steadman et al., 2013). In one study, Drug Court participants who were prescribed psychiatric medications were seven times more likely to graduate successfully from the program than participants with psychiatric symptoms who did not receive psychiatric medications (Gray & Saum, 2005). Thus, for Drug Courts to deny participants access to psychiatric medication or require them to discontinue legally prescribed psychiatric medication as a condition of entering or graduating from Drug Court is not appropriate [see also Standard I, Target

Population, and Standard V, Substance Use Disorder Treatment]. A participant should only be denied psychiatric medication if the decision is based on expert medical evidence from a qualified physician who has examined the participant and is adequately informed about the facts of the case (Peters & Osher, 2004; Steadman et al., 2013).

F. Trauma-Informed Services

More than one-quarter of Drug Court participants report having been physically or sexually abused in their lifetime or having experienced another serious traumatic event, such as a life-threatening car accident or work-related injury (Cissner et al., 2013; Green & Rempel, 2012). Among female Drug Court participants, studies have found that more than 80% experienced a serious traumatic event in their lifetime, more than half were in need of trauma-related services, and over a third met diagnostic criteria for PTSD (Messina et al., 2012; Powell et al., 2012; Sartor et al., 2012).

Unlike most types of mental illness which are typically noncriminogenic, individuals in the criminal justice system who have PTSD are approximately one and a half times more likely to reoffend than those without PTSD (Sadeh & McNiel, 2015). Moreover, as is true for many forms of mental illness, individuals with PTSD are significantly more likely to drop out or to be discharged prematurely from substance use disorder treatment than individuals without PTSD (Mills et al., 2012; Read et al., 2004; Saladin et al., 2014). For these reasons, addressing trauma-related symptoms beginning in the first phase of Drug Court and continuing as necessary throughout participants' enrollment in the program is essential.

Most research on treatment of PTSD and other trauma-related syndromes has been conducted with military veterans or women in gender-specific treatment programs. For persons suffering from a diagnosed PTSD, evidence-based treatments are manualized, standardized, and cognitive-behavioral in orientation (Benish et al., 2008). Effective interventions focus on the following objectives (Benish et al., 2008; Bisson et al., 2007; Bradley et al., 2005; Mills et al., 2012):

- Creating a safe and dependable therapeutic relationship between the participant and therapist
- Helping participants deal with anger, anxiety, and other negative emotions without lashing out or engaging in avoidance behaviors such as substance use
- Assisting participants to construct a coherent "narrative" or understanding of the traumatic events that points toward productive actions (For example, many trauma victims believe they were to blame for past traumas or are helpless to prevent future traumas. Helping participants absolve themselves of guilt for past events and learn effective behavioral strategies to avoid future retraumatization is far more productive.)
- Exposing participants, in tolerable dosages, to memories or images of the event in a manner that gradually desensitizes them to associated feelings of panic and anxiety

In a randomized controlled experiment, female Drug Court participants with trauma histories who received manualized cognitive-behavioral PTSD treatments—Helping Women Recover (Covington, 2008) or Beyond Trauma (Covington, 2003)—in gender-specific groups were more likely to graduate from Drug Court, were less likely to receive a jail sanction in the program, and reported more than twice the reduction in PTSD symptoms than participants with trauma histories who did not receive PTSD treatment (Messina et al., 2012). In another study, female Drug Court participants who received similar interventions—trauma-focused cognitive-behavioral therapy or abuse-focused cognitive-behavioral therapy—reported substantial reductions in substance use and mental health symptoms as well as

improvements in housing and employment (Powell et al., 2012). Given the design of these studies, separating the effects of the PTSD treatments from the effects of the gender-specific groups is not possible. Studies have reported superior outcomes when women in the criminal justice system received various types of substance use disorder treatment in female-only groups (Grella, 2008; Kissin et al., 2013; Liang & Long, 2013; Morse et al., 2013). Given the current state of knowledge, the best practice is to deliver trauma-related services for women in female-only groups because this combination of services clearly enhances outcomes for these participants.

Not all individuals who experience trauma will develop PTSD or require PTSD treatment, nor can Drug Courts assume that past trauma was the cause of a participant's substance use problem or criminal history (Saladin et al., 2014). In some cases, trauma is the result rather than the cause of a participant's substance use problem or criminal involvement. Persons who engage in substance use or crime often expose themselves repeatedly to the potential for trauma; therefore, treating trauma symptoms without paying equivalent attention to substance use and other criminogenic needs is unlikely to produce sustainable improvements.

Although some participants with trauma histories do not require formal PTSD treatment, all staff members, including court personnel and other criminal justice professionals, need to be *trauma-informed* for all participants (Bath, 2008). Staff members should remain cognizant of how their actions may be perceived by persons who have serious problems with trust, are paranoid or unduly suspicious of others' motives, or have been betrayed, sometimes repeatedly, by important persons in their lives. Safety, predictability and reliability are critical for treating such individuals. Several practice recommendations should be borne in mind (Bath, 2008; Covington, 2003; Elliott et al., 2005; Liang & Long, 2013):

- Staff members should strive continually to avoid inadvertently retraumatizing participants. For example, responding angrily to participant infractions, ignoring participants' fears or concerns, maintaining a chaotic or noisy group-counseling environment, or performing urine drug testing in a public or disrespectful manner may reawaken feelings of shame, fear, guilt, or panic in formerly traumatized individuals.
- Staff should remain true to their word, including following policies and procedures as described in the program manual and applying incentives and sanctions as agreed. Too much flexibility, no matter how well-intentioned, may seem unfair and unpredictable to persons who have fallen victim to unexpected dangers in the past.
- Staff should provide clear instructions in advance to participants concerning behaviors that are expected and prohibited in the program. Individuals with trauma histories need to understand the rules and to be prepared for what will occur in the event of an accomplishment or infraction.
- Staff should start and end counseling sessions, court hearings, and other appointments on time, at the agreed-upon location, and according to an agreed-upon structure and format. If participants cannot rely on staff to follow a basic itinerary, relying on those same staff persons for trustworthy support, feedback, and counseling may prove difficult for participants.
- Participants with PTSD or severe trauma-related symptoms, such as panic or dissociation (feeling detached from one's surroundings), may not be suitable candidates for group interventions, especially in the early stages of treatment (Yalom & Leszcz, 2005). Such individuals may need to be treated on an individual basis or in small groups with carefully

selected group members who are nonthreatening and nonpredatory. As was noted earlier, female participants with trauma histories are especially well suited for gender-specific groups (Liang & Long, 2013; Messina et al., 2012).

- Participants with histories of childhood-onset abuse or neglect may be at risk for developing a severe personality disorder such as borderline personality disorder. These individuals may have considerable difficulty trusting others, controlling overwhelming feelings of anger or depression, and containing their impulses. Manualized cognitive-behavioral treatments, such as dialectical behavior therapy (Linehan, 1996), have been shown to improve outcomes in these difficult cases (Dimeff & Koerner, 2007; Linehan et al., 1999). These complicated treatments require specialized training and continuous supervision to help staff deal with uncomfortable and confusing reactions that are commonly engendered in these challenging cases.

G. Criminal Thinking Interventions

As stated earlier, criminal-thinking patterns are observed frequently among Drug Court participants (Jones et al., 2015) and may contribute to program failure (responsivity need) and criminal recidivism (criminogenic need) (Gendreau et al., 1996; Helmond et al., 2015; Knight et al., 2006; Walters, 2003). Some Drug Court participants have considerable difficulty seeing other people's perspectives, recognizing their role in interpersonal conflicts, or anticipating consequences before they act. Moreover, they may hold counterproductive attitudes or values, such as assuming that all people are untrustworthy and motivated to manipulate or dominant others. Given such antisocial sentiments, these participants are often viewed as suspicious or manipulative in character, get into repeated conflicts with others, and fail to learn from negative social interactions.

Several manualized cognitive-behavioral interventions address criminal-thinking patterns among individuals addicted to drugs or charged with crimes. Evidence-based curricula demonstrating improved outcomes in Drug Courts and similar programs include but are not limited to Moral Reconation Therapy (Cheesman & Kunkel, 2012; Heck, 2008; Kirchner & Goodman, 2007), Thinking for a Change (Lowenkamp et al., 2009), and Reasoning & Rehabilitation (Cullen et al., 2012; Tong & Farrington, 2006). Other curricula focused specifically on the needs of men in the criminal justice system, such as Habilitation, Empowerment and Accountability Therapy (Turpin & Wheeler, 2012; Vito & Tewksbury, 1998) and Helping Men Recover (Covington et al., 2011), are undergoing development and effectiveness testing in Drug Courts.

Studies have not determined when delivering criminal-thinking interventions is most beneficial. Clinical experience suggests the most beneficial time to introduce these interventions is after participants are stabilized in treatment and no longer experiencing acutely debilitating symptoms such as cravings, withdrawal, or anhedonia (Milkman & Wanberg, 2007). Until participants are no longer in acute distress, expecting them to benefit from a cognitive-behavioral intervention that requires them to maintain consistent attention and cognitive endurance is unrealistic. Participants should be stabilized clinically before a Drug Court can reasonably expect them to think flexibly about the motivations for their behaviors and the potential ramifications of continuing in their current behavioral patterns.

H. Family and Interpersonal Counseling

Reductions in substance use and crime go hand in hand with reduced family conflict, fewer interactions with delinquent relatives and peers, and increased interactions with sober and pro-social individuals (Berg & Huebner, 2011; Fergusson et al., 2002; Knight & Simpson, 1996; Wooditch et al., 2013; Wright &

Cullen, 2004). These findings hold true in Drug Courts as they do in most correctional rehabilitation programs (Green & Rempel, 2012; Hickert et al., 2009).

Most studies of family treatments in Drug Courts have been conducted in the context of Family Drug Courts or Juvenile Drug Courts. Results have demonstrated consistently superior outcomes when manualized, cognitive-behavioral family interventions were added to the Drug Court curriculum, including Strengthening Families and Celebrating Families! (Brook et al., 2015) and modified versions of multidimensional family therapy (Dakof et al., 2009, 2010, 2015), multisystemic therapy (Henggeler et al., 2006), and functional family therapy (Datchi & Sexton, 2013). [Further information about these and other evidence-based family treatments is provided in Appendix D.] Each of these treatments focuses on lessening familial conflict, reducing interactions with drug-using and antisocial peers and relatives, improving communication skills, and enhancing problem-solving skills. In the beginning of treatment, prosocial and drug-free family members, friends, or daily acquaintances are trained by staff to monitor participant behavior reliably, reinforce prosocial activities, respond appropriately and helpfully to problematic behaviors, reduce tension and conflict, and deescalate confrontations. As therapy progresses, treatment focuses on teaching all parties effective communication and problem-solving skills.

Studies have not determined when delivering family or interpersonal counseling in Drug Courts is most beneficial. Given the powerful association between family functioning and criminal justice outcomes, these services should be delivered as soon as practicable. Outcomes in substance use disorder treatment are significantly better when at least one reliable and pro-social family member, friend, or close acquaintance is enlisted early in treatment to help the participant arrive on time for appointments and comply with other obligations in the program, such as following a curfew, adhering to prescribed medications, and avoiding forbidden locations like bars (Meyers et al., 1998; Roozen et al., 2010). The same individual may be enlisted to provide helpful observations to staff about the participant's conduct outside of treatment (Kirby et al., 1999). After participants are stabilized clinically, family interventions should focus on improving communication skills, altering maladaptive interactions, reinforcing pro-social behaviors, and reducing interpersonal conflicts.

I. Vocational and Educational Services

Approximately one-half to three-quarters of Drug Court participants have poor work histories or low educational achievement (Cissner et al., 2013; Deschenes et al., 2009; Green & Rempel, 2012; Hickert et al, 2009; Leukefeld et al., 2007). Being unemployed or having less than a high school diploma or general educational development (GED) certificate predicts poor outcomes in Drug Courts (DeVall & Lanier, 2012; Gallagher, 2013b; Gallagher et al., 2015; Mateyoke-Scrivener et al., 2004; Peters et al., 1999; Roll et al., 2005; Shannon et al., 2015) as it does in most other substance use disorder treatment (Keefer, 2013) and correctional rehabilitation programs (Berg & Huebner, 2011; Wright & Cullen, 2004).

Unfortunately, few vocational or educational interventions have been successful at reducing crime (Aos et al., 2006; Cook et al., 2014; Farabee et al., 2014; Wilson et al., 2000) or substance use (Lidz et al., 2004; Magura et al., 2004; Platt, 1995). Disappointing results have commonly been attributable to poor quality and timing of the interventions. Many vocational programs amount to little more than job-placement services, which alert participants to job openings, place them in a job, or help them conduct a job search. Placing high-risk and high-need individuals in a job is unlikely to be successful if they continue to crave drugs or alcohol, experience serious mental health symptoms, associate with delinquent peers, or respond angrily or impulsively when they are criticized or receive negative feedback from others (Coviello et al., 2004; Lidz et al., 2004; Magura et al., 2004; Platt, 1995; Samenow, 2014). Improvements in education

and employment rarely occur until after participants are stabilized clinically, cease interacting with delinquent peers, and learn to deal with frustration in a reasonably effective and mature manner.

At least two studies in Drug Courts have reported improved outcomes when unemployed or underemployed participants received a manualized, cognitive-behavioral vocational intervention. The effective interventions taught participants not only how to find a job, but also how to keep the job by behaving responsibly and dependably and how to land a better or higher-paying job in the future by continually honing their skills and productivity (Deschenes et al., 2009; Leukefeld et al., 2007). Comparable studies in substance use disorder treatment reported improved outcomes when participants learned to interact effectively with coworkers and employers and resolve interpersonal conflicts on the job (Platt et al., 1993; Platt, 1995).

Studies have not determined when administering vocational or educational interventions is most beneficial. For high-risk and high-need individuals, these services are best introduced late in the course of Drug Court after participants have secured safe and stable housing, their addiction and mental health symptoms have resolved substantially, they have completed a criminal-thinking intervention, and they are spending most or all of their time interacting with pro-social, sober, and supportive peers (Magura et al., 2004; Platt, 1995). For many high-risk and high-need participants, this preparatory process may require at least six months of treatment, and twelve months may be needed for individuals with serious substance use disorders or mental illness (Gottfredson et al., 2007; Peters et al., 2002).

J. Medical and Dental Treatment

Approximately one-quarter of Drug Court participants suffer from chronic medical or dental conditions that cause them serious discomfort, require ongoing medical attention, or interfere with their daily functioning (Green & Rempel, 2012). Medical and dental problems are typically maintenance needs, meaning they are most often a result rather than the cause of substance use and crime but can interfere with the maintenance of treatment gains. (An obvious exception is participants who become addicted to prescription medications during the course of medical or dental treatment.) Evidence suggests providing medical or dental treatment can improve outcomes for some Drug Court participants (Carey et al., 2012). Moreover, for humanitarian reasons, treating pain or discomfort regardless of the impact on criminal justice outcomes is always important.

No study has determined when addressing medical or dental concerns in Drug Courts is most appropriate. Needless to say, conditions that are life-threatening or may cause long-term disability should be treated immediately. However, waiting until later phases of Drug Court to treat nonessential or nonacute conditions that are exacerbated or maintained by substance use disorder may be prudent. Outcomes may be better if medical or dental services are delivered after participants have achieved sobriety and relinquished other antisocial behaviors. For example, participants who use methamphetamine often have serious dental problems (American Dental Association, n.d.). If these dental problems are not causing acute distress, it might be appropriate to wait until the participant has stopped using methamphetamine before attempting dental repairs. Continued substance use risks undoing dental efforts and may cause a participant to discontinue dental treatment prematurely. A more efficient use of resources may be to address nonessential dental or medical treatment in a late phase of Drug Court or as part of a participant's continuing-care plan so as to maintain and extend the Drug Court's beneficial effects. A logical first step is to refer participants for routine medical and dental checkups to establish relationships with health care providers and begin a long-term process of preventive and routine medical and dental care.

K. Prevention of Health-Risk Behaviors

Alarmingly high percentages of Drug Court participants engage in behaviors which put them at serious risk for contracting human immunodeficiency virus (HIV) and other sexually transmitted diseases (STDs). In some studies, approximately 50% to 85% of Drug Court participants reported engaging in frequent unprotected sex with multiple sex partners (Festinger et al., 2012; Robertson et al., 2012; Tolou-Shams et al., 2012). Drug Court participants were found in one study to lack basic knowledge about simple self-protective measures they can take to reduce their health-risk exposure, such as using condoms and cleaning injection needles (Robertson et al., 2012).

A recent systematic review identified several brief educational interventions that are proven to reduce HIV risk behaviors among drug-addicted persons in the criminal justice system (Underhill et al., 2014). Most effective interventions are brief and inexpensive to administer, and some can be delivered via computer or videotape with minimal burden on staff. The criminal justice system is a major vector for the spread of HIV, STDs, and other serious communicable diseases (Belenko et al., 2004; Spaulding et al., 2009). Impacts on crime and substance use aside, Drug Courts have a responsibility to reduce the chances that participants will contract a life-threatening or incurable illness, especially in light of the fact that effective interventions can be delivered at minimal cost and burden to the program.

L. Overdose Prevention and Reversal

Unintentional overdose deaths from illicit and prescribed opiates have more than tripled in the past fifteen years (Meyer et al., 2014). Individuals addicted to opiates are at especially high risk for overdose death following release from jail or prison because tolerance to opiates decreases substantially during periods of incarceration (Dolan et al., 2005; Strang, 2015; Strang et al., 2014).

Drug Courts should educate participants, their family members, and close acquaintances about simple precautions they can take to avoid or reverse a life-threatening drug overdose. At a minimum, this should include providing emergency phone numbers and other contact information to use in the event of an overdose or similar medical emergency.

As permitted by law, Drug Courts should also support local efforts to train Drug Court personnel, probation officers, law enforcement, and other persons likely to be first responders to an overdose on the safe and effective administration of overdose-reversal medications such as naloxone hydrochloride (naloxone or Narcan). Naloxone is nonaddictive, nonintoxicating, poses a minimal risk of medical side effects, and can be administered intranasally by nonmedically trained laypersons (Barton et al., 2002; Kim et al., 2009). The Centers for Disease Control and Prevention (2012) estimates that more than 10,000 potentially fatal opiate overdoses have been reversed by naloxone administered by nonmedical laypersons. Studies in the U.S. and Scotland confirm that educating at-risk persons and their significant others about ways to prevent or reverse overdose, including the use of naloxone, significantly reduces overdose deaths (National Institute on Drug Abuse, 2014; Strang, 2015).

State laws vary in terms of who may administer naloxone. Some states shield professional first responders and nonprofessional Good Samaritans from criminal or civil liability if they administer naloxone or render comparable medical aid in the event of a drug overdose (Strang et al., 2006). Other states restrict administration of naloxone to licensed medical providers, trained law enforcement personnel, or other professional first responders.

Some Drug Court professionals may fear this practice could give the unintended message to participants that continued drug use is acceptable or anticipated. On the contrary, educating participants about drug overdose delivers a clear message about the potentially fatal consequences of continued drug use.

Moreover, drug-abstinent participants may find themselves in the position of needing to save the life of a nonsober family member or acquaintance. Preparing participants to respond effectively in such circumstances delivers the pro-social message that they have a responsibility to help others.

References

American Dental Association. (n.d.). Oral health topics: Meth mouth. *Retrieved from* http://www.ada.org/en/member-center/oral- health-topics/meth-mouth.

Andrews, D.A., & Bonta, J. (2010). *The psychology of criminal conduct* (5th ed.). New Providence, NJ: Anderson.

Andrews, D.A., Bonta, J., & Wormith, J.S. (2006). The recent past and near future of risk and/or need assessment. *Crime and Delinquency, 52*(1), 7–27.

Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P., & Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology, 28*(3), 369–404.

Anglin, D.M., Longshore, D., & Turner, S. (1999). Treatment alternatives to street crime: An evaluation of five programs. *Criminal Justice and Behavior, 26*(2), 168–195.

Aos, S., Miller, M., & Drake, E. (2006). *Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates*. Olympia: Washington State Institute for Public Policy.

Barton, E.D., Ramos, J., Colwell, C., Benson, J., Baily, J., & Dunn, W. (2002). Intranasal administration of naloxone by paramedics. *Prehospital Emergency Care, 6*(1), 54–58.

Bath, H. (2008). The three pillars of trauma-informed care. *Reclaiming Children and Youth, 17*(3), 17–21.

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

Benish, S.G., Imel, Z.E., & Wampold, B.E. (2008). The relative efficacy of bona fide psychotherapies for treating post-traumatic stress disorder: A meta-analysis of direct comparisons. *Clinical Psychology Review, 28*(5), 746–758.

Bennett, T., Holloway, K., & Farrington, D. (2008). The statistical association between drug misuse and crime: A meta-analysis. *Aggression & Violent Behavior, 13*(2), 107–118.

Berg, M.T., & Huebner, B.M. (2011). Reentry and the ties that bind: An examination of social ties, employment, and recidivism. *Justice Quarterly, 28*(2), 382–410.

Bisson, J.I., Ehlers, A., Matthews, R., Pilling, S., Richards, D., & Turner, S. (2007). Psychological treatments for chronic post-traumatic stress disorder: Systematic review and meta-analysis. *British Journal of Psychiatry, 190*, 97–104. doi:10.1192/bjp.bp.106.021402.

Bonta, J., Law, M., & Hanson, R.K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychological Bulletin, 123*(2), 123–142.

Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *American Journal of Psychiatry, 162*(2), 214–227.

Braude, L. (2005). The Cook County Mental Health Court: Development, implementation, and initial implications. *Offender Substance Abuse Report, 5*(5), 67–76.

Brook, J., Akin, B.A., Lloyd, M.H., & Yan, Y. (2015). Family drug court, targeted parent training and family reunification: Did this enhanced service strategy make a difference? *Juvenile and Family Court Journal, 66*(2), 35–52.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Centers for Disease Control and Prevention. (2012). Community-based opioid overdose prevention programs providing naloxone—United States, 2010. *Morbidity and Mortality Weekly Report, 61*(6), 101–105.

Chandler, R.K., Peters, R.H., Field, G., & Juliano-Bult, D. (2004). Challenges in implementing evidence-based treatment practices for co-occurring disorders in the criminal justice system. *Behavioral Sciences & the Law, 22*(4), 431–448.

Cheesman, F.L., & Kunkel, T.L. (2012). *Virginia Adult Drug Treatment Courts: Cost benefit analysis*. Williamsburg, VA: National Center for State Courts.

Cissner, A.B., Rempel, M., Franklin, A.W., Roman, J.K., Bieler, S., Cohen, R., & Cadoret, C.R. (2013). *A statewide evaluation of New York's adult drug courts: Identifying which policies work best*. New York: Center for Court Innovation.

Clark, C.B., McCullumsmith, C.B., Redmond, N., Hardy, S., Waesche, M.C., Osula, G., & Cropsey, K.L. (2013). Factors associated with rapid failure in a Treatment Alternatives for Safer Communities (TASC) program. *Journal of Substance Abuse Treatment, 45*(4), 376–380.

Clark, V.A. (2014, November 12). Predicting two types of recidivism among newly released prisoners: First addresses as "launch pads" for recidivism or reentry success. *Crime & Delinquency: Online.* doi:10.1177/0011128714555760.

Cook, F. (2002). Treatment accountability for safer communities: Linking the criminal justice and treatment systems. In C.G. Leukefeld, F. Tims, and D. Farabee (Eds.), *Treatment of drug offenders: Policies and issues* (pp. 105–110). New York: Springer.

Cook, P.J., Kang, S., Braga, A.A., Ludwig, J., & O'Brien, M.E. (2014, December 20). An experimental evaluation of a comprehensive employment-oriented prisoner re-entry program. *Journal of Quantitative Criminology: Online*. doi:10.1007/s10940-014-9242-5.

Coviello, D.M., Zanis, D.A., & Lynch., K. (2004). Effectiveness of vocational problem-solving skills on motivation and job-seeking action steps. *Substance Use and Misuse, 39*(13-14), 2309–2324.

Covington, S. (2003). *Beyond trauma: A healing journey for women. Facilitator's guide.* Center City, MN: Hazelden.

Covington, S.S. (2008). *Helping women recover: A program for treating substance abuse—Special edition for use in the criminal justice system* (Facilitator's guide, Rev. ed.). San Francisco: Jossey-Bass.

Covington, S.S., Griffin, D., & Dauer, R. (2011). *A man's workbook: Helping men recover: A program for treating addiction—Special edition for use in the criminal justice system.* San Francisco: Jossey-Bass.

Cresswell, L.S, & Deschenes, E.P. (2001). Minority and non-minority perceptions of drug court program severity and effectiveness. *Journal of Drug Issues, 31*(1), 259–291.

Cullen, A.E., Clarke, A.Y., Kuipers, E., Hodgins, S., Dean, K., & Fahy, T. (2012). A multisite randomized trial of a cognitive skills program for male mentally disordered offenders: Violence and antisocial behavior outcomes. *Journal of Consulting and Clinical Psychology, 80*(6), 1114–1120.

Dakof, G.A., Cohen, J.B., & Duarte, E. (2009). Increasing family reunification for substance-abusing mothers and their children: Comparing two drug court interventions in Miami. *Juvenile and Family Court Journal, 60*(4), 11–23.

Dakof, G.A., Cohen, J.B., Henderson, C.E., Duarte, E., Boustani, M., Blackburn, A.,…Hawes, S. (2010). A randomized pilot study of the Engaging Moms program for family drug court. *Journal of Substance Abuse Treatment, 38*(3), 263–274.

Dakof, G.A., Henderson, C.E., Rowe, C.L., Boustani, M., Greenbaum, P.E., Wang, W.,…Liddle, H.A. (2015). A randomized clinical trial of family therapy in juvenile drug court. *Journal of Family Psychology, 29*(2), 232–241.

Datchi, C.C., & Sexton, T.L. (2013). Can family therapy have an effect on adult criminal conduct? Initial evaluation of functional family therapy. *Couple and Family Psychology: Research and Practice, 2*(4), 278–293.

Deschenes, E.P., Ireland, C., & Kleinpeter, C.B. (2009). Enhancing drug court success. *Journal of Offender Rehabilitation, 48*(1), 19–36.

DeVall, K.E., & Lanier, C.L. (2012). Successful completion: An examination of factors influencing drug court completion for white and non-white male participants. *Substance Use and Misuse, 47*(10), 1106–1116.

Dimeff, L.A., & Koerner, K. (Eds.) (2007). *Dialectical behavior therapy in clinical practice: Applications across disorders and settings.* New York: Guilford Press.

Dolan, K.A., Shearer, J., White, B., Zhou, J., Kaldor, J., & Wodak, A.D. (2005). Four-year follow-up of imprisoned male heroin users and methadone treatment: Mortality, reincarceration and hepatitis C infection. *Addiction, 100*(6), 820–828.

