

A FRAMEWORK FOR MANAGING DRUG COURT PERFORMANCE

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VALUE STATEMENT

This article presents a systematic process for developing, implementing, and sustaining a performance management system, as well as identifies critical performance measures and a highly-participatory strategy for key stakeholders to develop performance targets for performance measures. A scenario-based training program is introduced to empower local and state practitioners to collect and use data to define areas for improvement (performance measurement), implement strategies for improvement, and assess the effectiveness of proposed solutions (performance management). Sustainability without the reliance on outside experts is also addressed.

ABSTRACT

Adult drug courts are encouraged to utilize performance measurement for program improvement. Performance management can lead to improved performance and demonstrate to stakeholders, including the general public, that drug courts are holding themselves accountable. This article presents a novel and pragmatic methodology using performance measurement and performance management to achieve this charge. The multi-step process provides drug courts with a systematic data-driven method to measure and assess performance, and, if warranted, take corrective action. The steps of the process are: (1) selecting performance measures, (2) selecting performance targets for performance measures, (3) selecting platforms for storing, analyzing, and reporting performance data, (4) providing training to staff to use tools to manage their court's performance, and (5) implementing a plan to regularly incorporate new developments in research and practice into the performance management system. By developing the tools required for performance management and by actively engaging in performance management as a team, drug courts will be able to engage in decision-making to improve performance and adhere to best practices.

KEYWORDS

Performance measurement, performance management, drug court, best practices

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INTRODUCTION

The *Adult Drug Court Best Practice Standards: Volume II* encourages adult drug courts to monitor and report in-program outcomes routinely using performance measures (National Association of Drug Court Professionals (NADCP) 2015). To actualize this best practice, this article describes a multi-step process of performance management that enables drug courts to measure and assess their performance, and, if warranted, take corrective action—or in short, to practice performance management. The steps of the process are: (1) identifying and developing appropriate performance measures, (2) identifying appropriate performance targets for selected performance measures, (3) selecting platforms for storing and analyzing performance data and developing reports to provide useful summaries of performance to users, (4) providing training to problem-solving court staff to use performance measures and their associated performance targets to manage their court's performance, and (5) developing and implementing a plan to regularly incorporate new developments in research and practice into the performance management system. The first two steps in this process cover the development of the performance management system while the last three address its implementation.

At this point in time, drug courts are widely accepted and embraced by policymakers and practitioners as an effective and efficient approach to reduce recidivism and substance abuse. In addition, scholars and practitioners have clearly defined best practices and a clear set of steps for designing and starting a new drug court and have made available extensive training for judges and other drug court team members about evidence-based policies, practices, and procedures, and how drug courts can be sustained. However, what has not been clearly defined is a system of continuous improvement for drug courts that directly links performance measurement and management. This article represents a first step in filling this void by documenting a systematic, evidence-based, and replicable process for developing and implementing a sustainable performance management system for drug courts.

Performance management can provide obvious benefits to drug courts including better utilization of resources, problem-solving tools, better adherence to evidence-based practices, and improved performance. An ancillary benefit of practicing performance management in drug courts is the value it provides to internal and external stakeholders with the latter group including funders and the general public. When drug courts practice performance management, they demonstrate that they are holding themselves accountable, both fiscally and with regards to evidence-based practices. The practice of performance management provides data and information that can be shared with key stakeholders and the general public to better inform them about drug courts, as well as demonstrating that they are holding themselves accountable and continually seeking to improve their performance.

This article describes the development of a performance management system that was first implemented in Wisconsin and is currently in the process of being implemented in Kentucky, Maryland, and Iowa by the National Center for State Courts. Implementation of the system involves collecting and utilizing data to assess current practice, identifying areas for improvement by comparing measures to established performance targets,

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defining and implementing a strategy for improvement, and assessing empirically whether the intervention improved performance.

Performance Management

The purpose of performance management is to continuously improve services to users by using performance data to inform program-related decisions (Hatry 2014). Effectively designed and implemented performance management systems provide tools for managers to exercise and maintain control over their organizations, while also providing stakeholders with information about a programs' performance. In practice, performance management works through these steps (Kroll and Moynihan 2011):

- 1) Identifying performance measures that provide the metrics to assess whether a program is accomplishing its goals and objectives and producing intended outcomes;
- 2) Planning and meeting performance targets (also commonly referred to as benchmarks) that determine whether a program is achieving its goals, objectives, and intended outcomes;
- 3) Detecting deviations from planned levels of performance (performance targets);
- 4) Restoring performance to planned levels or achieving new levels of performance; and
- 5) Making this an iterative process to support a culture of continuous improvement

Historically, efforts to incorporate performance data into public decision-making were primarily concerned with performance measurement, with a focus on program processes and their outputs (e.g., production). Since the 1970s, the focus of performance measurement has shifted to *outcomes*, the results of the services that public organizations provide.⁴ Performance measures are derived from the program's goals and objectives, while outcomes measure whether the organization is accomplishing its goals (Poister 2003). Both are critical components of a performance management system (Hatry 2014).

Gerrish (2016) concluded that the act of measuring performance may not in itself improve performance but managing performance might. His meta-analysis of the impact of performance management on performance in public organizations found that performance management systems tended to have a small but positive average impact on performance in public organizations. However, when combined with performance management best practices in high-quality studies, a much larger impact was found. Gerrish identified these best practices as:

- 1) Performance benchmarking
- 2) The use of outcome or impact performance measures
- 3) "Bottom-up" versus "top-down" adoption of performance management, meaning it was voluntarily adopted by management as opposed to mandated by legislative or executive action

The results of Gerrish's meta-analysis suggest that performance management systems using best practice techniques are two to three times more effective than average. Benchmarking in particular appears to be an effective method for determining who is performing well (Gerrish 2016).

⁴ According to Hatry, local governments in the 1970s, followed by state governments in the 1980s, started the current performance measurement movement. However, it was the Government Performance and Results Act (GPRA) of 1993 that provided the principal impetus to this movement since it required all federal agencies to report performance information as part of the federal budgeting process. The GPRA Modernization Act of 2010 encouraged the use of performance measurement for performance management.

The NADCP (2015, 61) Adult Drug Court Best Practice Standard 10 (Monitoring and Evaluation) states that a drug court should “monitor its operations routinely, compare its performance to established benchmarks, and seek to align itself continually with best practices.” This standard is based on empirical research showing that routine performance monitoring increases cost-effectiveness, accountability, and positive outcomes (Carey, Mackin, and Finigan 2012). One rationale underlying these findings is that routine performance monitoring can be used to counter “drift,” along with giving drug courts the tools to improve their performance. Drift occurs when drug court services deteriorate over time as staff and leadership turn over. Performance measurement can be used as a tool to assess fidelity to program objectives and can consequently act as a counter to program drift (van Wormer 2013).

