Montgomery County Adult Drug Court Program Outcome and Cost Evaluation

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Montgomery County
Adult Drug Court Program
Outcome and Cost Evaluation

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EXECUTIVE SUMMARY

What Are Drug Courts?

Individual drug courts are intensive interventions that involve coordination of multiple agencies and professional practitioners applying a variety of areas of expertise, intensive case management and supervision, and frequent judicial reviews. The purpose of drug courts is to guide offenders, identified as abusing substances, into treatment that will reduce drug use and criminality, and consequently improving the quality of life for participants and their families. In the typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives that operate outside of their traditional, sometimes adversarial roles. Benefits to society take the form of reductions in crime committed by drug court participants, resulting in reduced costs to taxpayers and increased public safety.

How Was This Study Conducted?

NPC Research, under contract with the Administrative Office of the Courts of the State of Maryland, conducted an outcome and cost study of the Montgomery County Adult Drug Court (ADC) program.

Montgomery County Adult Drug Court Program Description

The Montgomery County Adult Drug Court (MCADC) is located in Rockville, the county seat. The county has a population of 950,680, based on the 2008 Census estimate.[1] The MCADC began serving participants in ber 2004. As of June 2009, 121 participants have been served. The MCADC serves nonviolent adult offenders with substance abuse problems in need of intensive treatment and monitoring services. The MCADC is a post-plea, post-conviction program. Upon entry into the program, participants are placed on 2 to 3 years of probation, although once a participant successfully completes the program (on average after 18 months), her/his probation is terminated successfully. The program provides services aimed at rehabilitation, including substance abuse treatment provided by Maryland's Department of Health and Human Services community-based substance abuse treatment programs.

The MCADC program has three phases and takes a minimum of 16 months to complete. For the 76 drug court participants included in this study[2] who had since exited the program, either successfully or unsuccessfully, the average number of days in the program was 512 (almost 17 months). Graduates spent an average of 525 days in the program (just over 17 months), whereas non-graduates spent an average of 487 days in the program (approximately 16 months).

Throughout the program, participants attend drug court hearings evaluating their progress, supervision meetings with a case manager, and group and individual counseling sessions. The pro-

[1] On line: http://quickfacts.census.gov/qfd/states/24/24031.html
[2] These are the participants who had at least 6 months of follow-up time and had data available in state databases.

gram requires that the individuals submit to drug testing, and uses incentives and sanctions to encourage positive behaviors. In order to graduate from the MCADC program, participants must satisfy program requirements for all three phases and complete an aftercare plan. In addition, they must meet all probation requirements, complete community service and other program assignments, have 9 months clean and sober, be recommended for graduation from the drug court team, and approved by the Judge.

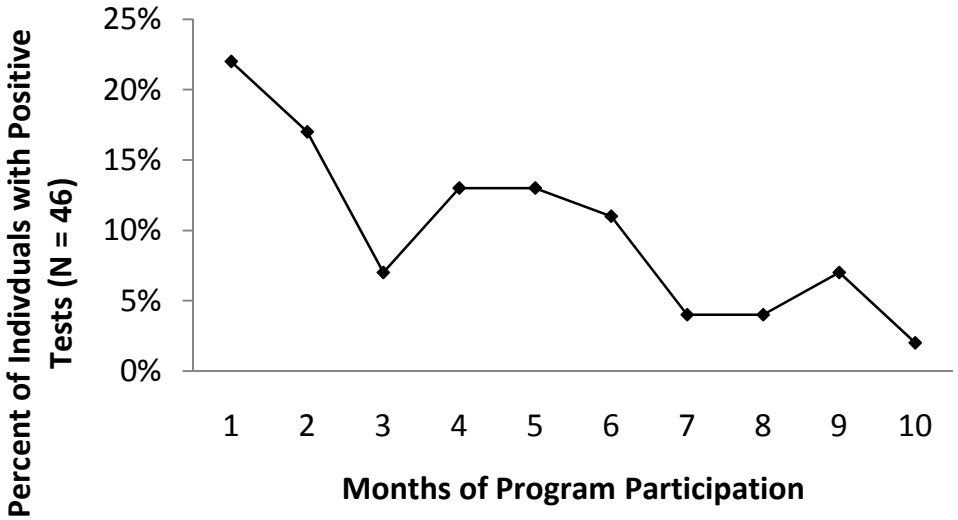
Three key policy questions of interest to program practitioners, researchers, and policymakers about drug courts were addressed in this study.

1. Do ADC Participants Reduce their Substance Abuse During Program Participation?

YES: ADC participants showed reductions in drug use following entrance into the program.

Figure A shows the percentage of program participants with a positive urine analysis (UA) test in each 1-month period for individuals receiving 10 months or more of program services, regardless of graduation status. The rate of substance use, as measured by positive drug tests among program participants, declined significantly over time (from month 1 to month 10), implying that involvement in the ADC reduces substance use.[3]

Figure A. Percent of ADC Participants with a Positive UA Test Over Time



[3] This reduction may or may not be due to program participation. While the results are promising, other factors besides or in addition to program participation may be responsible for this change. UA test data were not available for the comparison group.

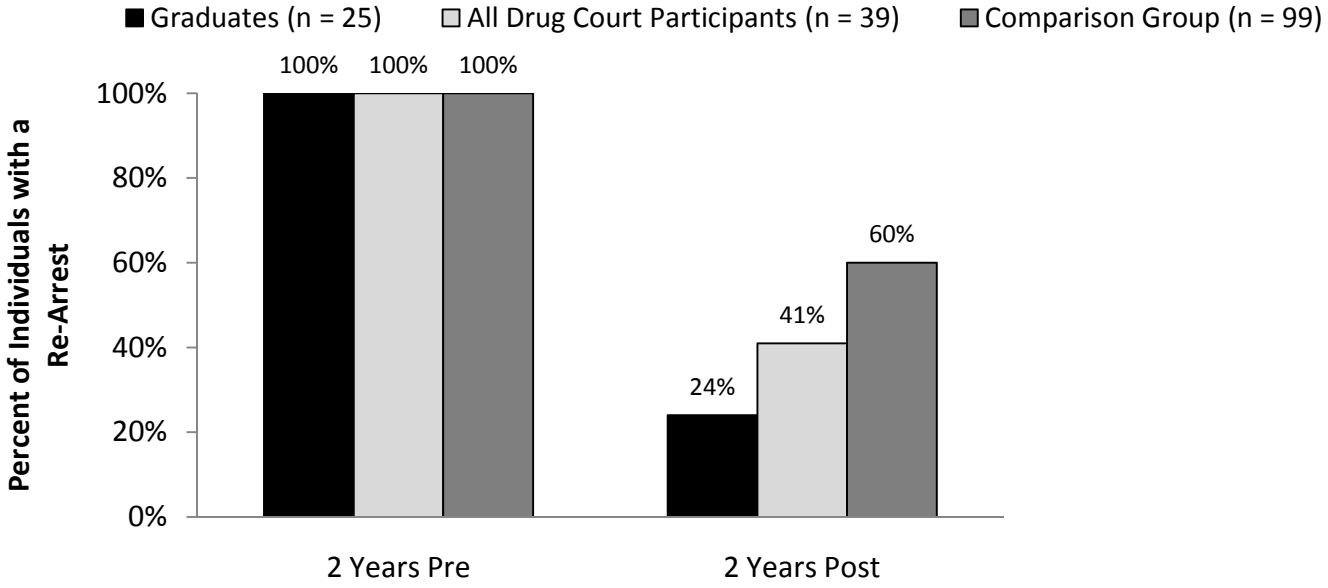
2. Do ADC Participants Have Reduced Re-Arrest Rates After Program Entry?

<u>YES:</u> The re-arrest rate for ADC participants decreased from 100% at pre-ADC to 41% post-ADC admission. This difference is statistically significant.

In addition, ADC program participants were re-arrested significantly less often that the comparison group in the 2 years after program entry (41% for program participants compared to 60% for the comparison group).

Figure B shows the re-arrest rate (the percentage of individuals re-arrested) using a 24-month pre-post comparison. The pre time period includes the 2 years leading up to ADC start or equivalent date for comparison individuals, which is compared to the post time period that begins at program start date (or equivalent for the comparison group).[4]

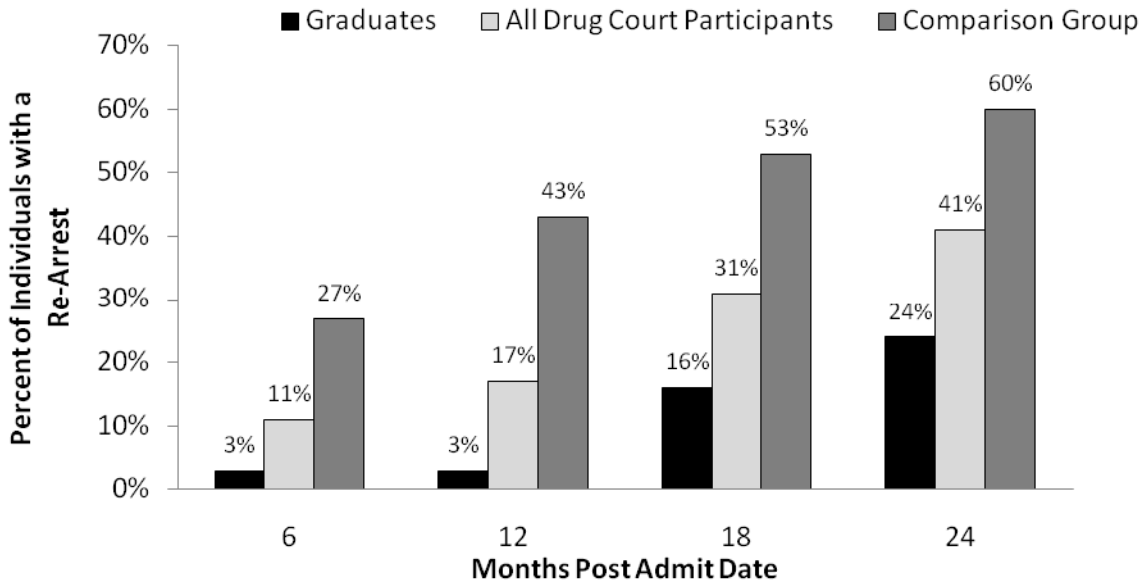
Figure B. Arrest Rates 2 Years Before and 2 Years After Program by Group



[4] It is important to note that a causal link between program participation and decreased arrests cannot be made. This comparison group is matched but not randomly assigned, so there are other factors that could possibly explain this outcome.

Figure C shows the percentage of individuals re-arrested, grouped by their amount of available follow-up time, for the program graduates, all ADC participants and a matched comparison group of individual offenders who were eligible for the program but did not participate. Montgomery County Adult Drug Court participants were significantly less likely to be re-arrested than the comparison group individuals at every time point.

Figure C. Individual Re-Arrest Rate Over Time by Group[5]



In the 12 months following entry to the program, 17% of all ADC participants and 3% of graduates were re-arrested, while 43% of the comparison group members were re-arrested. At the 24-month time period, the pattern continued, with 41% of all program participants having been re-arrested and 24% of graduates compared to 61% of comparison group individuals.

3. Does the ADC Result in Savings of Taxpayer Dollars?

<u>YES:</u> Outcome costs for ADC participants showed substantial savings, when factored against the comparison group.

The cost due to re-arrests and other outcomes over 24 months from program entry was $16,924 per ADC participant compared to $21,820 per comparison individual, resulting in a savings of $4,896 per participant (including both graduates and non-graduates). The vast majority of the cost in outcomes for ADC participants over the 24 months from ADC entry was due to time in jail ($14,183), mostly for participants who were unsuccessful in completing the program.

This savings will continue to grow with the number of participants that enter each year. If the ADC program continues to admit a cohort of **90** participants annually, the savings of $4,896 per participant over 24 months results in an annual savings of **$220,320** per year, which can then be multiplied by the number of years the program remains in operation and for additional new participant cohorts per year. After 5 years, the accumulated savings come to over **$3.3 million**. In

[5] Sample sizes: Graduates with 6 months n = 34, 12 months n = 34, 18 months n = 31, and 24 months n = 24; All ADC participants with 6 months n = 76, 12 months n = 64, 18 months n = 55, and 24 months n = 36; Comparison group n = 99 at all time points: 6, 12, 18, and 24 months.

sum, there is a clear benefit to the taxpayer in terms of criminal justice related costs in choosing the ADC process over traditional court processing.