Drake, R.E., Mueser, K.T., Brunette, M.F., & McHugo, G.J. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatric Rehabilitation Journal, 27*(4), 360–374.

Drake, R.E., O'Neal, E.L., & Wallach, M.A. (2008). A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. *Journal of Substance Abuse Treatment, 34*(1), 123–138.

Elbogen, E.B., & Johnson, S.C. (2009). The intricate link between violence and mental disorder: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry, 66*(2), 152–161.

Elbogen, E.B., Sullivan, C.P., Wolfe, J., Wagner, H.R., & Beckham, J.C. (2013). Homelessness and money mismanagement in Iraq and Afghanistan veterans. *American Journal of Public Health, 103*(S2), S248–S254.

Elliott, D.E., Bjelajac, P., Fallot, R.D., Markoff, L.S., & Reed, B.G. (2005). Trauma-informed or trauma-denied: Principles and implementation of trauma-informed services for women. *Journal of Community Psychology, 33*(4), 461–477.

Farabee, D., Zhang, S.X., & Wright, B. (2014). An experimental evaluation of a nationally recognized employment-focused offender reentry program. *Journal of Experimental Criminology, 10*(3), 309–322.

Fergusson, D.M., Swain-Campbell, N.R., & Horwood, L.J. (2002). Deviant peer affiliations, crime and substance abuse: A fixed effects regression analysis. *Journal of Abnormal Child Psychology, 30*(4), 419–430.

Festinger, D.S., Dugosh, K.L., Metzger, D.S., & Marlowe, D.B. (2012). The prevalence of HIV risk behaviors among felony drug court participants. *Drug Court Review, 8*(1), 131–146.

Frescoln, K.P. (2014). *Engaging with the Affordable Care Act: Implications and recommendations for adult drug court professionals*. Alexandria, VA: National Association of Drug Court Professionals.

Gallagher, J.R. (2013a). African American participants' views on racial disparities in drug court outcomes. *Journal of Social Work Practice in the Addictions, 13*(2), 143–162.

Gallagher, J.R. (2013b). Drug court graduation rates: Implications for policy advocacy and future research. *Alcoholism Treatment Quarterly, 31*(2), 241–253.

Gallagher, J.R., Nordberg, A., Deranek, M.S., Ivory, E., Carlton, J., & Miller, J.W. (2015). Predicting termination from drug court and comparing recidivism patterns: Treating substance use disorders in criminal justice settings. *Alcoholism Treatment Quarterly, 33*(1), 28–43.

Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology, 34*(4), 575–608.

Gottfredson, D.C., Kearley, B.W., Najaka, S.S., & Rocha, C.M. (2007). How Drug Treatment Courts work: An analysis of mediators. *Journal of Research on Crime & Delinquency, 44*(1), 3–35.

Gray, A.R., & Saum, C.A. (2005). Mental health, gender and drug court completion. *American Journal of Criminal Justice, 30*(1), 55–69.

Green, M., & Rempel, M. (2012). Beyond crime and drug use: Do adult drug courts produce other psychosocial benefits? *Journal of Drug Issues, 42*(2), 156–177.

Greiner, L.E., Law, M.A., & Brown, S.L. (2015). Using dynamic factors to predict recidivism among women: A four-wave prospective study. *Criminal Justice and Behavior, 42*(5), 457–480.

Grella, C. (2008). Gender-responsive drug treatment services for women: A summary of current research and recommendations for drug court programs. In C. Hardin & J.N. Kushner (Eds.), *Quality improvement for drug courts: Evidence-based practices* (Monograph Series no. 9, pp. 63–74). Alexandria, VA: National Drug Court Institute.

Guastaferro, W.P. (2012). Using the Level of Service Inventory-Revised to improve assessment and treatment in drug court. *International Journal of Offender Therapy and Comparative Criminology, 56*(5), 769–789.

Gutierrez, L., & Bourgon, G. (2012). Drug treatment courts: A quantitative review of study and treatment quality. *Justice Research and Policy, 14*(2), 47–77.

Heck, C. (2008). MRT: Critical component of a local drug court program. *Cognitive Behavioral Treatment Review, 17(1)*, 1–2.

Helmond, P., Overbeek, G., Brugman, D., & Gibbs, J.C. (2015). A meta-analysis on cognitive distortions and externalizing problem behavior: Associations, moderators, and treatment effectiveness. *Criminal Justice and Behavior, 42*(3), 245–262.

Henggeler, S.W., Halliday-Boykins, C.A., Cunningham, P.B., Randall, J., Shapiro, S.B., & Chapman, J.E. (2006). Juvenile drug court: Enhancing outcomes by integrating evidence-based treatments. *Journal of Consulting and Clinical Psychology, 74*(1), 42–54.

Hesse, M., Vanderplasschen, W., Rapp, R., Broekaert, E., & Fridell, M. (2007). Case management for persons with substance use disorders. *Cochrane Database of Systematic Reviews, 4*, CD006265.

Hickert, A.O., Boyle, S.W., & Tollefson, D.R. (2009). Factors that predict drug court completion and drop out: Findings from an evaluation of Salt Lake County's adult felony drug court. *Journal of Social Service Research, 35*(2), 149–162.

Hubbard, D.J., & Pealer, J. (2009). The importance of responsivity factors in predicting reductions in antisocial attitudes and cognitive distortions among adult male offenders. *Prison Journal, 89*(1), 79–98.

Johnson, J.E., O'Leary, C.C., Striley, C.W., Abdallah, A.B., Bradford, S., & Cottler, L.B. (2011). Effects of major depression on crack use and arrests among women in drug court. *Addiction, 106*(7), 1279–1286.

Jones, C.G., Fearnley, H., Panagiotopoulos, B., & Kemp, R.I. (2015, June 18). Delay discounting, self-control, and substance use among adult drug court participants. *Behavioural Pharmacology: Online.*

Karno, M.P., & Longabaugh, R. (2007). Does matching matter? Examining matches and mismatches between patient attributes and therapy techniques in alcoholism treatment. *Addiction, 102*(4), 587–596.

Keefer, Q.A.W. (2013). Employment type and length of stay in substance abuse treatment: Economic factors and gender specific effects. *International Journal of Social Science Studies, 1*(2), 219–229.

Kilmer, B., & Sussell, J. (2014). *Does San Francisco's Community Justice Center reduce criminal recidivism?* Santa Monica, CA: RAND Corp. & Superior Court of California, County of San Francisco.

Kim, D., Irwin, K.S., & Khoshnood, K. (2009). Expanded access to naloxone: Options for critical response to the epidemic of opioid overdose mortality. *American Journal of Public Health, 99*(3), 402–407.

Kirby, K.C., Marlowe, D.B., Festinger, D.S., & LaMonaca, V. (1999). Community reinforcement training for family and significant others of drug abusers: A unilateral intervention to increase treatment entry of drug users. *Drug and Alcohol Dependence, 56*(1), 85–96.

Kirchner, R.A., & Goodman, E. (2007). Effectiveness and impact of Thurston County, Washington drug court program. *Cognitive Behavioral Treatment Review, 16(2),* 1–4.

Kissin, W.B., Tang, Z., Campbell, K.M., Claus, R.E., & Orwin, R.G. (2014). Gender-sensitive substance abuse treatment and arrest outcomes for women. *Journal of Substance Abuse Treatment, 46*(3), 332–339.

Knight, D.K., & Simpson, D.D. (1996). Influences of family and friends on client progress during drug abuse treatment. *Journal of Substance Abuse, 8*(4), 417–429.

Knight, K., Garner, B.R., Simpson, D.D., Morey, J.T., & Flynn, P.M. (2006). An assessment for criminal thinking. *Crime and Delinquency, 52*(1), 159–177.

Kushner, J.N., Peters, R.H., & Cooper, C.S. (2014). *A technical assistance guide for drug court judges on drug court treatment services*. Washington, DC: American University.

Lee, C.G., Cheesman, F.L., Rottman, D.B., Swaner, R., Lambson, S., Rempel, M., & Curtis, R. (2013). *A community court grows in Brooklyn: A comprehensive evaluation of the Red Hook Community Justice Center, Final Report*. Williamsburg, VA: National Center for State Courts.

Leukefeld, C., Webster, J.M., Staton-Tindall, M., & Duvall, J. (2007). Employment and work among drug court clients: 12-month outcomes. *Substance Use & Misuse, 42*(7), 1109–1126.

Liang, B., & Long, M.A. (2013). Testing the gender effect in drug and alcohol treatment: Women's participation in Tulsa County drug and DUI programs. *Journal of Drug Issues, 43*(3), 270–288.

Lidz, V., Sorrentino, D.M., Robison, L., & Bunce, S. (2004). Learning from disappointing outcomes: An evaluation of prevocational interventions for methadone maintenance patients. *Substance Abuse & Misuse, 39*(13–14), 2287–2308.

Linehan, M.M. (1996). Dialectical behavior therapy for borderline personality disorder. In B. Schmitz (Ed.), *Treatment of personality disorders* (pp. 179–199). Munich, Germany: Psychologie Verlags Union.

Linehan, M.M., Schmidt, H., Dimeff, L.A., Craft, J.C., Kanter, J., & Comtois, K.A. (1999). Dialectical behavior therapy for clients with borderline personality disorder and drug-dependence. *American Journal of Addiction, 8*(4), 279–292.

Lowenkamp, C.T., Hubbard, D., Makarios, M.D., & Latessa, E.J. (2009). A quasi-experimental evaluation of Thinking for a Change: A "real-world" application. *Criminal Justice & Behavior, 36*(2), 137–146.

Lowenkamp, C.T., Pealer, J., Smith, P., & Latessa, E.J. (2006). Adhering to the risk and need principles: Does it matter for supervision-based programs*? Federal Probation, 70*(3), 3–8.

Lutze, F.E., Rosky, J.W., & Hamilton, Z.K. (2014). Homelessness and reentry: A multisite outcome evaluation of Washington State's Reentry Housing Program for high-risk offenders. *Criminal Justice and Behavior, 41*(4), 471–491.

Magura, S., Staines, G.L., Blankertz, L., & Madison, E.M. (2004). The effectiveness of vocational services for substance users in treatment. *Substance Use & Misuse, 39*(13-14), 2165–2213.

Manchak, S.M., Sullivan, C.C., Schweitzer, M., & Sullivan, C.J. (2014). The influence of co-occurring mental health and substance use problems on the effectiveness of juvenile drug courts. *Criminal Justice Policy Review*.

Marlowe, D.B., & Wong, C.J. (2008). Contingency management in adult criminal drug courts. In S.T. Higgins, K. Silverman, & S.H. Heil (Eds.), *Contingency management in substance abuse treatment* (pp. 334–354). New York: Guilford Press.

Mateyoke-Scrivner, A., Webster, J.M., Staton, M., & Leukefeld, C. (2004). Treatment retention predictors of drug court participants in a rural state. *American Journal of Drug and Alcohol Abuse, 30*(3), 605–625.

McLellan, A.T., Hagan, T.A., Levine, M., Gould, F., Meyers, K., Bencivengo, M., & Durell, J. (1998). Supplemental social services improve outcomes in public addiction treatment. *Addiction, 93*(10), 1489–1499.

McLellan, A.T., Hagan, T.A., Levine, M., Meyers, K., Gould, F., Bencivengo, M.,…Jaffe, J. (1999). Does clinical case management improve outpatient addiction treatment. *Drug and Alcohol Dependence, 55*(1–2), 91–103.

Mendoza, N.S., Trinidad, J.R., Nochajski, T.H., & Farrell, M.C. (2013). Symptoms of depression and successful drug court completion. *Community Mental Health Journal, 49*(6), 787–792.

Messina, N., Calhoun, S., & Warda, U. (2012). Gender-responsive drug court treatment: A randomized controlled trial. *Criminal Justice and Behavior, 39*(12), 1539–1558.

Meyer, R., Patel, A.M., Rattana, S.K., Quock, T.P., & Mody, S.H. (2014). Prescription opioid abuse: A literature review of the clinical and economic burden in the United States. *Population Health Management, 17*(6), 372–387.

Meyers, R.J., Miller, W.R., Hill, D.E., & Tonigan, J.S. (1998). Community reinforcement and family training (CRAFT): Engaging unmotivated drug users in treatment. *Journal of Substance Abuse, 10*(3), 291–308.

Milkman, H., & Wanberg, K. (2007). Cognitive-behavioral treatment: A review and discussion for corrections professionals. Washington, DC: National Institute of Corrections.

Mills, K.L., Teesson, M., Back, S.E., Brady, K.T., Baker, A.L., Hopwood, S.,…Ewer, P.L. (2012). Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: A randomized controlled trial. *Journal of the American Medical Association, 308*(7), 690–699.

Monchick, R., Scheyett, A., & Pfeiffer, J. (2006). *Drug court case management: Role, function, and utility* (Monograph Series no. 7). Alexandria, VA: National Drug Court Institute.

Morse, D.S., Cerulli, C., Bedell, P., Wilson, J.L., Thomas, K., Mittal, M.,…Chin, N. (2014). Meeting health and psychological needs of women in drug treatment court. *Journal of Substance Abuse Treatment, 46*(2), 150–157.

Morse, D.S., Silverstein, J., Thomas, K., Bedell, P., & Cerulli, C. (2015). Finding the loopholes: A cross-sectional qualitative study of systemic barriers to treatment access for women drug court participants. *Health and Justice, 3*(12). doi:10.1186/s40352-015-0026-2.

Mueser, K.T., Noordsy, D.L., Drake, R.E., & Fox, L. (2003). *Integrated treatment for dual disorders: A guide to effective practice*. New York: Guilford Press.

National Institute on Drug Abuse (2014). Nora's Blog: Naloxone—A potential lifesaver. *Retrieved from* http://www.drugabuse.gov/about-nida/noras-blog/2014/02/naloxone-potential-lifesaver.

Osher, F., D'Amora, D.A., Plotkin, M., Jarrett, N., & Eggleston, A. (2012). *Adults with behavioral health needs under correctional supervision: A shared framework for reducing recidivism and promoting recovery*. New York: Council of State Governments Justice Center.

Peters, R.H., Haas, A.L., & Hunt, W.M. (2002). Treatment "dosage" effects in drug court programs. *Journal of Offender Rehabilitation, 33*(4), 63–72.

Peters, R.H. (2008). Co-occurring disorders. In C. Hardin & J.N. Kushner (Eds.), *Quality improvement for drug courts: Evidence-based practices* (Monograph Series no. 9, pp. 51–61). Alexandria, VA: National Drug Court Institute.

Peters, R.H., Haas, A.L., & Murrin, M.R. (1999). Predictors of retention and arrest in drug courts. *National Drug Court Institute Review, 2*(1), 33–60.

Peters, R.H., Kremling, J., Bekman, N.M., & Caudy, M.S. (2012). Co-occurring disorders in treatment-based courts: Results of a national survey. *Behavioral Sciences and the Law, 30*(6), 800–820.

Peters, R.H., & Osher, F.C. (2004). *Co-occurring disorders and specialty courts* (2nd ed.). Delmar, NY: National GAINS Center.

Peters, R.H., Wexler, H.K., & Lurigio, A.J. (2015). Co-occurring substance use and mental disorders in the criminal justice system: A new frontier of clinical practice and research. *Psychiatric Rehabilitation Journal, 38*(1), 1–6.

Peterson, J.K., Skeem, J., Kennealy, P., Bray, B. & Zvonkovic, A. (2014). How often and how consistently do symptoms directly precede criminal behavior among offenders with mental illness? *Law and Human Behavior, 38*(5), 439–449.

Phillips, H.K., Gray, N.S., MacCulloch, S.I., Taylor, J., Moore, S.C., Huckle, P., & MacCulloch, M.J. (2005). Risk assessment in offenders with mental disorders: Relative efficacy of personal demographic, criminal history, and clinical variables. *Journal of Interpersonal Violence, 20*(7), 833–847.

Platt, J.J. (1995). Vocational rehabilitation of drug abusers. *Psychological Bulletin, 117*(3), 416–433.

Platt, J.J., Husband, S.D., Hermalin, J., Cater, J., & Metzger, D. (1993). A cognitive problem-solving employment readiness intervention for methadone clients. *Journal of Cognitive Psychotherapy, 7*(1), 21–33.

Powell, C., Stevens, S., Dolce, B.L., Sinclair, K.O., & Swenson-Smith, C. (2012). Outcomes of a trauma-informed Arizona family drug court. *Journal of Social Work Practice in the Addictions, 12*(3), 219–241.

Prendergast, M.L., Pearson, F.S., Podus, D., Hamilton, Z.K., & Greenwell, L. (2013). The Andrews' principles of risk, needs, and responsivity as applied in drug treatment programs: Meta-analysis of crime and drug use outcomes. *Journal of Experimental Criminology, 9*(3), 275–300.

Prins, S.J., Skeem, J.L., Mauro, C., & Link, B.G. (2015). Criminogenic factors, psychotic symptoms, and incident arrests among people with serious mental illnesses under intensive outpatient treatment. *Law and Human Behavior, 39*(2), 177–188.

Quirouette, M., Hannah-Moffat, K., & Maurutto, P. (2015). 'A precarious place': Housing and clients of specialized courts. *British Journal of Criminology.* doi:10.1093/bjc/azv050.

Rapp, R.C., Van Den Noortgate, W., Broekaert, E., & Vanderplasschen, W. (2014). The efficacy of case management with persons who have substance abuse problems: A three-level meta-analysis of outcomes. *Journal of Consulting and Clinical Psychology, 82*(4), 605–618.

Read, J.P., Brown, P.J., & Kahler, C.W. (2004). Substance use and posttraumatic stress disorders: Symptom interplay and effects on outcome. *Addictive Behaviors, 29*(8), 1665–1672.

Rezansoff, S.N., Moniruzzaman, A., Gress, C., & Somers, J.M. (2013). Psychiatric diagnoses and multiyear criminal recidivism in a Canadian provincial offender population. *Psychology, Public Policy, and Law, 19*(4), 443–453.

Ritsher, J.B., McKellar, J.D., Finney, J.W., Otilingam, P.G., & Moos, R.H. (2002). Psychiatric comorbidity, continuing care, and mutual help as predictors of five-year remission from substance use disorders. *Journal of Studies on Alcohol and Drugs, 63*(6), 709–715.

Robertson, A.A., St. Lawrence, J.S., & McCluskey, D.L. (2012). HIV/STI risk behavior of drug court participants. *Journal of Offender Rehabilitation, 51*(7), 453–473.

Rodriguez, P.F. (2011). Case management for substance abusing offenders. In C. Leukefeld, T.P. Gullotta & J. Gregrich (Eds.), *Handbook of evidence-based substance abuse treatment in criminal justice settings* (pp. 173–181). New York: Springer.

Roll, J.M., Prendergast, M., Richardson, K., Burdon, W., & Ramirez, A. (2005). Identifying predictors of treatment outcome in a drug court program. *American Journal of Drug and Alcohol Abuse, 31*(4), 641–656.

Roozen, H.G., De Waart, R., Van Der Kroft, P. (2010). Community reinforcement and family training: An effective option to engage treatment-resistant substance-abusing individuals in treatment. *Addiction, 105*(10), 1729–1738.

Ross, S. (2008). The mentally ill substance abuser. In M. Galanter & H.D. Kleber (Eds.), *Textbook of substance abuse treatment* (4th ed.) (pp. 537–554). Arlington, VA: American Psychiatric Publishing.

Sadeh, N., & McNiel, D.E. (2015). Posttraumatic stress disorder increases risk of criminal recidivism among justice-involved persons with mental disorders. *Criminal Justice and Behavior, 42*(6), 573–586.

Saladin, M.E., Back, S.E., Payne, R.A., Schumm, J., Goldsmith, R.J., & Chard, K.M. (2014). Posttraumatic stress disorder and substance use disorder comorbidity. In R.K. Ries, D.A. Fiellin, S.C. Miller & R. Saitz, *The ASAM principles of addiction medicine* (5th ed., pp. 1403–1417). Philadelphia: Wolters Kluwer.

Samenow, S. (2014). *Inside the criminal mind* (Rev. & upd. ed.). New York: Broadway Books.

Sartor, C.E., McCutcheon, V.V., O'Leary, C.C., Van Buren, D.J., Allsworth, J.E., Jeffe, D.B., & Cottler, L.B. (2012). Lifetime trauma exposure and posttraumatic stress disorder in women sentenced to drug court. *Psychiatry Research, 200*(2), 602–608.

Schaeffer, C.M., Henggeler, S.W., Chapman, J.E., Halliday-Boykins, C.A., Cunningham, P.B., Randall, J., & Shapiro, S.B. (2010). Mechanisms of effectiveness in juvenile drug court: Altering risk processes associated with delinquency and substance abuse. *Drug Court Review, 7*(1), 57–94.

Seligman, M.E.P. (1975). *Helplessness: On depression, development, and death*. New York: W.H. Freeman.

Serin, R.C., Lloyd, C.D., Helmus, L., Derkzen, D.M., & Luong, D. (2013). Does intra-individual change predict offender recidivism? Searching for the Holy Grail in assessing offender change. *Aggression and Violent Behavior, 18*(1), 32–53.

Shaffer, D.K. (2006). Reconsidering drug court effectiveness: A meta-analytic review (Doctoral dissertation, University of Cincinnati). Retrieved from https://etd.ohiolink.edu/ap:10:0::NO:10:P10_ACCESSION_NUM:ucin1152549096.

Shannon, L.M., Jackson, A., Newell, J., Perkins, E., & Neal, C. (2015). Examining factors associated with treatment completion in a community-based program for individuals with criminal justice involvement. *Addiction Science and Clinical Practice, 10*(Supp. 1), A60.

Smith, P., Gendreau, P., & Swartz, K. (2009). Validating the principles of effective intervention: A systematic review of the contributions of meta-analysis in the field of corrections. *Victims & Offenders, 4*(2), 148–169.

Somers, J.M., Moniruzzaman, A., Rezansoff, S.N., & Patterson, M. (2014). Examining the impact of case management in Vancouver's Downtown Community Court: A quasi-experimental design. *PLoS One, 9*(3), e90708. doi:10.1371/journal.pone.0090708.

Spaulding, A.C., Seals, R.M., Page, M.J., Brzozowski, A.K., Rhodes, W., & Hammet, T.M. (2009). HIV/AIDS among inmates of and releasees from US correctional facilities, 2006: Declining share of epidemic but persistent public health opportunity. *PLoS One, 4*(11), e7558. doi:10.1371/journal.pone.0007558.

Steadman, H.J., Peters, R.H., Carpenter, C., Mueser, K.T., Jaeger, N.D., Gordon, R.B.,…Hardin, C. (2013). Six steps to improve your drug court outcomes for adults with co-occurring disorders. *NDCI Drug Court Practitioner Fact Sheet, 8*(1), 1–27.

Strang, J. (2015). Death matters: Understanding heroin/opiate overdose risk and testing potential to prevent deaths. *Addiction, 110*(S2), 27–35.

Strang, J., Bird, S.M., Dietze, P., Gerra, G., & McLellan, A.T. (2014). Take-home emergency naloxone to prevent deaths from heroin overdose. *British Medical Journal, 349*, g6580. doi:10.1136/bmj.g6580.

Strang, J., Kelleher, M., Best, D., Mayet, S., & Manning, V. (2006). Emergency naloxone for heroin overdose: Should it be available over the counter? *British Medical Journal, 333*(7569), 614–615.

Substance Abuse and Mental Health Services Administration. (2010). *Integrated treatment for co-occurring disorders: Evidence-based practices (EBT) KIT*. Rockville, MD: Author. *Available at* http://store.samhsa.gov/product/SMA08-4367.

Tolou-Shams, M., Houck, C.D., Nugent, N., Conrad, S.M., Reyes, A., & Brown, L.K. (2012). Alcohol use and HIV risk among juvenile drug court offenders. *Journal of Social Work Practice in the Addictions, 12*(2), 178–188.

Tong, L.S.J., & Farrington, D.P. (2006). How effective is the "Reasoning and Rehabilitation" programme in reducing reoffending? A meta-analysis of evaluations in four countries. *Psychology, Crime & Law, 12*(1), 3–24.

Turpin, D., & Wheeler, G. (2012). *HEAT: Habilitation, Empowerment, Accountability Therapy*. Louisville, KY: Pinwheel Group.

Underhill, K., Dumont, D., & Operario, D. (2014). HIV prevention for adults with criminal justice involvement: A systematic review of HIV risk-reduction interventions in incarceration and community settings. *American Journal of Public Health,* 104(11), e27–e53. doi:10.2105/AJPH.2014.302152.

Ventura, A.L., & Lambert, E.G. (2004). Recidivism 12 months after TASC. *Journal of Offender Rehabilitation, 39*(1), 63–82.

Vieira, T.A., Skilling, T.A., & Peterson-Badali, M. (2009). Matching court-ordered services with treatment needs: Predicting treatment success with young offenders. *Criminal Justice and Behavior, 36*(4), 385–401.

Viglione, J., Rudes, D.S, & Taxman, F.S. (2015). Misalignment in supervision: Implementing risk/needs assessment instruments in probation. *Criminal Justice and Behavior, 42*(3), 263–285.

Vito, G.F., & Tewksbury, R.A. (1998). The impact of treatment: The Jefferson County (Kentucky) drug court program. *Federal Probation, 62*(2), 46–51.

Vose, B., Smith, P., & Cullen, F.T. (2013). Predictive validity and the impact of change in total LSI-R score on recidivism. *Criminal Justice and Behavior, 40*(12), 1383–1396.

Walters G.D. (2003). Predicting institutional adjustment and recidivism with the Psychopathy Checklist factor scores: A meta-analysis. *Law and Human Behavior, 27*(5), 541–558.

Walters, G.D. (2015). Recidivism and the "worst of both worlds" hypothesis: Do substance misuse and crime interact or accumulate? *Criminal Justice and Behavior, 42*(4), 435–451.

Wilson, D.B., Gallagher, C.A., & MacKenzie, D.L. (2000). A meta-analysis of corrections-based education, vocation, and work programs for adult offenders. *Journal of Research in Crime and Delinquency, 37*(4), 347–368.

Winn, J.L., Shealy, S.E., Kropp, G.J., Felkins-Dohm, D., Gonzales-Nolas, C., & Francis, E. (2013). Housing assistance and case management: Improving access to substance use disorder treatment for homeless veterans. *Psychological Services, 10*(2), 233–240.

Wooditch, A., Tang, L.L., & Taxman, F.S. (2014). Which criminogenic need changes are most important in promoting desistance from crime and substance use? *Criminal Justice and Behavior, 41*(3), 276–299.

Wright, J.P., & Cullen, F.T. (2004). Employment, peers, and life-course transitions. *Justice Quarterly, 21*(1), 183–205.