The Relationship between Performance Management and Evaluation

Both performance management and program evaluation provide performance-related information and recommendations for improving program performance to their users. They should be considered to be complementary strategies since each of these activities can inform the other. Nonetheless, they are distinct, albeit interrelated, assessment strategies. Their greatest commonality is they typically utilize the same data, but to accomplish different goals. In addition, they employ different criteria to evaluate performance, use different time frames, require different resources, and target different audiences.

GOALS AND PURPOSE

Evaluations can focus on the means or processes by which program implements are expected to achieve their objectives (implementation evaluations), the short-term (proximal) outcomes produced by a program (outcome evaluations), the long-term impact of a program (impact evaluations), and/or the cost-effectiveness of a program (cost-efficiency evaluations) (Rossi, Lipsey, and Freeman 2004). Each type of evaluation has a different goal. The goal of implementation evaluations is to assess the extent to which a program has been operating as designed, focusing on the means (program processes) by which the program was expected to achieve its desired short- and long-term outcomes. Implementation evaluations are important to both outcome and impact evaluations because many programs fail to produce expected outcomes and impacts as a result of poor implementation (Rossi et al. 2004).

Impact and outcome evaluations estimate the “value added by the program,” or the benefits that would not have occurred had the drug court program not existed (Lipsey 2004). The goal of outcome evaluations is to assess the extent to which program participants exhibit changes in targeted behaviors during the course of their participation, or the near-term or proximal effects of a program on participants. The goal of impact evaluations is to assess the long-term or distal effects of a program (e.g., long-term effects on participant behavior after the participant has exited from the program) to determine whether the program is accomplishing its long-term goals. They are both concerned with the question of *attribution*, the cause-and-effect relationships between: (1) program processes and proximal and distal outcomes and (2) proximal and distal outcomes themselves. Both types of evaluations seek to accomplish these goals through high-quality randomized controlled, or quasi-experimental, studies (Walker and Moore 2011). To determine the value added by a program such as a drug court, it is necessary to compare it to a counterfactual condition, meaning the business-as-usual programs and/or services in a drug court’s jurisdiction to which drug court participants would have been directed to in lieu of the drug court (typically probation or incarceration).

The goal of cost-efficiency analyses is to compare program costs and benefits to ascertain whether there is a net value to the program. Measures of cost-efficiency are not typically included in performance management systems.

The goal of performance management is to ensure that the program is effectively and efficiently accomplishing its objectives in support of its higher-level goals (Hatry 2014). Operationally, this means that critical measures of performance (performance measures) are examined to determine whether intended levels of performance (performance targets) are being achieved. When targets are not being met, corrective actions are taken and users are provided feedback about the effectiveness and efficiency of those corrective actions.

Although some measures and targets in performance management focus on program processes like implementation evaluations, the purpose of performance management is not to investigate the quality of the implementation process but rather to determine whether these processes are operating in a manner that accomplishes program objectives. For performance management, the concern is whether the program objective is being met. For example, are participants receiving at least twice-monthly status hearings, on average, during their first three months of participation in support of the objective of ongoing judicial interaction with participants?

Similar to outcome and impact evaluations, performance management systems should measure short-term outcomes and long-term impacts. In doing so, however, performance management systems seek to determine whether a program is accomplishing its goals, not whether proximal outcomes and distal impacts can be attributed to the program's effects nor whether the program adds value relative to its counterfactual. Consequently, the question of attribution is irrelevant to performance management and counterfactual comparison groups are unnecessary. In other words, the concern is only on whether the goal is accomplished, not on why it was achieved or whether there are improvements to "business as usual."

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PERFORMANCE CRITERIA

Evaluation and performance management also differ in the criteria used to judge effectiveness (Walker and Moore 2011). In the case of performance management, benchmarks (or performance

targets) are established for key measures, and program performance is measured against these. In the case of implementation evaluations, the criterion is fidelity to the implementation plan. In the case of outcome and impact evaluations, the criterion is the value added by the program.

Time Frame

Time frames also differ between evaluations and performance management. Program evaluations are conducted only periodically⁵ and entail examining a program's performance during a specific period in time. Alternatively, performance management requires regular, routine, and sustained reviews of recent program performance (Walker and Moore 2011). Performance management is an action-oriented strategy that provides regular feedback to programs, enabling them to take swift corrective actions when warranted and to develop strategies to increase their performances and achieve program goals (Hatry 2014; Poister 2003).⁶

Resources

In terms of resources, evaluations require experts (e.g., those with expertise in inferential statistics) external to the drug court team, can take a long time to complete, and may be costly. While performance management systems are typically designed with input from experts, they can be used effectively by a well-trained drug court staff once implemented. However, although employing external experts to conduct evaluations of drug court performance may be expensive, their value-added is the credibility they lend to their assessments, meaning they are non-biased and have less of a stake in the outcome of the evaluation than would a drug court team reviewing performance management data.

Audience

The audiences for performance management and evaluation reports can also differ. Information generated by performance management is primarily intended for use by the drug court team, while evaluations inform both the drug court team and external stakeholders such as funders, policymakers, and other practitioners.

Complementary Nature

Despite these differences, evaluations and performance management can also provide complementary information to one another. Information produced by evaluations can be helpful in identifying both performance measures and targets. Performance management can be used as a tool to assess fidelity to a program's intended objectives, information that is crucial in evaluations. Kroll and Moynihan (2018) also discuss the complementary nature of these two different means of assessing drug court performance. They claim the connection is that program evaluation offers causal evidence on the factors behind performance (as discussed earlier in this section). Lacking such causal knowledge, the implications of performance data for remedial action are difficult to discern.

Drug Court Performance Management Research

Performance management requires a consensus on what should be measured in order to provide a balanced and valid assessment of program performance. Drug court research has only recently achieved

⁵ Adult Drug Court Best Practice Standard 10 suggests at least every five years.

⁶ Hatry justifiably argues against annual reviews of performance measurement data in favor of more frequent reviews. NCSC recommends a minimum of bi-annual reviews but suggests that even more frequent reviews (quarterly or monthly) permit more rapid identification of performance problems (or successes) and a more rapid response (and thus likely more effective) to these problems.

a level that permits the establishment of evidence-based best practices that are required to achieve such a consensus. The first attempt to establish these practices was through the *Ten Key Components* released by the NADCP in 1997, when the first drug court was not yet ten years old. Even though they were based on informed opinions and professional experience, the Key Components were more aspirational in nature than evidence-based. Since then, researchers have studied drug courts extensively and have largely confirmed the collective wisdom of the seasoned practitioners who developed the Key Components.