Recommendations for Program Improvement

The Montgomery County Adult Drug Court program demonstrates promise in reducing negative individuals' behaviors, in particular, with decreases in substance use and criminal recidivism. Because intensive outpatient treatment makes up the majority of the program cost, the program may want to review participant assessments to ensure that this level of care is indicated for all participants who are assigned this level of service.

While this program can celebrate a higher than average graduation rate, it may still be useful for the ADC team to talk to the participants who are heading toward termination to see if the team can learn what the barriers are for those participants in complying with program requirements and determine whether there is further assistance (e.g., transportation, learning to keep a calendar or schedule) that would make it possible for these participants to be successful in meeting program expectations.

INTRODUCTION AND BACKGROUND

The Drug Court Model

In the last 20 years, one of the most dramatic developments in the movement to reduce substance abuse among the United States criminal justice population has been the spread of drug courts across the country. The first drug court was implemented in Florida in 1989. As of May 2009, there were 2,037 adult and individual drug courts active in all 50 states, the District of Columbia, Northern Mariana Islands, Puerto Rico, and Guam with another 214 being planned (Office of National Drug Court Policy, 2009).

Drug courts are designed to guide offenders, identified as having substance abuse issues, into treatment that will reduce drug dependence and improve the quality of life for them and their families. Benefits to society often take the form of reductions in crime committed by drug court participants, resulting in reduced costs to taxpayers and increased public safety.

In the typical drug court program, participants are closely supervised by a judge who is supported by a team of state and local agency representatives who operate outside of their traditional roles. The team typically includes a drug court coordinator, addiction treatment providers, prosecuting attorneys, defense attorneys, law enforcement officers, and parole and probation officers, who work together to provide needed services to drug court participants. Prosecuting attorneys and defense attorneys hold their usual adversarial positions in abeyance to support the treatment and supervision needs of program participants. Drug court programs can be viewed as blending resources, expertise, and interests of a variety of state and local jurisdictions and agencies.

Drug courts have been shown to be effective in reducing recidivism (GAO, 2005) and in reducing taxpayer costs due to positive outcomes for drug court participants (Carey & Finigan, 2004; Carey, Finigan, Waller, Lucas, & Crumpton, 2005). Some drug courts have even been shown to cost less to operate than processing offenders through traditional "business-as-usual" court processes (Carey & Finigan, 2004; Crumpton, Brekhus, Weller, & Finigan, 2004a & 2004b; Carey et al. 2005).

In 2001, NPC Research, under contract with the Administrative Office of the Courts of the State of Maryland, began cost studies of adult and individual drug courts across the state. The results presented in this report include the costs associated with the Montgomery County Adult Drug Court program, and the outcomes of participants as compared to a sample of matched individuals who received traditional court processing.

Process Description: Montgomery County Adult Drug Court

MONTGOMERY COUNTY, MARYLAND

Montgomery County is an urban county bordering Northern Virginia and Washington, DC. The county has three cities: Gaithersburg, Rockville, and Takoma Park; and several towns, villages, and unincorporated areas. According to the 2008 U.S. Census Bureau estimate,[6] it had a population of 950,680, with about 76% over the age of 18. Montgomery County's racial/ethnic composition in 2008 was estimated at 67% White, 17% Black or African American, 14% Asian, less than 1% American Indian and Alaska Native, and less than 1% Native Hawaiian and other Pacific Islander. Those individuals of Hispanic or Latino origin (of any race) comprised 15% of the

[6] http://quickfacts.census.gov/qfd/states/24/2467675.html

County's population. The Census found that in 2007, the median household income in the county was $91,440, with 5% of individuals living below federal poverty level. The main industries in the county were reported as professional, scientific, management; administrative; and waste management services.

The Montgomery County Adult Drug Court (MCADC) is located in Rockville, the county seat, which had a population of 59,114 in 2006.[7]

BACKGROUND, DRUG COURT TEAM, STEERING COMMITTEE

The MCADC began serving participants in December 2004. As of June 2009, 121 participants had been served since inception. Team members include the Judge, Drug Court Coordinator, Case Manager, Office Services Coordinator with the Department of Health and Human Services, representatives from the Office of the Public Defender and the State's Attorney's Office, and a Senior Agent with the Maryland Division of Parole and Probation. The drug court team is in charge of day-to-day functioning of the program, meets weekly to discuss each participant's progress and assist the Judge in determining court and treatment responses to participant behavior, and attends the weekly drug court hearing.

The MCADC Steering Committee, which makes all policy changes for the drug court, consists of the drug court Judge, two other Associate Judges, an Administrative Judge, the Court Administrator, an Assistant State's Attorney, an Assistant Public Defender, the Behavioral Health Operations Manager for the Department of Health and Human Services, the Field Supervisor for the Department of Public Safety and Correctional Services Division of Parole and Probation, the Director of the Department of Correction and Rehabilitation for Montgomery County, the Director of the Pre-Trial Services Unit at the Department of Correction and Rehabilitation, a representative from Montgomery County Behavioral Health and Crisis Services, a representative from the Montgomery County Police Department, the Director of Maryland Alcohol and Drug Abuse Administration, a representative from the Sheriff's Department, and the Executive Director of the Maryland Office of Problem-Solving Courts. The Steering Committee meets 2 to 3 times per year to make policy decisions for the drug court.

ELIGIBILITY AND DRUG COURT ENTRY

The MCADC serves nonviolent adult offenders with substance abuse problems in need of intensive treatment and monitoring services. The program provides services aimed at rehabilitation, including substance abuse treatment provided by Maryland's Department of Health and Human Services community-based substance abuse treatment programs.

There are two routes to enter the program: 1) as a response to a Violation of Probation or 2) as part of a plea agreement. Potential participants are identified by the Judge, an attorney, or probation agents. A referral form is sent to the Coordinator, who completes a legal screen and ensures that the candidate is a resident of Montgomery County. The Probation Agent and the Assistant State's Attorney also conduct legal background checks to be sure that all charges are discovered. The Coordinator reviews the candidate's substance abuse history to be sure that he/she qualifies for clinical eligibility for the program. The referral is forwarded to Outpatient Addiction Services Unit at the Department of Health and Human Services, where an eligibility assessment and treatment evaluation takes place using the Addiction Severity Index. If it is determined that the prospective participant is clinically eligible, the case is presented to the rest of the drug court team during the pre-court meeting. After discussion, the team decides whether an individual

[7] http://quickfacts.census.gov/qfd/states/24/2467675.html

should be admitted to the MCADC program. If so, the individual signs a Drug Court Agreement, agreeing to follow the rules of the drug court, and a confidentiality waiver, that allows their treatment information to be shared with the drug court team.

The MCADC is a post-plea, post-conviction program. Upon entry into the program, participants are placed on 2 to 3 years of probation, although once a participant successfully completes the program (on average after 17 months), her/his probation is terminated successfully.

DRUG COURT PROGRAM PHASES AND REQUIREMENTS

The MCADC program has three phases and takes a minimum of 16 months to complete. The program provides services aimed at rehabilitation, including substance abuse treatment provided by Maryland's Department of Health and Human Services community-based substance abuse treatment programs. During Phase I of the program participants receive drug testing by urinalysis (UA) 3 times per week (twice during weekdays and once on the weekend), are required to attend one individual meeting per week with their assigned therapist, at least three self-help group meetings each week, three 3-hour sessions of group therapy per week, and attend weekly drug court hearings. Phase II's requirements are the same as Phase I's, except drug court attendance is reduced to every other week and two 3-hour group therapy sessions are required. Phase III repeats most of the requirements of Phase I, but requires UAs twice per week (one weekday and one weekend day), and one 3-hour group therapy session. Community service is optional for the first two phases, but is required in the third phase. To successfully complete Phase III, participants must meet the phase requirements for at least 4 to 8 months and have 9 months of negative UA screens. Participants remain on probation between the end of Phase III and graduation. This period of time is termed "Continuing Care," and involves continued UAs and participation in the AA/NA alumni group conducted each week by the Case Manager.

During the first three phases of the program, participants are monitored by the Senior Probation or Parole Agent, who (among other drug court tasks) checks in with participants during drug court hearings. Once participants enter the aftercare phase of the program, they report to the Probation Agent once per month, or as instructed.

The majority of the drug court participants (75%) have been diagnosed with co-occurring disorders.[8] The program has a component through Outpatient Addiction Services that is specifically tailored for participants with co-occurring substance use and mental health disorders.

INCENTIVES AND SANCTIONS

Participants in the MCADC program receive rewards during drug court hearings for progressing in the program, including gift certificates and verbal praise. Treatment providers may also give rewards to individuals who are doing well in their recovery (such as latitude for minor noncompliance). When participants are doing well as a group, treatment providers may treat them with pizza or movie and popcorn nights.

Participants are sanctioned if they do not comply with drug court requirements. Sanctions include warnings and admonishments from the Judge, increased frequency of court appearances, increased, drug tests, community service, assignment to a work detail, extension of the time required to complete a phase of the program, demotion to a lower phase, escalating periods of jail confinement, and (as a last resort) being terminated from the program and having a non-drug court sentence imposed.

[8] Based on information collected for the process evaluation of this program (Mackin et al., 2008).

GRADUATION AND UNSUCCESSFUL COMPLETIONS

In order to graduate from the MCADC program, participants must satisfy program requirements for all three phases and complete an aftercare plan. In addition, they must meet all probation requirements, complete community service and other program assignments, have 9 months clean and sober, be recommended for graduation from the drug court team, and approved by the Judge.

Participants who commit a crime or exhibit violent or threatening behavior, show a lack of capacity or willingness to engage in treatment or comply with probation conditions imposed by the drug court, continue criminal activity, or have a mental illness severe enough to prevent active and full participation in the program may be removed from the program. Once participants are terminated, the drug court Judge sentences them based on the amount of probation or incarceration time remaining on the sentence at the time the person entered drug court. A jail sentence is not used if participation ended due to a mental health issue.

OUTCOME/IMPACT EVALUATION

Outcome Evaluation Methods

RESEARCH STRATEGY

One of the primary outcomes of interest to drug court programs is the criminal justice recidivism of participants after beginning, or completing, the programs. Re-arrests are defined in this study as any new criminal arrest after program entry and does not include non-criminal events, such as traffic citations.

This study examines outcomes over a 2-year period for program participants and a matched comparison group. NPC Research staff identified a sample of ADC participants who entered the program between December 2004 and December 2008. This time frame included all ADC participants since the program's inception and allowed for the availability of at least 6 months of data post-program entry for all sample participants. There were 27 participants who were not found in the statewide data or did not have enough follow-up time and were consequently not included in this study. Although it is generally advisable to leave out participants in the first 6 months to a year of program implementation (due to typical program adjustments when starting out), that was not feasible for this study due to the small number of participants.

Many of the outcome results present data for different groups of individuals who had 6, 12, 18 and 24 months of available follow-up time, with the 6-month group being the largest and the 24-month group being the smallest. The shorter follow-up period has the advantage of larger numbers but the disadvantage of representing a time period that most individuals were still in the program and with little time to demonstrate program impact. The longer follow-up periods allow for more time to examine program impact but the group sizes become too small in some cases to be able to measure significant differences between the program and comparison groups. The cost study section of this report uses the 24-month follow-up period to balance the need for a large enough group but also enough time to measure program impacts.

Graduation rates were calculated for the ADC by dividing the number of participants who graduated by the total number who exited the program, for those participants who had enough opportunity to have completed the program. The graduation rate does not include active participants.

Differences in demographics and criminal history between ADC graduates and non-graduates were examined to determine if there were indications that specific groups would need additional attention from the program to increase successful outcomes.

OUTCOME/IMPACT STUDY QUESTIONS

The outcome evaluation was designed to address the following study questions:

1. Do ADC participants reduce their substance abuse during program participation?
2. Do ADC participants have reduced re-arrest rates after program entry?
3. To what extent are participants successful in completing the ADC program?
4. What participant and program characteristics predict successful outcomes (i.e., program completion, decreased re-arrests)?

DATA COLLECTION AND SOURCES

NPC staff members adapted procedures developed in previous drug court evaluation projects for data collection, management, and analysis of these data. The data collected included days spent in prison and local jail, criminal justice histories in the form of arrest records, local court case information, substance abuse treatment services and program data from multiple sources.[9] Once data were obtained for the participant and comparison groups, the data were compiled, cleaned and moved into SPSS 15.0 for statistical analysis. The evaluation team employed univariate and multivariate statistical analyses using SPSS, which are described in more detail in the data analysis section. The majority of the data necessary for the outcome evaluation were gathered from the administrative databases described below and in presented in Table 1.