Yalom, I.D., & Leszcz, M. (2005). *The theory and practice of group psychotherapy* (5th ed.). New York: Basic Books.

Young, D., & Belenko, S. (2002). Program retention and perceived coercion in three models of mandatory drug treatment. *Journal of Drug Issues, 32*(1), 297–328.

Zweig, J.M., Lindquist, C., Downey, P.M., Roman, J.K., & Rossman, S.B. (2012). Drug Court policies and practices: How program implementation affects offender substance use and criminal behavior outcomes. *Drug Court Review, 8*(1), 43–79.

Appendix VII

Supporting Evidence Drug and Alcohol Testing

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume II, pages 27-37.

Certainty is one of the most influential factors for success in a behavior modification program (Harrell & Roman, 2001; Marlowe & Kirby, 1999). Outcomes improve significantly when detection of substance use is likely (Kilmer et al., 2012; Marques et al., 2014; Schuler et al., 2014), and participants receive incentives for abstinence and sanctions or treatment adjustments for positive test results (Hawken & Kleiman, 2009; Marlowe et al., 2005). Therefore, the success of any Drug Court will depend, in part, on the reliable monitoring of substance use. If a Drug Court does not have accurate and timely information about whether participants are maintaining abstinence from alcohol and other drugs, the team has no way to apply incentives or sanctions correctly or to adjust treatment and supervision services accordingly. Drug and alcohol testing also serves other important therapeutic aims, such as helping to confirm clinicians' diagnostic impressions, providing objective feedback to participants about their progress or lack thereof in treatment, and assisting clinicians to challenge and resolve participant denial about the severity of their problems (American Society of Addiction Medicine (ASAM), 2010, 2013; DuPont & Selavka, 2008; DuPont et al., 2014; Srebnik et al., 2014).

Participants cannot be relied upon to self-disclose substance use accurately (Hunt et al., 2015). Studies consistently find that between 25% and 75% of participants in substance use disorder treatment deny recent substance use when biological testing reveals a positive result (Auerbach, 2007; Harris et al., 2008; Hindin et al., 1994; Magura & Kang, 1997; Morral et al., 2000; Peters et al., 2015; Tassiopoulos et al., 2004). The accuracy of self-reporting is particularly low among individuals involved in the criminal justice system, presumably because they are likely to receive sanctions for substance use (Harrison, 1997; Peters et al., 2015). Although some clinicians may assume that the accuracy of self- report increases during the course of treatment, contrary evidence suggests participants may be *less* likely to acknowledge substance use after they have been enrolled in treatment for a period of time or have completed treatment (Wish et al., 1997). The longer participants are in treatment, the more staff come to expect and insist upon abstinence. For this reason, participants find it increasingly difficult to admit to substance use after they have been enrolled in treatment for several months (Davis et al., 2014; Nirenberg et al., 2013).

Best practices for conducting drug and alcohol testing vary considerably depending on whether a test is administered intermittently as opposed to continually, the length of the test's detection window, and the range of substances the test is capable of detecting. Some tests, such as urine or oral fluid tests, must be administered repeatedly, whereas others, such as sweat patches or ankle monitors, can measure substance use over extended periods of time. Most drug metabolites are detectable in urine for approximately two to four days, but are detectable in oral fluid for an average of twenty-four hours and in breath or blood for less than twelve hours (Auerbach, 2007; Cary, 2011; DuPont et al., 2014). Some tests, such as breathalyzers, can only assess for alcohol use, whereas urine tests can assess for a wide range of substances. These factors influence how the tests must be used to obtain useful results.

Urine testing is, by far, the most common methodology used in Drug Courts and probation programs. This is because urine is typically available in copious amounts, is relatively simple to collect, does not require elaborate sample preparation procedures, is inexpensive to analyze, and can be examined for many substances (Cary, 2011). Most studies, to date, have examined best practices for conducting urine testing

with offenders; however, recent studies have begun to examine other testing methods in Drug Courts, including sweat patches and ankle monitors.

A. Frequent Testing

The more frequently Drug Courts and probation programs perform urine drug testing, the better their outcomes in terms of higher graduation rates and lower drug use and criminal recidivism (Banks & Gottfredson, 2003; Gottfredson et al., 2007; Griffith et al., 2000; Harrell et al., 1998; Hawken & Kleiman, 2009; Kinlock et al., 2013; National Institute on Drug Abuse, 2006). In focus groups, Drug Court participants consistently identified frequent drug and alcohol testing as being among the most influential factors for success in the program (Gallagher et al., 2015; Goldkamp et al., 2002; Saum et al., 2002; Turner et al., 1999; Wolfer, 2006).

The most effective Drug Courts perform urine drug testing at least twice per week for the first several months of the program (Carey et al., 2008). In a multisite study of approximately seventy Drug Courts, programs performing urine testing at least twice per week in the first phase produced 38% greater reductions in crime and were 61% more cost-effective than programs performing urine testing less frequently (Carey et al., 2012). Because the metabolites of most psychoactive drugs are detectable in urine for approximately two to four days, testing less frequently leaves an unacceptable time gap during which participants can use substances and evade detection, thus leading to significantly poorer outcomes (Stitzer & Kellogg, 2008).

Recent studies have examined the impact of other testing methods in Drug Courts. The Secure Continuous Remote Alcohol Monitor (SCRAM) is an ankle device that can detect alcohol in sweat and transmits a wireless signal to a remote monitoring station. Preliminary evidence suggests the use of a SCRAM may deter alcohol consumption and alcohol-impaired driving among recidivist driving-while-impaired (DWI) offenders if it is worn for at least ninety consecutive days (Flango & Cheesman, 2009; Tison et al., 2015). Another study found that adding sweat patches to urine testing did not improve outcomes in a Drug Court (Kleinpeter et al., 2010). However, that study did not examine the influence of sweat patches alone or as compared against urine testing. The study merely found that the addition of sweat patches did not improve outcomes beyond what was already being achieved from frequent urine drug testing.

Ethyl glucuronide (EtG) and ethyl sulfate (EtS) are metabolites of alcohol that can be detected in urine for longer periods of time than ethanol. The use of EtG or EtS can extend the time window for detecting alcohol consumption from several hours to several days (Cary, 2011). A recent randomized, controlled trial reported that participants completed the first two phases of a Drug Court significantly sooner when they were subjected to weekly EtG and EtS testing (Gibbs & Wakefield, 2014). The EtG and EtS testing enabled the Drug Court to respond more rapidly and reliably to instances of alcohol use, thus producing more efficient results. Importantly, EtG and EtS testing was determined in the same study to be superior to standard ethanol testing for detecting alcohol use occurring over weekends. Because some Drug Courts may not perform drug or alcohol testing on weekends, weekday tests capable of detecting weekend substance use are crucial.

As was noted previously, some drug or alcohol tests have short detection windows of twelve to twenty-four hours. This makes them generally unsuitable for use as the primary testing method in Drug Courts. Such tests can be used effectively, however, for spot-testing when recent use is suspected or during high-risk times, such as weekends or holidays. Evidence also suggests these tests can deter substance use effectively if they are administered on a daily basis. A statewide study in South Dakota found that daily breathalyzer testing significantly reduced failures to appear and rearrest rates among DWI offenders

released on bail (Kilmer et al., 2012). In that study, daily breathalyzer testing appears to have been sufficient to deter alcohol consumption in the majority of cases without the need for additional services.

B. Random Testing

Drug and alcohol testing is most effective when performed on a random basis (ASAM, 2013; ASAM, 2010; Auerbach, 2007; Carver, 2004; Cary, 2011; Harrell & Kleiman, 2002; McIntire et al., 2007). If participants know in advance when they will be tested, they can adjust the timing of their usage or take other countermeasures, such as excessive fluid consumption, to defraud the tests (McIntire & Lessenger, 2007). Random drug testing elicits significantly higher percentages of positive tests than prescheduled testing, suggesting that many participants can evade detection if they have advance notice about when testing will occur (Harrison, 1997).

Random testing means the odds of being tested are the same on any given day of the week, including weekends and holidays. For example, if a participant is scheduled to be drug tested two times per week, then the odds of being tested should be two in seven (28%) on every day of the week. For this reason, Drug Courts should not schedule their testing regimens in seven-day or weekly blocks, which is a common practice. Assume, for example, that a participant is randomly selected for drug testing on Monday and Wednesday of a given week. If testing is scheduled in weekly blocks, then the odds of that same participant being selected again for testing on Thursday will be zero. In behavioral terms, this is referred to as a *respite* from detection, which can lead to increased drug or alcohol use owing to the absence of negative consequences (Marlowe & Wong, 2008).

The odds of being tested for drugs and alcohol should be the same on weekends and holidays as on any other day of the week (Marlowe, 2012). Weekends and holidays are high-risk times for drug and alcohol use (Kirby et al., 1995; Marlatt & Gordon, 1985). Providing a respite from detection during high-risk times reduces the randomness of testing and undermines the central aims of a drug-testing program (ASAM, 2013).

Limiting the time delay between notification of an impending drug or alcohol test and collection of the test specimen is essential (ASAM, 2013). If participants can delay provision of a specimen for even a day or two, they can rely on natural elimination processes to reduce drug and metabolite concentrations below cutoff levels. For participants who live in close proximity to the testing facility and do not have confirmed scheduling conflicts, Drug Courts can reasonably expect samples to be delivered within a few hours of notification that a test has been scheduled (Cary, 2011). Barring exigent circumstances, participants should be required to deliver a urine specimen no more than eight hours after being notified that a urine test has been scheduled (Auerbach, 2007). This practice should give most participants ample time to meet their daily obligations and travel to the sample collection site, while also reducing the likelihood that metabolite concentrations will fall below cutoff levels. For tests with short detection windows of less than twenty-four hours, such as oral fluid tests, participants should be required to deliver a specimen no more than four hours after being notified that a test has been scheduled.

C. Duration of Testing

A basic tenet of behavior modification provides that the effects of any intervention should be assessed continually until all components of the intervention are completed (Rusch & Kazdin, 1981). This is the only way to know whether a participant is likely to relapse or regress after the program ends.

Drug Courts commonly decrease the intensity of treatment and supervision as participants make progress in the program. For example, the frequency of court hearings or case management sessions is commonly reduced as participants advance through successive phases. With a reduction of services comes the ever-

present risk of relapse or other behavioral setback; therefore, drug and alcohol testing should continue uninterrupted to reveal any relapse as other components of the participants' treatment regimens are adjusted (Cary, 2011; Marlowe, 2011, 2012). Although research has not addressed the issue, logic dictates maintaining the frequency of drug and alcohol testing until participants are engaged in what will ultimately be their continuing-care or aftercare plan. This practice provides the greatest assurance that participants are likely to remain abstinent after program graduation.

D. Breadth of Testing

Drug Courts must test for the full range of substances that are likely to be used by participants in the program. Participants can easily evade detection of their substance use on many standard test panels—such as the National Institute on Drug Abuse five-panel test (NIDA-5) or a standard eight-panel test—simply by switching to other drugs that have similar psychoactive effects but are not detected by the test (ASAM, 2013). For example, heroin users can avoid detection by many standard test panels if they switch to pharmaceutical opioids, such as oxycodone or buprenorphine (Wish et al., 2012). Similarly, marijuana users can avoid detection by using synthetic cannabinoids, such as K2 or Spice, which were developed for the specific purpose of avoiding detection (Cary, 2014; Castaneto et al., 2014). Studies confirm that some marijuana users do switch to synthetic cannabinoids to evade detection by drug tests and then return to marijuana use after the testing regimen has been discontinued (Perrone et al., 2013). Because new substances are constantly being sought out by offenders to cheat drug tests, Drug Courts should select test specimens randomly and frequently and examine them for a wide range of potential drugs that might be emerging in their population (ASAM, 2013).

E. Witnessed Collection

Drug Court participants and probationers acknowledge engaging in widespread efforts to defraud drug and alcohol tests. These efforts include, but are not limited to, consuming excessive water to dilute the sample (dilution), adulterating the sample with chemicals intended to mask a positive result (adulteration), and substituting another person's urine or a look-alike sample that is not urine, such as apple juice (substitution) (Cary, 2011; McIntire & Lessenger, 2007). Collectively, these efforts are referred to as tampering. In focus groups, Drug Court participants reported being aware of several individuals in their program who tampered with drug tests on more than one occasion without being detected by staff (Goldkamp et al., 2002).

The most effective way to avoid tampering is to ensure that sample collection is witnessed directly by a trained and experienced staff person (ASAM, 2013; Cary, 2011). If substitution or adulteration is suspected, a new sample should be collected immediately under closely monitored conditions (McIntire et al., 2007). Staff members should be trained in how to implement countermeasures to avoid tampered test specimens. Examples of such countermeasures include searching participants' clothing for chemical adulterants or fraudulent samples, requiring participants to leave outerwear outside of the test-collection room, and putting colored dye in the sink and toilet to prevent water from being used to dilute test specimens (McIntire & Lessenger, 2007).

If substitution or other efforts at tampering are suspected for a urine specimen, it may be useful to obtain an oral fluid specimen immediately as a secondary measure of substance use. Generally speaking, observing the collection of oral fluid closely is easier than for the collection of urine, and oral fluid tests are less susceptible to dilution than urine tests (Heltsley et al., 2012; Sample et al., 2010). However, because oral fluid testing has a shorter detection window than urine testing, a negative oral fluid test would not necessarily rule out recent drug use or the possibility of a tampered urine test.

Because specialized training is required to minimize tampering of test specimens, under most circumstances participants should be precluded from undergoing drug and alcohol testing by independent sources. In exigent circumstances, such as when participants live a long distance from the test collection site, the Drug Court might designate independent professionals or laboratories to perform drug and alcohol testing. As a condition of approval, these professionals should be required to complete formal training on the proper collection, handling, and analyses of drug and alcohol test samples among Drug Court participants or comparable criminal justice populations. Drug Courts are also required to follow generally accepted chain-of-custody procedures when handling test specimens (ASAM, 2013; Cary, 2011; Meyer, 2011). Therefore, if independent professionals or laboratories perform drug and alcohol testing, they must be trained carefully to follow proper chain-of-custody procedures.

F. Valid Specimens

Several low-cost analyses can be performed to detect adulterated or diluted test specimens (McIntire et al., 2007). The temperature of each urine specimen should be examined immediately upon collection to ensure it is consistent with an expected human body temperature. An unusual temperature might suggest the sample cooled down because it was collected at an earlier point in time, or was mixed with water that was too cold or too hot to be consistent with body temperature. Under normal conditions, urine specimens should be between 90^0 and 100^0 F within four minutes of collection, and a lower or higher temperature likely indicates a deliberate effort at deception (ASAM, 2013; Tsai et al., 1998).

Urine specimens should also be tested for creatinine and specific gravity. Creatinine is a metabolic product of muscle contraction that is excreted in urine at a relatively constant rate. A creatinine level below 20 mg/dL is rare and is a reliable indicator of an intentional effort at dilution or excessive fluid consumption barring unusual medical or metabolic conditions (ASAM, 2013; Cary, 2011; Jones & Karlsson, 2005; Katz et al., 2007). Specific gravity reflects the amount of solid substances that are dissolved in urine. The greater the specific gravity, the more concentrated the urine; and the lower the specific gravity, the closer its consistency to water. The normal range of specific gravity for urine is 1.003 to 1.030, and a specific gravity of 1.000 is essentially water. Some experts believe a specific gravity below 1.003 reflects a diluted sample (Katz et al., 2007). Although this analysis, by itself, may not be sufficient to prove excessive fluid consumption, dilution is likely to have occurred if the specific gravity is low and accompanies other evidence of tampering or invalidity, such as a low creatinine level or temperature. Several commercially available test strips, such as Adultacheck and Intect, have also been shown to reliably detect dilution or adulteration of urine test samples (Dasgupta et al., 2004; Mikkelsen & Ash, 1988).

G. Accurate and Reliable Testing Procedures

To be admissible as evidence in a legal proceeding, drug and alcohol test results must be derived from scientifically valid and reliable methods (Meyer, 2011). Appellate courts have recognized the scientific validity of several commonly used methods for analyzing urine, including gas chromatography/mass spectrometry (GC/MS), liquid chromatography/tandem mass spectrometry (LC/MS/MS), the enzyme multiple immunoassay technique (EMIT), and some sweat, oral fluid, hair, and ankle-monitor tests (Meyer, 2011).

Tests such as GC/MS and LC/MS/MS are referred to as instrumented tests, laboratory-based tests, or confirmation tests. These tests have a higher degree of scientific precision than immunoassay tests, point of collection tests (POCT), or screening tests, such as on-site test cups or instant test strips. If a participant denies substance use in the face of a positive screening test, courts will typically require, and toxicology experts recommend, performing confirmation testing using GC/MS or a similar instrumented technique

(ASAM, 2013; Cary, 2011). Confirmation with an instrumented test virtually eliminates the odds of a false-positive result, assuming the sample was collected and stored properly (Auerbach, 2007; Peat, 1988). Drug Courts commonly require participants to pay the cost of confirmation tests if the initial screening result is confirmed (Cary, 2011; Meyer, 2011). Confirmation testing should be performed on a portion of the original test specimen. If confirmation testing is performed on a different specimen that was collected at a later point in time, a conflicting result might not reflect a failure to confirm but rather differences in the detection windows for the tests or the metabolic processes of the participant.

Drug Courts must follow generally accepted chain-of-custody procedures when handling test specimens (ASAM, 2013; Cary, 2011; Meyer, 2011). They need to establish a reliable paper trail identifying each professional who handled the specimen from collection through laboratory analysis to reporting of the results. Establishing a proper chain of custody requires sufficient labeling and security measures to provide confidence the specimen belongs to the individual identified on the record and the specimen was transported and stored according to generally accepted laboratory procedures and manufacturer recommendations.

Some Drug Courts interpret changes in quantitative levels of drug metabolites as evidence that new substance use has occurred or a participant's substance use pattern has changed. Unless a Drug Court has access to an expert trained in toxicology, pharmacology, or a related discipline, such practices should be avoided. Quantitative metabolite levels can vary considerably based on a number of factors, including the total fluid content in urine or blood (Cary, 2004; Schwilke et al., 2010). Moderate changes in participants' fluid intake or fluid retention could lead Drug Courts to miscalculate substance use patterns. Most drug and alcohol tests used in Drug Courts were designed to be *qualitative*, meaning they were designed to determine whether a drug or drug metabolite is present at levels above a prespecified concentration level. The cutoff concentration level is calculated empirically to maximize the true-positive rate, true-negative rate, or classification rate. When Drug Courts engage in quantitative analyses, they are effectively altering the cut-off score and making the results less accurate.

Some Drug Courts have difficulty interpreting positive cannabinoid (marijuana) test results. Because cannabinoids are lipid-soluble (i.e., bind to fat molecules), they may be excreted more slowly than other substances. This has caused confusion about when a positive cannabinoid result may be interpreted as evidence of new use as opposed to residual use from an earlier episode. A participant is highly unlikely to produce a cannabinoid-positive urine result above 50 ng/mL after more than ten days following cessation of chronic usage or for more than three to four days following a single-use event (Cary, 2005). Therefore, a Drug Court would be justified in considering the first two weeks of enrollment to be a grace period during which there would be no sanctions for positive cannabinoid test results. However, subsequent positive tests may be interpreted as evidence of new cannabis use and dealt with accordingly. Moreover, once a participant has produced two consecutive cannabinoid-negative urine specimens (called an *abstinence baseline*), a subsequent cannabinoid-positive test may be interpreted as new use (Cary, 2005). Some Drug Courts or laboratories may employ a lower cutoff level of 20 ng/mL for cannabis metabolites. Using this lower cutoff, thirty days is sufficient to establish a presumptive abstinence baseline even for chronic users (Cary, 2005); in the majority of cases, twenty-one days should be sufficient.

Some participants may attempt to attribute a positive cannabinoid test to passive inhalation or second-hand smoke. This excuse should not be credited. The likelihood of passive inhalation triggering a positive cannabinoid test is negligible (Cone et al., 2014; Law et al., 1984; Katz et al., 2007; Niedbala et al., 2005). Moreover, because Drug Court participants are usually prohibited from associating with people who are engaged in substance use, passive inhalation may be viewed as a violation of this central prohibition, thus meriting an additional sanction (Marlowe, 2011).

H. Rapid Results

In addition to certainty, timing is one of the most influential factors for success in a behavior modification program (Harrell & Roman, 2001; Marlowe & Kirby, 1999). The sooner sanctions are delivered after an infraction and incentives delivered after an achievement, the better the results. Because sanctions and incentives are imposed routinely on the basis of drug and alcohol test results, the Drug Court team needs test results before participants appear for status hearings.

A study of approximately seventy Drug Courts reported significantly greater reductions in criminal recidivism and significantly greater cost benefits when the teams received drug and alcohol test results within forty-eight hours of sample collection (Carey et al., 2012). Drug Courts that received test results within forty-eight hours were 73% more effective at reducing crime and 68% more cost-effective than Drug Courts receiving test results after longer delays. Ordinarily, negative test results should take no longer than one business day to produce, and positive results should require no more than two days if confirmation testing is requested (Cary, 2011; Robinson & Jones, 2000).

I. Participant Contract

Outcomes are significantly better when Drug Courts specify their policies and procedures clearly in a participant manual or handbook (Carey et al., 2012). Criminal defendants are significantly more likely to react favorably to an adverse judgment if they were given advance notice about how such judgments would be made (Burke & Leben, 2007; Frazer, 2006; Tyler, 2007). Drug Courts can enhance participants' perceptions of fairness substantially and reduce avoidable delays from contested drug and alcohol tests by describing their testing procedures and requirements in a participant contract or handbook.

Below are examples of provisions that should be included in a participant contract to address many of the best practices discussed above. For participants with limited educational histories, the language may need to be simplified and the requirements explained orally. Repeat the information periodically to ensure participants understand their rights and obligations.

- Drug and alcohol testing will be performed frequently and on a random basis throughout your enrollment in the Drug Court.
- Drug and alcohol testing will be performed on weekends and holidays.
- Drug and alcohol testing will be performed by a laboratory or program approved by the Drug Court.
- Because cannabinoids (a byproduct of marijuana) may persist in the body for several days, marijuana users have a two-week grace period following enrollment during which no sanctions will be given for positive cannabinoid test results. However, after two weeks positive cannabinoid tests will be presumed to reflect new marijuana use. Participants bear the burden of establishing a convincing alternative explanation for such results. After you have had two consecutive cannabinoid-negative urine specimens, the Drug Court will presume that subsequent positive cannabinoid results reflect new use.
- You must arrive at the testing facility as soon as possible after being notified that a test has been scheduled. You will be sanctioned for an unexcused failure to arrive within eight hours of being notified that a urine test has been scheduled or within four hours for tests that have short detection windows, such as breath or oral fluid tests.

- A staff person will directly observe the collection of test specimens. The staff person will be the same gender as you unless you, your defense attorney or your therapist request otherwise.
- Failure to provide a test specimen or providing an insufficient volume of fluid for analysis is an infraction of the rules of the program and will be sanctioned accordingly. You will be given a sufficient time (up to one hour) to deliver a urine specimen and allowed to drink up to one cup of water in the presence of staff.
- You may not drink any fluid excessively before testing and must avoid environmental contaminants, over-the-counter medications, or foods that can reduce the accuracy of the tests. Potential contaminants that you need to avoid are [provide list of contaminants].
- You may be subjected to immediate spot testing if the Drug Court has reason to suspect recent use or during high-risk times such as weekends or holidays.
- You have the right to challenge the results of a screening test and to request proof that an adequate chain of custody was established for your specimen. The Drug Court will rely on the results of an instrumented or laboratory-based test in confirming whether substance use has occurred. You may be charged the cost of the confirmation test if a screening test is confirmed.
- You will be sanctioned for providing diluted, adulterated, or substituted test specimens. Urine specimens below 90° F, above 100° F, or that have a creatinine level below 20 mg/dL will be presumed to be diluted or fraudulent. Participants bear the burden of establishing a convincing alternative explanation for such results. Under such circumstances, you may receive two sanctions, one for the substance use and one for the effort at deception.
- You will be sanctioned for using synthetic substances such as K2 or Spice that are designed to avoid detection by standard drug tests. Switching to a new substance (for example, switching from heroin to an unauthorized prescription opioid) will be presumed to be an effort to defraud the drug test. You may receive two sanctions in such circumstances, one for the substance use and one for the effort at deception.
- You will be sanctioned for associating with other people who are engaged in substance use or for exposing yourself to passive inhalation or secondhand smoke.

References

American Society of Addiction Medicine. (2010). *Public policy statement on drug testing as a component of addiction treatment and monitoring programs and in other clinical settings.* Chevy Chase, MD: Author. *Available at* http://www.asam.org/advocacy/find-a-policy-statement/view-policy-statement/public-policy-statements/2011/12/15/drug-testing-as-a-component-of-addiction-treatment-and-monitoring-programs-and-in-other-clinical-settings.

American Society of Addiction Medicine. (2013). *Drug testing: A white paper of the American Society of Addiction Medicine (ASAM).* Chevy Chase, MD: Author. *Available at* http://www.asam.org/docs/default-source/publicy-policy-statements/drug- testing-a-white-paper-by-asam.pdf?sfvrsn=2.

Auerbach, K. (2007). Drug testing methods. In J.E. Lessenger & G.F. Roper (Eds.), *Drug courts: A new approach to treatment and rehabilitation* (pp. 215–233). New York: Springer.

Banks, D., & Gottfredson, D.C. (2003). The effects of drug treatment and supervision on time to rearrest among drug treatment court participants. *Journal of Drug Issues*, *33*(2), 385–412.

Burke, K., & Leben, S. (2007). Procedural fairness: A key ingredient in public satisfaction. *Court Review, 44*(1-2), 4–25.

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes and costs*. Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/NIJ_Cross-site_Final_Report_0308.pdf.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Carver, C. (2004). Drug testing: A necessary prerequisite for treatment and for crime control. In P. Bean & T. Nemitz (Eds.), *Drug treatment: What works?* (pp. 142–177). New York: Routledge.

Cary, P. (2004). Urine drug concentrations: The scientific rationale for eliminating the use of drug test levels in drug court proceedings. *NDCI Drug Court Practitioner Fact Sheet, 4*(1).

Cary, P. (2005). The marijuana detection window: Determining the length of time cannabinoids will remain detectable in urine following smoking: A critical review of relevant research and cannabinoid detection guidance for drug courts. *Drug Court Review, 5*(1), 23–58.