This research evolved through two generations (Marlowe 2012). The first generation revealed that drug courts are efficacious and can produce better short- and long-term outcomes for offenders with substance use diagnoses than alternative programs or incarceration (Lattimer, Morton-Bourgon, and Chretien 2006). The second generation of drug court research focuses on the inner workings of the “black box” of drug courts (Goldkamp, White, and Robinson 2001). These studies seek to answer the question of “what works” to help programs identify and implement evidence-based practices. The goal has been to identify the factors, such as the types and dosages of services, the use of sanctions and incentives, and processing models, that distinguish effective programs from those that are ineffective or even harmful (Marlowe 2012). This work is well underway and has established a firm, research-driven foundation for the development of best practice standards and has contributed to the determination of key performance measures and targets for adult drug courts (Carey, Mackin, and Finigan 2012; NADCP 2013). To increase their effectiveness, drug courts must be able to assess their compliance with second-generation drug court research and with existing best practice standards.

What to Measure

The first step in developing a performance management system is the development of performance measures. The approach undertaken was informed by:

- 1) Performance measures developed for trial courts, including the Trial Court Performance Standards and *CourTools* (Casey 1998; National Center for State Courts 2019);
- 2) Performance measures developed specifically for drug courts, such as the work by the NADCP through its National Research Advisory Committee (NRAC);
- 3) Other resources including the 10 Key Components, the National Center for State Courts’ (NCSC’s) Mental Health Court performance measures, and NCSC’s state and program specific work with problem-solving courts (Rubio et al. 2008); and
- 4) Empirical research in the field and the expert opinions of stakeholders in each project.

BUILDING ON PAST WORK

The Trial Court Performance Standards (TCPS) were a pioneering effort to develop performance measures for trial courts in general (Casey 1998). More recently, *CourTools* took the TCPS as a point of departure and applied a “balanced scorecard” approach to develop ten performance measures for trial courts (National Center for State Courts 2019). *CourTools* reflected a lesson learned from the TCPS, namely that performance measures should be manageably few in number and should focus on measuring the most critical aspects of trial court performance.

NADCP took the first step in identifying these critical aspects of performance in a drug court setting (Heck 2006). In 2006, NADCP convened leading drug court researchers and evaluators to form the NRAC to define core measures. The NRAC measures include:

- 1) RETENTION – the number of participants who completed the drug court divided by the number who entered the program
- 2) SOBRIETY – the number of negative drug and alcohol tests divided by the total number of tests performed
- 3) 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
- 4) UNITS OF SERVICE – the numbers of treatment sessions, probation sessions, and court hearings attended
- 5) LENGTH OF STAY – the number of days from entry to discharge or the participant’s last in-person contact with staff

As research in the field has evolved and projects to develop performance measures for drug courts have been conducted, more comprehensive sets of performance measures have emerged. These measures have been developed through NCSC and others as well (Rubio et al. 2008; National Institute of Justice 2010; Peters 1996; Rempel 2007; Waters et al. 2010). The NCSC approach for expanding performance measures beyond the initial NRAC core measures relies on research and practice.

Performance Measure Recommendations

The authors’ philosophy for the development of performance measures is guided by a few important principles:

- 1) The philosophy aims for a small number of measures targeting the most critical drug court processes that research has demonstrated to be related to key outcomes.
- 2) Local stakeholders provide guidance regarding which measures will be included and how they are conceptualized to ensure that the measures are informed by local and state-specific practices.
- 3) Local drug courts are the target audiences for the performance measures. That is, these measures are intended to provide information to individual courts to better manage and improve their performance. While the information generated by the performance measures will also be useful to state-level policymakers, they are not the primary target audience.
- 4) Performance measures are well-documented. Detailed specification sheets are written for each performance measure, for documenting data sources, for making calculations, and for interpretation, leaving little equivocation about implementation.
- 5) This set of performance measures is balanced in the sense that they provide indicators for all critical goals and objectives rather than focusing on a few (e.g., those that are easy to measure).

With these principles in mind, a logic model is used to select performance measures. The common-sense logic embedded in this model is that, to achieve the primary goal of drug courts and to reduce the probability of recidivism among participants, drug courts must accomplish several objectives (see Table 1). The extent to which each objective is accomplished will influence the desired outcomes: retention in program, sobriety, and reduction in the probability of re-offending. The NADCP *Ten Key Components of Drug Courts* (1997) and *Adult Drug Court Best Practice Standards: Volumes I and II* (2013; 2015) provided the basis for distilling the principal goal and critical objectives of adult drug courts shown in Table 1, while Heck (2006) identified important outcomes. The objectives reflect crit-

ical evidence-based processes, shown by the generations of drug court research described previously in this article to influence the desired outcomes for participants. Outcomes are both proximal (meaning short-term and measured during the course of participation in the program) and distal (meaning long-term and measured after the participant has exited the drug court). The extent to which the desired proximal outcomes are achieved will influence the likelihood of achieving the desired distal outcomes. Distal outcomes provide an indicator of the extent to which drug courts are achieving their primary goal of reducing the probability that participants will re-offend.

The logic model provides guidance for the selection of performance measures. Performance measures should include indicators of the extent to which each objective is being accomplished. In addition, both proximal and distal outcomes should be included in the performance measurement system (Hatry 2014). Rubio et al. (2008) also provide guidance on the selection of performance measures based on the valuations made by practitioners and stakeholders as to what aspects of drug court performance they desire to be measured. The Appendix provides a list of recommended performance measures derived from this logic model and describes how their measurement should be operationalized.

The extent to which the desired proximal outcomes are achieved will influence the likelihood of achieving the desired distal outcomes. Distal outcomes provide an indicator of the extent to which drug courts are achieving their primary goal of reducing the probability that participants will re-offend.