Montgomery County Adult Drug Court

Data were provided by the ADC office that included names, demographic information, program acceptance status, time spent in ADC, and discharge status for ADC participants only.

Maryland Department of Public Safety & Correctional Services

The Maryland Department of Public Safety & Correctional Services (DPSCS) provided data in July 2009 for ADC participants and the comparison group members from their management information system that stores Maryland adult criminal justice information in the OBSCIS I & II and Criminal Justice Information System (CJIS) systems, including arrest information, charges, prison and local jail stays and probation and parole episode information.

Maryland Judicial Information System

The Maryland Administrative Office of the Courts provided data in September 2009 from their JIS system on court cases heard in Montgomery County for ADC participants.

Substance Abuse Management Information System (SAMIS)

Substance abuse treatment data for the ADC participants were obtained from administrative records at the Maryland Alcohol and Drug Abuse Administration (ADAA). These records included dates of treatment episodes, level of care for services provided (e.g., individual counseling session, intensive outpatient session, detoxification) and drug testing conducted by treatment facilities.

HIDTA (High Intensity Drug Trafficking Area) Automated Tracking System (HATS) operated by the University of Maryland, Institute for Governmental Services and Research

Exports from the HATS data system provided urinalysis test results and participant program information from April 2004 to September 2007 for ADC participants.

Statewide Maryland Automated Record Tracking (SMART) operated by the University of Maryland, Institute for Governmental Services and Research

Data were extracted from SMART, a client tracking system for state agencies and private treatment providers, for ADC participants. These data include the results of urinalysis tests, dates of court hearings, and contacts with probation officers for individuals in the program from September 2007 to the August 2009.[10]

[9] All data were gathered for this study with appropriate Institutional Review Board approval, including HIPAA waivers. Memorandums of Understanding (MOUs) with individual data sources were also obtained as needed.
[10] September 2007 is when the program began using this data system.

Table 1. Data Sources

Database	Source	Example of Variables
ADC Program Coordinator's List of Participants	Program Coordinator	Acceptance status, time spent in ADC, discharge status.
Offender Based State Correctional Information System (OBSCIS II) [electronic data]	Maryland Department of Public Safety & Correctional Services (DPSCS)	Demographics, prison data.
Criminal Justice Information System (CJIS) [electronic data]	Maryland Department of Public Safety & Correctional Services (DPSCS)	Adult arrest history, arrest charges.
Judicial Information Systems (JIS) [electronic data]	Maryland Judiciary, on behalf of the State court systems (including the Motor Vehicle Administration and DPSCS	District Court case management (e.g., case dates)
Maryland Judiciary Case Search (online electronic data)	Maryland Judiciary	ADC court hearing information for Circuit Court cases
Substance Abuse Management Information System (SAMIS)	Maryland Department of Health and Mental Hygiene (DHMH); Alcohol and Drug Abuse Administration (ADAA)	Number of treatment episodes; time spent in treatment; level of care, drug of choice

SAMPLE SELECTION

Drug Court Participant Group

This study examines outcomes over a 2-year period from program entry for program participants and a matched comparison group of individuals who were eligible for the program but did not participate. All ADC participants who entered the program from December 2004 to December 2008 were selected for this study. ADC participant information was obtained from a list kept by the ADC Program Coordinator. The number of ADC participants in this study's cohort is presented in Table 2 by the year of their admission.

Table 2. Montgomery ADC Admissions by Year (study participants only)

Year	Admissions
2004	2
2005	12
2006	15
2007	26
2008	21
Total	**76**

Comparison Group

A comparison group was created for this study based on the eligibility criteria used by the program to select its participants. Potential participants must be adult residents of Montgomery County at the time of their violation and have had no history of violent offenses. These criteria were established in consultation with the ADC coordinator in accordance with the program eligibility criteria.

These individuals were identified from a list of people arrested or on probation for an ADC-eligible charge and who also had an ADC-eligible criminal history. The ADC program participants and comparison group individuals were matched[11] on age, gender, race/ethnicity, indication of a drug issue by their probation officer and criminal history. The data used for matching between the ADC participants and comparison group individuals were also controlled for in the subsequent outcome analyses. The final sample included 76 adult drug court participants and 99 comparison individuals.[12]

DATA ANALYSES

Once the comparison group was selected and all data were gathered on all study participants, the data were compiled, cleaned, and imported into SPSS 15.0 for statistical analysis. The analyses used to answer specific questions were:

1. Do ADC participants reduce their substance abuse during program participation?

The dates of positive drug tests (urinalyses or UAs) for ADC participants were obtained from the program through the HATS and SMART systems. To determine whether there was a reduction in drug use, the number of individuals who were tested over 10 months while in the program was coded as being tested and testing positive (yes/no) during each 1-month time period from program start.

In addition, the 2-year means for re-arrests with drug charges were calculated for ADC and comparison groups. Univariate analysis of variance was performed to compare the mean number of re-

[11] Because the comparison group was matched and not randomly assigned, causality cannot be definitively attributed to the outcome results.

[12] The comparison group is larger than the program group because more people with the appropriate criteria were available who had not participated in the program. Keeping them all in the study increased the statistical power of the analyses (making it more likely to find differences that exist between the two groups). All of the drug court participants who were found in the state data systems and who had at least 6 months of time after their drug court entry were kept in the study.

arrests for all ADC participants with the comparison group. The means comparing the ADC to the comparison groups were adjusted for differences between the groups on gender, age at eligible arrest, race/ethnicity, number of prior arrests, type of prior arrests present, type of eligible arrests present, and time at risk to re-offend. Time at risk was calculated by summing the total amount of days the individual was incarcerated during each follow-up period and then subtracted that number from the total possible time during the follow-up period, resulting in the total amount of time in each follow-up period that the individuals was potentially in the community to re-offend.

The non-adjusted means for graduates within each group are included for reference but should not be compared directly with the comparison group as the comparison group includes an unknown number of individuals who, had they participated in drug court, may have been terminated from the program and are therefore not equivalent to drug court graduates.

2. Do ADC participants have reduced re-arrest rates after program entry?

Univariate analysis of variance was performed to compare the mean number of re-arrests for ADC and comparison groups. The means comparing the ADC and comparison groups were adjusted for any differences between the groups on gender, age at eligible arrest, race/ethnicity, number of prior arrests, type of prior arrests present, type of eligible arrests present, and time at risk to re-offend. Time at risk was calculated by summing the total amount of days the individual was incarcerated during each follow-up period and then subtracted that number from the total possible time during the follow-up period, resulting in the total amount of time in each follow-up period that the individuals was potentially in the community to re-offend.

The non-adjusted means for graduates within each group are included for reference but should not be compared directly with the comparison group as the comparison group includes an unknown number of individuals who, had they participated in drug court, may have been discharged from the program and are therefore not equivalent to drug court graduates.

Crosstabs were run to examine differences in re-arrest rates, i.e., the percentage of individuals re-arrested, between ADC and comparison groups. Chi-square analyses were used to identify any significant differences in re-arrest rates between ADC and comparison groups.

3. To what extent are participants successful in completing the ADC program and within the intended time period?

To measure the programs' level of success at graduating participants, graduation rates and average lengths of stay were calculated. Graduation rates were calculated by dividing the number of participants who were no longer active in the ADC program by the number of graduates, i.e., participants who completed the program successfully. Average length of stay was calculated as the mean number of days between the program start date and program end date for each participant to determine if, on average, participants graduate within the intended time period.

4. What participant and program characteristics predict successful outcomes, i.e., program completion and decreased re-arrests?

Graduates and non-graduates from the ADC were compared on demographic characteristics and number of arrests during the 2 years prior to program entry to determine whether any characteristics predicted program graduation or re-arrests. In order to best determine which demographic characteristics were related to graduation, Chi-square and independent samples t-tests were performed to identify which factors were significantly associated with program success.

Participant characteristics were also examined in relation to subsequent re-arrests following program entry. Chi-square and independent samples t-test were performed to identify which factors

were significantly associated with re-arrests. Logistic regression was also used, including all variables of interest in the model, to determine which characteristics were significantly related to being re-arrested, above and beyond other characteristics.

Ultimately, the ADC and comparison groups were examined through data provided by DPSCS for a period up to 2 years from the date of ADC program entry or equivalent. The evaluation team utilized the arrest history data to determine whether there was a difference in individual re-arrests, placements, and other outcomes of interest between the ADC and comparison groups.

All individuals who were studied for the outcomes report had at least 6 months of follow-up time, which included 76 ADC participants (34 graduates, 18 non-graduates, and 24 active participants) and 99 comparison group individuals.

LIMITATIONS

Findings from this study should be interpreted with caution due to the following limitations:

A quasi-experimental design was used rather than random assignment for comparison group selection: The individuals in the study sample were not randomly assigned to the ADC and comparison groups due to the desire of the program to serve all eligible participants who opted to participate and the interest in having a larger group of individuals served to measure re-arrests. The comparison group sample was created from data provided by the Department of Public Safety and the Administrative Office of the Courts and is matched on demographic variables and criminal history. In addition, information on addiction severity was not available in selecting the comparison group individuals.

Unavailable data: Statewide criminal histories data were unavailable for some of the study participants, further reducing the sample sizes. Criminal history data included arrests and charges, but not information about convictions. In addition, information about non-ADC services received, treatment received, and drug testing (including urinalyses) were not collected for the comparison group.

Use of unadjusted outcomes: Some of the analyses in this report use unadjusted rates due to the comparisons being made and the available data. Therefore, positive outcomes cannot be definitively attributed to the ADC because the differences found could potentially be the result of differences between the groups being compared.

Short follow-up time period: Because of the small sample sizes, it was necessary to include all ADC participants through September 2008, which resulted in a follow-up time period for some participants of only 6 months (due to lead time needed to access some data). Many ADC study participants were still receiving program services at the time of the study. In addition, 6 months is a relatively brief period of time to observe outcomes of interest.

Start-up participants were included in the participant sample: ADC participants who received services during the implementation of the program were included to increase sample sizes. Typically, participants in court programs during the first 6 to 12 months post program startup are excluded in order to avoid introducing biases based on implementation factors, including lower fidelity to the intended program model, lack of staff experience with the program, and staff turnover.

A future study of the potential impacts of the Montgomery County Circuit Court Adult Drug Court program is suggested, given the limitations of the current study. An increased follow-up time period, larger sample sizes that would increase statistical power and allow participants who

were in the program during the first year of the program to be omitted, as well as obtaining data that were more complete would provide additional information about the impact of this program.

Outcome Evaluation Results

Table 3 provides demographic information for ADC and comparison groups. Independent samples t-tests and chi-square analyses showed no significant differences between ADC and comparison groups on the characteristics listed in this table.

Table 3. ADC and Comparison Group Characteristics

	All ADC Participants N = 76	Comparison Group N = 99
Gender		
Male	88%	87%
Female	12%	13%
Race		
Caucasian	29%	29%
Non-Caucasian[13]	71%	71%
Mean age at eligible arrest date	31 years	30 years
Median	29 years	26 years
Range	19 – 52 years	19 – 52 years
Primary drug of choice[14]		
Cocaine	42%	N/A
Marijuana	28%	
Alcohol	8%	
PCP	8%	
All Others[15]	15%	
Type of charge at eligible arrest		
Drug-related	65%	56%
Property-related	38%	27%
Person-related	11%	19%
'Other'	38%	39%
Average number of total arrests in the 2 years prior to the arrest leading to program participation	1.95 (range 1 – 5)	1.90 (range 1 – 5)
Average number of drug arrests in the 2 years prior to the arrest leading to program participation	1.11 (range 0 – 5)	1.09 (range 0 – 4)

[13] The ADC "non-Caucasian" group is 2% Asian, 7% Hispanic and 91% African American. The comparison "non-Caucasian" group is 100% African American.
[14] These data are only available for participants in ADC.
[15] 'Others' include heroin, Oxycodone, Ecstasy, 'other' opiates, and 'other' amphetamines.