Cary, P. (2011). The fundamentals of drug testing. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 113–138). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Cary, P. (2014). Designer drugs: What drug court practitioners need to know. *NDCI Drug Court Practitioner Fact Sheet, 9*(2). Castaneto, M.S., Gorelick, D.A., Desrosiers, N.A., Hartman, R.L., Pirard, S., & Huestis, M.A. (2014). Synthetic cannabinoids: Epidemiology, pharmacodynamics, and clinical implications. *Drug and Alcohol Dependence: Online, 144*, 12–41. doi: http://dx.doi.org/10.1016/j.drugalcdep.2014.08.005.

Cone, E.J., Bigelow, G.E., Herrmann, E.S., Mitchell, J.M., LoDico, C., Flegel, R., & Vandrey, R. (2014). Nonsmoker exposure to secondhand cannabis smoke. I. Urine screening and confirmation results. *Journal of Analytic Toxicology: Online, 39*(1), 1–12. doi:10.1093/jat/bku116.

Dasgupta, A., Chughtai, O., Hannah, C., David, B., & Wells, A. (2004). Comparison of spot tests with Adultacheck 6 and Intect 7 urine test strips for detecting the presence of adulterants in urine specimens. *Clinica Chimica Acta, 348 (1-2),* 19–25.

Davis, C.G., Doherty, S., & Moser, A.E. (2014). Social desirability and change following substance abuse treatment in male offenders. *Psychology of Addictive Behaviors, 28*(3), 872–879.

DuPont, R.L., Goldberger, B.A., & Gold, M.S. (2014). The science and clinical uses of drug testing. In R.K. Ries, D.A. Fiellin, S.C. Miller, & R. Saitz (Eds.), *The ASAM principles of addiction medicine* (5th ed., pp. 1717–1729). Philadelphia: Wolters Kluwer Health.

DuPont, R.L., & Selavka, C. (2008). Testing to identify recent drug use. In M. Galanter & H.D. Kleber (Eds.), *Textbook of substance abuse treatment* (4th ed., pp. 655–664). Arlington, VA: American Psychiatric Publishing.

Flango, V.E., & Cheesman, F.L. (2009). The effectiveness of the SCRAM alcohol monitoring device: A preliminary test. *Drug Court Review, 6*(2), 109–134.

Frazer, M.S. (2006). *The impact of the community court model on defendant perceptions of fairness.* New York: Center for Court Innovation. *Available at* http://www.courtinnovation.org/sites/default/files/Procedural_Fairness.pdf.

Gallagher, J.R., Nordberg, A., & Kennard, T. (2015). A qualitative study assessing the effectiveness of the key components of a Drug Court. *Alcoholism Treatment Quarterly, 33*(1), 64–81.

Gibbs, B.R., & Wakefield, W. (2014). The efficacy of enhanced alcohol use monitoring: An examination of the effects of EtG/EtS screening on participant performance in Drug Court. *Drug Court Review, 9*(1), 1–22.

Goldkamp, J.S., White, M.D., & Robinson, J.B. (2002). An honest chance: Perspectives on drug courts. *Federal Sentencing Reporter, 14*(6), 369–372.

Gottfredson, D.C., Kearley, B.W., Najaka, S.S., & Rocha, C.M. (2007). How drug treatment courts work: An analysis of mediators. *Journal of Research on Crime & Delinquency, 44*(1), 3–35.

Griffith, J.D., Rowan-Szal, G.A., Roark, R.R., & Simpson, D.D. (2000). Contingency management in outpatient methadone maintenance treatment: A meta-analysis. *Drug & Alcohol Dependence, 58*(1), 55–66.

Harrell, A., Cavanagh, S., & Roman, J. (1998). *Findings from the evaluation of the D.C. Superior Court Drug Intervention Program* (Final report). Washington, DC: The Urban Institute.

Harrell, A., & Kleiman, M. (2002). Drug testing in criminal justice settings. In C.G. Leukefeld, F.M. Tims & D. Farabee (Eds.), *Treatment of drug offenders: Policies and issues* (pp. 149–171). New York: Springer.

Harrell, A., & Roman, J. (2001). Reducing drug use and crime among offenders: The impact of graduated sanctions. *Journal of Drug Issues, 31*(1), 207–231.

Harris, K.M., Griffin, B.A., McCaffrey, D.F., & Morral, A.R. (2008). Inconsistencies in self-reported drug use by adolescents in substance abuse treatment: Implications for outcome and performance measurements. *Journal of Substance Abuse Treatment, 34*(3), 347–355.

Harrison, L. (1997). The validity of self-reported drug use in survey research: An overview and critique of research methods. In L. Harrison & A. Hughes (Eds.), *The validity of self-reported drug use: Improving the accuracy of survey estimates* [Research Monograph No. 167] (pp. 17–36). Rockville, MD; National Institute on Drug Abuse.

Hawken, A., & Kleiman, M. (2009). *Managing drug involved probationers with swift and certain sanctions: Evaluating Hawaii's HOPE* (NCJRS No. 229023). Washington, DC: National Institute of Justice. *Available at* http://www.ncjrs.gov/pdffiles1/nij/grants /229023.pdf.

Heltsley, R., DePriest, A., Black, D.L., Crouch, D.J., Robert, T., Marshall, L.,…Cone, E.J. (2012). Oral fluid drug testing of chronic pain patients. II. Comparison of paired oral fluid and urine specimens. *Journal of the Annals of Toxicology, 36*(2), 75–80. doi:10.1093/jat/bkr019.

Hindin, R., McCusker, J., Vickers-Lahti, M., Bigelow, C., Garfield, F., & Lewis, B. (1994). Radioimmunoassay of hair for determination of cocaine, heroin and marijuana exposure: Comparison with self-report. *Addiction, 29*(6), 771–789.

Hunt, D.E., Kling, R., Almozlino, Y., Jalbert, S., Chapman, M.T., & Rhodes, W. (2015). Telling the truth about drug use: How much does it matter? *Journal of Drug Issues, 45*(3), 31–329.

Jones, A.W., & Karlsson, L. (2005). Relation between blood- and urine-amphetamine concentrations in impaired drivers as influenced by urinary pH and creatinine. *Human Experimental Toxicology, 24*(12), 615–622.

Katz, O.A., Katz, N.B., Mandel, S., & Lessenger, J.E. (2007). Analysis of drug testing results. In J.E. Lessenger & G.F. Roper (Eds.), *Drug Courts: A new approach to treatment and rehabilitation* (pp. 255–262). New York: Springer.

Kilmer, B., Nicosia, N., Heaton, P., & Midgette, G. (2012). Efficacy of frequent monitoring with swift, certain, and modest sanctions for violations: Insights from South Dakota's 24/7 Sobriety Project. *American Journal of Public Health: Online, 103*(1), e37–e43. doi:10.2105/AJPH.2012.300989.

Kinlock, T.M., Gordon, M.S., Schwartz, R.P., & O'Grady, K.E. (2013). Individual patient and program factors related to prison and community treatment completion in prison-initiated methadone maintenance treatment. *Journal of Offender Rehabilitation, 52*(8), 509–528.

Kirby, K.C., Lamb, R.J., Iguchi, M.Y., Husband, S.D., & Platt, J.J. (1995). Situations occasioning cocaine use and cocaine abstinence strategies. *Addiction, 90*(9), 1241–1252.

Kleinpeter, C.B., Brocato, J., & Koob, J.J. (2010). Does drug testing deter drug court participants from using drugs or alcohol? *Journal of Offender Rehabilitation, 49*(6), 434–444.

Law, B., Mason, P.A., Moffat, A.C., King, L.J., & Marks, V. (1984). Passive inhalation of cannabis smoke. *Journal of Pharmacy & Pharmacology, 36*(9), 578–581.

Magura, S., & Kang, S. (1997). The validity of self-reported cocaine use in two high-risk populations. In L. Harrison & A. Hughes (Eds.), *The validity of self-reported drug use: Improving the accuracy of survey estimates* [Research Monograph No. 167] (pp. 227–246). Rockville, MD; National Institute on Drug Abuse.

Marlatt, G.A., & Gordon, J.R. (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors*. New York: Guilford Press.

Marlowe, D.B. (2011). Applying incentives and sanctions. In D.B. Marlowe & W.B. Meyer (Eds.), *The drug court judicial benchbook* (pp.139–157). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Marlowe, D.B. (2012). Behavior modification 101 for drug courts: Making the most of incentives and sanctions. *NDCI Drug Court Practitioner Fact Sheet, 7*(3), 1–11.

Marlowe, D.B., Festinger, D.S., Foltz, C., Lee, P.A., & Patapis, N.S. (2005). Perceived deterrence and outcomes in drug court. *Behavioral Sciences & the Law, 23*(2), 183–198.

Marlowe, D.B., & Kirby, K.C. (1999). Effective use of sanctions in drug courts: Lessons from behavioral research. *National Drug Court Institute Review, 2*(1), 1–31.

Marlowe, D.B., & Wong, C.J. (2008). Contingency management in adult criminal drug courts. In S.T. Higgins, K. Silverman, & S.H. Heil (Eds.), *Contingency management in substance abuse treatment* (pp. 334–354). New York: Guilford Press.

Marques, P.H., Jesus, V., Olea, S.A., Vairinhos, V., & Jacinto, C. (2014). The effect of alcohol and drug testing at the workplace on individual's occupational accident risk. *Safety Science, 68*, 108–120. doi:10.1016/j.ssci.2014.03.007.

McIntire, R.L., & Lessenger, J.E. (2007). Drug testing scams. In J.E. Lessenger & G.F. Roper (Eds.), *Drug Courts: A new approach to treatment and rehabilitation* (pp. 247–254). New York: Springer.

McIntire, R.L., Lessenger, J.E., & Roper, G.F. (2007). The drug and alcohol testing process. In J.E. Lessenger & G.F. Roper (Eds.), *Drug Courts: A new approach to treatment and rehabilitation* (pp. 234–246). New York: Springer.

Meyer, W. (2011). Constitutional and legal issues in drug courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 159–180). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Mikkelsen, A.L., & Ash, K.O. (1988). Adulterants causing false negatives in illicit drug testing. *Clinical Chemistry, 34*(11), 2333–2336.

Morral, A.R., McCaffrey, D.F., & Iguchi, M.Y. (2000). Hardcore drug users claim to be occasional users: Drug use frequency underreporting. *Drug & Alcohol Dependence, 57*(3), 193–202.

National Institute on Drug Abuse. (2006). *Principles of drug abuse treatment for criminal justice populations* (NIH Pub. No. 06–5316). Bethesda, MD: Author.

Niedbala, R.S., Kardos, K.W., Fritch, D.F., Kunsman, K.P., Blum, K.A., Newland, G.A.,…Cone, E.J. (2005). Passive cannabis smoke exposure and oral fluid testing. II. Two studies of extreme cannabis smoke exposure in a motor vehicle. *Journal of Analytical Toxicology, 29*(7), 607–615.

Nirenberg, T., Longabaugh, R., Baird, J., & Mello, M.J. (2013). Treatment may influence self-report and jeopardize our understanding of outcome. *Journal of Studies on Alcohol and Drugs, 74*(5), 770–776.

Peat, M.A. (1988). Analytical and technical aspects of testing for drug abuse: Confirmatory procedures. *Clinical Chemistry, 34*(3), 471–473.

Perrone, D., Helgesen, R.D., & Fischer, R.G. (2013). United States drug prohibition and legal highs: How drug testing may lead cannabis users to Spice. *Drugs: Education, Prevention and Policy, 20*(3), 216–224.

Peters, R.H., Kremling, J., & Hunt, E. (2015). Accuracy of self-reported drug use among offenders: Findings from the Arrestee Drug Abuse Monitoring-II Program. *Criminal Justice and Behavior, 42*(6), 623–643.

Robinson, J.J., & Jones, J.W. (2000). *Drug testing in a drug court environment: Common issues to address* (NCJ Pub. No. 181103). Washington, DC: Office of Justice Programs, Drug Court Clearinghouse and Technical Assistance Project at American University.

Rusch, F.R., & Kazdin, A.E. (1981). Toward a methodology of withdrawal designs for the assessment of response maintenance. *Journal of Applied Behavior Analysis, 14*(2), 131–140.

Sample, R.H.B., Abbott, L.B., Brunelli, B.A., Clouette, R.E., Johnson, T.D., Predescu, R.D., & Rowland, B.J. (2010). *Positive prevalence rates in drug tests for drugs of abuse in oral-fluid and urine*. Paper presented at the Society of Forensic Toxicologists Annual Meeting, Richmond, VA.

Saum, C.A., Scarpitti, F.R., Butzin, C.A., Perez, V.W., Jennings, D., & Gray, A.R. (2002). Drug court participants' satisfaction with treatment and the court experience. *Drug Court Review, 4*(1), 39–81.

Schuler, M.S., Griffin, B.A., Ramchand, R., Almirall, D., & McCaffrey, D.F. (2014). Effectiveness of treatment for adolescent substance use: Is biological drug testing sufficient? *Journal of Studies on Alcohol, 75*(2), 358–370.

Schwilke, E.W., Gullberg, R.G., Darwin, W.D., Chiang, C.N., Cadet, J.L., Gorelick, D.A.,…Huestis, M.A. (2010). Differentiating new cannabis use from residual urinary cannabinoid excretion in chronic, daily cannabis users. *Addiction, 106*(3), 499–506.

Srebnik, D.S., McDonell, M.G., Ries, R.K., & Andrus, G. (2014). Conflicts among CMHC clinicians over the role of urine drug testing. *Psychiatric Services, 65*(5), 700–701.

Stitzer, M.L., & Kellogg, S. (2008). Large-scale dissemination efforts in drug abuse treatment clinics. In S.T. Higgins, K. Silverman, & S.H. Heil (Eds.), *Contingency management in substance abuse treatment* (pp. 241–260). New York: Guilford Press.

Tassiopoulos, K., Bernstein, J., Heeren, T., Levenson, S., Hingson, R., & Bernstein, E. (2004). Hair testing and self-report of cocaine use by heroin users. *Addiction, 99*(4), 590–597.

Tison, J., Nichols, J.L., Casanova-Powell, T., & Chaudhary, N.K. (2015). *Comparative study and evaluation of SCRAM use, recidivism rates, and characteristics* (Report No. DOT HS 812 143). Washington, DC: National Highway Traffic Safety Administration.

Tsai, S.C., ElSohly, M A., Dubrovsky, T., Twarowski, B., Towt, J., & Salamonde, S.J. (1998). Determination of five abused drugs in nitrite-adulterated urine by immunoassay and gas chromatography-mass spectrometry. *Journal of the Annals of Toxicology, 22*(6), 474–480.

Turner, S., Greenwood, P. Fain, T., & Deschenes, E. (1999). Perceptions of drug court: How offenders view ease of program completion, strengths and weaknesses, and the impact on their lives. *National Drug Court Institute Review, 2*(1), 61–85.

Tyler, T.R. (2007). Procedural justice and the courts. *Court Review, 44*(1-2), 26.

Wish, E.D., Artigiani, E., Billing, A., Hauser, A., Hemberg. J., Shiplet, M., & DuPont, R.L. (2012). The emerging buprenorphine epidemic in the United States. *Journal of Addictive Diseases, 31*(1), 3–7.

Wish, E.D., Hoffman, J.A., & Nemes, S. (1997). The validity of self-reports of drug use at treatment admission and at follow-up: Comparisons with urinalysis and hair assays. In L. Harrison & A. Hughes (Eds.), *The validity of self-reported drug use: Improving the accuracy of survey estimates* [Research Monograph No. 167] (pp. 200–226). Rockville, MD; National Institute on Drug Abuse.

Wolfer, L. (2006). Graduates speak: A qualitative exploration of drug court graduates' views of the strengths and weaknesses of the program. *Contemporary Drug Problems, 33*(2), 303–320.

Appendix VII

Supporting Evidence Multidisciplinary Team

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume II, pages 39-50.

The Drug Court team is a multidisciplinary group of professionals responsible for administering the day-to-day operations of a Drug Court, including reviewing participant progress during pre-court staff meetings and status hearings, contributing observations and recommendations within team members' respective areas of expertise, and delivering or overseeing the delivery of legal, treatment, and supervision services (Hardin & Fox, 2011). Some Drug Courts may have additional governing bodies such as Steering Committees that are not involved in the daily operations of the program, but provide oversight on policies and procedures, negotiate MOUs between partner agencies, garner political and community support for the Drug Court, or engage in fundraising. Researchers have examined the influence of the multidisciplinary Drug Court team on participant outcomes but have not addressed the influence of other governing bodies.

A. Team Composition

Studies reveal the composition of the Drug Court team has a substantial influence on outcomes. Drug Courts produce significantly greater reductions in criminal recidivism and are significantly more cost-effective when the following professionals are dedicated members of the Drug Court team and participate regularly in pre-court staff meetings and status hearings (Carey et al., 2008, 2012; Cissner et al., 2013; Rossman et al., 2011; Shaffer, 2010):

- *Judge*—Typically a trial court judge leads the Drug Court team; however, in some jurisdictions a nonjudicial officer such as a magistrate or commissioner may preside over the Drug Court. Nonjudicial officers usually report directly to a judge and require judicial authorization for actions that affect participants' liberty interests such as jail sanctions or discharge from the program. No study has compared outcomes between judges and nonjudicial officers.

- *Program Coordinator*—Typically a court administrator or clerk serves as the coordinator for the Drug Court program; however, some Drug Courts may employ a senior probation officer, case manager, or clinician as the coordinator. Among many other duties, the coordinator is responsible for maintaining accurate and timely records and documentation for the program, overseeing fiscal and contractual obligations, facilitating communication between team members and partner agencies, ensuring policies and procedures are followed, overseeing collection of performance and outcome data, scheduling court sessions and staff meetings, and orienting new hires.

- *Prosecutor*—Typically an assistant district attorney serves on the team. Among other duties, the prosecutor advocates on behalf of public safety, victim interests, and holding participants accountable for meeting their obligations in the program. The prosecutor may also help to resolve other pending legal cases that impact participants' legal status or eligibility for Drug Court.

- *Defense Attorney*—Typically an assistant public defender or private defense attorney specializing in Drug Court cases serves on the team. Among other duties, the defense attorney ensures participants' constitutional rights are protected and advocates for participants' stated legal interests. Defendants are usually represented by a public defender or private defense attorney in proceedings leading up to their entry into Drug Court. After entry, participants may retain their previous defense counsel, provide informed consent to be represented by a defense representative serving on the Drug Court team, or consent to be represented jointly by private defense counsel and the defense representative. In cases of joint representation, the defense representative typically handles most day-to-day issues relating to Drug Court participation, but private counsel may step in if the participant faces a potential jail sanction or discharge from the program (Freeman-Wilson et al., 2003; Tobin, 2012).

  In postconviction Drug Courts, participation in the program is a condition of probation or part of a criminal sentence. Ordinarily, participants are not entitled to defense representation at the postconviction stage unless they face a potential jail sanction or revocation of probation (Meyer, 2011a). Nevertheless, postconviction Drug Courts should include a defense representative on their team because studies indicate defense involvement improves outcomes significantly (Carey et al., 2012; Cissner et al., 2013; National Association of Drug Court Professionals [NADCP], 2009). Evidence suggests participants may be more likely to perceive Drug Court procedures as fair when a dedicated defense attorney represents their interests in team meetings and status hearings (Frazer, 2006), and greater perceptions of fairness are consistently associated with better outcomes in Drug Courts and other problem-solving courts (Berman & Gold, 2012; Burke, 2010; Gottfredson et al., 2007; Rossman et al., 2011).

  Some Drug Courts require participants to waive defense representation as a condition of entry. Although no case has addressed this issue squarely in the context of Drug Court, the weight of legal authority suggests defendants and probationers are entitled to withdraw such waivers and reassert their right to counsel at critical stages in the proceedings such as when they face a potential jail sanction or probation revocation (McKaskle v. Wiggins, 1984; Menefield v. Borg, 1989; Robinson v. Ignacio, 2004; State v. Pitts, 2014). Regardless of the legality of such waivers, defense representation should be encouraged rather than discouraged in Drug Courts because doing so is associated with significantly better outcomes and ensures participants' due process rights are protected (Hora & Stalcup, 2008; NADCP, 2009).

- *Community Supervision Officer*—Typically a probation officer or pretrial services officer serves on the team; however, some Drug Courts may rely on law enforcement or specially trained case managers or social service professionals to provide community supervision. Duties of the community supervision officer may include performing drug and alcohol testing, conducting home or employment visits, enforcing curfews and travel restrictions, and delivering cognitive-behavioral interventions designed to improve participants' problem-solving skills and alter dysfunctional criminal-thinking patterns (Harberts, 2011).

- *Treatment Representative*—Typically an addiction counselor, social worker, psychologist, or clinical case manager serves on the team. In many Drug Courts, participants can be referred to multiple treatment agencies or providers for substance use disorder treatment and other complementary services such as mental health counseling or vocational rehabilitation.

Because it is unwieldy to have multiple providers attend pre-court staff meetings and status hearings, many Drug Courts will designate one or two treatment professionals to serve as treatment representatives on the Drug Court team (Carey et al., 2012). The treatment representatives receive clinical information from programs treating Drug Court participants, report that information to the Drug Court team, and contribute clinical knowledge and expertise during team deliberations. *Law Enforcement Officer*—Typically a police officer, deputy sheriff, highway patrol officer, or jail official serves on the team. Law enforcement is often the eyes and ears of Drug Court on the street, observing participant behavior and interacting with participants in the community. Law enforcement may also assist with home and employment visits, and serves as a liaison between the Drug Court and the police department, sheriff's office, jail, and correctional system.

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Drug Courts may include other community representatives on their team as well, such as peer mentors, vocational advisors, or sponsors from the self-help recovery community. Studies have not examined the impact of including such persons on the Drug Court team; however, anecdotal reports suggest this practice can enhance team decision making and effectiveness (Taylor, 2014). As a condition of federal grant funding and funding from many states, Drug Courts may also be required to include an evaluator on their team beginning in the planning stages for the program and continuing during implementation. This practice helps to ensure Drug Courts collect reliable performance data to report to grant-making authorities and is generally advisable for all Drug Courts to ensure good-quality program monitoring and evaluation [see Standard X, Monitoring and Evaluation]. Finally, Drug Courts may be advised to include a nurse or physician on their team if they treat substantial numbers of participants requiring medication-assisted treatment or suffering from co-occurring medical or mental health disorders.

B. Pre-Court Staff Meetings

The Drug Court model requires Drug Courts to hold pre-court staff meetings—commonly referred to as *staffings* or *case reviews*—to review participant progress, develop a plan to improve outcomes, and prepare for status hearings in court (Hardin & Fox, 2011; NADCP, 1997; Roper & Lessenger, 2007). Not every participant is discussed in every meeting; however, staffings are held frequently enough (typically weekly or at the same frequency as status hearings) to ensure the team has an opportunity to consider the needs of each case.

Consistent attendance by all team members at staffings is associated with significantly better outcomes (Carey et al., 2012; Cissner et al., 2013; Rossman et al., 2011; Shaffer, 2010). A multisite study of approximately seventy Drug Courts found that programs were 50% more effective at reducing recidivism when all team members—the judge, prosecutor, defense representative, program coordinator, treatment representative, law-enforcement representative, and community supervision officer—attended staffings on a consistent basis (Carey et al., 2008, 2012). Drug Courts were nearly twice as cost-effective when defense counsel attended staffings consistently, and were more than twice as effective at reducing recidivism when the program coordinator, treatment representative, and law enforcement representative attended staffings consistently (Carey et al., 2012).

In most Drug Courts, staffings are presumptively closed. Discussions are not transcribed or recorded and the meeting is not open to the public or to participants unless the court has a good reason to allow a participant to attend discussions related to his or her case. Few appellate opinions have addressed the constitutionality or legality of closing staffings. In a recent opinion, the Washington State Supreme Court—which traditionally holds a very dim view of off-the-record proceedings—ruled that staffings may be presumptively closed at the discretion of the Drug Court judge (State of Washington v. Sykes, 2014). The Court analogized staffings to *pre-court conferences* in which attorneys commonly meet with the judge in chambers to clarify what legal issues are under contention, determine which facts are in dispute, and address other practical or collateral matters necessary to achieve a fair and efficient resolution of the case, such as scheduling witnesses or issuing discovery orders. In line with this reasoning, staffings may be closed so long as no final decisions are reached concerning disputed facts or legal issues in the case, and the judge recites in open court what decisions, if any, were made during the staffing. A closed staffing may not result in a binding order or factual conclusion related to a contested matter (Meyer, 2011a). Contested matters must be addressed and resolved in open court during status hearings or related due process hearings such as termination hearings or probation violation hearings.

Studies have not determined whether closed staffings produce more favorable outcomes than open staffings. The rationale for closing staffings derives largely from empirical studies and ethical analyses conducted in the context of psychotherapy progress notes and case conferences. For example, the Health Insurance Portability and Accountability Act (HIPAA) of 1996 grants broad access for patients to their health records, yet provides a lone exception for psychotherapy progress notes (45 C.F.R §§ 164.508(a)(2) & 164.524; U.S. Dept. of Health & Human Services [U.S. DHHS], 2003; Wooten v. Duane Reade, 2009). Psychotherapy notes receive heightened protection against patient access, in part, because they often contain sensitive information provided by collateral sources, such as family members and friends (U.S. DHHS, 2003). If participants could gain access to this information, collateral sources might not be forthright in providing sensitive information about matters which are critical for delivering effective treatment, such as providing accurate histories of participants' substance use patterns, criminality, or related conduct (Stasiewicz et al., 2008). Studies have also reported that patients can be harmed psychologically by receiving unfettered access to their therapists' diagnostic impressions and conclusions (Lajeunesse & Lussier, 2010; Ross & Lin, 2003; Sergeant, 1986; Short, 1986; Westin, 1977). Sensitive clinical information must be communicated to patients in a cautious, empathic, and understandable manner to avoid causing psychological distress, embarrassment, confusion, or other untoward reactions (McFarlane et al., 1980; Miller et al., 1987).

Participant attendance at staffings might also inhibit free flow of information among staff, which is necessary to achieve productive aims. Treatment representatives, for example, may be reluctant to discuss their concerns about a participant's prognosis in front of the participant. Probation officers might similarly be reticent to recommend sanctions for participants in response to infractions. It is one thing for sanctions to be imposed by the team as a whole, but quite another for an individual staff member to be identified as the person who first proposed the sanction. Closed staffings allow team members to freely consider alternative courses of action that may or may not be adopted ultimately by the team.

Although staffings are presumptively closed, the judge and team may conclude they have a good reason for a participant to attend discussions related to that participant's case. For example, the team might wish to discuss highly sensitive matters with a participant in private, such as a history of childhood sexual abuse or positive HIV test result. Drug Courts are encouraged to include participants in staffings when clinically indicated or necessary to protect a participant from serious harm resulting from public disclosure of highly sensitive treatment information.