TABLE 1
PROCESS FOR DEVELOPING RECOMMENDED PERFORMANCE MEASURES

GOAL: Reduce the probability of recidivism of drug court participants

OBJECTIVES:

- Target defendants for admission who are addicted to illicit drugs or alcohol and are at substantial risk for reoffending or failing to complete a less intensive disposition, such as standard probation or pretrial supervision.
- Identify eligible participants early and place them promptly in Drug Court.
- Provide ongoing judicial interaction with each Drug Court participant.
- Conduct all Drug Court team interactions with participants in a manner that is consistent with procedural justice
- Provide community supervision to hold participants accountable and protect public safety
- Employ graduated sanctions and rewards to hold participants accountable, promote recovery, and protect public safety
- Provide appropriate evidence-based alcohol, drug, and other related treatment and rehabilitation services to Drug Court participants in sufficient dosages as to reasonably expect impacts on participant behavior
- Monitor abstinence by frequent alcohol and other drug testing
- Improve the ability of participants to function effectively in society
- Provide all defendants the same opportunities to participate and succeed in the Drug Court regardless of race, ethnicity, gender, and age

PROXIMAL OUTCOMES:

- Retention
- Sobriety
- In-program reoffending

DISTAL OUTCOME:

- Post Drug Court recidivism

The values reported for these measures are valid only if they are based on a sufficiently large and representative sample of drug court participants. One way to obtain a sufficiently large sample of participants and to ensure that the sample is representative of most drug court participants is to accumulate this sample over time. In line with the NRAC's recommendations and good research practice, the NCSC recommends organizing admission and discharge streams of participants into cohorts for reporting purposes. Longitudinal prospective and retrospective cohorts, corresponding to "admission" and "discharge" cohorts, respectively, have long been a staple of bio-medical research and, more recently, of sociological and criminological research.

Admission cohorts consist of all drug court participants admitted during a specified period of time. Because all members of the cohort are admitted during the same timeframe, they will be equally subject to the same set of historical influences during the time they participate in the drug court, some of which may influence their progression through the drug court. For example, drug court policy may change as the cohort progresses through drug court (e.g., the frequency of urinalysis may increase or decrease as a result of the court's budget or treatment providers may change). By using admission cohorts, we are able to link changes in the performance of different admission cohorts to particular events. For example, decreasing the frequency of urinalysis for a particular admission cohort may result in an increased termination rate for that cohort in comparison to previous admission cohorts that had a higher frequency of urinalysis. Because we know everyone in the admission cohort is subject to the same set of historical influences, and that the only difference between the two cohorts is the frequency of urinalysis, *ceteris paribus*, any performance differential is straight-forward. Thus, admission cohorts are used to control for historical artifacts that may lead to incorrect conclusions about drug court performance. It is recommended that the performance measures derived from Objectives One and Two (see Appendix), along with Outcome One (retention), use admission cohorts.

Discharge cohorts consist of all drug court participants that are discharged from the drug court during the same period of time, whether successfully or in some other fashion. While they do not provide the same level of protection against historical artifacts as do admission cohorts, they do avoid the delays in reporting information that are associated with admission cohorts (which must be tracked until every member of the admission cohort is discharged to provide complete information). Because drug courts can rarely wait for admission cohorts to be completely discharged to provide valid performance data, the use of discharge cohorts is recommended for most performance measures. Excepting the performance measures and outcomes recommended for admission cohorts in the last paragraph, all other performance measures and outcomes should be based on exit cohorts with one exception. The performance measures associated with Objective Ten are based on referral cohorts, which include all candidates referred to a drug court during a given period of time.

Even within a given cohort, most performance measures must be measured over time to increase their utility. For example, the percent of failed drug tests can be measured by quarter of participation to provide information not only about how often participants are failing drug tests, but also when these failures occur. If failures are clustered at certain points of processing, programmatic changes may be required at that processing point. The choice of time frame for performance measures (monthly, by phase, or quarterly) was informed by relevant research.

Though the evidence-based measures in the Appendix are recommended, they serve in practice as a point of departure for discussion with local stakeholders (usually in the form of an advisory group) about the aspects of drug court performance they want to measure and how they want to measure it

(Cheesman, Rubio, and van Duizend 2004; Rubio et al. 2008). Political, process, and resource differences between jurisdictions require an accounting of how performance measures will work in local contexts. For example, the way that local jurisdictions opt to measure recidivism and their ability to conduct the measurement according to their specifications varies extensively. Additionally, some jurisdictions prioritize aspects of drug court programming which are less of a priority elsewhere. For example, stakeholders in Wisconsin selected a performance measure to assess participants' compliance with a restitution plan, while those in Kentucky, Iowa, and Maryland did not. Our approach incorporates these stakeholder preferences and works to ensure that their measurement is valid and consistent with evidence-based practices. This process also fosters "ownership" of the performance management system by local stakeholders.

MAKING PERFORMANCE MEASURES PRODUCTIVE

After performance measurement systems are implemented and local programs begin collecting data, the programs must be armed with the information that allows them to actually manage their performance with the data they are collecting. In other words, programs need to be able to identify strengths and weaknesses in performance and this is accomplished by using performance benchmarks or targets. Though the value of benchmarks or performance targets to a performance management system is clear and irrefutable, there is little guidance, even in the *Adult Drug Court Best Practice Standards* (NADCP 2013; 2015), as to how they should be determined for drug courts.

Consequently, the authors developed a process that capitalizes on pertinent research, guidance from the *Adult Drug Court Best Practice Standards* (2013; 2015), empirical data (when available), and expert opinion to inform the process of selecting performance targets for performance measures. Information from these sources was provided to advisory groups consisting of a variety of drug court stakeholders (typically including judges, coordinators, prosecutors, defense bar representatives, treatment representatives, evaluators, and academics) selected by the statewide drug court coordinator. The development of benchmarks or performance targets should be considered an iterative process since both emergent relevant research and the analysis of ever-accumulating locally-collected data over time can inform these targets. When research and local data suggest that current targets are not appropriate, they should be revised accordingly.

To set the initial benchmarks (or performance targets), advisory groups make informed selections of appropriate performance targets, using the information described above to anchor their selections. Whenever the research or the *Adult Drug Court Best Practice Standards* (NADCP 2013; 2015) were unequivocal, advisory groups in all three states rarely strayed from their recommendations. However, to be clear, their selections were certainly tempered by their current baseline performance on a given measure (when data was available, as it was in Kentucky and Maryland) and the perceived ability to achieve recommended levels of performance.

Though the value of benchmarks or performance targets to a performance management system is clear and irrefutable, there is little guidance, even in the *Adult Drug Court Best Practice Standards* (NADCP 2013; 2015), as to how they should be determined for drug courts.

In some cases, the guidance from research was quite clear. For example, Carey et al. (2012) evaluated sixty-nine drug court programs, finding that programs able to keep the time between arrest and program entry at fifty days or less reduced recidivism by sixty-three percent ($p > .05$) more than programs that took longer. Other examples include the ratio of incentives to sanctions, average number of treatment services attended, and average time from last positive drug test to program discharge (Carey et al. 2012; Gendreau 1996; Makarios, Sperber, and Latessa 2014; Sperber, Latessa, and Makarios 2013; Wodahl et al. 2011).