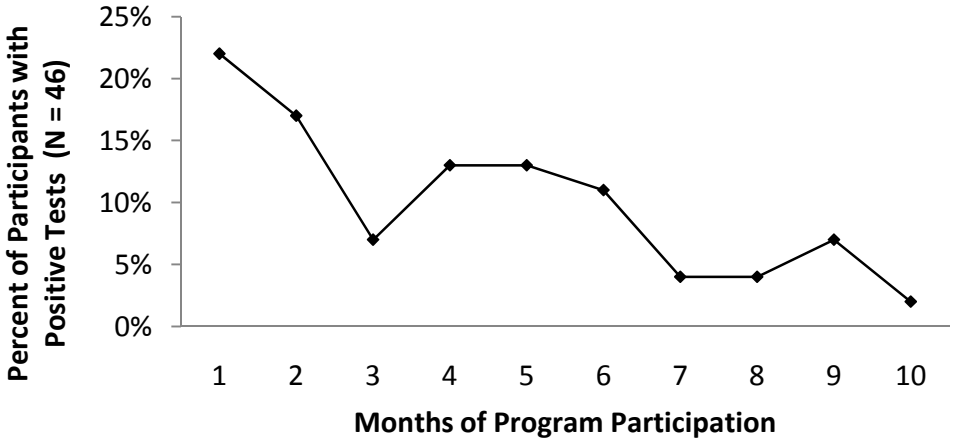
POLICY QUESTION # 1: DO ADC PARTICIPANTS REDUCE THEIR SUBSTANCE ABUSE DURING PROGRAM PARTICIPATION?

Drug Testing

YES: ADC participants showed reductions in drug use following entrance into the program.

Figure 1 shows the percentage of program participants with a positive urine analysis (UA) test in each 1-month period for individuals receiving 10 months or more of program services, regardless of graduation status. The rate of substance use, as measured by positive drug tests among program participants, declined significantly over time (from month 1 to month 10), implying that involvement in the ADC reduces substance use.[16] There is a particularly strong drop in the proportion of participants with positive drug tests after the first 3 months of program participation, indicating that drug use is decreasing for these individuals.

Figure 1. Percent of ADC Participants With a Positive UA Test Over Time



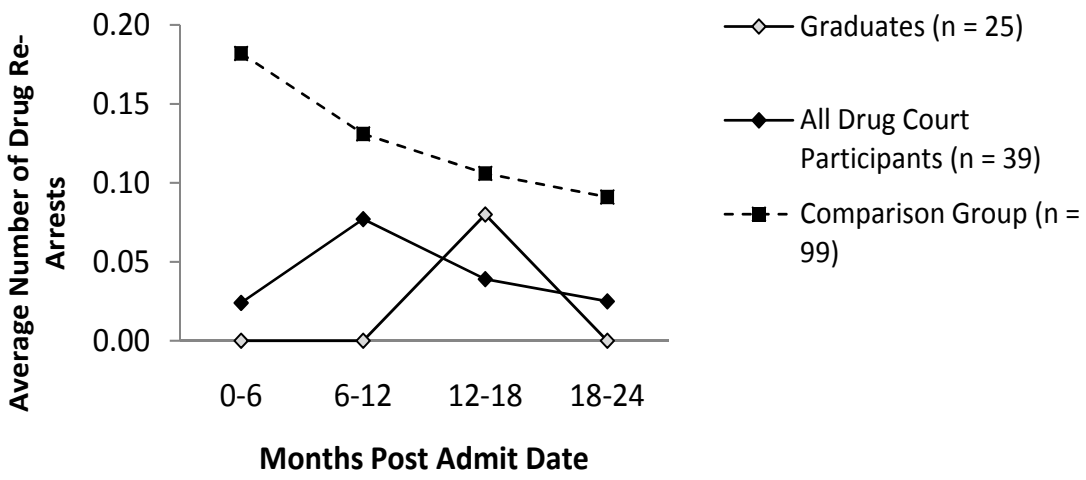
Drug-related Offenses

Another way to look at participant outcomes related to substance abuse is to measure the rate of drug-related re-arrests over time. Figure 2 displays the mean number of drug re-arrests in the ADC and comparison groups during discrete, 6-month periods over 24 months after program entry. An examination of ADC and comparison group individuals showed that, while the comparison group had a steady decrease in the average number of drug re-arrests over 24 months, ADC participants showed a significantly lower number in the first 6 months post ADC start.[17] The ADC and comparison groups do not have significantly different numbers of drug re-arrests in the following time periods.

[16] This reduction may or may not be due to program participation. While the results are promising, other factors besides or in addition to program participation may be responsible for this change. UA test data were not available for the comparison group.

[17] This reduction may or may not be due to program participation. While the results are promising, other factors besides or in addition to program participation may be responsible for this change.

Figure 2. Average Number of Drug Re-Arrests Over Time



POLICY QUESTION # 2: DO ADC PARTICIPANTS HAVE REDUCED CRIMINAL RE-ARREST RATES[18] AFTER PROGRAM ENTRY?

<u>YES:</u> There is a pattern of lower re-arrest rates and lower numbers of re-arrests for program participants.

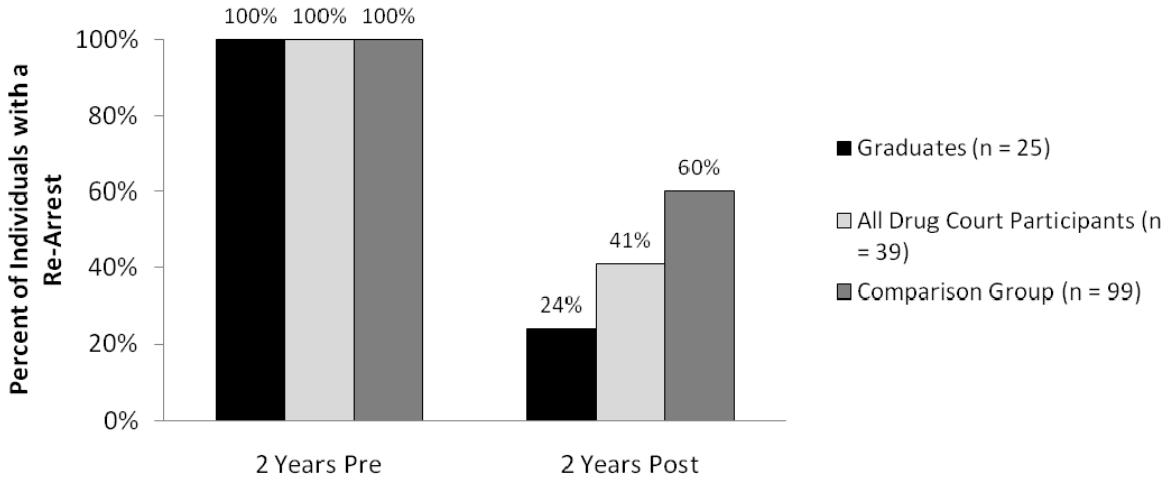
Criminal Justice Re-Arrest Rate

For this analysis, all criminal arrests are used, including drug, person, property, and other crimes. In addition, the measure includes arrests, not convictions.[19] Figure 3 shows the arrest rate (the percentage of individuals arrested) in the drug court and comparison group for the 24 months pre-program entry and 24 months post-program entry. The pre time period includes the 2 years leading up to the eligible arrest. The post time period begins at program start date (or equivalent).

[18] Rates described here in Policy Question # 2 include all criminal arrests (drug-related, property, person and other crimes combined).

[19] As stated earlier, data on convictions were not available for this study. However, data from the U. S. Department of Justice estimate that in large urban areas, the average rate of convictions for all offenses (based on the most serious arrest charge) was about 68%.
See http://bjs.ojp.usdoj.gov/content/pub/html/fdluc/2004/tables/fdluc04st19.cfm.

Figure 3. Individual Arrest Rates 2 Years Pre and 2 Years Post Program Entry



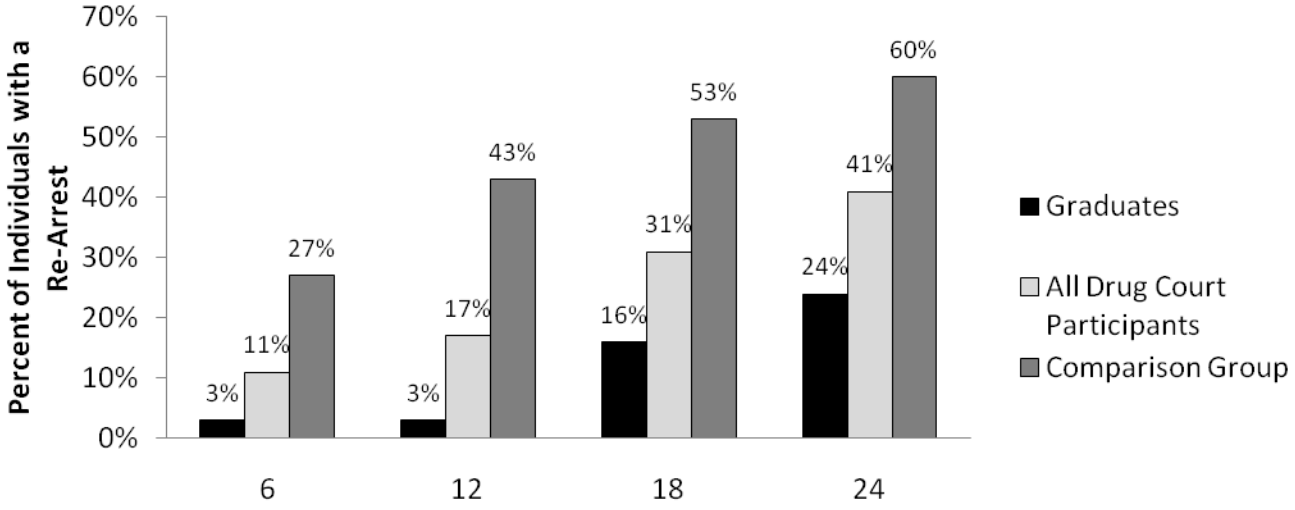
The percentage of individuals arrested in the ADC and comparison groups in the 2 years post program start was significantly less than the percentage re-arrested pre-program start. However, in comparing the difference in rates at 2 years post start date or equivalent, a significantly smaller proportion of the ADC group was re-arrested than the comparison group. Further, although all ADC graduates were arrested during the 2 years prior to the admission, only one quarter had been re-arrested in the 2 years after entering the ADC program.[20]

As shown in Figure 4, the re-arrest rate for ADC participants is significantly lower ($p < .05$) than the comparison group at every time period, regardless of graduation status.[21]

[20] One of the drug court participants who had a new re-arrest during the 24-month follow-up was still active in the program; the rest were no longer participating. It is important to note that a causal link between program participation and decreased arrests cannot be made. This comparison group is matched but not randomly assigned, so there are other factors, such as addiction severity or criminogenic risk factors, which could possibly explain this outcome.

[21] Some of the participants with new arrests were still active in the program (3 were still active at 6 months, 3 were still active at 12 months, 2 were still active at 18 months, and 1 was still active at 24 months). In addition, non-graduates were more likely than graduates to have a re-arrest: 4 people (22%) at 6 months, 7 people (47%) at 12 months, 10 people (67%) at 18 months, and 9 people 69%) at 24 months.

Figure 4. Re-Arrest Rate Over Time by Group[22]



In the 12 months following entry to the program, 17% of all ADC participants and 3% of graduates were re-arrested, while 43% of the comparison group members were re-arrested. At the 24-month time period, the pattern continued, with 41% of all program participants having been re-arrested and 24% of graduates and compared to 61% of comparison group individuals.

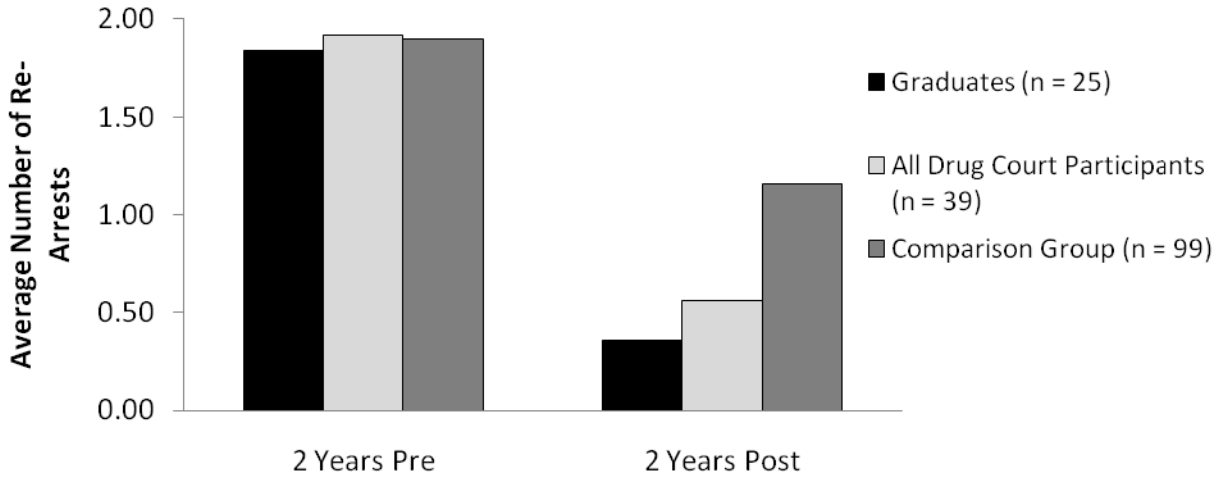
Number of Re-Arrests

An analysis of the *number* of re-arrests per individual shows a similar pattern as the re-arrest rate in Figures 3 and 4. In this analysis, all types of criminal arrests are included, and the focus is on arrests and not convictions.