C. Sharing Information

Participants and staff rate communication among team members as one of the most important factors for success in Drug Courts (Frazer, 2006; Gallagher et al., 2015; Lloyd et al., 2014). Participants complain frequently that they are forced to repeat the same information to different professionals and to comply with excessive and inconsistent mandates stemming from different agencies (Goldkamp et al., 2002; Saum et al., 2002; Turner et al., 1999). Ongoing communication among staff ensures participants receive consistent messages, reduces unwarranted burdens on participants, and prevents participants from falling through the cracks or eluding responsibility for their actions by providing different information selectively to different team members.

Contrary to some misconceptions, the HIPAA and other applicable confidentiality statutes (e.g., Confidentiality of Substance Abuse Patient Records, 42 C.F.R. Part 2) do *not* prohibit treatment professionals or criminal justice professionals from sharing information related to substance use and mental health treatment (Matz, 2014; Meyer, 2011b). Rather, these statutes control how and under what circumstances such information may be disclosed (U.S. DHHS, 2003). Treatment professionals are generally permitted to share confidential treatment information with criminal justice professionals pursuant to a voluntary, informed, and competent waiver of a patient's confidentiality and privacy rights (45 C.F.R. §164.502(a)) or pursuant to a court order (45 C.F.R. §164.512(e)).

The scope of the disclosure must be limited to the minimum information necessary to achieve the intended aims of the disclosure (45 C.F.R. §§164.502(b) & 164.514(d)). In Drug Courts, team members may ordinarily share information pursuant to a valid waiver to the degree necessary to ensure that participants are progressing adequately in treatment and complying with other conditions of the program (Meyer, 2011b). At a minimum, the following data elements are required by all Drug Court team members to appraise participant progress and compliance or noncompliance with the conditions of Drug Court:

- Assessment results pertaining to a participant's eligibility for Drug Court and treatment and supervision needs Attendance at scheduled appointments
- Drug and alcohol test results, including efforts to defraud or invalidate said tests
- Attainment of treatment plan goals, such as completion of a required counseling regimen
- Evidence of symptom resolution, such as reductions in drug cravings or withdrawal symptoms
- Evidence of treatment-related attitudinal improvements, such as increased insight or motivation for change
- Attainment of Drug Court phase requirements, such as obtaining and maintaining employment or enrolling in an educational program
- Compliance with electronic monitoring, home curfews, travel limitations, and geographic or association restrictions
- Adherence to legally prescribed and authorized medically assisted treatments
- Procurement of unauthorized prescriptions for addictive or intoxicating medications
- Commission of or arrests for new offenses

- Menacing, threatening, or disruptive behavior directed at staff members, participants or other persons

To be legally valid, an informed consent document must specify what data elements may be shared, with whom, and for what authorized period of time (Meyer, 2011b). Therefore, the above data elements and any other information that may be shared among team members should be listed in releases of information or confidentiality waivers executed by Drug Court participants (Meyer, 2011b). If the scope of the disclosure is not enumerated clearly, then the waiver may not be knowing or informed—and thus may be legally invalid. Consent documents must also indicate which professionals are authorized to receive the information, what steps participants must take to revoke consent, and when the consent expires. Expiration of consent may be predicated upon a specific event, such as discharge from Drug Court, as opposed to a specific date or time frame (Meyer, 2011b). Finally, recipients of confidential information must be put on notice that they are only permitted to redisclose information to additional parties under carefully specified and approved conditions. MOUs between partner agencies—referred to as business associate contracts pursuant to HIPAA—must state clearly that confidential information may not be redisclosed to additional parties outside of the Drug Court without the express written permission of the participant and may not be used to prosecute new charges against the participant.

Assuming a participant has executed a valid waiver of his or her privacy and confidentiality rights, Drug Court team members are permitted, and indeed may be required, to share covered information in the course of performing their professional duties. Confidentiality and privacy rights belong to the participant, not to staff, and may be waived freely and voluntarily in exchange for receiving anticipated benefits, such as gaining access to effective treatment or avoiding a criminal record or jail sentence (Melton et al., 2007). Failing to abide by a valid confidentiality waiver could, under some circumstances, be a breach of a staff person's professional responsibilities to the participant.

Staff persons also have ethical obligations to other Drug Court team members. If a staff person knowingly withholds relevant information about a participant from other team members, this omission could inadvertently interfere with the participant's treatment goals, endanger public safety, or undermine the functioning of the Drug Court team. All agencies involved in the administration of a Drug Court should, therefore, execute MOUs specifying what data elements will be shared among team members (Harden & Fox, 2011). The data elements listed above might be included in such MOUs to clarify the obligations of each professional on the team.

If a staff person questions the validity or legality of a consent waiver, that staff person should raise this concern with the Drug Court team and make it clear that he or she may withhold relevant progress information until the matter is resolved. This course of action puts the Drug Court team on notice that important information may not be forthcoming and reduces the likelihood that mistaken actions will be taken based on erroneous or incomplete information.

Controversy surrounds the question of whether defense representatives should report infractions by participants to the Drug Court team. In most instances, infractions come to the attention of the team from sources other than defense counsel, such as positive drug tests or progress reports from treatment providers or probation officers. In some instances, however, participants may self-disclose infractions to defense representatives which would otherwise go undetected by the program.

Some defense experts advise against disclosing such communications because doing so may violate the attorney's ethical duty to advocate for the participant's stated legal interests, which are to be distinguished from the participant's *best* interests (Boldt, 1998; National Association of Criminal Defense Lawyers [NACDL], 2009). Other defense experts take the contrary position that withholding such information may

undermine the defense representative's trustworthiness and credibility with the team. If team members know or suspect that defense counsel is shielding important information from them, they may discount recommendations from that defense expert as one-sided or nonobjective or may withhold information of their own (Tobin, 2012). In the absence of empirical evidence or legal precedent to guide the decision, defense representatives should make clear their position and the rationale for that position to participants and team members from the outset of each case (Freeman-Wilson et al., 2003). Participants have a right to know whether some confidences shared with defense representatives may be disclosed to other staff members, and team members have a right to know whether some information may not be available to them for decision making.

D. Team Communication and Decision Making

Before the advent of Drug Courts, studies of *courtroom workgroups* raised concerns about relying on multidisciplinary teams to manage criminal and civil cases. In response to overwhelming court dockets in the 1980s, some jurisdictions appointed teams of professionals—commonly including a judge, defense attorney, prosecutor, court clerk, probation officer, and bailiff—to process certain types of cases more efficiently, such as drug possession cases and child maltreatment cases. Observational studies revealed these workgroups tended to routinize their procedures to speed case processing, often at the expense of applying evidence-based practices or adapting dispositions to the needs and risk levels of litigants (Haynes et al., 2010; Knepper & Barton, 1997; Lipetz, 1980). Teaming up as a group did not necessarily improve outcomes and in some cases may have undermined litigants' due process rights. Drug Courts must not, in the interest of expediency, allow assembly-line procedures or groupthink mindsets to interfere with their adherence to due process and best practices.

Drug Courts are properly characterized as nonadversarial programs, meaning participants waive some, but not all, adversarial trial rights as a condition of entry, including the right to a speedy trial and to refuse to provide self-incriminating information (Hora & Stalcup, 2008; NADCP, 1997). Moreover, unlike traditional adversarial proceedings, the Drug Court judge speaks directly to participants rather than through legal counsel and takes an active role in supervising cases. The term nonadversarial does *not*, however, imply that team members relinquish their professional roles or responsibilities (Holland, 2010; Hora & Stalcup, 2008). Prosecutors continue to advocate on behalf of public safety, victim interests, and participant accountability; defense counsel continue to advocate for participants' legal rights; and treatment providers continue to advocate for effective and humane treatment (Freeman-Wilson et al., 2003; Holland, 2010; Tobin, 2012). In other words, the term *nonadversarial* does not have the same meaning as *nonadvocacy*. The principal distinction in Drug Courts is that advocacy occurs primarily in staffings as opposed to court hearings, reserving the greater share of court time for intervening with participants rather than arbitrating uncontested facts or legal issues (Christie, 2014; Portillo et al., 2013).

How Drug Court teams make decisions in this nonadversarial climate has constitutional implications. Due process and judicial ethics require Drug Court judges to exercise independent discretion when resolving factual controversies, ordering conditions of treatment and supervision, and administering sanctions and incentives that affect participants' liberty interests (Hora & Stalcup, 2008; Meyer, 2011c; Meyer & Tauber, 2011). The judge may not delegate these decisions to the Drug Court team or acquiesce to majority rule [see Standard III, Roles and Responsibilities of the Judge]. The judge must, however, consider arguments from all sides of a controversy (typically from the defense and prosecution) before rendering a decision and must hear evidence from scientific experts if the subject matter of the controversy is beyond the common knowledge of laypersons (Hora & Stalcup, 2008; Meyer, 2011a). Information relating to addiction science and substance use disorder treatment is typically beyond the

knowledge of laypersons; therefore, this information must usually be introduced or explained by a qualified expert (e.g., Federal Rule of Evidence 702, 2015).

In Drug Courts, the multidisciplinary team serves essentially as a panel of "expert witnesses" providing legal and scientific expertise for the judge (Bean, 2002; Hora & Stalcup, 2008). Team members have an obligation to contribute relevant observations and insights and to offer suitable recommendations based on their professional knowledge, experience, and training. A team member who remains silent in staffings or defers habitually to group consensus is violating his or her professional obligations to participants and to the administration of justice (Freeman-Wilson et al., 2003; Holland, 2010; NACDL, 2009; Tobin, 2012). The judge may ultimately overrule a team member's assertions, but this fact does not absolve the team member from articulating and justifying an informed opinion.

Studies have identified effective communication strategies that can enhance team decision making in Drug Courts. For example, researchers have improved team decision-making skills in several Drug Courts using the NIATx (Network for the Improvement of Addiction Treatment) Organizational Improvement Model (Melnick et al., 2014a, 2014b; Wexler et al., 2012). The NIATx model seeks to create a climate of psychological safety by teaching team members to articulate divergent views in a manner that is likely to be heeded by fellow team members. Examples of NIATx techniques include the following (Melnick et al., 2014b):

- *Avoid Ego-Centered Communications*—Focus statements on the substantive issue at hand rather than attempting to be "right" or win an argument.
- *Avoid Downward Communication*—Ensure that all team members, regardless of status or authority, have an equal opportunity to speak.
- *Practice Attentive Listening*—Hear all aspects of a team member's statements before thinking about or forming a response.
- *Reinforce Others' Statements*—Express appreciation for a team member's input before making counterarguments or changing the subject.
- *Find Common Ground*—Acknowledge areas of agreement among team members before making counterarguments.
- *Reframe Statements Neutrally*—Restate a position in a manner that minimizes counterproductive affect such as anger or frustration.
- *Ensure Inclusiveness*—Ensure that all team members weigh in on subjects within their area of expertise or experience.
- *Show Understanding*—Restate others' positions to demonstrate accurate understanding.
- *Engage in Empathic Listening*—Imagine oneself in other team members' positions to understand issues from their perspective.
- *Sum Up*—The judge should recap the various arguments and positions, assure the team that all positions were considered carefully, and explain his or her rationale for reaching a conclusion or tabling the matter pending further information.

Preliminary studies in more than ten Drug Courts found that training Drug Court teams on the NIATx model enhanced team communication skills (Melnick et al., 2014b), increased staff job satisfaction

(Melnick et al., 2014a), and improved program efficiency, leading to higher admission rates, shorter wait times for treatment, and reduced no-show rates at scheduled appointments (Wexler et al., 2012).

E. Status Hearings

Status hearings are critical components of Drug Courts (NADCP, 1997). In status hearings, participants interact with all team members in the same proceeding, the judge speaks personally with each participant, and incentives, sanctions and treatment adjustments are administered in accordance with participants' progress or lack thereof in treatment (Roper & Lessenger, 2007). A substantial body of research establishes convincingly that better outcomes are achieved when status hearings are held biweekly (every two weeks) or more frequently at least during the first phase of Drug Court (Carey et al., 2012; Cissner et al., 2013; Festinger et al., 2002; Jones, 2013; Marlowe et al., 2006, 2007; Mitchell et al., 2012; Rossman et al., 2011).[25]

Studies further reveal that consistent attendance by all team members at status hearings is associated with significantly better outcomes. A study of approximately seventy Drug Courts found that programs were 35% more cost-effective and 35% more effective at reducing crime when all team members—the judge, program coordinator, defense representative, prosecutor, probation officer, treatment representative, and law enforcement representative—attended status hearings regularly (Carey et al., 2012). When a treatment representative attended status hearings regularly, Drug Courts were nearly twice as effective at reducing crime and 80% more cost-effective, and when a representative from law enforcement attended hearings regularly, Drug Courts were over 80% more effective at reducing crime and 60% more cost-effective (Carey et al., 2008, 2012).

Although the judge typically controls most of the interactions during status hearings, observational studies reveal that other team members play an important role as well. Team members may report on participant progress, share their observations of participants, fill in missing information for the judge, offer praise and encouragement to participants, challenge inaccurate statements by participants, or make recommendations for suitable consequences to impose (Baker, 2013; Christie, 2014; Mackinem & Higgins, 2008; McPherson & Sauder, 2013; Portillo et al., 2013; Roper & Lessenger, 2007). Colloquially referred to as *courtroom as theater*, these interactions are often planned in advance during staffings to illustrate treatment-relevant concepts, prevent participants from fomenting disagreement among staff members, and demonstrate unity of purpose for the team as a whole (Satel, 1998; Tauber, 2011). In focus groups, participants rated interactions among staff during court sessions as informative and helpful to improving their performance (Goldkamp et al., 2002).

F. Team Training

Drug Courts represent a fundamentally new way of treating persons charged with drug-related offenses (Roper & Lessenger, 2007). Specialized knowledge and skills are required to implement these multifaceted programs effectively (Carey et al., 2012; Shaffer, 2010; Van Wormer, 2010). To be successful in their new roles, staff members require at least a journeyman's knowledge of best practices in a wide range of areas, including substance use disorder and mental health treatment, complementary treatment and social services, behavior modification, community supervision, and drug and alcohol testing. Staff must also learn to perform their duties in a multidisciplinary environment, consistent with constitutional due process and the ethical mandates of their respective professions. These skills and knowledge sets are not taught in traditional law school, graduate school, or most continuing education programs (Berman &

[25] This finding assumes the Drug Court is serving the appropriate target population of high-risk and high-need participants [see Standard I, Target Population].

Feinblatt, 2005; Holland, 2010). Ongoing specialized training and supervision are needed for staff to achieve the goals of Drug Court and conduct themselves in an ethical, professional, and effective manner.

Preimplementation Trainings—In preimplementation trainings, staff meet for several days as a team to, among other things, develop a mission statement and goals and objectives for their program, learn from expert faculty about best practices in Drug Courts, and develop effective policies and procedures to govern their day-to-day operations (Hardin & Fox, 2011). A multisite study found that Drug Courts were nearly two and a half times more cost-effective and over 50% more effective at reducing recidivism when the teams participated in formal training prior to implementation (Carey et al., 2008, 2012). Drug Courts that did not receive preimplementation training produced outcomes that were negligibly different from traditional criminal justice approaches (Carey et al., 2008).

Continuing Education Workshops—Continuing education workshops are commonly delivered as part of national, regional, or state Drug Court training conferences or in stand-alone seminars. These workshops provide experienced Drug Court professionals with up-to-date knowledge about new research findings on best practices in Drug Courts. Studies consistently find that annual attendance by staff at training workshops is associated with significantly better outcomes. A multisite study involving more than sixty Drug Courts found that annual attendance at training conferences was the greatest predictor of program effectiveness (Shaffer, 2006, 2010). Another large-scale study found that regular participation in continuing education workshops was the greatest predictor of a program's adherence to the Drug Court model (Van Wormer, 2010). After taking continuing education into account, no other variable was independently or incrementally associated with adherence to the Drug Court model. This finding suggests that adherence to best practices may be mediated primarily through staff participation in continuing education workshops. The same study determined that regular attendance in continuing education workshops was also associated with better collaboration among Drug Court team members, increased job satisfaction by staff, greater perceived benefits of Drug Court, greater optimism about the effects of substance use disorder treatment, and better perceived coordination between the criminal justice system and other social service and treatment systems (Van Wormer, 2010).

Tutorials for New Staff—Within five years, 30% to 60% of Drug Courts experience substantial turnover in key staff positions (Van Wormer, 2010). The highest turnover rates, commonly exceeding 50%, are among substance use disorder and mental health treatment providers (Lutze & Van Wormer, 2007; McLellan et al., 2003; Taxman & Bouffard, 2003; Van Wormer, 2010). Evidence further reveals that staff turnover correlates significantly with downward drift in the quality of the services provided, meaning that services diverge increasingly from the Drug Court model as more staff positions turn over (Van Wormer, 2010).

Research has determined that Drug Courts are more effective when they provide introductory tutorials for new hires. A multisite study of approximately seventy Drug Courts found that programs were over 50% more effective at reducing recidivism when they routinely provided formal orientation training for new staff (Carey et al., 2012). Typically, the tutorials provide a *"Reader's Digest"* orientation to the Ten Key Components of Drug Courts (NADCP, 1997) and a synopsis of best practices associated with each component. The tutorials are not intended to take the place of formal continuing education workshops, but serve rather as a stopgap measure to prevent acute disruption in services and degradation of outcomes. To maintain effective outcomes over time, recent hires should attend formal training workshops as soon as practicable after assuming their new positions. Given the powerful influence of staff training on Drug Court outcomes (Carey et al., 2012; Shaffer, 2006, 2010; Van Wormer, 2010), a firm commitment to ongoing professional education is key to maintaining the success and integrity of Drug Courts.

References

Baker, K.M. (2013). Decision making in a hybrid organization: A case study of a southwestern drug court treatment program. *Law and Social Inquiry*, *38*(1), 27–54.

Bean, P. (2002). Drug courts, the judge, and the rehabilitative ideal. In J.L. Nolan (Ed.), *Drug courts in theory and in practice* (pp. 235–245). New York: Aldine de Gruyter.

Berman, G., & Feinblatt, J. (2005). *Good courts: The case for problem-solving justice*. New York: New Press.

Berman, G., & Gold, E. (2012). Procedural justice from the bench: How judges can improve the effectiveness of criminal courts. *Judges' Journal*, *51*(2), 20–22.

Boldt, R.C. (1998). Rehabilitative punishment and the Drug Treatment Court movement. *Washington University Law Review*, *76*(4), 1205–1306.

Burke, K.S. (2010). Just what made drug courts successful? *New England Journal on Criminal & Civil Confinement*, *36*(1), 39–58.

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

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review*, *8*(1), 6–42.

Christie, N.V. (2014, November 24). Understanding the role of cross-sector collaborations on the success of Florida's drug courts. *Criminal Justice Policy Review: Online*. doi:10.1177/0887403414559044.

Cissner, A., Rempel, M., Franklin, A.W., Roman, J.K., Bieler, S., Cohen, R., & Cadoret, C.R. (2013). *A statewide evaluation of New York's adult drug courts: Identifying which policies work best*. New York: Center for Court Innovation.

FederalEvidence.com. (2015). Federal Rule of Evidence 2015. Arlington, VA: Author. *Available at* http://federalevidence.com /downloads/rules.of.evidence.pdf.

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

Frazer, M.S. (2006). *The impact of the community court model on defendant perceptions of fairness: A case study at the Red Hook Community Justice Center*. New York: Center for Court Innovation.

Freeman-Wilson, K., Sullivan, R., & Weinstein, S.P. (2003). *Critical issues for defense attorneys in drug court* [Monograph Series No. 4]. Alexandria, VA: National Drug Court Institute.

Gallagher, J.R., Nordberg, A., & Kennard, T. (2015). A qualitative study assessing the effectiveness of the key components of a drug court. *Alcoholism Treatment Quarterly*, *33*(1), 64–81.

Goldkamp, J.S., White, M.D., & Robinson, J.B. (2002). An honest chance: Perspectives on drug courts. *Federal Sentencing Reporter*, *14*(6,) 369–372.

Gottfredson, D.C., Kearley, B.W., Najaka, S.S., & Rocha, C.M. (2007). How drug treatment courts work: An analysis of mediators. *Journal of Research on Crime & Delinquency*, *44*(1), 3–35.

Harberts, H. (2011). Community supervision. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 97–111). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp /14146 _NDCI_Benchbook_v6.pdf.

Hardin, C., & Fox, C. (2011). Getting started. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 19–43). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp/14146 _NDCI_Benchbook_v6.pdf.

Haynes, S.H., Ruback, B., & Cusick, G.R. (2010). Courtroom workgroups and sentencing: The effects of similarity, proximity, and stability. *Crime & Delinquency*, *56*(1), 126–161.

Holland, P. (2010). Lawyering and learning in problem-solving courts. *Washington University Journal of Law and Policy*, *34*(1), 185–238.

Hora, P.F., & Stalcup, T. (2008). Drug Treatment Courts in the twenty-first century: The evolution of the revolution in problem-solving courts. *Georgia Law Review*, *42*(3), 717–811.

Jones, C. (2013). Early-phase outcomes from a randomized trial of intensive judicial supervision in an Australian drug court. *Criminal Justice & Behavior*, *40*(4), 453–468.

Knepper, P.E., & Barton, S.M. (1997). The effect of courtroom dynamics on child maltreatment proceedings. *Social Service Review, 71*(2), 288–308.

Lajeunesse, R.C., & Lussier, M.T. (2010). Therapeutic privilege: Between the ethics of lying and the practice of truth. *Journal of Medical Ethics, 36*(6), 353–357.

Lipetz, M.J. (1980). Routine and deviations: The strength of the courtroom workgroup in a misdemeanor court. *International Journal of the Sociology of Law, 8*(1), 47–60.

Lloyd, M.H., Johnson, T., & Brook, J. (2014). Illuminating the black box from within: Stakeholder perspectives on family drug court best practices. *Journal of Social Work Practice in the Addictions, 14*(4), 378–401.

Lutze, F.E., & Van Wormer, J.G. (2007). The nexus between drug and alcohol treatment program integrity and drug court effectiveness: Policy recommendations for pursuing success. *Criminal Justice Policy Review, 18*(3), 226–245.

Mackinem, M.B., & Higgins, P. (2008). *Drug courts: Constructing the moral identity of drug offenders*. Springfield, IL: Charles C. Thomas.

Marlowe, D.B., Festinger, D.S., Dugosh, K.L., Lee, P.A., & Benasutti, K.M. (2007). Adapting judicial supervision to the risk level of drug offenders: Discharge and six-month outcomes from a prospective matching study. *Drug & Alcohol Dependence, 88*(Suppl. 2) S4–S13.

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

Matz, A.K. (2014). *A note on HIPAA and 42 CFR Part 2: Dispelling the myths about justice-involved information sharing*. Washington, DC: Council of State Governments & American Probation and Parole Association.

McFarlane, W.J., Bowman, R.G., & MacInnes, M. (1980). Patient access to hospital records: A pilot project. *Canadian Journal of Psychiatry, 25*(6), 497.

McKaskle v. Wiggins, 465 U.S. 168, 104 S. Ct. 944, 79 L.Ed.2d 122 (1984).

McLellan, A.T., Carise, D., & Kleber, H.D. (2003). Can the national addiction treatment infrastructure support the public's demand for quality care? *Journal of Substance Abuse Treatment, 25*(2), 117–121.

McPherson, C.M., & Sauder, M. (2013). Logics in action: Managing institutional complexity in a drug court. *Administrative Science Quarterly, 58*(2), 165–198. doi:10.1177/0001839213486447

Melnick, G., Wexler, H.K., & Rajan, S. (2014a). Measuring team members' satisfaction in drug courts: An instrument to gauge the component disciplines in drug court. *Drug Court Review, 9*(1), 56–73.

Melnick, G., Wexler, H.K., & Zehner, M. (2014b). Communication in drug courts: The consensus-building enhancement. *Drug Court Review, 9*(1), 99–116.

Melton, G.B., Petrila, J., Poythress, N.G., & Slobogin, C. (2007). *Psychological evaluations for the courts: A handbook for mental health professionals and lawyers* (3rd ed.). New York: Guilford Press.

Menefield v. Borg, 881 F.2d 696 (9th Cir. 1989).

Meyer, W. (2011a). Constitutional and legal issues in drug courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 159–180). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/ sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Meyer, W. (2011b). Confidentiality. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 181–194). Alexandria, VA: National Drug Court Institute.

Meyer, W. (2011c). Ethical obligations of judges in drug courts. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 195–212). Alexandria, VA: National Drug Court Institute.

Meyer, W.G., & Tauber, J. (2011). The roles of the drug court judge. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 45–61). Alexandria, VA: National Drug Court Institute.

Miller, R.D., Morrow, B., Kaye, M., & Maier, G. (1987). Patient access to medical records in a forensic center: A controlled study. *Hospital and Community Psychiatry, 38*(10), 1081–1085.

Mitchell, O., Wilson, D.B., Eggers, A., & MacKenzie, D.L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and nontraditional Drug Courts. *Journal of Criminal Justice, 40*(1), 60–71.

National Association of Criminal Defense Lawyers. (2009). *America's problem-solving courts: The criminal costs of treatment and the case for reform*. Washington, DC: Author.

National Association of Drug Court Professionals. (1997). *Defining drug courts: The key components*. (NCJ No. 205621). Washington, DC: Author.

National Association of Drug Court Professionals. (2009). Position statement of the Board of Directors on defense counsel in drug courts. *Retrieved from* http://www.allrise.org/sites/default/files/nadcp/NADCP%20Board%20Position%20Statement%20-%20Defense%20Counsel%20in%20Drug%20Court%2006-10-09.pdf.

Portillo, S., Rudes, D.S., Viglione, J., & Nelson, M. (2013). Front-stage stars and backstage producers: The role of judges in problem-solving courts. *Victims and Offenders, 8*(1), 1–22.

Robinson v. Ignacio, 360 F.3d 1044 (9th Cir. 2004).

Roper, G.F., & Lessenger, J.E. (2007). Drug court organization and operations. In J.E. Lessenger & G.F. Roper (Eds.), *Drug courts: A new approach to treatment and rehabilitation* (pp. 284–300). New York: Springer.

Ross, S.E., & Lin, C.T. (2003). The effects of promoting patient access to medical records: A review. *Journal of the American Medical Association, 10*(2), 129–138.

Rossman, S.B., Rempel, M., Roman, J.K., Zweig, J.M., Lindquist, C.H., Green, M.,…Farole, D.J. (2011). *The multi-site adult drug court evaluation: The impact of drug courts* (Vol.4). Washington, DC: Urban Institute Justice Policy Center. *Available at* https://www.ncjrs.gov/pdffiles1/nij/grants/237112.pdf.

Satel, S. (1998). Observational study of courtroom dynamics in selected drug courts. *National Drug Court Institute Review, 1*(1), 43–72.