In other areas (e.g., average length of time in program, percent positive drug tests, and recidivism), research was less definitive but provided a range of values observed in meta-analyses and systematic reviews, surveys, and collected evaluations for consideration by the advisory group when selecting a target for measures (Bureau of Justice Assistance 2015; Cissner et al. 2013; Cheesman et al. 2016; Kunkel et al. 2015; Kunkel and Waters 2015; Marlowe, Hardin, and Fox 2016; Mitchell et al. 2012; Shaffer 2011; Shannon et al. 2015; Zweig et al. 2012). The *Adult Drug Court Best Practice Standards* (2013; 2015), which are strongly supported by research, readily informed the selection of many targets (e.g., frequency of status hearings and drug tests). Caseload standards established by the American Probation and Parole Association (APPA) informed the selection of targets for frequency of supervision contacts (Burrell 2006).

In some cases, expert opinion provided the only source of information for establishing performance targets (e.g., improvements in educational status, employment status, residency status, access, and fairness), informed wherever possible by data (as they were in Kentucky and Maryland⁷). In these cases, expert opinion was rendered by the advisory groups consisting of a variety of drug court stakeholders (typically including judges, coordinators, prosecutors, defense bar representatives, treatment representatives, evaluators, and academics) selected by the statewide drug court coordinator.

Implementation

Under the best of circumstances, a performance management system is supported by an extensive supporting informational infrastructure. This informational infrastructure should include a computerized database containing the required data elements recorded at the level of the individual participant. For example, the dates and results of each drug test must be recorded for each participant.

For example, Kentucky and Maryland have advanced statewide drug court databases and report-producing capabilities.⁸ NCSC-recommended performance measures have been fully integrated into

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⁷ Both of which have robust statewide drug court databases.

⁸ Although Pennsylvania has not fully implemented the performance management system described in this article, they have integrated NCSC-recommended performance measures into their advanced drug court database and regularly produce performance management reports.

Kentucky's database and are in the process of being integrated into Maryland's database. Kentucky generates regular performance management reports. Interestingly, partial implementation of the performance management framework has spurred efforts in two other states to develop statewide databases for drug courts. In Wisconsin, it has led directly to the development of a statewide database for drug courts. While in Iowa, preliminary efforts to modify existing probation and court case management systems to include the data required to support the performance measures and produce performance management reports are underway.

However, for those drug courts lacking such resources, systematically recording individual-level data in Microsoft Excel, Access, or similar applications provides an alternative. No matter how the data is recorded, completeness and accuracy are essential. Further, the informational infrastructure must be capable of producing reports of performance-related information that are easily understandable and useful to users.

Programs often struggle with data collection and information sharing, especially those with limited resources. Programs should consider developing policy that:

- 1) Guides the collection and entry of data
- 2) Identifies roles and responsibilities of team members in collecting data and analysis
- 3) Specifies quality assurance practices
- 4) Plans routine team discussions to understand the data, identify areas of strength and weaknesses, consider corrective actions when necessary, and require follow-up to examine whether or not corrective action is successful

Performance management is a team activity that requires buy-in from team members, especially when the program needs to take corrective action. Understanding performance management data, identifying problems and strengths, and following up on those conversations with actions and analyses of the actions taken as a team, helps to encourage team engagement and can help mitigate some political obstacles that can emerge in the process. Though programs should work at performance management as a team, a designated team member (usually the coordinator) should oversee the process and organize team discussions.

Training

The last step in the initial implementation of the drug court performance management system is to train staff to use performance measures and targets to assess and improve their performance and to solve problems. Often programs will collect data only to be unsure of how to use it. To address this common problem, the authors developed a training program to help users overcome obstacles to using

No matter how the data is recorded, completeness and accuracy are essential. Further, the informational infrastructure must be capable of producing reports of performance-related information that are easily understandable and useful to users.

Performance management is a team activity that requires buy-in from team members, especially when the program needs to take corrective action.

data to manage programs. The training was designed to assist drug court teams to use data to: (1) identify a problem or challenge facing an individual program, (2) look at the problem in depth to identify the causes of the problem, (3) work together as a team to create a strategy to address the causes of the problem, (4) implement the strategy agreed upon by the team, and (5) develop a plan to assess whether the strategy was successful in addressing the underlying performance issue.

To achieve these goals, the training strategy employed in the NCSC model is scenario-based learning (SBL), considered to be an educational best practice (Clark 2014). SBL uses interactive scenarios to support an active learning strategy to solve problems that require participants to apply their subject matter knowledge and use critical thinking and problem-solving skills in a safe, real-world context (Massey University 2017). SBL has been used for training in a wide variety of contexts, including medicine, aviation, engineering, education, and military (Designing Education Lab 2015; Federal Aviation Administration 2007; Moore 2010; Wood 2003).

One of the keys to success in scenario-based training is the selection of a work-authentic scenario (Clark 2014). To this end, four scenarios were developed by the authors in consultation with seasoned drug court practitioners with extensive experience in the development of performance measures, performance targets, and training curriculum development. The scenarios were initially created for a statewide project in Wisconsin but were updated to appropriately match the political and social contexts of individual programs and states. In other states and localities, additional scenarios are being created to best meet stakeholders' goals. In Wisconsin, the scenarios were all reviewed by an advisory committee of drug court stakeholders in the state. The four scenarios employed in Wisconsin focus on the following issues:

- 1) Long waits for admission to drug court
- 2) Declining rates of successful completion
- 3) High rates of post-program recidivism
- 4) Declining rates of procedural fairness of the judge

Each scenario was designed to be resolved in four steps. The first step requires trainees to Define the Problem or Identify the Challenge. Training participants are asked to answer four questions:

- 1) How would you state the issue in one or two sentences?
- 2) What factors could play a role in this performance problem?
- 3) What information and/or data should the drug court team gather to further examine the issue?
- 4) What performance measures would provide helpful information to better understand the problem?

In the second step, the team of trainees work on Clarifying the Issue. During this part of the training, participants are provided with the additional performance measure data identified in step one and asked to answer the following questions:

- 1) What are two or three things you learned about the situation from the available data?
- 2) Does the data allow you to better understand the issue? If so, how would you refine and focus the statement of the issue?
- 3) Based on the available data, what steps would you recommend in response to the challenge confronting the drug court?

- 4) Is there any additional data that you may want to consider to better understand the issue facing the drug court?

The third step is the Initial Response. Here, the participants select an initial strategy to address the problem and are asked to answer the following questions:

- 1) What plan should the drug court adopt to address the issue? Based on the available data, what steps would you recommend in response to the challenge confronting the drug court?
- 2) What alternative strategies could be pursued if the initial plan is not producing the desired results?