The mean number of total individual re-arrests is compared through a 24-month pre-post comparison as shown in Figure 5. The pre time period includes the 2 years leading up program start or equivalent, which is compared to the post time period which begins at ADC start date or equivalent.

[22] Sample sizes: Graduates with 6 months n = 34, 12 months n = 34, 18 months n = 31, and 24 months n = 24; All ADC participants with 6 months n = 76, 12 months n = 64, 18 months n = 55, and 24 months n = 39; Comparison group n = 99 at all time points: 6, 12, 18, and 24 months.

Figure 5. Number of Re-Arrests[23] 2 Years Pre and 2 Years Post Program Entry

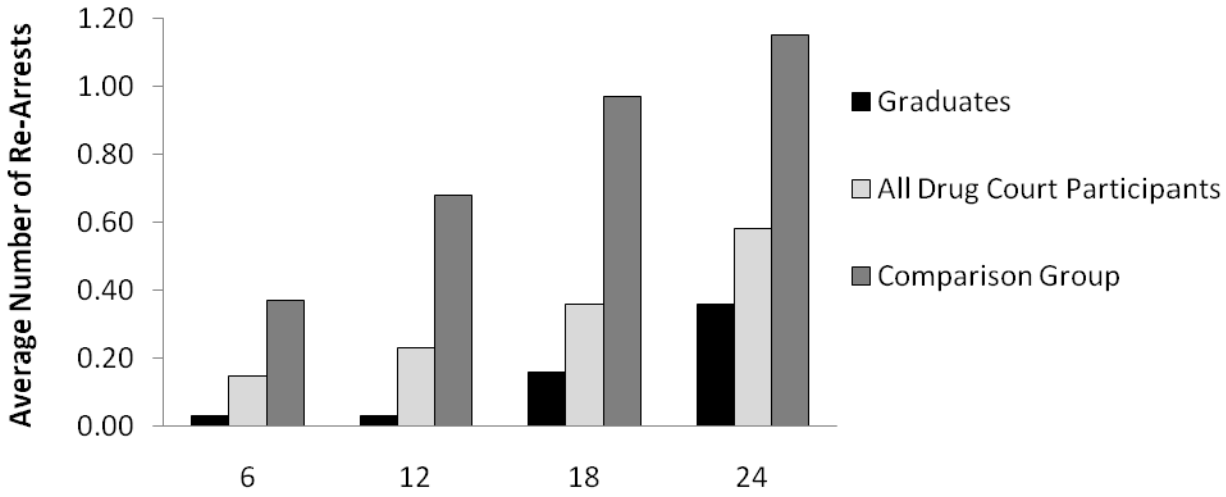


The ADC participants had significantly fewer arrests in the 24 months post program entry than in the 24 months pre-program entry ($p < .05$). This result may indicate an effect from the program on reducing the number of re-arrests among ADC participants. But, the comparison group also had significantly fewer re-arrests, which demonstrates why using a pre and post program entry analysis alone does not always indicate an effect that is due solely to the program. However, the ADC participants also had significantly fewer re-arrests than the comparison group in the 2 years post program entry.

[23] The average number of re-arrests presented in this figure was not adjusted for any differences between groups as the comparison being made in this analysis is between the same groups before and after program participation. Therefore these means are actual, unadjusted means and are slightly different from the adjusted means presented in the recidivism section as well as those presented in the cost section.

Figure 6 shows the mean number of individual re-arrests over time for ADC graduates, all ADC participants, and the comparison group. ADC participants showed a significantly lower number of re-arrests at every time period.[24]

Figure 6. Cumulative Number of Re-Arrests Over Time by Group[25]



Re-Arrests by Charge Type

To present a more descriptive picture of the criminality of the groups, arrests were coded as drug-related (e.g., possession), property-related (e.g., larceny), or person-related (e.g., assault).[26] Table 4 presents the results of this analysis.

In the 2 years post drug court entry, ADC participants with 2 years of follow-up had significantly fewer drug arrests compared to the comparison group. As would be expected, in the 2 years following drug court entry, ADC *graduates* were re-arrested significantly less often than other participants and the comparison group for all types of arrests.

[24] The mean number of re-arrests was adjusted to control for differences between ADC and comparison groups on gender, race/ethnicity, age at eligible arrest, prior arrest history, and total time of opportunity for re-offending. These results differ somewhat from the mean number of re-arrests reported in the cost section of this report, which are adjusted for differences between groups on demographic characteristics and prior arrest history but not for time of opportunity because the cost calculations include time incarcerated.

[25] Sample sizes: Graduates with 6 months n = 34, 12 months n = 34, 18 months n = 31, and 24 months n = 24; All ADC participants with 6 months n = 76, 12 months n = 64, 18 months n = 55, and 24 months n = 39; Comparison group n = 99 at all time points: 6, 12, 18, and 24 months.

[26] When an individual received more than one charge per arrest, a single arrest could be coded as both a person and drug crime. Therefore, the totals in Table 4 do not reflect the average total arrests reported elsewhere.

Table 4. Average Number of Cumulative Re-Arrests by Charge Type at 48 Months by Group

	ADC Graduates N = 25	All ADC Participants N = 39	Comparison Group N = 99	Significantly Different (All ADC & Comparison)?[27] ($p < .05$)
Average number of **drug** arrests in the 24 months post drug court entry or equivalent	.08	.16	.51	**Yes**
Average number of **property** arrests in the 24 months post drug court entry or equivalent	.16	.25	.35	No
Average number of **person** arrests in the 24 months post drug court entry or equivalent	.12	.16	.30	No

POLICY QUESTION # 3: DO PARTICIPANTS OF THE ADC PROGRAM COMPLETE THE PROGRAM SUCCESSFULLY?

YES: ADC participants are successful in completing the ADC program and complete within the intended time period.

During the study period, the overall graduation rate for the ADC was 65%, while the national average graduation rate for adult drug court programs is around 50% (Belenko, 2001). This means that the MCADC program has an above average graduation rate.

The average time for graduates to complete the program was just over 17 months. Non-graduates spent an average of 16 months in the program. The minimum length of time for this program is 16 months. The results indicate that most participants spend an average of 7 months longer than the minimum time of the program. However, most individuals are not expected to graduate in the minimum amount of time. When working with addicted individuals, some amount of relapse and recovery is to be expected. Overall, an average of 17 months in the program is only slightly higher than is typical for these types of programs.

[27] Yes indicates $p < .05$, No indicates $p > .10$, Trend indicates $p > .05$ and $p < .10$.

Table 5. Number of ADC Graduates in Study Sample by Year

Admission Year	Number Graduated (N = 34)	Number Discharged (N = 18)	Graduation Rate
2004	2	0	100%
2005	7	4	64%
2006	11	4	73%
2007	11	7	61%
2008	3	3	*
Total	**34**	**18**	**65%**

* Note: most of the individuals in entering the program in 2008 were still in service at the time the data for this study were collected, so there are not enough individuals to calculate an accurate graduation rate for this year.

POLICY QUESTION # 4: WHAT PREDICTS PARTICIPANT SUCCESS?

Which characteristics of drug court participants are associated with positive drug court program outcomes, e.g., graduation and reduced re-arrests?

Graduation

NPC examined the characteristics of ADC participants who successfully completed the program (graduates) and those who were "terminated" or left the program for non-compliance before completing (non-graduates). Differences between these two groups can illustrate the characteristics of the participants who are likely to have success in ADC and the characteristics of the participants who may need additional or specialized services to succeed.

Characteristics of graduates and non-graduates were compared[28] and are presented in Table 6. Participants were significantly more likely to graduate if they had fewer days incarcerated during the program. However, this result could be due to longer stays of incarcerations because of re-arrests for those participants who end up being unsuccessful in the program, rather than use of jail as a program sanction.

[28] Each variable in Table 6 was analyzed independently.

Table 6. Characteristics of ADC Graduates and Non-Graduates

	ADC Graduates N = 34	ADC Non-Graduates N = 18	Significantly Different?[29] ($p < .05$)
Gender Female	12%	6%	No
Race Non-Caucasian[30]	74%	78%	No
Mean age in years, at eligible arrest date	32	30	No
Mean length of stay in ADC in days	525	487	No
Mean number of days incarcerated (jail and/or prison) during the program	32	153	**Yes**
Average number of total lifetime arrests prior to the arrest leading to program participation	6.62	10.28	No
Average number of total arrests in the 2 years prior to the arrest leading to program participation	1.85	2.17	No
Average number of drug arrests in the 2 years prior to the arrest leading to program participation	1.06	1.44	No
Average number of property arrests in the 2 years prior to the arrest leading to program participation	.68	.50	No
Average number of person arrests in the 2 years prior to the arrest leading to program participation	.24	.28	No

When ADC participant characteristics were examined together in relation to graduation status in a logistic regression model, time in the program and time in jail and/or prison were significant predictors of graduation above and beyond other characteristics: graduates were more likely to be in the program longer and have fewer days in jail and/or prison, i.e., spend more time in the program while not in jail or prison. Further, number of lifetime priors was a trend-level predictor, suggesting that the fewer prior arrests before entering the ADC program was related with graduation.

The team may want to talk to the participants who are heading toward termination to learn what the barriers are for those participants in complying with program requirements and determine whether there is further assistance (e.g., transportation, learning to keep a calendar or schedule) that would make it possible for these participants to be successful in meeting program expectations.

[29] Yes indicates $p < .05$, No indicates $p > .10$, Trend indicates $p > .05$ and $p < .10$.
[30] ADC "non-Caucasian" graduates were 7% Hispanic, 7% Asian and 87% African American. "Non-Caucasian" non-graduates were 8% Hispanic and 92% African American.

Re-Arrests

Participant characteristics and arrest history were also examined in relation to whether or not participants were re-arrested in the 2 years following ADC entry. These analyses include ADC participants who had 24 months of follow-up time post ADC entry. The results are shown in Table 7.

Table 7. Demographic and Criminal Justice History-Related Variables Associated With Re-Arrest at 24 Months

	Participants who were re-arrested were more likely to be:	Significantly associated with re-arrest at 24 Months?[31] ($p < .05$)
Gender	Male	**Yes**
Race	African American	**Trend**
Mean age at eligible arrest date	Younger at eligible arrest	**Yes**
Mean length of stay in ADC program		No
Program status at exit	Non-graduates	**Yes**
Time at risk	Incarcerated for longer periods	**Yes**
Average number of total lifetime arrests prior to the arrest leading to program participation		No
Average number of total arrests in the 2 years prior to the arrest leading to program participation		No
Average number of drug arrests in the 2 years prior to the arrest leading to program participation		No
Average number of property arrests in the 2 years prior to the arrest leading to program participation		No
Average number of person arrests in the 2 years prior to the arrest leading to program participation		No

[31] Yes indicates $p < .05$, No indicates $p > .10$, Trend indicates $p > .05$ and $p < .10$.

As shown in Table 7, ADC participants were significantly more likely to have been re-arrested within 24 months of program entry if they were younger at the time of their eligible arrest, male, if they had less time in the community (spent more time incarcerated), and if they did not graduate. Additionally, African American participants were more likely to be re-arrested within 24 months of program entry. This information can help identify those groups of participants in general that might benefit from additional support and supervision—in conjunction with gender-, culture-, and age-specific services—during the program in order to address their increased risk of recidivism.

When these factors were entered into a logistic regression model, and each variable was controlled for, only age at eligible arrest remained a significant predictor, above and beyond the other characteristics, suggesting that participants who were younger at start were more likely to re-offend at 24 months.