Saum, C.A., Scarpitti, F.R., Butzin, C.A., Perez, V.W., Jennings, D., & Gray, A.R. (2002). Drug court participants' satisfaction with treatment and the court experience. *Drug Court Review, 4*(1), 39–81.

Sergeant, H. (1986). Should psychiatric patients be granted access to their hospital records? *Lancet, 328*(8519), 1322–1325.

Shaffer, D.K. (2006). Reconsidering Drug Court Effectiveness: A Meta-Analytic Review (Doctoral dissertation, University Of Cincinnati). *Retrieved from* https://etd.ohiolink.edu/ap:10:0::NO:10:P10_ACCESSION_NUM:ucin1152549096.

Shaffer, D.K. (2010). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly, 28*(3), 493–521. Short, D. (1986). Some consequences of granting patients access to consultants' records. *Lancet, 327*(8493), 1316–1318.

Stasiewicz, P.R., Vincent, P.C., Bradizza, C.M., Connors, G.J., Maisto, S.A., & Mercer, N.D. (2008). Factors affecting agreement between severely mentally ill alcohol abusers' and collaterals' reports of alcohol and other substance abuse. *Psychology of Addictive Behaviors, 22*(1), 78–87.

State v. Pitts, 131 Haw. 537 (2014).

State of Washington v. Sykes, slip op. no. 87946–0, consolidated with 87947–8 (S. Ct. Wash. en banc, 12/18/2014).

Tauber, J. (2011). Drug courts: Back to the future. In D.B. Marlowe & W.G. Meyer (Eds.), *The drug court judicial benchbook* (pp. 7–17). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp/14146_NDCI_Benchbook_v6.pdf.

Taxman, F.S., & Bouffard, J.A. (2003). Substance abuse counselors' treatment philosophy and the content of treatment services provided to offenders in drug court programs. *Journal of Substance Abuse Treatment, 25*(2), 75–84.

Taylor, P. (2014). Building recovery-oriented systems of care for drug court participants. *Drug Court Practitioner Fact Sheet, 9*(1), 1–8. Alexandria, VA: National Drug Court Institute.

Tobin, M. (2012). Participation of defense attorneys in drug courts. *Drug Court Review, 8*(1), 96–130.

Turner, S., Greenwood, P., Fain, T., & Deschenes, E. (1999). Perceptions of Drug Court: How offenders view ease of program completion, strengths and weaknesses, and the impact on their lives. *National Drug Court Institute Review, 2*(1), 61–85.

U.S. Department of Health & Human Services. (2003). *Summary of the HIPAA privacy rule* [Office for Civil Rights Policy Brief]. Washington, DC: Author.

Van Wormer, J. (2010). *Understanding operational dynamics of Drug Courts* (Doctoral dissertation, University of Washington). *Retrieved from h*ttp://research.wsulibs.wsu.edu:8080/xmlui/bitstream/handle/2376/2810/vanWormer_wsu_0251E_10046.pdf?sequence=1.

Westin, A.F. (1977). Medical records: Should patients have access? *Hastings Center Report, 7*(6), 23–28.

Wexler, H.K., Zehner, M., & Melnick, G. (2012). Improving Drug Court operations: NIATx organizational improvement model. *Drug Court Review, 8*(1), 80–95.

Wooten v. Duane Reade, 2009 U.S. Dist. LEXIS 14724 (E.D. N.Y., 2009).

Appendix IX

Supporting Evidence Census and Caseloads

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume II, pages 52-58.

A. Drug Court Census

Drug Courts serve fewer than 10% of adults in the criminal justice system in need of their services (Bhati et al., 2008; Huddleston & Marlowe, 2011). An important goal for the Drug Court field is to take Drug Courts to scale and serve every drug-addicted person in the criminal justice system who meets evidence-based eligibility criteria for the programs (Fox & Berman, 2002). Putting arbitrary restrictions on the size of the Drug Court census unnecessarily reduces the program's impact on public health and public safety.

Not all Drug Courts, however, may have adequate resources to increase capacity while maintaining fidelity to best practices. Surveys of judges and other criminal justice professionals consistently identify insufficient personnel and other resources as the principal barrier preventing Drug Courts from expanding to serve more people (Center for Court Innovation, n.d.; Farole, 2006, 2009; Farole et al., 2005; Huddleston & Marlowe, 2011). Resource limitations may put some Drug Courts in the challenging position of needing to choose between diluting their services to treat more people or turning away deserving individuals.

Evidence suggests expanding Drug Court capacity without sufficient resources can interfere with adherence to best practices. A multisite study of approximately seventy Drug Courts found a significant inverse correlation between the size of the Drug Court census and effects on criminal recidivism (Carey et al., 2008, 2012a). On average, programs evidenced a steep decline in effectiveness when the census exceeded approximately 125 participants. Drug Courts with fewer than 125 participants were over five times more effective at reducing recidivism than Drug Courts with more than 125 participants (Carey et al., 2012a).

Further analyses uncovered a likely explanation for this finding: Drug Courts with more than 125 participants were less likely to follow best practices than Drug Courts with fewer participants. Specifically, when the census exceeded 125 participants, the following was observed (Carey et al., 2012b):[26]

- Judges spent approximately half as much time interacting with participants in court.
- Team members were less likely to attend pre-court staff meetings.
- Treatment and law enforcement representatives were less likely to attend status hearings.
- Drug and alcohol testing occurred less frequently.
- Treatment agencies were less likely to communicate with the court about participant performance via email or other electronic means.
- Participants were treated by a large number of treatment agencies with divergent practices and expectations.

[26] All comparisons statistically significant as $p < .05$.

- Team members were less likely to receive training on Drug Court best practices.

These findings are merely correlations and do not prove that a large census produces poor outcomes. Most Drug Courts in the study were staffed by a single judge and a small team of roughly four to five other professionals overseeing a single court docket. Drug Courts can serve far more than 125 participants with effective results if the programs have sufficient personnel and resources to accommodate larger numbers of individuals. In fact, studies have reported positive outcomes for well-resourced Drug Courts serving more than 400 participants (Carey et al., 2012a; Cissner et al., 2013; Marlowe et al., 2008; Shaffer, 2010).

Nevertheless, the above results raise a red flag that as the census increases, Drug Courts may have greater difficulty delivering the quantity and quality of services required to achieve effective results. Therefore, when the Drug Court census reaches 125 active participants, this milestone should trigger a careful reexamination of the program's adherence to best practices. For example, staff should monitor Drug Court operations to ensure the judge is spending at least three minutes interacting with each participant in court [see Standard III, Roles and Responsibilities of the Judge], drug and alcohol testing is being performed randomly at least twice per week [see Standard VII, Drug and Alcohol Testing], team members are attending pre-court staff meetings and status hearings on a consistent basis [see Standard III and Standard VIII, Multidisciplinary Team], and team members are receiving up-to-date training on best practices [see Standards III and VIII]. If the results of this reexamination suggest some operations are drifting away from best practices, the team should develop a remedial action plan and timetable to rectify the deficiencies and evaluate the success of the remedial actions. For example, the Drug Court might need to hire additional staff to ensure it has manageable participant-to-staff caseloads, schedule status hearings on more days of the week, purchase more drug and alcohol tests, or schedule more continuing-education workshops for staff.

Studies have not determined whether censuses greater than 125 participants should trigger additional reexaminations of adherence to best practices. Until research addresses this question, at a minimum Drug Courts are advised to reexamine adherence to best practices when the census increases by successive increments of 125 participants.

B. Supervision Caseloads

In most Drug Courts, probation officers or pretrial services officers are responsible for supervising participants in the community; however, some Drug Courts may rely on law enforcement or specially trained court case managers to provide community supervision. Duties of the supervision officer may include performing drug and alcohol testing, conducting home and employment visits, enforcing curfews and geographic restrictions, and delivering cognitive-behavioral interventions designed to improve participants' problem-solving skills or alter dysfunctional criminal-thinking patterns (Harberts, 2011).

No study has examined the influence of supervision caseloads in Drug Courts. However, many studies have examined supervision caseloads in the context of adult probation. Early studies found that small probation caseloads were paradoxically associated with *increased* rates of technical violations and arrests for new offenses (Gendreau et al., 2000a; Petersilia, 1999; Turner et al., 1992). This counterintuitive finding was attributable to increased surveillance of the probationers coupled with a failure to apply evidence-based practices. Smaller caseloads led to greater detection of infractions, but most infractions received excessively punitive responses, such as probation revocations, rather than evidence-based treatment or gradually escalating incentives and sanctions (Andrews et al., 1990; Gendreau et al., 2000b; Hollin, 1999).

Recent studies have reported improved outcomes when reduced probation caseloads were combined with evidence-based cognitive-behavioral counseling, motivational interviewing, or gradually escalating incentives and sanctions (Jalbert & Rhodes, 2012; Jalbert et al., 2010, 2011; Paparozzi & Gendreau, 2005; Pearson & Harper, 1990; Worrall et al., 2004). Results of these newer studies confirm that detecting infractions alone is insufficient to improve outcomes. To achieve positive results, probation officers must respond to infractions and achievements by delivering effective behavioral contingencies (incentives and sanctions) and ensuring probationers receive effective and adequate evidence-based treatment and social services (Center for Effective Public Policy, 2014; Paparozzi & Hinzman, 2005; Skeem & Manchak, 2008).

Identifying optimal probation caseloads has been a challenging task. In 1990, the American Probation and Parole Association (APPA, 1991) issued caseload guidelines derived from expert consensus. The 1990 guidelines recommended caseloads of 30:1 for high-risk probationers who have a substantial likelihood of failing on probation or committing a new offense (Table 2). In 2006, the APPA guidelines were amended, in part, to add a new category for intensive supervised probation (ISP). ISP was designed for probationers who are both high risk and high need, meaning they pose a substantial risk of failing on probation and also have serious treatment or social-service needs (Petersilia, 1999). Because ISP and Drug Courts are both intended for high-risk and high-need individuals, recommendations for ISP may be particularly instructive for Drug Court best practices. Based on expert consensus, the 2006 APPA amendments recommended caseloads of 20:1 for high-risk and high-need probationers on ISP, and increased the recommended caseloads to 50:1 for moderate- and high-risk probationers who do not have serious treatment or social-service needs (Byrne, 2012; DeMichele, 2007).

Table 2	**APPA* Recommended Caseloads**	
Probationer Risk and Need Level	**1990 Guidelines**	**2006 Guidelines**
ISP:† high risk and high need	NR§	20:1
High risk	30:1	50:1
Moderate risk	60:1	50:1
Low risk	120:1	200:1

*American Probation and Parole Association Sources: APPA (1991); Byrne (2012); DeMichele (2007)
†Intensive supervised probation
§Not reported

Recent studies examined the effects of adhering to the 2006 APPA guidelines. A randomized experiment compared the services received and outcomes achieved when probation officers had reduced caseloads of approximately 50:1 for moderate and high-risk probationers as compared to typical probation caseloads of approximately 100:1 (Jalbert & Rhodes, 2012). Results confirmed that probationers on 50:1 caseloads received significantly more probation office sessions, field visits, employer contacts, telephone check-ins, and substance use disorder and mental health treatment (Jalbert & Rhodes, 2012). As a consequence of receiving more services, they also had significantly better probation outcomes, including fewer positive drug tests and other technical violations (Jalbert & Rhodes, 2012). Probation officers with caseloads substantially above 50:1 had considerable difficulty accomplishing their core missions of monitoring probationers closely and reducing technical violations.

Another quasi-experimental study examined the effects of reducing caseloads from 50:1 to 30:1 for high-risk and high-need probationers on ISP (Jalbert et al., 2010). A 30:1 caseload is greater than the APPA recommended guideline of 20:1 for ISP, but is considerably smaller than typical probation caseloads of 100:1 (Bonta et al., 2008; Paparozzi & Hinzman, 2005) and recommended caseloads of 50:1 for most high-risk probationers (Byrne, 2012). Results confirmed that probationers on 30:1 caseloads had more frequent and longer contacts with their probation officers, and received more specialized services designed to reduce their risk to public safety, including behavior therapy, domestic-violence counseling, spousal-batterer interventions, and sex-offender treatment (Jalbert et al., 2010). Most striking, probationers on 30:1 caseloads had significantly lower recidivism rates lasting for at least two and a half years, including fewer new arrests for drug, property, and violent crimes (Jalbert et al., 2010).

Taken together, the weight of scientific evidence (Jalbert & Rhodes, 2012; Jalbert et al., 2011) and expert consensus (APPA, 1991; Byrne, 2012; DeMichele, 2007) suggests supervision officers are unlikely to manage high-risk cases effectively and reduce technical violations when their caseloads exceed 50:1. Supervision officers in Drug Courts are unlikely to accomplish their core functions of monitoring participants accurately, applying effective behavioral consequences, and sharing important compliance information with Drug Court team members if their caseloads exceed this critical threshold.

Research in ISP programs suggests long-term reductions in criminal recidivism are most likely to be achieved for high-risk and high-need participants when caseloads stay at or below 30:1 (Jalbert et al., 2010). Whether 30:1 caseloads are required similarly for Drug Courts is an open question. Drug Courts include several components not encompassed by ISP, which may enhance the influence of supervision officers. For example, Drug Court participants are supervised and treated by a multidisciplinary team of professionals and attend status hearings in court on a frequent basis. Larger caseloads may be manageable for supervision officers in light of these additional service elements. Until research resolves the issue, Drug Courts are advised to monitor their operations carefully when caseloads for supervision officers exceed 30:1; caseloads should never exceed a 50:1 ratio. Assurance is needed that supervision officers can monitor participant performance effectively, contribute critical observations and information during pre-court staff meetings and status hearings, and complete other assigned duties such as performing drug and alcohol testing, conducting field visits, and delivering cognitive-behavioral criminal-thinking interventions.

Bear in mind these caseload guidelines assume the supervision officer is assigned principally to Drug Court and is not burdened substantially with other professional obligations. Smaller caseloads may be required if supervision officers are also managing caseloads outside of Drug Court or if they have supplementary administrative or managerial duties in addition to supervising Drug Court participants.

C. Clinician Caseloads

In Drug Courts, addiction counselors, social workers, psychologists, or clinical case managers are typically responsible for assessing participant needs, delivering or overseeing the delivery of treatment services, charting treatment progress, and reporting progress information to the Drug Court team (Lutze & Van Wormer, 2007; Shaffer, 2010; Van Wormer, 2010). Outcomes are significantly better in Drug Courts when participants meet individually with one of these clinicians on a weekly basis for at least the first phase of the program [see Standard V, Substance Use Disorder Treatment and Standard VI, Complementary Treatment and Social Services].

National studies of outpatient individual substance use disorder treatment consistently find that the size of clinician caseloads is inversely correlated with patient outcomes and clinician job performance (Hser et al., 2001; McCaughrin & Price, 1992; Stewart et al., 2004; Vocisano et al., 2004; Woodward et al., 2006).

As caseloads increase, patients receive fewer services, patients are more likely to use illicit substances, clinicians are more likely to behave punitively toward patients, and clinicians are more likely to report significant job burnout and dissatisfaction (King et al., 2004; Stewart et al., 2004). Comparable studies are lacking for residential substance use disorder treatment and for group clinicians who deliver services to several participants simultaneously.

Determining appropriate caseloads for clinicians in Drug Courts depends largely on their role and the scope of their responsibilities:

- Clinical Case Management Role—Some clinicians in Drug Courts serve principally as clinical case managers, assessing participant needs, brokering referrals for services, and reporting progress information to the Drug Court team (Monchick et al., 2006). They may also represent treatment concerns during pre-court staff meetings and status hearings.
- Treatment Provider Role—Some clinicians serve principally as treatment providers, administering individual therapy or counseling and perhaps facilitating or cofacilitating group interventions (Cissner et al., 2013; Zweig et al., 2012). They may also provide or refer participants for indicated complementary services, such as mental health treatment or vocational counseling.
- Combined Clinical Case Management and Treatment Provider Roles—Some clinicians serve both clinical case management and treatment provider functions. In addition to providing individual therapy or counseling, they are responsible for assessing participant needs, referring participants for complementary services, coordinating care between multiple service providers, reporting progress to the Drug Court team, and representing treatment concerns during pre-court staff meetings and status hearings (Braude, 2005; Monchick et al., 2006).

National practitioner organizations have published broad caseload guidelines based in part on these professional roles and responsibilities (Case Management Society of America & National Association of Social Workers, 2008; North Carolina Administrative Office of the Courts, 2010; Rodriguez, 2011). These guidelines have not been validated empirically in terms of their effects on outcomes. Rather, they are derived from expert consensus about heavy caseloads that are likely too large to deliver adequate services or that contribute to staff burnout and job dissatisfaction. The guidelines focus exclusively on individual counseling and clinical case management. Comparable guidelines for group counselors have not been published. Table 3 summarizes the consensus conclusions.

Table 3	**Caseload Guidelines Derived from Expert Consensus**	
Principal Role and Responsibilities	**Caseload**	**Reference**
Clinical case management	50:1 to 75:1	Rodriguez (2011)
Individual therapy or counseling	40:1 to 50:1	CMSA* & NASW† (2008) Hromco et al. (2003)
Combination of clinical case management and individual therapy or counseling	30:1	CMSA & NASW (2008) NCAOC§ (2010)

*Case Management Society of America
†National Association of Social Workers §North Carolina Administrative Office of the Courts

To reiterate, these guidelines are derived from expert consensus and have not been validated against outcomes. Moreover, professional roles and responsibilities are rarely so clearly delineated in day-to-day Drug Court operations. Clinicians in Drug Courts may provide clinical case management for some participants and therapy or counseling for others, may have a mixture of individual and group treatment responsibilities, and may have other nonclinical duties, such as drug and alcohol testing, that reduce the time they have available for clinical assessment, treatment, or case management. Caseload expectations need to be adjusted in light of actual job responsibilities.

Nevertheless, these guidelines should serve as broad milestones to alert Drug Courts to the possibility of clinician overload and the need to audit their operations to ensure adequate services are being delivered. Because Drug Courts serve high-risk and high-need individuals, programs are advised to reexamine adherence to best practices when clinician caseloads reach the lowest ratios reported in Table 3. For example, when clinical case management caseloads exceed 50:1, individual counseling caseloads exceed 40:1, or combined caseloads exceed 30:1, staff should monitor Drug Court operations to ensure participants are being assessed appropriately for risk and need [see Standard I, Target Population], participants are meeting individually with a clinician on a weekly basis for at least the first phase of treatment [see Standard V, Substance Use Disorder Treatment and Standard VI, Complementary Treatment and Social Services], participants are receiving at least 200 hours of cognitive-behavioral treatment [see Standard V], and clinicians are providing reliable and timely progress information to the Drug Court team [see Standard VIII, Multidisciplinary Team]. Drug Courts are unlikely to achieve the goals of rehabilitating participants and reducing crime if clinicians are spread too thin to assess and meet participants' service needs.

References

American Probation and Parole Association. (1991). Caseload standards: APPA issues committee report. *APPA Perspectives*, (Summer), 34–36. *Available at* https://www.appa-net.org/eweb/docs/APPA/stances/ip_CS.pdf.

Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P., Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology, 28*(3), 369–404.

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

Bonta, J., Rugge, T., Scott, T., Bourgon, G., & Yessine, A.K. (2008). Exploring the black box of community supervision. *Journal of Offender Rehabilitation, 47*(3), 248–270.

Braude, L. (2005). The Cook County Mental Health Court: Development, implementation, and initial implications. *Offender Substance Abuse Report, 5*(5), 67–76.

Byrne, J.M. (2012). New directions in community supervision: Should we target high risk offenders, high risk times, and high risk locations? *European Journal of Probation, 4*(2), 77–101.

Carey, S.M., Finigan, M.W., & Pukstas, K. (2008). *Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes and costs*. Portland, OR: NPC Research. *Available at* http://www.npcresearch.com/Files/NIJ_Cross-site_Final_Report_0308.pdf.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012a). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012b, May/June). *Top 10 drug court best practices and more! What works? Findings from the latest research*. Symposium conducted at the National Association of Drug Court Professionals 18th Annual Training Conference, Nashville, TN.

Case Management Society of America, & National Association of Social Workers. (2008). *Case management caseload concept paper: Proceedings of the Caseload Work Group*. Little Rock, AR: Author. *Available at* http://www.cmsa.org/portals/0 /pdf /CaseloadCalc.pdf.

Center for Court Innovation. (n.d.). Researchers, practitioners and the future of drug courts. *Retrieved from* http://www.courtinnovation.org/research/researchers-practitioners-and-future-drug-courts.

Center for Effective Public Policy. (2014). *Dosage probation: Rethinking the structure of probation sentences.* Silver Spring, MD: Author.

Cissner, A., Rempel, M., Franklin, A.W., Roman, J.K., Bieler, S., Cohen, R., & Cadoret, C.R. (2013). *A statewide evaluation of New York's adult drug courts: Identifying which policies work best*. New York: Center for Court Innovation.

DeMichele, M.T. (2007). *Probation and parole's growing caseloads and workload allocation: Strategies for managerial decision making.* Lexington, KY: American Probation & Parole Association. *Available at* http://www.appa-net.org/eweb/docs/appa/pubs/SMDM.pdf.

Farole, D.J. (2006). *The challenges of going to scale: Lessons from other disciplines for problem-solving courts*. New York, NY: Center for Court Innovation.

Farole, D.J. (2009). Problem solving and the American bench: A national survey of trial court judges. *Justice System Journal, 30*(1), 50–69.

Farole, D.J., Puffett, N., Rempel, M., & Byrne, F. (2005). Applying problem-solving principles in mainstream courts: Lessons for state courts. *Justice System Journal, 26*(1), 57–75.

Fox, A., & Berman, G. (2002). Going to scale: A conversation about the future of drug courts. *Court Review, 39*(3), 4–13.

Gendreau, P., Goggin, C., Cullen, F.T., & Andrews, D.A. (2000a). The effects of community sanctions and incarceration on recidivism. *Forum on Corrections Research, 12*(2), 10–13.

Gendreau, P., Goggin, C., & Smith, P. (2000b). Intensive supervision in probation and parole. In C. Hollin (Ed.), *Handbook of offender assessment and treatment* (pp. 195–204). Chichester, UK: Wiley.

Harberts, H. (2011). Community supervision. In D.B. Marlowe & W.B. Meyer (Eds.), *The drug court judicial benchbook* (pp. 97–111). Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/nadcp /14146 _NDCI_Benchbook_v6.pdf.

Hollin, C.R. (1999). Treatment programs for offenders: Meta-analysis, "what works," and beyond. *International Journal of Law and Psychiatry, 22*(3–4), 361–372.

Hromco, J., Moore, M., & Nikkel, R. (2003). How managed care has affected mental health case management activities, caseloads, and tenure. *Community Mental Health Journal, 39*(6), 501–509.

Hser, Y., Joshi, V., Maglione, M., Chou, C., & Anglin, M.D. (2001). Effects of program and patient characteristics on retention of drug treatment patients. *Evaluation and Program Planning, 24*(4), 331–341.

Huddleston, W., & Marlowe, D.B. (2011). *Painting the current picture: A national report on drug courts and other problem-solving court programs in the United States.* Alexandria, VA: National Drug Court Institute.

Jalbert, S.K., & Rhodes, W. (2012). Reduced caseloads improve probation outcomes. *Journal of Crime and Justice, 35*(2), 221–238.

Jalbert, S.K., Rhodes, W., Flygare, C., & Kane, M. (2010). Testing probation outcomes in an evidence-based practice setting: Reduced caseload size and intensive supervision effectiveness. *Journal of Offender Rehabilitation, 49*(4), 233–253.

Jalbert, S.K., Rhodes, W., Kane, M., Clawson, E., Bogue, B., Flygare, C., Kling, R., & Guevera, M. (2011). *A multi-site evaluation of reduced probation caseload size in an evidence-based practice setting: Final report.* Cambridge, MA: Abt Associates.

King, R., Meadows, G., & LeBas, J. (2004). Compiling a caseload index for mental health case management. *Australian and New Zealand Journal of Psychiatry, 38*(6), 455–462.

Lutze, F.E., & Van Wormer, J.G. (2007). The nexus between drug and alcohol treatment program integrity and drug court effectiveness: Policy recommendations for pursuing success. *Criminal Justice Policy Review, 18*(3), 226–245.

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

McCaughrin, W.C., & Price, R.H. (1992). Effective outpatient drug treatment organizations: Program features and selection effects. *International Journal of Addictions, 27*(11), 1335–1358.

Monchick, R., Scheyett, A., & Pfeiffer, J. (2006). *Drug court case management: Role, function, and utility* [Monograph Series No. 7]. Alexandria, VA: National Drug Court Institute.

North Carolina Administrative Office of the Courts. (2010). *Best practices for North Carolina drug treatment courts.* Raleigh, NC: Author. *Available at* http://www.nccourts.org/Citizens/CPrograms/DTC/documents/dtcbestpractices.pdf.

Paparozzi, M.A., & Gendreau, P. (2005). An intensive supervision program that worked: Service delivery, professional orientation, and organizational supportiveness. *Prison Journal, 85*(4), 445–466.

Paparozzi, M.A., & Hinzman, G. (2005). Caseload size in probation and parole. *APPA Perspectives,* (Spring), 23–25. *Available at* http://www.mariopaparozzi.com/uploads/CaseloadSize.pdf.

Pearson, F.S., & Harper, A. (1990). Contingent intermediate sanctions: New Jersey's intensive supervision program. *Crime and Delinquency, 36*(1), 75–86.

Petersilia, J. (1999). A decade of experimenting with intermediate sanctions: What have we learned? *Justice Research and Policy, 1*(1), 9–23.

Rodriguez, P.F. (2011). Case management for substance abusing offenders. In C. Leukefeld, T.P. Gullotta, & J. Gregrich (Eds.), *Handbook of evidence-based substance abuse treatment in criminal justice settings* (pp. 173–181). New York: Springer.

Shaffer, D.K. (2010). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly, 28*(3), *493–521*.

Skeem, J.L., & Manchak, S. (2008). Back to the future: From Klockars' model of effective supervision to evidence-based practice in probation. *Journal of Offender Rehabilitation, 47*(3), 220–247.

Stewart, D., Gossop, M., & Marsden, J. (2004). Increased caseloads in methadone treatment programs: Implications for the delivery of services and retention in treatment. *Journal of Substance Abuse Treatment, 27*(4), 301–306.

Turner, S., Petersilia, J., & Deschenes, E.P. (1992). Evaluating intensive supervision probation/parole (ISP) for drug offenders. *Crime and Delinquency, 38*(4), 239–256.