In the final step (Moving to Implement the Plan), the plan identified in the previous step is implemented and plans are made to evaluate its effectiveness. Participants are asked to answer the following questions:

- 1) What is your assessment of the proposed strategies?
- 2) What are some potential obstacles to implementing the plan and how would you overcome them?
- 3) How would you follow up the implementation of the plan to ensure that it is having the desired impact?

There are no right or wrong solutions to these scenarios. Their purpose is instructive, and they are designed to reinforce several key principles of performance management. First, performance measures and targets can provide a valuable diagnostic function and lead their users to possible solutions. Second, to solve problems, it is imperative to follow trends over time. Third, the best solutions come from the entire drug court team acting collectively to solve the problem and not just one or two team members. Fourth, performance measures can be used to assess the effectiveness of possible solutions to problems facing drug courts.

The training exercises are best conducted with the entire drug court team and several teams can be trained in the same exercise. The training also fosters buy-in from potential users by demonstrating the practical utility of performance management and engaging in the use of performance management tools to solve problems. Additional refresher trainings should be considered as part of the state's regular training programs.

...the best solutions come from the entire drug court team acting collectively to solve the problem and not just one or two team members.

THE ITERATIVE NATURE OF PERFORMANCE MANAGEMENT: REFINING YOUR SYSTEM

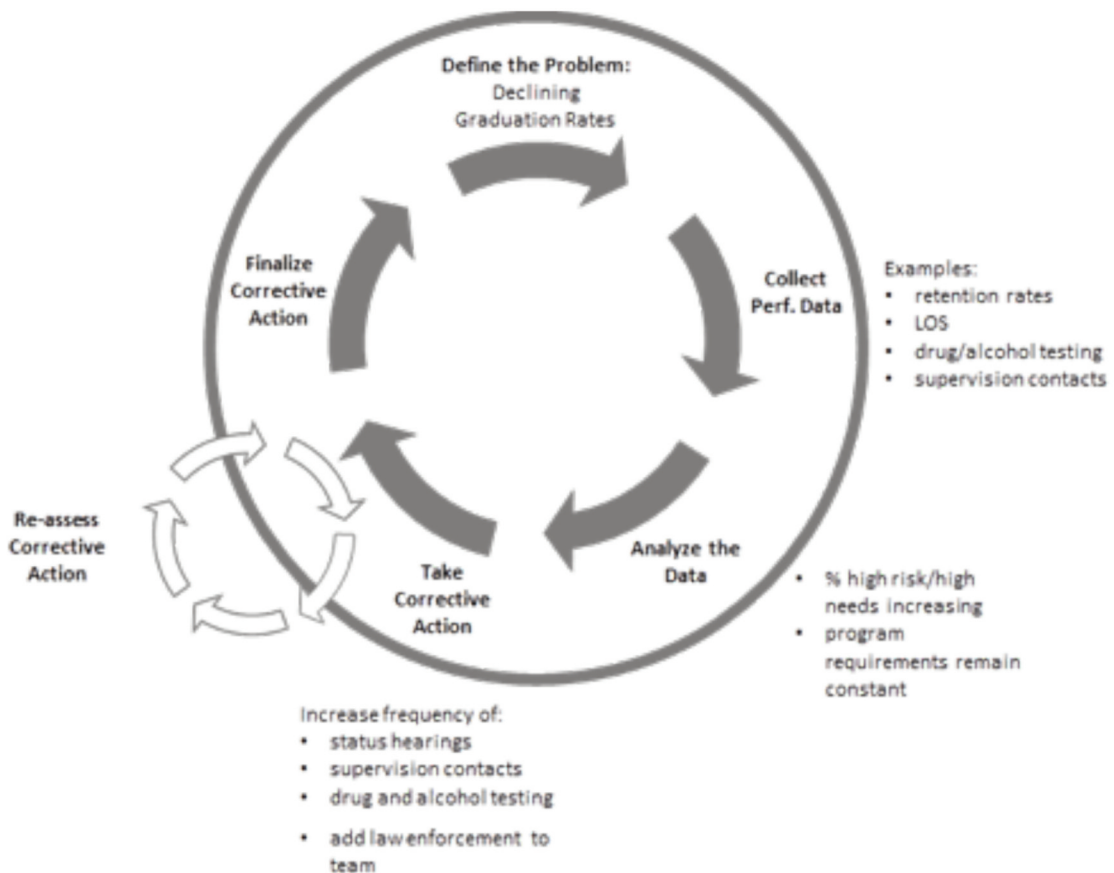
Once performance measures and targets are selected, users are trained, and a data storage/analysis/reporting platform is selected, the drug court has the informational infra-structure in place to engage in a process of continuous quality improvement. Many models for process improvement have been developed, including the Deming's Plan-Do-Check-Act (PDCA) cycle (Walton 1986), Lean Six Sigma Management, Total Quality Management (TQM), Just-in-Time methods, and others. The most germane model for drug courts was articulated by Ostrom and Hanson (2010) and Ostrom, Kleiman, and Roth (2015), who developed models that are applicable to a variety of court types. Their model for process improvement is an example of a double-loop learning model (Argyris and Schon 1996)

and includes the following steps, organized into repeating cycles:

- 1) First Cycle:
 - a. Define the problem
 - b. Collect the data
 - c. Analyze the data
 - d. Take corrective action
 - e. Finalize corrective action
 - f. Repeat cycle
- 2) Second Cycle:
 - a. Re-assess the corrective action
 - b. Repeat after every iteration of the first cycle

Figure 1 illustrates how this process improvement cycle operates, using one of the training scenarios as the basis for an example. In this scenario, a drug court judge notices a declining number of participants eligible for graduation across several consecutive quarters. The drug court is located in a state that has implemented the recommended performance measures, so the drug court team has access to

FIGURE 1
PROCESS IMPROVEMENT CYCLE FOR DRUG COURTS



the performance data that they generate. The team initially defines the problem to be declining graduation rates and to further investigate this problem, they collect data from several performance measures. When they begin to analyze the data, the judge's initial observation of declining graduations is confirmed by data from the retention performance measure that shows a trend for declining graduation rates across several admission cohorts. Further, when they examined the measure for average length of time in the program, a trend for increasing lengths of stay (LOS) was observed.

Trying to understand these trends, the team refined their data collection and analysis efforts and also examined data from the targeting, frequency of status hearings, frequency of supervision contacts, and frequency of drug/alcohol testing performance measures. This data revealed that the percent of admissions classified as high-risk/high-needs had increased across several consecutive admission cohorts, while the frequency of status hearings, supervision contacts, and drug/alcohol testing had all remained stable and all had met their performance targets.