The results of this analysis show that spending less time in jail, being male and younger are predictors of recidivism. The findings for gender and age are consistent with the criminal justice literature in general in predicting risk for re-arrest. It may be difficult for the program to adjust services to address age, however, it could be useful for the program to determine if the services provided are developmentally appropriate for the range of participant ages (as individuals continue to develop differently at different ages even as adults) and possibly introduce educational classes around changing criminal thinking to address particularly those participants that have a more significant criminal history.

OUTCOME SUMMARY

Overall, outcomes for ADC participants are quite positive. After participation in the program, regardless of whether they graduate, ADC participants had significantly fewer positive drug tests over time and were re-arrested on drug charges significantly less often than a comparison group of similar individuals who did not participate, indicating a reduction in drug use due to program participation.

Further, ADC participants had a lower re-arrest rate and lower average number of re-arrests per person than the comparison group. When the re-arrest rate was examined using a 24-month pre-post program entry model, ADC participants were re-arrested significantly less often post program entry compared to pre program entry. In addition, ADC participants were re-arrested significantly less often than the comparison group in the 2 years post drug court entry, indicating that the reduced re-arrest rate for the ADC group was due to program participation.

The graduation rate for the program was 65%, which is well above the national average of 50%. In addition, an examination of the characteristics of those who graduated from the program compared to those who did not graduate showed that ADC graduates were more likely to stay in the program longer and have less time incarcerated, providing evidence that jail as a sanction is not necessarily an effective sanction in changing participant behavior in a positive direction (to complete the program). Finally, participants who were older, female, graduates, and/or had less time in jail were less likely to recidivate.

Overall, the results of this outcome study indicate that the ADC program is successful in its main goals of reducing participant drug use and reducing participant re-arrests.

COST EVALUATION

The Montgomery County Adult Drug Court cost evaluation was designed to address the following study questions:

1. How much does the ADC program cost?
2. What are the costs of re-arrests? Specifically, what is the 24-month cost impact due to re-arrests and related activities on the criminal justice system of sending offenders through ADC versus traditional court processing?
3. What is the impact on the criminal justice system of the time between the eligible arrest and ADC program entry (in terms of arrests and jail)?

Cost Evaluation Methodology

COST EVALUATION DESIGN

Transactional and Institutional Cost Analysis

The cost approach utilized by NPC is called Transactional and Institutional Cost Analysis (TICA). The TICA approach views an individual's interaction with publicly funded agencies as a set of *transactions* in which the individual utilizes resources contributed by multiple agencies and jurisdictions. Transactions are those points within a system where resources are consumed and/or change hands. In the case of drug courts, when a participant appears in court, resources such as judge time, state's attorney time, defense attorney time, and court facilities are used. When a program participant has a drug test, urine cups are used. Court appearances and drug tests are transactions. In addition, the TICA approach recognizes that these transactions take place within multiple organizations and institutions that work together to create the program of interest. These organizations and institutions contribute to the cost of each transaction that occurs for program participants. TICA is an intuitively appropriate approach to conducting cost assessment in an environment such as a drug court, which involves complex interactions among multiple taxpayer-funded organizations.

Cost to the Taxpayer

In order to maximize the study's benefit to policymakers, a "cost-to-taxpayer" approach was used for this evaluation. This focus helps define which cost data should be collected (costs and avoided costs involving public funds) and which cost data should be omitted from the analyses (e.g., costs to the individual participating in the program). The core of the cost-to-taxpayer approach in calculating benefits (avoided costs) for drug court specifically is the fact that untreated substance abuse will cost various tax-dollar funded systems public funds that could be avoided or diminished if substance abuse were treated. In this approach, costs that result from untreated substance abuse are used in calculating the benefits of substance abuse treatment.

Opportunity Resources

NPC's cost approach looks at publicly funded costs as "opportunity resources." The concept of *opportunity cost* from economics relates to the cost of doing an activity instead of doing something else. The term *opportunity resource* as it is applied in TICA describes resources that are now available for a given use because they have not been consumed for an alternative activity. For example, if substance abuse treatment reduces the number of times that a client is subsequently in-

carcerated, the local Sheriff may see no change in his or her budget, but an opportunity resource will be available to the Sheriff in the form of a jail bed that can now be filled by another person.

COST EVALUATION METHODS

The current cost evaluation builds on the outcome evaluation performed by NPC on the Montgomery County Adult Drug Court. The costs to the individual justice system (cost-to-taxpayer) in Montgomery County incurred by participants in Drug Court are compared with the costs incurred by those who were similar to but did not enter Drug Court. In addition, the specific program costs are calculated separately in order to determine the per-participant costs of the Montgomery County Adult Drug Court program.

TICA Methodology

The TICA methodology as it has been applied in the analysis of the Montgomery County Adult Drug Court is based upon six distinct steps. Table 8 lists each of these steps and the tasks involved.

Steps 1 through 3 were performed through analysis of court and ADC documents, including review of this program's process evaluation report (conducted by another organization) and through interviews with key stakeholders. Step 4 was performed in the outcome evaluation. Step 5 was performed through interviews with ADC and non-drug court staff and with agency finance officers. Step 6 involved calculating the cost of each transaction and multiplying this cost by the number of transactions. All the transactional costs for each individual are added to determine the overall cost per individual. This information was generally reported as an average cost per individual. In addition, the TICA approach has made it possible to calculate the cost for Drug Court processing for each agency.

This evaluation utilized a previously-conducted process evaluation and interviews with program staff to identify the specific program transactions to include in this study. Cost data were collected through interviews with ADC staff and jurisdiction and agency contacts with knowledge of jurisdiction and agency budgets and other financial documents, as well as from budgets either found online or provided by jurisdiction and agency staff.

The costs to the criminal justice system outside of ADC program costs consist of those due to new criminal arrests, court cases, probation, jail and prison. Program costs include all program transactions. These include drug court sessions, case management, group and individual treatment sessions, intensive outpatient treatment, residential care, detoxification, alcohol monitoring, drug tests, Jail Addiction Services (a jail-based substance abuse program), and jail sanctions.

Table 8. The Six Steps of TICA

	Description	Tasks
Step 1:	Determine flow/process (i.e., how clients move through the system)	• Site visit • Interviews with key stakeholders (agency and program staff)
Step 2:	Identify the transactions that occur within this flow (i.e., where clients interact with the system)	• Analysis of process information gained in Step 1
Step 3:	Identify the agencies involved in each transaction (e.g., court, treatment, police)	• Analysis of process information gained in Step 1
Step 4:	Determine the resources used by each agency for each transaction (e.g., amount of judge time per transaction, amount of attorney time per transaction, number of transactions)	• Interviews with program key informants using cost guide. • Administrative data collection of number of transactions (e.g., number of court appearances, number of treatment sessions, number of drug tests).
Step 5:	Determine the cost of the resources used by each agency for each transaction	• Interviews with budget and finance officers • Document review of agency budgets and other financial paperwork
Step 6:	Calculate cost results (e.g., cost per transaction, total cost of the program per participant)	• Support and overhead costs (as a percentage of direct costs) are added to the direct costs of each transaction to determine the cost per transaction • The transaction cost is multiplied by the average number of transactions for program participants to determine the total average cost per transaction type • These total average costs per transaction type are added to determine the program and outcome costs.

Cost Evaluation Results

Drug courts are intensive interventions that involve coordination of multiple agencies and professional practitioners applying a variety of areas of expertise, intensive case management and supervision, and frequent judicial reviews. Drug courts are typically made possible through the application and coordination of resources drawn from multiple agencies located in more than one jurisdictional organization. Although the amount of staff time and other resources (buildings, materials and supplies and operating equipment) made available by a number of public organizations represents substantial public costs, research in drug courts demonstrates that due to decreased future system impacts (less frequent re-offending, for example), this investment frequently results in substantial future savings. In addition, drug courts can provide cost-effective intensive treatment and supervision in a community-based setting rather than relying on next

steps in the continuum of services such as residential placements. This report tests whether this pattern holds for the Montgomery County ADC program.

As described in the methodology section, the Transactional and Institutional Cost Analysis (TICA) approach was used to calculate the costs of each of the transactions that occurred while participants were engaged in the program. Program transactions calculated in this analysis include drug court sessions, case management, group and individual treatment sessions, intensive outpatient treatment, residential care, detoxification, alcohol monitoring, drug tests, Jail Addiction Services and jail sanctions. The costs for this study were calculated to include taxpayer costs only. All cost results provided in this report are based on fiscal year 2009 dollars.

COST EVALUATION QUESTION #1: PROGRAM COSTS

How much does the ADC program cost?

Program Transactions

A drug court session, for the majority of drug courts, is one of the most staff and resource intensive program transactions. In the Montgomery County Adult Drug Court, these sessions include representatives from:

- Circuit Court of Maryland (Judge, Court Reporter, Sheriff, Drug Court Coordinator, and Circuit Court Case Managers);
- Montgomery County State's Attorney's Office (State's Attorney);
- Maryland Office of the Public Defender (Public Defender);[32]
- Maryland Division of Parole and Probation (Probation Agent);
- Montgomery County Department of Health & Human Services (Therapists, Treatment Supervisor, Case Managers, Office Services Coordinator)

The cost of a ***Drug Court Appearance*** (the time during a session when a single program participant interacts with the Judge) is calculated based on the average amount of court time (in minutes) each participant interacts with the judge during the Drug Court session. This includes the direct costs of each Drug Court Team member present, the time Team members spend preparing for the session, the agency support costs, and jurisdictional overhead costs. The average cost for a single Drug Court appearance is **$197.99** per participant.

Case Management is based on the amount of staff time dedicated to case management activities during a regular work week and is then translated into a total cost for case management per participant per day.[33] The agencies involved in case management for the Montgomery County Individual ADC program are the Division of Parole and Probation and the Department of Health & Human Services. The daily cost of case management in this program is **$10.88** per participant.

Drug Treatment Sessions are provided by the Department of Health & Human Services, through Outpatient Addiction Services, an HHS treatment agency that offers individual, group, and intensive outpatient treatment (IOP) services for program participants. Outpatient individual treatment per participant is **$80.00** per session. Outpatient group treatment is **$39.00** per participant per ses-

[32] The Maryland Office of the Public Defender chose not to provide cost information for this study; therefore, costs attributed to this agency are estimated based on salary, benefits, support rate, and overhead rate data from cost evaluations conducted on Harford County District and Prince George's County Circuit drug courts.

[33] Case management includes meeting with participants, evaluations, phone calls, referring out for other help, answering questions, reviewing referrals, consulting, making community service connections, assessments, documentation, file maintenance, and residential referrals.

sion. Intensive outpatient treatment is **$125.00** per day. ADC participants have a maximum co-pay of $5.00, but due to a lack of data, the co-pays were not taken into account for this analysis.

Drug Tests are performed by Department of Health & Human Services (HHS) Treatment Providers and occasionally, the case manager. The cost per HHS urinalysis (UA) is **$5.00** and the cost per HHS breathalyzer is **$0.22**.[34] Drug Court participants are not charged for Urine Testing services; county, state, and federal grant funding (through the HHS) is used to cover UA costs. There are two costs associated with the SCRAM alcohol monitoring bracelets; a one-time installation fee of **$85.00** for each placement of the bracelet on a new participant and a daily operating cost of **$12.00** per unit. The costs associated with the SCRAM unit are currently covered by a grant (through the HHS) from the Maryland Administrative Office of the Court (AOC).

Residential Care, Detoxification and Intermediate Care Facilities are provided by agencies contracted with the Department of Health & Human Services. Long term residential services are provided by Second Genesis, Inc. and cost **$160.00** per day. Level II and III residential services can be purchased through Resources for Human Development at **$140.00** per day. Intermediate care facility stays are provided at **$135.00** per day and detoxification and intermediate care services are provided through a contract with the Maryland Treatment Center at **$200.00** per day. All rates were provided by a representative of HHS.

Jail Addiction Services is a jail-based substance abuse program run out of the Montgomery County Correctional Facility (MCCF) by HHS. The cost of the JAS program is **$38.00** per day. This rate was provided to NPC by a representative of the Department of Correction and Rehabilitation.

Jail Sanctions are provided by the County Department of Correction and Rehabilitation at the MCCF and the Montgomery County Detention Center at a rate of **$142.00** per day. This rate was taken from information found in the Department of Correction and Rehabilitation's 2009 Budget.