Van Wormer, J. (2010). *Understanding operational dynamics of drug courts* (Doctoral dissertation, University of Washington). *Retrieved from* http://research.wsulibs.wsu.edu:8080/xmlui/bitstream/handle/2376/2810/vanWormer_wsu_0251E_10046.pdf?sequence=1.

Vocisano, C., Klein, D.N., Arnow, B., Rivera, C., Blalock, J.A., Vivian, D., . . . & Riso, L.P. (2004). Therapist variables that predict symptom change in psychotherapy with chronically depressed outpatients. *Psychotherapy: Theory, Research, Practice, Training, 41*(3), 255–265.

Woodward, A., Das, A., Raskin, I.E., & Morgan-Lopez, A.A. (2006). An exploratory analysis of treatment completion and client and organizational factors using hierarchical linear modeling. *Evaluation and Program Planning, 29*(4), 335–351.

Worrall, J.L., Schram, P., Hays, E., & Newman, M. (2004). An analysis of the relationship between probation caseloads and property crime rates in California counties. *Journal of Criminal Justice, 32*(4), 231–241.

Zweig, J.M., Lindquist, C., Downey, P.M., Roman, J., & Rossman, S.B. (2012). Drug court policies and practices: How program implementation affects offender substance use and criminal behavior outcomes. *Drug Court Review, 8*(1), 43–79.

Appendix X

Supporting Evidence Monitoring and Evaluation

This supporting evidence is based on the Adult Drug Court Best Practice Standards developed by the National Association of Drug Court Professionals, Volume II, pages 61-74.

A. Adherence to Best Practices

Adherence to best practices is generally poor in most sectors of the criminal justice and substance use disorder treatment systems (Friedmann et al., 2007; Henderson et al., 2007; McLellan et al., 2003; Taxman et al., 2007). Programs infrequently deliver services that are proven to be effective and commonly deliver services which have not been subjected to careful scientific scrutiny. Over time, the quality and quantity of the services provided may decline precipitously (Etheridge et al., 1995; Van Wormer, 2010). The best way for a Drug Court to guard against these prevailing destructive pressures is to monitor its operations routinely, compare its performance to established benchmarks, and seek to align itself continually with best practices. Not knowing whether one's Drug Court is in compliance with best practices makes it highly unlikely that needed improvements will be recognized and implemented; therefore, evaluating a Drug Court's adherence to best practice standards is, itself, a best practice.

Studies reveal that Drug Courts are significantly more likely to deliver effective services and produce positive outcomes when they hold themselves accountable for meeting empirically validated benchmarks for success. A multisite study involving approximately seventy Drug Courts found that programs had more than twice the impact on crime and were more than twice as cost-effective when they monitored their operations on a consistent basis, reviewed the findings as a team, and modified their policies and procedures accordingly (Carey et al., 2008, 2012).

Like many complex service organizations, Drug Courts are highly susceptible to *drift*, in which the quality of their services may decline appreciably over time (Van Wormer, 2010). Management strategies such as continuous performance improvement (CPI), continuous quality improvement (CQI), and managing for results (MFR) are designed to avoid drift and enhance a program's adoption of best practices. Each of these management strategies emphasizes continual self-monitoring and rapid-cycle testing. This process involves collecting real-time information about a program's operations and outcomes, feeding that information back to key staff members and decision makers on a routine basis, and implementing and evaluating remedial action plans where indicated. Research consistently shows that continual self-monitoring and rapid-cycle testing are critical elements for improving outcomes and increasing adoption of best practices in the health care and criminal justice systems (Damschroder et al., 2009; Rudes et al., 2013; Taxman & Belenko, 2013). These strategies are essential for programs that require cross collaboration and interdisciplinary communication among multiple service agencies, including Drug Courts (Bryson et al., 2006; Wexler et al., 2012).

Studies have not determined how frequently programs should review performance information and implement and evaluate self-corrective measures. Common practice among successful organizations is to collect performance data continually and meet at least annually as a team to review the information and take self-corrective measures (Carey et al., 2012; Rudes et al., 2013; Taxman & Belenko, 2013).

Reporting outcomes from Drug Courts without placing those findings into context by describing the quality of the programs is no longer enough. Meta-analyses (Aos et al., 2006; Latimer et al., 2006; Lowenkamp et al., 2005; Mitchell et al., 2012; Shaffer, 2010; Wilson et al., 2006) and large-scale multisite studies (Rossman et al., 2011) have already clearly established that Drug Courts reduce crime by approximately 8% to 14% on average. These averages, derived from evaluations of more than 100 Drug Courts, mask a great deal of variability between programs. Some Drug Courts reduce crime by more than 50%, others have no impact on crime, and still others increase crime rates in their communities (Carey et al., 2012; Carey & Waller, 2011; Cissner et al., 2013; Downey & Roman, 2010; Government Accountability Office, 2011; Mitchell et al., 2012; Shaffer, 2010). The important question is no longer whether Drug Courts can work, but rather how they work and what services contribute to better outcomes (Marlowe et al., 2006). Understanding what distinguishes effective Drug Courts from ineffective and harmful Drug Courts is now an essential goal for the field. Unless evaluators describe each Drug Court's adherence to best practices, there is no way to place that program's outcomes in context or interpret the significance of the findings.

B. In-Program Outcomes

One of the primary aims of a Drug Court is to rehabilitate seriously addicted individuals, which means that retaining participants in treatment, reducing drug and alcohol use, and helping participants to complete treatment successfully are important indicators of short-term progress. However, policymakers, the public, and other stakeholders are likely to judge the merits of a Drug Court by how well it reduces crime, incarceration rates, and taxpayer expenditures. Therefore, Drug Courts need to measure in-program outcomes that not only reflect clinical progress, but are also significant predictors of postprogram criminal recidivism and other long-term outcomes.

At minimal cost and effort, Drug Courts can evaluate short-term outcomes while participants are enrolled in the program. These short-term outcomes provide significant information about participants' clinical progress and the likely long-term impacts of the Drug Court on public health and public safety. Studies have consistently determined that postprogram recidivism is reduced significantly when participants attend more frequent treatment and probation sessions, provide fewer drug-positive urine tests, remain in the program for longer periods of time, have fewer in-program technical violations and arrests for new crimes, and satisfy other conditions for graduation (Gifford et al., 2014; Gottfredson et al., 2007, 2008; Huebner & Cobbina, 2007; Jones & Kemp, 2011; Peters et al., 2002). Drug Courts should, therefore, monitor and report on these in-program outcomes routinely during the course of their operations.

Several resources are available to help Drug Courts define and calculate performance measures of in-program outcomes (Berman et al., 2007; Heck, 2006; Marlowe, in press; Peters, 1996; Rubio et al., 2008a). In 2006, NADCP convened leading Drug Court researchers and evaluators to form the National Research Advisory Committee (NRAC). One goal of this committee was to define a core data set of in-program performance measures for adult Drug Courts (Heck, 2006). NRAC selected measures that are simple and inexpensive to track and evaluate and proven to predict long-term outcomes. These performance measures include the following:

- *Retention*—the number of participants who completed the Drug Court divided by the number who entered the program
- *Sobriety*—the number of negative drug and alcohol tests divided by the total number of tests performed

- *Recidivism*—the number of participants arrested for a new crime divided by the number who entered the program, and the number of participants adjudicated officially for a technical violation divided by the number who entered the program
- *Units of Service*—the numbers of treatment sessions, probation sessions, and court hearings attended
- *Length of Stay*—the number of days from entry to discharge or the participant's last in-person contact with staff

Longer lists of performance measures addressing a wide range of outcomes in Drug Courts and other problem-solving courts have been published by expert organizations including the National Center for State Courts (Rubio et al., 2008a; Waters et al., 2010), the Center for Court Innovation (Rempel, 2006, 2007), American University (Peters, 1996), the Organization of American States (Marlowe, in press), the National Center for DWI Courts (Marlowe, 2010), and the National Institute of Justice (NIJ, 2010). Drug Courts are advised to consult these and other resources for further information on how to calculate and interpret additional performance measures for their evaluations.

C. Criminal Recidivism

For many policymakers and members of the public, reducing criminal recidivism is one of the primary aims of a Drug Court. Recidivism is defined as any return to criminal activity after the participant entered the Drug Court. Recidivism does not include crimes that occurred before the participant entered Drug Court even if those crimes are charged or prosecuted after entry.

Recidivism is measured most commonly by new arrests, new convictions, or new incarcerations occurring over a two- or three-year period (Carey et al., 2012; King & Elderbroom, 2014; Rempel, 2006). For example, the Bureau of Justice Statistics (BJS) tracks new arrests, convictions, and incarcerations occurring within three years of the date that state and federal inmates are released from jail or prison (Durose et al., 2014).

Based on scientific considerations, evaluators should follow participants for at least three years, and ideally up to five years, from the date of entry into the Drug Court or from the date of the arrest or technical violation that made the individual eligible for Drug Court. The date of entry should be the *latest* start date for the evaluation because that is when the Drug Court becomes capable of influencing participant behavior directly.

Starting from the date of arrest or technical violation takes into account the potential impact of delays in admitting participants to Drug Court. The sooner participants enter Drug Court after an arrest or probation violation, the better the results (Carey et al., 2008, 2012); therefore, evaluators may wish to examine how delayed entry affects outcomes. However, because Drug Courts cannot always control what transpires before participants enter the Drug Court program, attributing to the Drug Court any recidivism occurring before entry may not fairly represent the Drug Courts' effects on recidivism. Starting from the date of entry ensures recidivism may be attributed fairly to the effects of the Drug Court. No one answer fully addresses the issues surrounding selection of a start date for evaluation; therefore; evaluators should state clearly what start date was selected and the rationale for choosing that start date.

Rates of criminal recidivism among drug-involved offenders become relatively stable after approximately three to five years (King & Elderbroom, 2014). After three years, statistically significant between-group differences in recidivism are likely to remain significant going forward (e.g., Knight et al., 1999; Martin et al., 1999; Wexler et al., 1999). For example, if Drug Court participants have significantly lower rearrest

rates than comparison group subjects after three years, this difference is likely (although not guaranteed) to remain significant after an additional two years (DeVall et al., 2015). After five years, recidivism rates tend to reach a plateau, meaning that most (but not all) participants who will recidivate have likely done so by then (e.g., Gossop et al., 2005; Inciardi et al., 2004; Olson & Lurigio, 2014).

Importantly, these findings do not suggest Drug Courts must wait three to five years before reporting recidivism outcomes. Recidivism occurring during enrollment and shortly after discharge from Drug Court may be of considerable interest to practitioners, policymakers, and other stakeholders. However, implying that recidivism rates occurring within the first two years are likely to reflect the long-term effects of a Drug Court is inappropriate. Evaluators should state clearly that such recidivism rates are preliminary and likely to increase over time.

No one basis exists for deciding whether new arrests, new convictions, or new incarcerations are likely to be the most valid or informative indicator of recidivism. As discussed below, each measure has advantages and disadvantages that the evaluator must take into account. Because no one measure is clearly superior to another, whenever possible evaluators are advised to report all three measures of recidivism, discuss the implications and limitations of each, or indicate why a particular measure is not being reported.

Analyzing new arrests as a measure of criminal recidivism provides at least two advantages. First, arrests are often substantially closer in time to the alleged offense than convictions. Resolving a criminal case and determining guilt or innocence may take months or years. Evaluators can usually report arrest outcomes in much less time than waiting for lengthy legal proceedings to resolve. Second, criminal cases are often dismissed or pled down to a lesser charge for reasons having little to do with factual guilt, such as insufficient evidence or plea bargains. As a result, the absence of a conviction or conviction on a lesser charge may not reflect the offense that occurred.

However, some individuals are arrested for crimes they did not commit. This fact may lead to an overestimation of the true level of criminal recidivism. Relying on conviction data rather than arrest data may provide greater assurances that the crimes did, in fact, occur.

Incarceration has substantial cost impacts that may far exceed those of arrests and convictions. A day in jail or prison can cost between five and twenty times more than a day on probation or in community-based treatment (Belenko et al., 2005; Zarkin et al., 2012). Evaluators typically distinguish between incarceration that occurred while participants were enrolled in the Drug Court and incarceration that occurred after discharge. In-program incarceration often reflects brief jail sanctions that may be imposed for misconduct in the program, whereas postprogram incarceration typically reflects pretrial detention for new charges, sentences for new charges, or (for terminated participants) sentencing on the original charge that led to participation in Drug Court. In cost evaluations, in-program jail sanctions are typically counted as an investment cost for the Drug Court whereas postprogram detention is typically counted as an outcome cost (Carey et al., 2012).

Evaluators must also consider the timeliness and accuracy of information contained in criminal justice databases. In some jurisdictions, arrest data may be recorded in a more timely and faithful manner than conviction or incarceration data. Evaluators must familiarize themselves with how and when information is entered into national, state, and local criminal justice records and should describe clearly in their evaluation reports any limitations that may relate to the accuracy or timeliness of the data.

Self-report information could potentially provide the most accurate assessment of criminal recidivism because it does not require detection or prosecution by law enforcement. Because many crimes are

unreported by victims and undetected by the authorities (Truman & Langton, 2014), arrest and conviction data may underestimate true levels of criminal activity. For obvious reasons, however, individuals cannot be relied upon to acknowledge their crimes unless they receive strict assurances that the information will be kept confidential and will not be used against them in a criminal proceeding. Drug Courts will typically be required to hire an independent evaluator who has no connection to the court or criminal justice system to confidentially survey participants. This method is likely to be prohibitively costly for many Drug Courts, which explains why it has rarely been employed with the notable exception of one highly funded national study (Rossman et al., 2011).

Whether measured by arrests, convictions, or incarcerations, categorizing recidivism according to the level (i.e., felony, misdemeanor, or summary offense) and nature (e.g., drug offenses, property and theft offenses, violent offenses, technical violations, prostitution, and traffic offenses) of the crimes involved is highly informative and necessary. Different categories of crime can have very different implications for public safety and cost. For example, violent offenses may have serious victimization costs and may result in substantial jail or prison sentences, whereas drug possession may not involve an identifiable victim and is more likely to receive a less costly probation sentence (Zarkin et al., 2012).

As a final note, not all Drug Courts have reasonable access to data on new arrests, convictions, or incarcerations occurring after participants have been discharged from the program. In some jurisdictions, these records may be in the possession of other executive agencies, such as the police department or department of corrections, and the Drug Court may not be entitled to the information. Under such circumstances, Drug Courts should make every effort to negotiate access to the data, but of course, Drug Courts cannot be held accountable for reporting information beyond their reach.

D. Independent Evaluations

In addition to monitoring their own performance, Drug Courts benefit greatly from having an independent evaluator examine their program and issue recommendations to improve their adherence to best practices. Drug Courts that engaged an independent evaluator and implemented at least some of the evaluator's recommendations were determined in one multisite study to be twice as cost-effective and nearly twice as effective at reducing crime as Drug Courts that did not engage an independent evaluator (Carey et al., 2008, 2012).

Drug Courts benefit from an independent evaluation for several reasons. Every program has blind spots that prevent staff from recognizing their own shortcomings. Some team members, such as the judge, may have more social influence or power than others, making it difficult for some team members to call attention to problems in court or during team meetings. Drug Courts also operate in a political environment and staff may be hesitant to criticize local practices for fear of reprisal. An independent evaluator from another jurisdiction can usually offer frank criticisms of current practices with less fear of repercussions (Heck & Thanner, 2006).

Although most Drug Courts are capable of keeping descriptive statistics about their program, considerably more expertise is required to perform *inferential analyses*, which compare Drug Court outcomes to those of a comparison group. Controlling statistically for preexisting group differences that could bias one's results is often necessary. For example, if Drug Court participants had fewer previous convictions than comparison subjects before entering the study, better outcomes for the Drug Court might simply reflect the fact that it treated a less severe population. Evaluators must take numerous scientific matters into consideration and may need to apply several levels of statistical corrections to produce valid and reliable results.

Studies also reveal that participant perceptions are often highly predictive of outcomes in Drug Courts. For example, perceptions concerning the procedural fairness of the program (Burke, 2010; McIvor, 2009), the manner in which incentives and sanctions are delivered (Goldkamp et al., 2002; Harrell & Roman, 2001; Marlowe et al., 2005), and the quality of the treatment services provided (Turner et al., 1999) are often predictive of recidivism and correlate significantly with adherence to best practices. Needless to say, participants are more likely to be forthright with an independent evaluator about their perceptions of the Drug Court than with staff members who control their fate in the criminal justice system.

Studies have not determined how frequently Drug Courts should be evaluated by an independent investigator. Generally speaking, a new evaluation should be performed whenever a program or the environment within which it operates changes substantially. Staff turnover and evidence of drift from the intended model are critical events that call for a new evaluation (Yeaton & Camberg, 1997). Evidence suggests that staff turnover and model drift occur within five-year intervals in Drug Courts. Within five years, between roughly 30% and 60% of Drug Courts experience substantial turnover in key staff positions (Van Wormer, 2010). The highest turnover rates, commonly exceeding 50%, are among substance use disorder and mental health treatment providers (Lutze & Van Wormer, 2007; McLellan et al., 2003; Taxman & Bouffard, 2003; Van Wormer, 2010). Evidence further reveals that staff turnover correlates significantly with drift in the quality of the services provided (Van Wormer, 2010). Therefore, five years is a reasonable outside estimate of how frequently Drug Courts should be evaluated independently. If resources allow, Drug Courts should engage independent evaluators at more frequent intervals to detect drift readily and prevent services from worsening with time.

Drug Courts need to select competent evaluators. The first step in selecting a competent evaluator is to request recommendations from other Drug Courts and national organizations that are familiar with Drug Court operations and research. Senior staff at NADCP and NDCI are familiar with the evaluation literature and the skill sets of dozens of evaluators nationally. When selecting an evaluator, review prior evaluation reports, especially those involving Drug Courts or other problem-solving courts. If prior evaluations failed to follow the practices described herein, consider selecting another evaluator who has demonstrated expertise in applying best practices related to Drug Court program evaluations. One of the most important questions to consider when reviewing prior evaluations is whether the report recommended concrete actions the Drug Court could take to enhance its adherence to best practices and improve its outcomes. The most effective evaluators are aware of the literature on best practices, measure Drug Court practices against established performance benchmarks, and promote useful strategies to improve each program's operations and results.

Many Drug Courts do not have sufficient resources to hire independent evaluators. One way to address this problem is to contact local colleges or universities to determine whether graduate or undergraduate students may be interested in evaluating the Drug Court as part of a thesis, dissertation, or capstone project. Because such projects require close supervision from senior academic faculty, the Drug Court can receive high-level research expertise at minimal or no cost. Moreover, students are likely to be highly motivated to complete the evaluation successfully because their academic degree and standing depends on it.

E. Historically Discriminated Against Groups

The focus of this section in on socio-demographic groups that have historically experienced sustained discrimination or reduced social opportunities due to their race, ethnicity, gender, sexual orientation, sexual identity, physical or mental disability, religion, or socioeconomic status. Best practices for ensuring

equivalent treatment for members of groups that have historically experienced discrimination in Drug Courts are described in Standard II, Equity and Inclusion.

Evidence suggests racial and ethnic minority individuals are underrepresented in some Drug Courts and may have lower graduation rates than other participants [see Commentary in Standard II, Equity and Inclusion]. Drug Courts have an affirmative obligation to determine whether racial and ethnic minority individuals and members of other groups that have historically experienced discrimination are being disproportionately burdened or excluded from their programs; and if so, to take reasonable corrective measures to rectify the problem and evaluate the success of the corrective actions [see Standard II]. Not knowing whether one's Drug Court is disproportionately burdening disadvantaged groups is itself a violation of best practice standards (Marlowe, 2013).

Studies have not determined how frequently Drug Courts should review performance information for members of groups that have historically experienced discrimination. Consistent with the general literature on CPI, CQI and MFR, the Drug Court team should review performance information at least annually and implement and evaluate self-corrective measures on a rapid-cycle basis (Rudes et al., 2013; Wexler et al., 2012).

A number of resources are available to help Drug Courts identify and rectify disparate impacts for groups that have historically experienced discrimination (e.g., Casey et al., 2012; Rubio et al., 2008b; Yu et al., 2009). Seasoned evaluators and university faculty are likely to be familiar with this literature and to know how to perform these types of analyses. Many analyses, such as comparing graduation rates between different racial groups, are relatively simple and straightforward to perform. Other analyses, such as determining whether disadvantaged groups have equivalent access to Drug Court, are considerably more difficult. Many Drug Courts may not have adequate information about the relevant arrestee population to determine whether disadvantaged groups are gaining access to the Drug Court at equivalent rates. For example, information might not be available to determine what proportion of racial-minority arrestees have serious drug problems and are therefore eligible for participation in Drug Court. The primary challenge for such Drug Courts may be to gain better access to a wider range of information on the arrestee population, and as a practical matter, such analyses may be beyond the ability and expertise of some programs to accomplish.

F. Electronic Database

Paper files have minimal value for conducting program evaluations. Evaluators are typically required to extract information from handwritten notes and progress reports that are difficult to read, contain contradictory information, and have numerous missing entries. As a consequence, many evaluations are completed months or years after the fact when the results may no longer reflect what is occurring in the program. Such evaluations often contain so many gaps or caveats in the data that the conclusions which may be drawn are tentative at best.

Drug Courts are approximately 65% more cost-effective when they enter standardized information concerning their services and outcomes into an electronic management information system (MIS), which is capable of generating automated summary reports (Carey et al., 2008, 2012). The cost of purchasing an MIS is offset many times over by providing greater efficiencies in operations and yielding the type of performance feedback that is necessary to continually improve and fine-tune one's Drug Court program.

Appendix E provides examples of MISs that have been developed for use in Drug Court evaluations. Some of the older and less sophisticated systems can be obtained free of charge. For example, the Buffalo System (so named because it was developed in a Drug Court in Buffalo, New York) is a Microsoft Access

database that can be obtained at no cost by contacting NADCP. Newer systems must be purchased or licensed, but are more likely to be web-based and can be accessed simultaneously by multiple users and agencies. Allowing multiple agencies to use the same MIS, each with its own secured and encrypted access, can spread the cost of the system across several budgets. Newer systems are also more likely to have preprogrammed analytic reports that provide important summary information for staff at the push of a button. Finally, newer systems are more likely to include a data-extraction tool. A data-extraction tool allows information to be imported readily into a statistical program, such as SAS or SPSS, which skilled evaluators then can use to conduct sophisticated statistical analyses.

G. Timely and Reliable Data Entry

The biggest threat to a valid program evaluation is poor data entry by staff. The adage "garbage in/garbage out" is particularly apt in this regard. If staff members do not accurately record what occurred, no amount of scientific expertise or sophisticated statistical adjustments can produce valid findings.

The best time to record information about services and events is when they occur. For example, staff members should enter attendance information into an MIS or written log during court hearings and treatment sessions. This is referred to as *real-time recording*. The typical staff person in a Drug Court is responsible for dozens of participants and each participant has multiple obligations in the program, such as appearing at court hearings, attending treatment sessions, and delivering urine specimens. Only the rare staff person can recall accurately what events transpired or should have transpired days or weeks in the past. Attempting to reconstruct events from memory is likely to introduce unacceptable error into a program evaluation.

Data should ordinarily be recorded within no more than forty-eight hours of the respective events. Medicare, for instance, requires physicians to document services within a "reasonable time frame," defined as twenty-four to forty-eight hours (Pelaia, n.d.). After forty-eight hours, errors in data entry have been shown to increase significantly. After one week, information is so likely to be inaccurate that it may be better to leave the data as missing than attempt to fill in gaps from faulty memory (Marlowe, 2010).

Staff members who are persistently tardy when entering data pose a serious threat to the integrity of a Drug Court. Not only are evaluation results unlikely to be accurate, but those same staff persons are unlikely to be delivering appropriate services. Good-quality treatment and supervision require staff to monitor participant behavior vigilantly, record performance information in a timely and actionable fashion, and adjust services and consequences accordingly. Failing to record performance information in a timely and reliable manner undermines the quality and effectiveness of a Drug Court and seriously jeopardizes participant care.

F. Intent-to-Treat Analyses

A serious error in some Drug Court evaluations is to examine outcomes only for participants who graduated successfully from the program. The logic for performing such an analysis is understandable. Evaluators are often interested in learning what happens to individuals who received all of the services the program has to offer. If individuals who dropped out or were terminated prematurely from the Drug Court are included in the analyses, the results will be influenced by persons who did not receive all of the intended services.

Although this reasoning might seem logical, it is scientifically flawed (Heck, 2006; Heck & Roussell, 2007; Marlowe, 2010, in press; Peters, 1996; Rempel, 2006, 2007). Outcomes must be examined for all eligible individuals who participated in the Drug Court regardless of whether they graduated, were terminated, or withdrew from the program. This is referred to as an *intent-to-treat analysis* because it

examines outcomes for all individuals whom the program initially set out to treat. Reporting outcomes for graduates alone is not appropriate because such an analysis unfairly and falsely inflates the apparent success of the program. For example, individuals who graduated from the Drug Court are more likely than terminated participants to have entered the program with less severe drug or alcohol problems, less severe criminal propensities, higher motivation for change, or better social supports. As a result, they might have been less likely to commit future offenses or relapse to substance use regardless of the services they received in Drug Court.

This issue is particularly important when outcomes are contrasted against those of a comparison sample, such as probationers. Selecting the most successful Drug Court cases and comparing their outcomes to all of the probationers unfairly skews the results in favor of the Drug Court. It is akin to selecting the A+ students from one classroom, comparing their scores on a test to those of all of the students in a second classroom, and then concluding the first class had a better teacher. Such a comparison would clearly be slanted unfairly in favor of the first teacher.

This is not to suggest that outcomes for graduates are of no interest. Drug Courts may, indeed, want to know what happens to individuals who receive all of the services in the program. This, however, should be a *secondary analysis* that is performed after the intent-to-treat analysis has shown positive results. If it is first determined that the Drug Court achieved significantly improved outcomes on an intent-to-treat basis, it may then be appropriate to proceed further and determine whether outcomes were even better for the graduates. If the intent-to-treat analysis is not significant, then it is not acceptable to move on to evaluate outcomes for graduates alone.

Importantly, if secondary analyses are performed on Drug Court graduates, then the comparison sample should also comprise successful completers. For example, outcomes for Drug Court graduates should be compared to those of probationers who satisfied the conditions of probation. Comparing outcomes for Drug Court graduates to all probationers, including probation failures, would unfairly favor the Drug Court.

The only exception to an intent-to-treat analysis is for what are sometimes referred to as *neutral discharges*. Some Drug Courts assign a neutral discharge to participants who are withdrawn from the program for reasons beyond the control of the participant and the program. A neutral discharge is assigned most commonly when the Drug Court discovers a participant was admitted to the program erroneously. For example, a participant might need to be withdrawn from Drug Court if he or she had a prior conviction that precluded eligibility for the Drug Court or resided in a judicial district that was not within the jurisdictional boundaries of the Drug Court. A neutral discharge may also be assigned to participants who are withdrawn from the program because they enlisted in the military or moved out of the jurisdiction with the court's permission. A neutral discharge should never be assigned to cases in which termination was related to a participant's performance in Drug Court.