The team reached a consensus that their target population was changing and that they were serving an increasingly higher percent of high-risk/high-need participants, which may have explained the trend for increasing time to complete the program and lower graduation rates. They also noted that, despite the changing target population, the program had not made adjustments to its processes.

Despite some differences of opinion among the team members, they eventually reached a consensus on which corrective actions to take. The frequency of status hearings, drug testing, and supervision contacts would all be increased for high-risk/high-need participants. They also added a law enforcement representative to the team to assist with community supervision. The team agreed to meet again in two months to review the impact of these changes and reassess their corrective actions.

The corrective actions were left in place and graduation rates increased and termination rates declined for high-risk/high-need participants across two consecutive admission cohorts. Consequently, the corrective actions were finalized, and these changes were incorporated into the drug court's policies and procedures manual. The team agreed to continue to monitor graduation and termination rates for high-risk/high-need offenders across admission cohorts, and if warranted, re-assess these corrective actions. Figure 1 provides a roadmap for the course of actions that this team undertook.

Periodically, both the performance measures and targets should be revisited and, in some cases, revised. As drug court research continues to advance, additional measures may need to be added and others reconfigured. To avoid performance management drift and to refine users' skills for performance management, periodic trainings need to continue and user groups formed. New trainings should incorporate additional scenarios based on users' experience with solving problems using performance management.

DISCUSSION

Performance management provides drug courts with a systematic, data-driven method to measure and assess their performance, and, if warranted, to take corrective action, all within a short-time horizon. Performance management does not supplant program evaluation but rather complements it. By developing the tools required for performance management described in this article and by actively engaging in performance management as a team, drug courts will

Performance management does not supplant program evaluation but rather complements it.

be able to make decisions that help their programs to improve and follow best practices as outlined in Standard Ten (Monitoring and Evaluation) of the *Adult Drug Court Best Practice Standards* (NADCP 2013). Local drug courts are empowered by performance management, which provides them with the capabilities to manage their own performance, generally without the need for external experts or interventions.

Using a goal and objectives derived from *The Ten Key Components of Drug Courts* and the *Adult Drug Court Best Practice Standards*, a common set of core performance measures that are appropriate for all adult drug courts, was identified (NADCP 1997; 2013; 2015). These measures are evidence-based, focused on the most critical aspects of drug court performance, and relatively few in number, so as not to overwhelm their users. They can be supplemented by additional measures that assess the accomplishment of objectives that are particular to a specific court.

Performance management requires that performance measures have performance targets that are selected using relevant research, empirical data, and affirmed by expert professional opinion. To the extent feasible, performance targets should be defined for each performance measure. Establishing performance targets is an iterative process. Specific targets may change as relevant research emerges and the ongoing collection and analysis of data warrants such a change.

The importance of training users to apply the performance measures and their associated performance targets to assess their performance and diagnose and solve problems cannot be overstated. Scenario-based learning provides an appropriate vehicle to effectively deliver such training, and it is recommended that a library of scenarios be developed and made available to all drug courts to use for performance management training.

...an advisory group of opinion leaders who buy into the utility of the system is essential.

Taken together, performance measures, performance targets, and user training constitute a performance management system that provides the tools that users need to implement a cycle of continuous organizational improvement. Adoption of this system will advance drug courts towards achieving the admirable goal of becoming a learning organization (Senge 1990).

While the process for designing a performance management system was presented as an orderly, linear, and logical process, implementing such a system in practice presents challenges. Most of the performance measurement and management systems with which the authors have assisted in the design and implementation were created at the behest of statewide drug court coordinators. In other words, these systems were implemented from the top down. The advantage of this approach is that the state typically has the resources required to facilitate implementation while many local jurisdictions do not. However, this implementation strategy can generate apprehension among potential users about the purpose of the system and detract from their buy-in to its utility at the local level. Potential users often initially fear that the system will be used to grade the performance of their drug court with the potential loss of state-supplied resources at stake, as well as a loss of their independence. They also

Performance management requires that performance measures have performance targets that are selected using relevant research, empirical data, and affirmed by expert professional opinion.

have apprehension about being compared to other drug courts in a way that does not take into consideration the particular context of their jurisdiction (e.g., the availability of treatment providers).

To counter these fears, an advisory group of opinion leaders who buy into the utility of the system is essential. Their buy-in is facilitated by their participation in the design of the system. This group must act as advocates for the system among their peers. A statewide coordinator who is sensitive to these concerns and who can make a case for the utility of such a system at the local level is also highly beneficial. The coordinator needs to be able to make a case that the system can be used to identify resource gaps for drug courts and subsequently provide evidence for the need for resources to close those gaps. Finally, the training is designed to directly demonstrate the value of such a system to local stakeholders for better managing the performance of their courts and has been well received.

In addition to local buy-in, other challenges arise when performance measures and targets are being selected and designed. It is extremely important to take into consideration the particular context of the jurisdiction(s) for which the performance management system is being developed. This includes knowledge of governing statutes and other relevant legal considerations, the availability of resources, preferences and capabilities of the stakeholders (represented by an advisory body and the statewide coordinator), and the population served by the drug court(s) (e.g., primary drugs of choice). The advisory body must be given a basic understanding of the performance management process and will need guidance from experts. One of the primary tasks for the experts is to ensure that all selections made by the advisory group are credible, linked to objectives and/or outcomes, and evidence-based. Given this, allowance must be made for the professional opinions of the advisory body.

Weak informational infrastructure to support the performance management system, a stark reality in many jurisdictions, presents a major challenge. This impacts the design of the measures and especially the targets, because targets must be selected in these cases without knowledge of local performance data, which is important for understanding baseline performance. Such an informational infrastructure is also needed to store and analyze performance data and produce useful reports. Jurisdictions vary widely in their capabilities in this regard. The most ideal situation is to have a dedicated statewide drug court database that may already contain the data elements needed for the performance measures and targets. In cases where this is not the case, software commonly found on many PCs, such as Microsoft Excel and Access, should be used as the platform for housing the performance management system.

Sustainability presents an additional major concern. After the experts leave, the jurisdiction(s) must have the resources and the willpower to keep the performance management system vital and relevant. However, it is easy for drift to set in as team members change and the value of performance management is not fully appreciated. The training of new team members and refresher trainings for established users can combat this tendency. It is also important to periodically revisit the system itself, as described previously, to ensure that it reflects new research findings and best practices and is consistent with national standards.