Program Costs

Table 9 provides the unit cost per transaction described above, the average number of ADC transactions per participant, and the average cost per participant for each type of transaction. The average cost per participant is the product of the unit cost multiplied by the average number of program transactions per participant. The sum of these transactions is the total per participant cost of the program. The table includes the average for ADC graduates (n = 34) and for all ADC participants (n = 52), regardless of completion status. It is important to include participants who were discharged as well as those who graduated as all participants use program resources, whether they graduate or not.

[34] Because the specific cost per breathalyzer test was unknown for the Montgomery County ADC, the cost per breathalyzer test used here is a proxy based on the cost found per breathalyzer test for the Anne Arundel County DUI Court.

Table 9. Average ADC Program Costs per Participant

Transaction	Transaction unit cost	Average number of transactions per ADC graduate	Average cost per ADC graduate N = 34	Average number of transactions per ADC participant	Average cost per ADC participant N = 52
Drug Court Appearances	$197.99	43.67	**$8,646**	42.12	**$8,339**
Case Management	$10.88	524.91 Days[35]	**$5,711**	511.63 Days	**$5,567**
Individual Treatment Sessions	$80.00	11.50	**$920**	11.83	**$946**
Group Treatment Sessions	$39.00	73.56	**$2,869**	68.73	**$2,680**
Intensive Outpatient Treatment Days	$125.00	103.56	**$12,945**	112.92	**$14,115**
UA Tests	$5.00	97.52	**$488**	93.08	**$465**
Breathalyzer Tests	$0.22	97.52	**$21**	93.08	**$20**
SCRAM Bracelet Installation Fee	$85.00	0.15	**$13**	0.15	**$13**
SCRAM Bracelet Days	$12.00	10.15	**$122**	13.31	**$160**
Level 1 and 3 Residential Treatment Days	$140.00	0.00	**$0**	0.00	**$0**
Long-term Residential Days	$160.00	0.00	**$0**	0.00	**$0**
Detoxification Days	$200.00	0.74	**$148**	0.96	**$192**
Intermediate Care Facility Days	$135.00	7.76	**$1,048**	8.69	**$1,173**
Jail Addiction Service Days	$38.00	18.00	**$684**	19.00	**$722**
Jail Sanctions	$142.00	1.44	**$204**	1.79	**$254**
Total ADC			**$33,819**		**$34,646**

Note: Average costs per participant have been rounded to the nearest whole dollar amount.

On average, the total cost per participant in ADC is **$34,646**. Note that the two most expensive areas of cost for the program are intensive outpatient treatment days ($14,115) and drug court appearances ($8,339). The next highest cost is for case management ($5,567). The drug court appearances and case management results are commensurate with the drug court model, which emphasizes high supervision, but the ADC may want to examine its use of intensive outpatient

[35] The average cost per participant for case management is calculated based on the average number of days participants spent in the ADC program.

treatment (41% of total program costs) to determine if this level of care is necessary for all participants who are assigned to it.

Program Costs per Agency

Another useful way to examine program costs is to break them down by agency. Table 10 shows the ADC program cost per participant by agency.

Table 10. Average ADC Cost per Participant by Agency

Agency	Average Cost per ADC Graduate N = 34	Average Cost per ADC Participant N = 52
Montgomery County Circuit Court	$2,859	$2,758
Montgomery County State's Attorney's Office	$447	$431
Montgomery County Department of Health & Human Services	$29,436	$30,362
Montgomery County Department of Correction and Rehabilitation	$204	$254
Maryland Division of Parole and Probation	$494	$477
Maryland Office of the Public Defender	$378	$365
Total[36]	**$33,818**	**$34,647**

Because HHS employees appear at Drug Court sessions and provide case management, drug and alcohol testing, JAS and treatment services (especially intensive outpatient) to ADC participants, HHS shoulders 88% of the total ADC program costs. Due to its employees that attend Drug Court sessions, the Circuit Court incurs the next largest expense for the ADC, followed by the Division of Parole and Probation and its support of Drug Court sessions and case management.

The other agencies involved in the ADC program (State's Attorney, Office of Public Defender, and the Department of Correction and Rehabilitation) incur their costs primarily through staff attendance at Drug Court sessions and providing jail sanctions.

Local Versus State Costs for the ADC Program

State policy leaders and administrators may find it useful to examine programs costs by jurisdiction (state or local/county). The majority of ADC program costs accrue to Montgomery County (98% or $33,805 per participant), mainly due to the HHS services (treatment, case management, Drug Court sessions, drug and alcohol testing, and JAS). It is important to note that HHS receives state and federal grant money in support of drug and alcohol testing, even though all drug and alcohol testing costs are shown as accruing to HHS and Montgomery County. The State of Maryland's portion of ADC costs are 2% of total program costs per participant, or $842.

[36] Totals in this row may not match the totals in the outcome costs by transaction table due to rounding.

COST EVALUATION QUESTION #2: OUTCOME COSTS

What is the 24-month cost impact on the criminal justice system of sending offenders through ADC or traditional court processing?

As described in the cost methodology section of this report, the Transactional and Institutional Cost Analysis (TICA) approach was used to calculate the costs of each of the criminal justice system outcome transactions that occurred for ADC and comparison group participants. Transactions are those points within a system where resources are consumed and/or change hands. Outcome transactions for which costs were calculated in this analysis included re-arrests, subsequent court cases, probation/parole time, jail time, and prison time. Only costs to the taxpayer were calculated in this study. All cost results represented in this report are based on fiscal year 2009 dollars or updated to fiscal year 2009 dollars using the Consumer Price Index.

Outcome Cost Data

The outcome statistics reflect data through April 2009. There were 138 individuals who had at least 24 months of available outcome data (39 ADC participants and 99 comparison group members). This follow-up period was selected to allow a large enough group of both ADC and comparison individuals to be representative of the program, as well as to allow more robust cost numbers through use of as long a follow-up period as possible (with as many individuals as possible having at least some time during the follow-up period that represented time after program involvement). All ADC participants in the cohorts included in these analyses had exited the program (graduated or were unsuccessful at completing the program).

Outcome costs were calculated for 24 months after ADC program entry (or an approximate start date for comparison group members). The outcome costs discussed below do not represent the entire cost to the criminal justice system. Rather, the outcome costs include the transactions for which NPC's research team was able to obtain outcome data and cost information. However, we believe that the costs represented capture the majority of system costs. Outcome costs were calculated using information from the Montgomery County District Court, the Maryland Circuit Court in Montgomery County, the Montgomery County State's Attorney's Office, the Maryland Office of Public Defender in Montgomery County, the Maryland Department of Public Safety & Correctional Services, the Montgomery County Department of Correction & Rehabilitation, the Maryland Division of Parole and Probation, the Maryland State Police, the Montgomery County Sheriff's Office, Montgomery County Police Department and the Maryland State Operating Budget (FY 2009).

The methods of calculation were carefully considered to ensure that all direct costs, support costs and overhead costs were included as specified in the TICA methodology followed by NPC. It should be noted that, since NPC accounts for all jurisdictional and agency institutional commitments involved in the support of agency operations, the costs that appear in NPC's analysis typically will not correspond with agency operating budgets.

Outcome Transactions

Arrests for Montgomery County are conducted by multiple law enforcement agencies, with the Maryland State Police, Montgomery County Sheriff's Office and Montgomery County Police Department being the most common. An average of all three arrest rates was used for this outcome cost analysis, using information provided by representatives from each agency. The average cost of a single arrest is **$237.06**.

Court Cases include all court cases, including those cases that are reviewed and rejected by the Montgomery County State's Attorney's Office, as well as those cases that result in arraignment and are adjudicated. Court case costs are shared among the Montgomery County District Court, Maryland Circuit Court, the Montgomery County State's Attorney's Office, and the Maryland Office of the Public Defender. The average cost of an individual Circuit Court case is **$5,067.13.** The average cost of an individual District Court case is **$1,551.68**.[37]

Probation and Parole is provided by the Maryland Division of Parole and Probation. According to a Department of Public Safety & Correctional Services representative, the average cost of supervision is **$4.09** per person per day.

Jail Days are provided by the Montgomery County Department of Correction and Rehabilitation at the Montgomery County Correctional Facility and the Montgomery County Detention Center**.** The cost of a jail day is **$142.00.** This rate was taken from information found in the Department of Correction and Rehabilitation's 2009 Budget.

Prison Days are provided by the Maryland Department of Public Safety & Correctional Services. The cost of a prison day is **$85.15**, which was given to NPC by a representative of the Department.

Outcomes and Outcome Cost Consequences

Table 11 presents the average number of criminal justice system outcome events (e.g., the average number of re-arrests, the average number of probation days, etc.) incurred per participant for Montgomery County ADC graduates, all participants (both graduated and non-graduates combined), and the comparison group for 24 months after entry date (or equivalent date for the comparison group).

Table 11. Average Number of Outcome Transactions per ADC and Comparison Group Member (Including ADC Graduates) Over 24 Months

Transaction	ADC Graduates N = 25	All ADC Participants N = 39	Comparison Group N = 99
Arrests	0.36	0.57	1.16
Circuit Court Cases	0.04	0.13	0.37
District Court Cases[38]	0.32	0.58	0.55
Probation and Parole Days	50.28	49.80	459.79
Jail Days	41.04	99.88	72.20
Prison Days	0.00	9.90	78.50

[37] For the cost of Montgomery County court cases, the Maryland Office of the Public Defender portion of costs are based on the statewide Public Defender budget and statewide Public Defender caseload information. The Circuit Court, District Court, and State's Attorney's Office costs are based on local agency budget and local caseload information.

[38] Even though the ADC is in Circuit Court, during the outcome period, participants and comparison group members had re-arrests in District Court as well as Circuit Court. The cost of processing in the two courts differs, so both are included here. In addition, it is sometimes informative to look at patterns of re-arrests, using District or Circuit Court contacts as a proxy for the severity of new charges,

As can be seen in Table 11, ADC participants have fewer re-arrests, Circuit Court cases, probation and parole days, and prison days than members of the comparison group. District Court cases and jail days are the only outcome transactions for which ADC participants (regardless of graduation status) show a higher rate than the comparison group. Graduates of the ADC show smaller numbers than all drug court participants across every transaction, except for probation and parole days. From these results an interpretation can be reasonably asserted that participation in ADC is associated with less severe criminal activity.

Outcome Cost Results

Table 12 demonstrates the costs associated with the outcomes described above for all ADC participants, ADC graduates, and the comparison sample.

Table 12. Criminal Justice System Outcome Costs per ADC and Comparison Group Member (Including ADC Graduates) Over 24 Months

Transaction	Transaction Unit Cost	ADC Graduates N = 25	All ADC Participants N = 39	Comparison Group N = 99
Arrests	$237.06	$85	$135	$275
Circuit Court Cases	$5,067.13	$203	$659	$1,875
District Court Cases	$1,551.68	$497	$900	$853
Probation and Parole Days	$4.09	$206	$204	$1,881
Jail Days	$142.00	$5,828	$14,183	$10,252
Prison Days	$85.15	$0	$843	$6,684
Total		**$6,819**	**$16,924**	**$21,820**

Note: Average costs per participant have been rounded to the nearest whole dollar amount.

Table 12 reveals that ADC participants cost less for every transaction except District Court cases and jail days, due to lower amounts of serious criminal re-arrests. The cost for jail is by far the most expensive transaction for both ADC participants and comparison group members.

The total average cost savings after 24 months is $**4,896** per ADC participant, regardless of whether or not the participant graduates. If the ADC program continues in their current capacity of serving a cohort of 90 participants annually, this savings of $2,448 per participant per year ($4,896 divided by 2) results in a yearly savings of **$220,320** per cohort year**,** which can then continue to be multiplied by the number of years the program remains in operation and by the number of cohorts over time. This savings continues to grow for participants every year after program entry. If savings continue at the same rate, after 10 years the savings *per cohort* will total **$2,203,200**.

Another interesting point of analysis involves the graduates. When this group is considered from an epidemiological perspective, the graduates have received the designed "dosage" and term of treatment for the therapeutic intervention under consideration. From this perspective the difference in average total cost between this group and the comparison group of $15,001 after 24 months is an immediate return on the therapeutic investment in the graduate group. However, it

is important to remember that the graduates are not directly comparable to the comparison group as they are the most successful participants.

Outcome Costs by Agency

As was noted above, the TICA approach to program cost analysis is particularly useful in this setting, in that it is possible calculate costs for each agency. Table 13 presents the outcome costs by agency.