I. Comparison Groups

The mere fact that individuals perform well after participating in Drug Court does not prove the Drug Court was responsible for their favorable outcomes. Those same individuals might have functioned just as well if they had never entered Drug Court. To examine the important question of causality, the performance of Drug Court participants must be compared against that of an equivalent and unbiased comparison group. Comparing what happened in the Drug Court to what would most likely have happened if the Drug Court did not exist is referred to as testing the *counterfactual hypothesis,* or the possibility that the Drug Court was ineffective (Popper, 1959).

Some comparison groups are reasonably unbiased and can yield a fair and accurate assessment of what would most likely have occurred without the Drug Court. Others, however, may be systematically biased in such a manner as to make the Drug Court look better or worse than it deserves. This may lead to the unwarranted conclusion that the Drug Court was effective or ineffective when, in fact, the reverse could be true.

Random Assignment—The strongest inference of causality may be reached when eligible individuals are randomly assigned either to the Drug Court or to a comparison group. Random assignment provides the greatest assurance that the groups started out with an equal chance of success; therefore, better outcomes for one group can be confidently attributed to the effects of the program (Campbell & Stanley, 1963; Farrington, 2003; Farrington & Welsh, 2005; National Research Council, 2001; Telep et al., 2015). Even when an evaluator employs random assignment, there is still the possibility (albeit a greatly diminished possibility) that the groups differed on important dimensions from the outset. This possibility requires the evaluator to perform a confirmation of the randomization procedure. The evaluator will need to check for preexisting differences between the groups that could have affected the results. If the groups differed significantly on variables that are correlated with outcomes (such as the severity of participants' criminal histories or drug problems), the evaluator might employ statistical procedures to adjust for those differences and obtain defensible results.

As a practical matter, conducting random assignment is often very difficult in Drug Courts. Some staff members may have ethical objections against denying potentially effective services to eligible individuals. Moreover, some Drug Courts may have difficulty filling their slots and may not wish to turn away eligible individuals. The evaluator will also need to gain approval and buy-in for random assignment from numerous professionals and agencies, including the court, prosecution, and defense counsel. Finally, random assignment usually requires implementation of ethical safeguards (National Research Council, 2001). For example, participants may need to provide informed consent to random assignment, and an independent ethics review board may need to oversee the safety and fairness of the study. Local colleges and universities often have institutional review boards (IRBs) or data and safety monitoring boards (DSMBs) which have the authority and expertise to provide ethical oversight for randomized studies.

Random assignment poses far fewer challenges if a Drug Court has insufficient capacity to treat many individuals who would otherwise be eligible for its services. If many eligible people must be turned away, then it would arguably be fairest to select participants randomly rather than allow staff members to pick and choose who gets into the program. Under such circumstances, random assignment may provide the best protection against unfair discrimination and unconscious bias (National Research Council, 2001). In fact, a number of Drug Court studies have used random assignment successfully in light of insufficient program capacity (e.g., Gottfredson et al., 2003; Jones, 2011; Turner et al., 1999).

Quasi-Experimental Comparison Group—In many Drug Courts, engaging in random assignment is simply impractical. The next best approach is to use a quasi-experimental comparison group (Campbell & Stanley, 1963). This refers to individuals who were eligible for the Drug Court but did not enter for reasons that are unlikely to have influenced their outcomes. Perhaps the best example is individuals who were eligible for and willing to enter the Drug Court, but were denied access because there were no empty slots available. This is referred to as a *wait-list comparison group*. The mere happenstance that the Drug Court was full is unlikely to have led to the systematic exclusion of individuals who had more severe problems or poorer prognoses to begin with, and therefore is unlikely to bias the results.

Less optimal, but still potentially acceptable, quasi-experimental comparison groups include individuals who would have been eligible for the Drug Court but were arrested in the year or so before the Drug Court was established, or were arrested in an immediately adjacent county that does not have a Drug Court (Heck, 2006; Heck & Roussell, 2007; Marlowe, 2010, in press; Peters, 1996). Because these individuals were arrested at an earlier point in time or in a different geographic region than the Drug Court participants, such comparison groups might still be different enough from the Drug Court group to bias the results. For example, socioeconomic conditions might differ significantly between neighboring communities, or law enforcement practices might change from year to year. The likelihood of this occurring, however, is usually not substantial and these may be the only practical comparison conditions that can be used for many Drug Court evaluations.

When using a quasi-experimental comparison group, the evaluator must check for preexisting differences between the groups that could have affected the results (Campbell & Stanley, 1963). For example, the comparison individuals may have had more serious criminal histories than the Drug Court participants to begin with. This, in turn, might have put them at greater risk for criminal recidivism. If so, then superior outcomes for the Drug Court participants might not have been due to the effects of the Drug Court, but rather to the fact that it treated a less severe population. A skilled evaluator can use a number of statistical procedures to adjust for such differences and potentially obtain scientifically defensible results.

Matched Comparison Group—Evaluators do not always have a quasi-experimental comparison group at their disposal. Under such circumstances, they may be required to construct a comparison group out of a large and heterogeneous pool of offenders. For example, an evaluator might need to select comparison subjects from a statewide probation database. Many of those probationers would not have been eligible for Drug Court, or are dissimilar to Drug Court participants on characteristics that are likely to have influenced their outcomes. For example, some of the probationers might not have had serious drug problems, or might have been charged with offenses that would have excluded them from participation in Drug Court. The evaluator must, therefore, select a subset of individuals from the entire probation pool that are similar to the Drug Court participants on characteristics that are known to affect outcomes. For example, the evaluator might pair each Drug Court participant with a probationer who has the same or similar criminal history, demographic characteristics, and substance use diagnosis (Heck, 2006; Marlowe, 2010, in press). Because the evaluator will choose only those probationers who are similar to the Drug Court participants on multiple characteristics, it is necessary to start out with a large sample of potential candidates from which to select comparable individuals.

The success of any matching strategy will depend largely on whether the evaluator has adequate information about the comparison candidates to make valid matches (Campbell & Stanley, 1963). If data are not available on such important variables as the probationers' criminal histories or substance use problems, evaluators and Drug Courts will not be able to place confidence in the validity of the matches. Simply matching the groups on variables that are easy to measure and readily available, such as gender or race, is not sufficient because the groups might differ on other important dimensions that were not taken into account.

Propensity Score Analysis—An evaluator may also use an advanced statistical procedure called a propensity score analysis to mathematically adjust for differences between the Drug Court and comparison groups. This procedure calculates the statistical probability that an individual with a given set of characteristics would be in the Drug Court group as opposed to the comparison group—in other words, the relative similarity of that individual to one group as opposed to the other (Dehejia & Wahba, 2002). The analysis then mathematically adjusts for this relative similarity when comparing outcomes. Advanced statistical expertise is required to implement and interpret this complicated procedure.

As with any statistical adjustment, the success of a propensity score analysis will depend on whether the evaluator has adequate information about the comparison subjects to make valid adjustments. If data are not available on such important variables as the comparison subjects' criminal histories or substance use problems, evaluators and Drug Courts will not be able to place confidence in the adjustments (Peikes et al., 2008). Again, merely adjusting the scores based on easily measured variables, such as gender or race, is not sufficient because the groups might differ on other important dimensions that were never taken into account.

Invalid Comparison Groups—Several comparison groups have been used in Drug Court evaluations that quite likely produced seriously biased results. Comparing outcomes from a Drug Court to those of individuals who refused to enter the Drug Court, were denied access to the Drug Court because of their clinical or criminal histories, dropped out of the Drug Court, or were terminated prematurely from the Drug Court is rarely, if ever, justified (Heck, 2006; Heck & Thanner, 2006; Marlowe, 2010, in press; Peters, 1996). The probability is unacceptably high that such persons had poorer prognoses or more severe problems to begin with. For example, they very likely had more serious criminal or substance use histories, lower motivation for change, or lesser social supports. Given the high likelihood that these individuals were seriously disadvantaged from the outset, statistical adjustments cannot be relied upon to overcome the differences (Campbell & Stanley, 1963).

J. Time at Risk

For an evaluation to be valid, Drug Court and comparison participants must have the same time at risk, meaning the same opportunity to engage in substance use, crime, and other behaviors of interest to the evaluation. If, for example, an evaluator measured criminal recidivism over a period of twelve months for Drug Court participants, but over a period of twenty-four months for the comparison group, this would give an unfair advantage to the Drug Court participants. The comparison group participants would have twelve additional months in which to commit new crimes or other infractions.

Ensuring an equivalent time at risk requires the evaluator to begin the analyses from a comparable start date for both groups. As was mentioned earlier, Drug Court evaluations typically use the date of entry into Drug Court or the date of the arrest or technical violation that made the individual eligible for Drug Court as the start date for analyses. If the comparison group is comprised of probationers, comparable start dates might be the date the individual was placed on probation or the date of the arrest that led to a probation sentence.

If the time at risk differs significantly between groups, the evaluator might be able to compensate for this problem by adjusting statistically for time at risk in outcome comparisons. For example, the evaluator might enter time at risk as a covariate in the statistical analyses. A *covariate* is a variable that is entered first into a statistical model. The independent effect of the variable of interest (in this case, being treated in a Drug Court) is then examined after first taking the effect of the covariate into account. This procedure would indicate whether Drug Court participants had better outcomes after first taking into account the influence of their shorter time at risk. The use of covariates is not always successful, however, and the best course of action is to ensure the groups have equivalent follow-up windows.

A related issue is referred to as *time at liberty.* Time at liberty and time at risk are similar in that both affect a participant's opportunity to reoffend or engage in other behaviors of interest to the evaluation. The difference is that time at liberty relates to whether restrictive conditions were placed on the participant. The most obvious restrictive conditions involve physical barriers to freedom, such as incarceration or placement in a residential treatment facility. These physical barriers severely restrict a

participant's ability to use drugs, commit new offenses, obtain a job, or engage in other behaviors of interest to evaluators.

A potential error in Drug Court evaluations is to neglect time at liberty when performing outcome comparisons. In some jurisdictions, for example, individuals who do not enter Drug Court may be more likely to receive a jail sentence. If they are jailed for a portion of the follow-up period, they might have fewer opportunities to reoffend or use drugs than Drug Court participants who are treated in the community. The evaluator might conclude, erroneously, that Drug Court caused participants to reoffend or use drugs more often, when in fact they simply had more time at liberty to do so. Under such circumstances, the evaluator would need to adjust statistically for participants' time at liberty in the outcome analyses. For example, the evaluator might need to enter time at liberty as a covariate in the statistical models. This would indicate whether Drug Court participants had better outcomes after first taking into account their longer time at liberty. As was noted earlier, such adjustments are not always successful and Drug Courts will require expert consultation to ensure the analyses are carried out appropriately.

Note that evaluators are not always advised to adjust for time at liberty. In cost analyses, for example, the time participants spend in jail or a residential treatment facility is an important outcome in its own right and should be valued accordingly from a fiscal standpoint. Deciding whether to adjust for time at liberty, like many evaluation-related decisions, requires scientific expertise and careful consideration of the aims of the study. For such analyses, Drug Courts are strongly advised to obtain expert statistical and scientific consultation.

References

Aos, S., Miller, M., & Drake, E. (2006). *Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates*. Olympia: Washington State Institute for Public Policy.

Belenko, S., Patapis, N., & French, M.T. (2005). *Economic benefits of drug treatment: A critical review of the evidence for policy makers*. Philadelphia: Treatment Research Institute.

Berman, G., Rempel, M., & Wolf, R.V. (Eds.). (2007). *Documenting results: Research on problem-solving justice.* New York: Center for Court Innovation.

Bryson, J.M., Crosby, B.C., & Stone, M.M. (2006). The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review, 66*(Suppl.1), 44–55.

Burke, K.S. (2010). Just what made drug courts successful? *New England Journal on Criminal & Civil Confinement, 36*(1), 39–58.

Campbell, D.T., & Stanley, J.C. (1963). *Experimental and quasi-experimental designs for research.* Chicago: Rand McNally College Publishing Company.

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

Carey, S.M., Mackin, J.R., & Finigan, M.W. (2012). What works? The ten key components of drug court: Research-based best practices. *Drug Court Review, 8*(1), 6–42.

Carey, S.M., & Waller, M.S. (2011). *Oregon drug courts: Statewide costs and promising practices.* Portland, OR: NPC Research. Casey, P., Warren, R., Cheesman, F., & Elek, J. (2012). *Helping courts address implicit bias: Resources for education.* Williamsburg, VA: National Center for State Courts.

Cissner, A., Rempel, M., Franklin, A.W., Roman, J.K., Bieler, S., Cohen, R., & Cadoret, C.R. (2013). *A statewide evaluation of New York's adult drug courts: Identifying which policies work best.* New York: Center for Court Innovation.

Damschroder, L.J., Aron, D.C., Keith, R.E., Kirsh, S.R., Alexander, J.A., & Lowery, J.C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science, 4*(50). doi:10.1186/1748-5908-4-50.

Dehejia, R.H., & Wahba, S. (2002). Propensity score-matching methods for nonexperimental causal studies. *Review of Economics and Statistics, 84*(1), 151–161.

DeVall, K.E., Gregory, P.D., & Hartmann, D.J. (2015, June 10). Extending recidivism monitoring for drug courts: Methods, issues and policy implications. *International Journal of Offender Therapy and Comparative Criminology: Online.* doi:10.1177/0306624X15590205.

Downey, P.M., & Roman, J.K. (2010). *A Bayesian meta-analysis of drug court cost-effectiveness.* Washington, DC: The Urban Institute.

Durose, M.R., Cooper, A.D., & Snyder, H.N. (2014). *Recidivism of prisoners released in 30 states in 2005: Patterns from 2005 to 2010.* Washington, DC: U.S. Dept. of Justice, Bureau of Justice Statistics.

Etheridge, R.M., Craddock, S.G., Dunteman, G.H., & Hubbard, R.L. (1995). Treatment services in two national studies of community-based drug abuse treatment programs. *Journal of Substance Abuse, 7*(1), 9–26.

Farrington, D.P. (2003). A short history of randomized experiments in criminology: A meagre feast. *Evaluation Review, 27*(3), 218–227.

Farrington, D.P., & Welsh, B.C. (2005). Randomized experiments in criminology: What have we learned in the last two decades? *Journal of Experimental Criminology, 1*(1), 9–38.

Friedmann, P.D., Taxman, F.S., & Henderson, C.E. (2007). Evidence-based treatment practices for drug-involved adults in the criminal justice system. *Journal of Substance Abuse Treatment, 32*(3), 267–277.

Gifford, E.J., Eldred, L.M., McCutchan, S.A., & Sloan, F.A. (2014). The effects of participation level on recidivism: A study of Drug Treatment Courts using propensity score matching. *Substance Abuse Treatment, Prevention, and Policy, 9*(40). doi:10.1186/1747-597X-9-40.

Goldkamp, J.S., White, M.D., & Robinson, J.B. (2002). An honest chance: Perspectives on drug courts. *Federal Sentencing Reporter, 14*(6), 369–372.

Gossop, M., Tradaka, K., Stewart, D., & Witton, J. (2005). Reductions in criminal convictions after addiction treatment: 5-year follow-up. *Drug & Alcohol Dependence, 79*(3), 295–302.

Gottfredson, D.C., Kearley, B.W., & Bushway, S.D. (2008). Substance use, drug treatment, and crime: An examination of intra-individual variation in a drug court population. *Journal of Drug Issues, 38*(2), 601–630.

Gottfredson, D.C., Kearley, B.W., Najaka, S.S., & Rocha, C.M. (2007). How Drug Treatment Courts work: An analysis of mediators. *Journal of Research on Crime & Delinquency, 44*(1), 3–35.

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

Government Accountability Office. (2011). *Adult drug courts: Studies show courts reduce recidivism, but DOJ could enhance future performance measure revision efforts* [No. GAO-12-53]. Washington, DC: Author.

Harrell, A., & Roman, J. (2001). Reducing drug use and crime among offenders: The impact of graduated sanctions. *Journal of Drug Issues, 31*(1), 207–232.

Heck, C. (2006). *Local drug court research: Navigating performance measures and process evaluations* [Monograph Series No. 6]. Alexandria, VA: National Drug Court Institute. *Available at* http://www.ndci.org/sites/default/files/ndci/Mono6.Local Research.pdf.

Heck, C., & Roussell, A. (2007). Record keeping and statistics. In J.E. Lessenger & G.F. Roper (Eds.), *Drug courts: A new approach to treatment and rehabilitation* (pp. 401–413). New York: Springer.

Heck, C., & Thanner, M.H. (2006). Evaluating drug courts: A model for process evaluation. *Drug Court Review, 5*(2), 51–82.

Henderson, C.E., Young, D.W., Jainchill, N., Hawke, J., Farkas, S., & Davis, R.M. (2007). Program use of effective drug abuse treatment practices for juvenile offenders. *Journal of Substance Abuse Treatment, 32*(3), 279–290.

Huebner, B.M., & Cobbina, J. (2007). The effect of drug use, drug treatment participation, and treatment completion on probationer recidivism. *Journal of Drug Issues, 37*(3), 619–641.

Inciardi, J., Martin, S., & Butzin, C. (2004). Five-year outcomes of therapeutic community treatment of drug-involved offenders after release from prison. *Crime & Delinquency, 50*(1), 88–107.

Jones, C. (2011, November). Intensive judicial supervision and drug court outcomes: Interim findings from a randomized controlled trial. *Crime & Justice Bulletin, 152,* 1–16. *Available at* http://www.bocsar.nsw.gov.au/Documents/cjb152.pdf.

Jones, C., & Kemp, R.I. (2011). The relationship between early-phase substance use trajectories and drug court outcomes. *Criminal Justice & Behavior, 38*(9), 913–933.

King, R., & Elderbroom, B. (2014). *Improving recidivism as a performance measure.* Washington, DC: The Urban Institute. *Available at* http://www.urban.org/UploadedPDF/413247-improving-recidivism.pdf.

Knight, K., Simpson, D.D., & Hiller, M.L. (1999). Three-year reincarceration rates outcomes for in-prison therapeutic community treatment in Texas. *Prison Journal, 79*(3), 337–351.

Latimer, J., Morton-Bourgon, K., & Chretien, J. (2006). *A meta-analytic examination of drug treatment courts: Do they reduce recidivism?* Ottawa, ON: Canada Dept. of Justice, Research & Statistics Division.

Lowenkamp, C.T., Holsinger, A.M., & Latessa, E.J. (2005). Are drug courts effective? A meta-analytic review. *Journal of Community Corrections, 15*(1), 5–28.

Lutze, F.E., & Van Wormer, J.G. (2007). The nexus between drug and alcohol treatment program integrity and drug court effectiveness: Policy recommendations for pursuing success. *Criminal Justice Policy Review, 18*(3), 226–245.

Marlowe, D.B. (2010). *Introductory handbook for DWI court program evaluations.* Alexandria, VA: National Center for DWI Courts. *Available at* http://www.dwicourts.org/sites/default/files/nadcp/DWI%20Ct%20Eval%20Manual%20REVISED-8- 10.pdf.

Marlowe, D.B. (2013). Achieving racial and ethnic fairness in drug courts. *Court Review, 49*(1), 40–47.

Marlowe, D.B. (in press). *Manual for scientific monitoring and evaluation of drug treatment courts in the Americas.* Washington, DC: Inter-American Drug Abuse Control Commission, Organization of American States.

Marlowe, D.B., Festinger, D.S., Foltz, C., Lee, P.A., & Patapis, N.S. (2005). Perceived deterrence and outcomes in drug court. *Behavioral Sciences & the Law, 23*(2), 183–198.

Marlowe, D.B., Heck, C., Huddleston, C.W., & Casebolt, R. (2006). A national research agenda for drug courts: Plotting the course for second-generation scientific inquiry. *Drug Court Review, 5*(2), 1–31.

Martin, S.S., Butzin, C.A., Saum, C.A., & Inciardi, J.A. (1999). Three-year reincarceration outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare. *Prison Journal, 79*(3), 294–320.

McIvor, G. (2009). Therapeutic jurisprudence and procedural justice in Scottish drug courts. *Criminology & Criminal Justice, 9*(1) 29–49.

McLellan, A.T., Carise, D., & Kleber, H.D. (2003). Can the national addiction treatment infrastructure support the public's demand for quality care? *Journal of Substance Abuse Treatment, 25*(2), 117–121.

Mitchell, O., Wilson, D.B., Eggers, A., & MacKenzie, D.L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of traditional and nontraditional drug courts. *Journal of Criminal Justice, 40*(1), 60–71.

National Institute of Justice. (2010). Drug court performance measures and program evaluation. Retrieved from http://www.nij.gov/topics/courts/drug-courts/pages/measures-evaluation.aspx.

National Research Council. (2001). *Informing America's policy on illegal drugs: What we don't know keeps hurting us.* Washington, DC: National Academy Press.

Olson, D.E., & Lurigio, A.J. (2014). The long-term effects of prison-based drug treatment and aftercare services on recidivism. *Journal of Offender Rehabilitation, 53*(8), 600–619.

Peikes, D.N., Moreno, L., & Orzol, S.M. (2008). Propensity score matching: A note of caution for evaluators of social programs. *American Statistician, 62*(3), 222–231. doi:10.1198/000313008X332016.

Pelaia, R.A. (n.d.). Medical record entries: What is timely and reasonable? Retrieved from http://news.aapc.com/index.php/2013 /09/medical-record-entries-what-is-timely-and-reasonable/.

Peters, R.H. (1996). *Evaluating drug court programs: An overview of issues and alternative strategies.* Washington, DC: Justice Programs Office at American University.

Peters, R.H., Haas, A.L., & Hunt, W.M. (2002). Treatment "dosage" effects in drug court programs. *Journal of Offender Rehabilitation, 33*(4), 63–72.

Popper, K. (1959). *The logic of scientific discovery.* New York: Harper & Row.

Rempel, M. (2006). Recidivism 101: Evaluating the impact of your drug court. *Drug Court Review, 5*(2), 83–112.

Rempel, M. (2007). Action research: Using information to improve your drug court. In G. Berman, M. Rempel & R.V. Wolf (Eds.), *Documenting results: Research on problem-solving justice* (pp. 101–122). New York: Center for Court Innovation.

Rossman, S.B., Rempel, M., Roman, J.K., Zweig, J.M., Lindquist, C.H., Green, M.,… Farole, D.J. (2011). *The multisite adult drug court evaluation: The impact of drug courts (vol. 4).* Washington, DC: Urban Institute Justice Policy Center. Available at https://www.ncjrs.gov/pdffiles1/nij/grants/237112.pdf.

Rubio, D.M., Cheesman, F., & Federspiel, W. (2008a). *Performance measurement of drug courts: The state of the state.* Williamsburg, VA: National Center for State Courts. *Available at* http://cdm16501.contentdm.oclc.org/cdm/ref/collection /spcts/id/171.

Rubio, D.M., Cheesman, F., & Webster, L. (2008b). *Kentucky drug court statewide technical assistance project: Development of statewide adult drug court performance measures*. Denver, CO: National Center for State Courts.

Rudes, D.S., Viglione, J., & Porter, C.M. (2013). Using quality improvement models in correctional organizations. *Federal Probation, 77*(2). *Available at* http://www.uscourts.gov/uscourts/FederalCourts/PPS/FedProb/2013-09/quality.html.

Shaffer, D.K. (2010). Looking inside the black box of drug courts: A meta-analytic review. *Justice Quarterly, 28*(3), 493–521. Taxman, F.S., & Belenko, S. (2013). *Implementing evidence-based practices in community corrections and addiction treatment*. New York: Springer.

Taxman, F.S., & Bouffard, J.A. (2003). Substance abuse counselors' treatment philosophy and the content of treatment services provided to offenders in drug court programs. *Journal of Substance Abuse Treatment, 25*(2), 75–84.

Taxman, F.S., Perdoni, M.L., & Harrison, L.D. (2007). Drug treatment services for adult offenders: The state of the state. *Journal of Substance Abuse Treatment, 32*(3), 239–254.

Telep, C.W., Garner, J.H., & Visher, C.A. (2015, July 3). The production of criminological experiments revisited: The nature and extent of federal support for experimental designs, 2001–2013. *Journal of Experimental Criminology: Online.* doi:10.1007/s11292-015-9239-6.

Truman, J.L., & Langton, L. (2014). *Criminal victimization, 2013.* Washington, DC: Bureau of Justice Statistics, U.S. Dept. of Justice. *Available at* http://www.bjs.gov/content/pub/pdf/cv13.pdf.

Turner, S., Greenwood, P., Fain, T., & Deschenes, E. (1999). Perceptions of drug court: How offenders view ease of program completion, strengths and weaknesses, and the impact on their lives. *National Drug Court Institute Review, 2*(1), 61–85.

Van Wormer, J. (2010). Understanding operational dynamics of drug courts (Doctoral dissertation, University of Washington). Retrieved from http://research.wsulibs.wsu.edu:8080/xmlui/bitstream/handle/2376/2810/vanWormer_wsu_0251E_10046.pdf ?sequence=1.

Waters, N.L., Cheesman, F.L., Gibson, S.A., & Dazevedo, I. (2010). *Mental health court performance measures: Implementation and user's guide*. Williamsburg, VA: National Center for State Courts.

Wexler, H.K., Melnick, G., Lowe, L., & Peters, J. (1999). Three-year reincarceration outcomes for Amity in-prison therapeutic community and aftercare in California. *Prison Journal, 79*(3), 321–336.

Wexler, H.K., Zehner, M., & Melnick, G. (2012). Improving drug court operations: NIATx organizational improvement model. *Drug Court Review, 8*(1), 80–95.

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

Yeaton, W., & Camberg, L. (1997). *Program evaluation for managers: A primer.* Boston: Management Decision and Research Center and Office of Research and Development, Dept. of Veterans Affairs. *Available at* http://www.hsrd.research.va.gov /publications/internal/ProgEval-Primer.pdf.

Yu, J., Clark, L.P., Chandra, L., Dias, A., & Lai, T.F. (2009). Reducing cultural barriers to substance abuse treatment among Asian Americans: A case study in New York City. *Journal of Substance Abuse Treatment, 37*(4), 398–406.

Zarkin, G.A., Cowell, A.J., Hicks, K.A., Mills, M.J., Belenko, S., Dunlap, L.J., & Keyes, V. (2012, November 5). Lifetime benefits and costs of diverting substance-abusing offenders from state prison. *Crime & Delinquency: Online.* doi:10.1177/0011128712461904.