NEXT STEPS

The next stage of this research is to assess the impact of performance management on drug court performance. It is important to monitor implementation and ongoing use to ensure that these processes are conducted with fidelity to the design and intended use of the measures and their targets.

Users should be surveyed to ensure that the performance management system is meeting their needs and they have the resources to use the system to take corrective action when warranted, as well as to evaluate whether changes in the measures and their targets are required. To assess impact, drug court performance before implementation could be compared to performance after implementation. Further, the performance of drug courts that have implemented performance management should be compared to the performance of comparable drug courts that have not implemented it.

CONCLUSION

As the pendulum of sentencing continues to move away from a focus on retribution and incarceration towards rehabilitation, the demand for policies and practices that focus on the treatment of individual defendants, while maintaining public safety, is on the rise. Within this landscape, drug courts have served as a proven and effective strategy for treating substance abuse and reducing recidivism. The efficacy of the drug court model is no longer in question. However, the performance of individual drug courts is directly linked to the way that the drug court is managed. Drug courts that follow a continuous improvement model that incorporates both performance measurement and performance management, as laid out in this paper, will be more successful. These courts will have improved outcomes, utilize resources more efficiently and effectively, and better adhere to evidence-based practices. An ancillary benefit of practicing performance management in drug courts is the value it provides to stakeholders, both internal and external, including funders and the general public. When drug courts practice performance management, they demonstrate that they are holding themselves accountable, both fiscally and with regards to evidence-based practices. The adoption and use of performance measurement and performance management should be considered a new best practice and something that all drug courts should embrace.

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APPENDIX: RECOMMENDED PERFORMANCE MEASURES BY DRUG COURT OBJECTIVE

The following measures are recommended to gauge the level of court performance and should serve as a basis for discussion during a meeting of key stakeholders facilitated by NCSC staff. They are organized by the drug court objective they are measuring.

- 1) To target defendants for admission who are addicted to illicit drugs or alcohol and are at substantial risk for reoffending or failing to complete a less intensive disposition, such as standard probation or pretrial supervision
 - Percentage of admissions classified as:
 - a) High risk/needs
 - b) Low risk
 - 2) To identify eligible participants early and place them promptly in drug court
 - a) Average number of days between arrest and admission, disaggregated into the following intervals:
 - i. Arrest and referral
 - ii. Referral and eligibility determination
 - iii. Eligibility determination and admission
 - b) Admission and treatment initiation
 - 3) To provide ongoing judicial interaction with each drug court participant
 - a) Average number of drug court status hearings attended per participant by quarter
 - 4) To provide community supervision to hold participants accountable and protect public safety
 - a) Average number of supervision contacts per participant by quarter
 - 5) To monitor abstinence by frequent alcohol and other drug testing
 - a) Average number of drug/alcohol tests conducted per participant by quarter
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- 6) To conduct all drug court team interactions with participants in a manner that is consistent with procedural justice
 - a) Administered to all active participants twice per year on designated dates
 - 7) To employ graduated sanctions and rewards to hold participants accountable, promote recovery, and protect public safety
 - a) Average number of incentives per participant
 - b) Average number of sanctions per participant
 - c) Average ratio of incentives to sanctions
 - d) Amount of time between precipitating event and imposition of sanction
 - 8) To improve the ability of participants to function effectively in society
 - a) Difference in the average number of residential address changes in the last 12 months prior to program exit as compared to the 12 months prior to program admission
 - b) Improved housing quality status between admission and exit
 - c) Difference in employment/education status between admission and exit
 - 9) To provide appropriate evidence-based alcohol, drug, and other related treatment and rehabilitation services to drug court participants in sufficient dosages as to reasonably expect impacts on participant behavior
 - a) Average units of treatment service attended (or average time receiving treatment service), delineated by treatment type
 - b) Average length of time in program
 - 10) To provide all defendants the same opportunities to participate and succeed in the drug court regardless of race, ethnicity, gender, and age

Compare the number and percentage of drug court:

 - a) **Referrals** disaggregated by race, ethnicity, gender, and age to drug court eligible arrests disaggregated in the same fashion, if available. If not, compare to general population disaggregated in the same fashion.
 - b) **Admissions** disaggregated by race, ethnicity, gender, and age to drug court referrals disaggregated in the same fashion, if available.
 - c) **Exits** disaggregated by race, ethnicity, gender, and age to drug court admissions disaggregated in the same fashion, if available.

OUTCOMES INFLUENCED BY OBJECTIVES

Proximal (short-term and immediate)

- 1) Retention in program
 - a) Percentage of participants currently enrolled
 - b) Percentage of participants who successfully completed
 - c) Percentage of participants that exited other than successfully
- 2) Sobriety
 - a) Percentage of positive drug and alcohol screens by quarter for the duration of program participation

- b) Average length of time without detected drug or alcohol use at program exit (number of days between last positive drug screen and program exit)

3) In-program recidivism

- a) Percentage of participants reoffending during program participation

Distal (long-term)

4) Post-program recidivism

- a) Percentage of participants convicted of a new offense for up to two years after program exit, measured annually

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Courtney E. Broschious, PhD, is an Assistant Professor of Political Science at Eastern Connecticut State University and consultant for the National Center for State Courts. Prior to joining the faculty at Eastern, Dr. Broschious worked as a research associate at the National Center for State Courts. Her work focuses on state standards, performance management, and evaluation projects for problem-solving courts in several states. Her academic research focuses on criminal justice policy, the public and the legal system, and problem-solving courts. She holds a doctorate in political science from Temple University.

Matthew Kleiman, PhD, is the Deputy Director of the Pennsylvania Commission on Sentencing and an Associate Research Professor with the Department of Sociology and Criminology at Pennsylvania State University. As deputy director of the Commission he provides leadership and oversight of the Research and Analysis and Data Management work units and promotes the research partnerships with The Pennsylvania State University and other research institutions and criminal justice partners. His current research focuses on the development of risk assessment tools for use at pretrial release and at sentencing, as well as the development of guidelines to inform parole decisions. Prior to joining the Commission, Dr. Kleiman worked for close to two decades at the National Center for State Courts (NCSC) where he visited more than 100 trial courts and worked with hundreds of judges, prosecutors, public defenders, and court staff throughout the US and across the world. While at NCSC he developed tools and provided information to key justice system stakeholders to better inform and improve decision-making. Additionally, his work focused on the development of resource assessment models, strategic planning, program evaluation, the implementation of court specific performance measures, and improving the rule of law, including projects in Bulgaria, Kosovo, Serbia, Tunisia, and the West Bank. He holds a doctorate in political science from Michigan State University.