Table 13. Criminal Justice System Outcome Costs by Agency per ADC and Comparison Group Member (Including ADC Graduates) Over 24 Months

Jurisdiction/Agency	ADC Graduates N = 25	All ADC Participants N = 39	Comparison Group N = 99	Difference (Benefit)
Montgomery County District Court	$187	$338	$321	-$17
Montgomery County State's Attorney's Office	$259	$578	$1,010	$432
Montgomery County Dept. of Correction and Rehabilitation	$5,828	$14,183	$10,252	-$3,931
Maryland Circuit Court in Montgomery County	$83	$270	$769	-$499
Maryland Office of the Public Defender	$170	$373	$628	$255
Maryland Dept. of Public Safety and Correctional Services	$0	$843	$6,684	$5,841
Maryland Division of Probation and Parole	$206	$204	$1,881	$1,677
Law Enforcement	$85	$135	$275	$140
Total[39]	**$6,818**	**$16,924**	**$21,820**	**$4,896**

Note: Average agency costs per participant have been rounded to the nearest whole dollar amount.

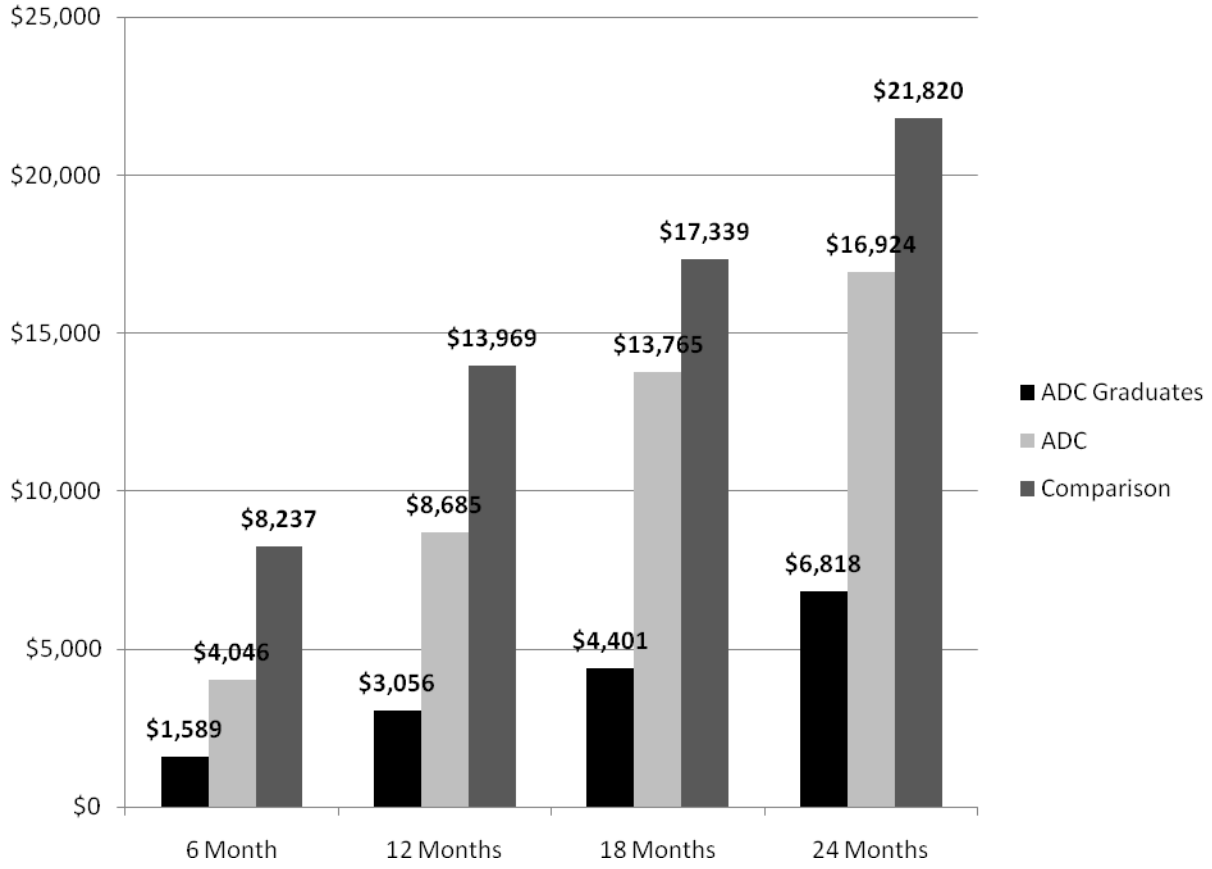
Similar to many of the drug court studies in which NPC has been involved, greater outcome savings associated with ADC participants accrue to some agencies than others. The Circuit Court, State's Attorney, Public Defender, Division of Parole and Probation, Law Enforcement and Department of Public Safety & Correctional Services all show cost savings, but the District Court and County Department of Correction and Rehabilitation do not. The greatest saving accrues to the Department of Public Safety & Correctional Services, due to the decreased prison time for ADC participants. The Montgomery County Department of Correction and Rehabilitation uses the most resources, due to ADC participants having more jail days than comparison group individuals.

In terms of their comparative re-arrest experiences, ADC participants are shown to cost $4,896 (or 22.4%) less per participant than members of this study's comparison group. Due to lower rates of re-arrest, ADC graduates show outcome costs of $6,818 ($10,106 less than all ADC participants and $15,002 less than the comparison group) after 24 months.

[39] Totals in this row may not match the totals in the outcome costs by transaction table due to rounding.

Figure 7 displays a graph of the cumulative outcome costs over the 24 months post-ADC entry (or the equivalent for the comparison group). Note that these results by 6-month periods are not the same participants over time, but represent those different cohorts of participants who had at least 6, 12, 18, and 24 months of follow-up time, respectively.

Figure 7. Criminal Justice Outcome Cost Consequences per Person: ADC Participants and Comparison Group Members (Including ADC Graduates) Over 24 Months

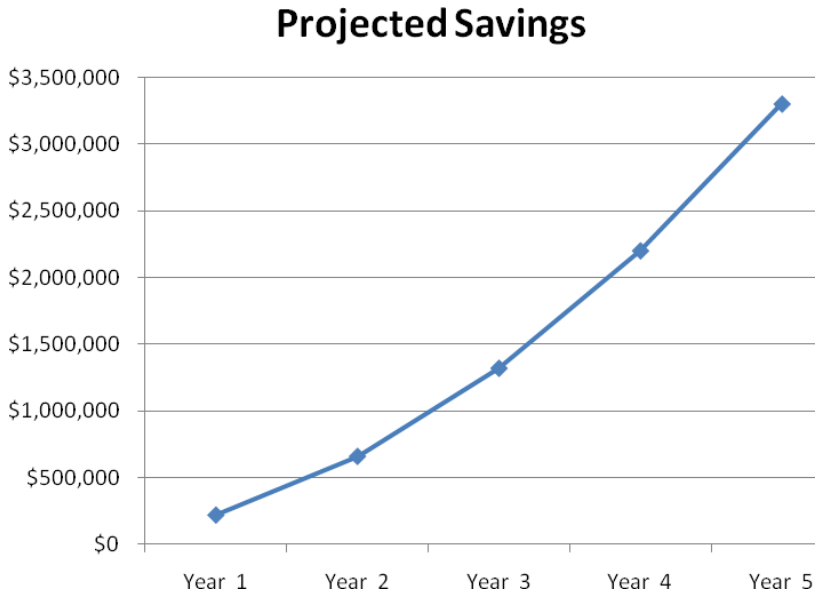


The cost savings illustrated in Figure 7 are those that have accrued in just the 24 months since ADC entry. Many of these savings are due to positive outcomes while the participant is still in the program. Therefore, it is reasonable to state that savings to the state and local criminal justice systems are generated from the time of participant entry into ADC.

If ADC participants continue to have positive outcomes in subsequent years (as has been shown in drug courts, e.g., Carey et al., 2005; Finigan, Carey, & Cox, 2007) then these cost savings can be expected to continue to accrue over time, repaying the program investment costs and providing further savings in opportunity resources to public agencies.

This savings will also continue to grow with the number of participants that enter each year. If the ADC program continues to enroll a cohort of **90** participants annually, the savings of $4,896 per participant over 24 months results in an annual savings of **$220,320** per year, which can then be multiplied by the number of years the program remains in operation and for additional new participant cohorts per year. This accumulation of savings is demonstrated in Figure 8. After 5 years, the accumulated savings come to over **$3.3 million**.

Figure 8. Projected ADC Criminal Justice Cost Savings Over 5 Years



As the existence of the program continues, the savings generated by ADC participants due to decreased substance use and decreased criminal activity can be expected to continue to accrue, repaying investment in the program and beyond. Taken together, these findings indicate that the ADC is both beneficial to ADC participants and beneficial to Maryland taxpayers.

COST EVALUATION SUMMARY

Overall, the ADC results in significant cost savings and a return on taxpayer investment in the program. The program investment costs are $34,646 per ADC participant. When program costs are divided by the average number of days in the program, the cost per day per participant for the ADC program is $67.72, which is lower than the per day cost of both jail ($142.00) and prison ($85.15).

The cost due to re-arrests over 24 months from program entry was $16,924 per ADC participant compared to $21,820 per comparison individual, resulting in a savings of $4,896 per participant (regardless of whether they graduate). The vast majority of the cost in outcomes for ADC participants over the 24 months from ADC entry was due to time in jail ($14,183), mostly for participants who were unsuccessful in completing the program.

This savings will continue to grow with the number of participants that enter each year. If the ADC program continues to enroll a cohort of **90** participants annually, the savings of $4,896 per participant over 24 months results in an annual savings of **$220,320** per year, which can then be multiplied by the number of years the program remains in operation and for additional new participant cohorts per year. After 5 years, the accumulated savings come to over **$3.3 million**. In sum, there is a clear benefit to the taxpayer in terms of criminal justice related costs in choosing the ADC process over traditional court processing.

DISCUSSION-SUMMARY OF FINDINGS

This study of the Montgomery County Adult Drug Court program shows outcomes that are very positive for drug court participants, compared to individuals who had similar demographic characteristics and criminal histories but who did not participate in drug court. After participation in the program, regardless of whether they graduate, ADC participants had fewer positive drug tests over time and were re-arrested on drug charges significantly less often than a comparison group of similar individuals who did not participate, indicating a reduction in drug use due to program participation.

Further, ADC participants had lower re-arrest rates and average number of re-arrests per person than the comparison group In the 2 years after drug court entry, drug court participants were re-arrested half as often as the comparison group.

The graduation rate for the program was 65%, which is well above the national average of 50%. Taken as a whole, the results of this outcome study indicate that the ADC program is successful in its main goals of reducing participant drug use and reducing participant re-arrests.

In addition, the ADC results in significant cost savings and a return on taxpayer investment in the program. The program investment costs were $34,646 per ADC participant. When program costs are divided by the average number of days in the program, the cost per day per participant for the ADC program is $67.72, which is lower than the per day cost of both jail ($142.00) and prison ($85.15).

The cost due to re-arrests and related criminal justice system activity over 24 months from program entry was $16,924 per ADC participant compared to $21,820 per comparison individual, resulting in a savings of $4,896 per participant (regardless of whether they graduate). The vast majority of the cost in outcomes for ADC participants over the 24 months from ADC entry was due to time in jail ($14,183), mostly for participants who were unsuccessful in completing the program.

This savings will continue to grow with the number of participants that enter each year. If the ADC program continues to admit a cohort of **90** participants annually, the savings of $4,896 per participant over 24 months results in an annual savings of **$220,320** per year, which can then be multiplied by the number of years the program remains in operation and for additional new participant cohorts per year. After 5 years, the accumulated savings come to over **$3.3 million**. In sum, there is a clear benefit to the taxpayer in terms of criminal justice related costs in choosing the ADC process over traditional court processing.

The program may want to review the level of care assessments to ensure that all of the participants assigned to intensive outpatient really need it (and whether some of them may need higher or lower intensity of treatment services), because the program's use of intensive outpatient treatment as it makes up the majority of the program cost.

The program might be able to increase its already-strong graduation rate by talking to the participants who are heading toward termination to learn what the barriers are for those participants in complying with program requirements and determine whether there is further assistance (e.g., transportation, learning to keep a calendar or schedule) that would make it possible for these participants to be successful in meeting program expectations.

Because older participants were less likely to be re-arrested, it could be useful for the program to determine if the services provided are developmentally appropriate for the range of participant ages (as individuals continue to develop differently at different ages even as adults) and possibly introduce educational classes around changing criminal thinking to address particularly those participants that have a more significant criminal history.

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