

Baltimore City District Court Adult Drug Treatment Court

10-Year Outcome and Cost Evaluation



Submitted to:

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EXECUTIVE SUMMARY

In the past 20 years, one of the strongest movements in the United States focused on reducing substance abuse among the criminal justice population has been the spread of drug treatment courts across the country. Drug treatment courts are designed to guide offenders identified as drug-addicted into treatment that will reduce drug dependence and improve the quality of life for offenders and their families. Drug treatment court programs are a collaborative process between multiple agencies including the Court, State's Attorney, Public Defender, Probation, law enforcement, and treatment agencies. 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.

The Baltimore City District Court Adult Drug Treatment Court (DTC) was implemented in 1994, with the goal of identifying people with a substance abuse addiction and offering them a program with treatment rather than incarceration. The District Court program focuses on individuals with misdemeanor charges.

The goals of this project were to describe the program and its participants over time, evaluate the effectiveness of the DTC in reducing recidivism, and determine the cost-benefits of drug treatment court participation. The results of this evaluation are designed to be helpful in assisting the DTC in improving the services to drug court participants, and in gaining support from the community. This report provides a 10-year follow-up of a cohort of DTC participants who entered the program between 1995 and 1998 and compares their outcomes to a group of offenders who had similar criminal histories and demographic backgrounds but who had not participated in any of the Baltimore City adult drug treatment court programs. It also compares the costs of these outcomes in a cost-benefit analysis using the Transactional and Institutional Cost Analysis (TICA) method.

Results: Outcome Evaluation Summary

The outcome component of this study included both descriptive research questions and impact research questions related to recidivism and program completion. The results are summarized below.

DESCRIPTIVE OUTCOME SUMMARY

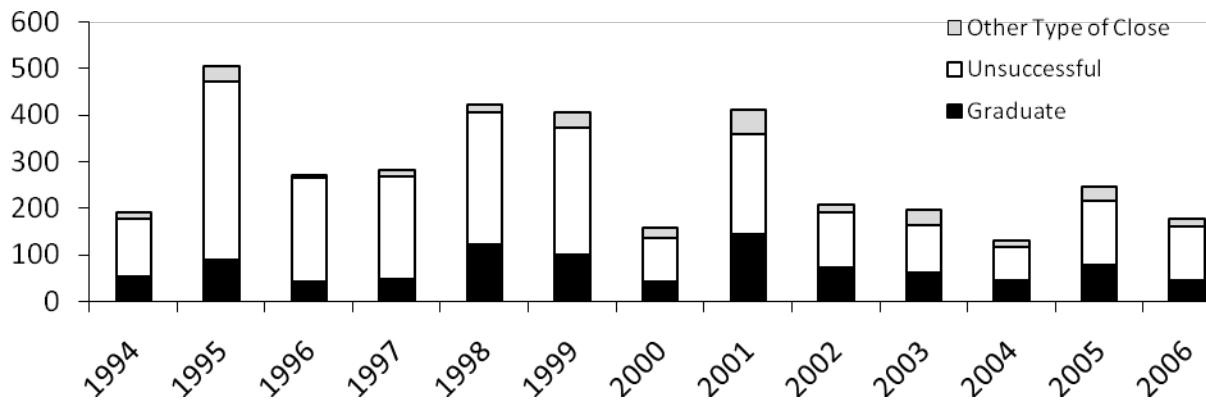
Descriptive Research Question 1: What were the characteristics of individuals who participated in DTC between 1994 and 2008?

Overall, the DTC program served approximately **4,131 individuals** with a total of 4,274 program participation episodes between program inception and August 2008, a month when the program recorded approximately **470 active participants**. New admissions to the program have ranged from 132 to 505 per year, with an average of **approximately 200 new admissions per year**.

Most participants have been men. The proportion of women admitted each year to the program has ranged from 27% to 50% but overall is about 35%. **The majority of DTC participants is African-American.** The proportion of African-American participants has ranged from 85% to 95% per year. **The average age of participants at DTC entry date has gradually but significantly increased over time**, from an average of 33 years at DTC entry among participants who

entered in 1994 to an average of 42 years at DTC entry among participants who entered in 2008. **Most participants' drug of choice is heroin** (ranging from 65% to 86% of participants in any given year), followed by cocaine, with little documented use of other substances.

Figure A. Number of New DTC Participants by Year of Entry With Closing Status



Descriptive Research Question 2: How many individuals have graduated from DTC between 1994 and 2008?

Since the program's inception, **25% of participants (955) have graduated** or satisfactorily completed the program, 65% (2,475) were unsuccessful, and 10% (359) ended their participation in other ways, such as being transferred to another jurisdiction, being deceased, or other unspecified reasons. Annual graduation rates ranged from 16% to 35%, with rates lower in 1995-1997 and better during 2001-2005.

Descriptive Research Question 3: What were the characteristics of individuals who had a repeated episode in DTC between 1994 and 2008?

Of the 4,132 individuals who participated in the DTC program through August 2008, 737 (**18%**) **had a subsequent episode** in this program, or a previous or subsequent contact with one of the other Drug Treatment Court programs in Baltimore City.

RECIDIVISM OUTCOME SUMMARY

This portion of the outcome analyses were based on a cohort of **694 DTC participants** who entered the DTC program from January 1, 2005, through July 31, 2008, and a **comparison group of 860 offenders eligible for DTC but who received traditional probation** rather than DTC. Their criminal histories were examined prior to DTC participation (or equivalent) and after their entry into the DTC program (or equivalent date) for the following 10 years.

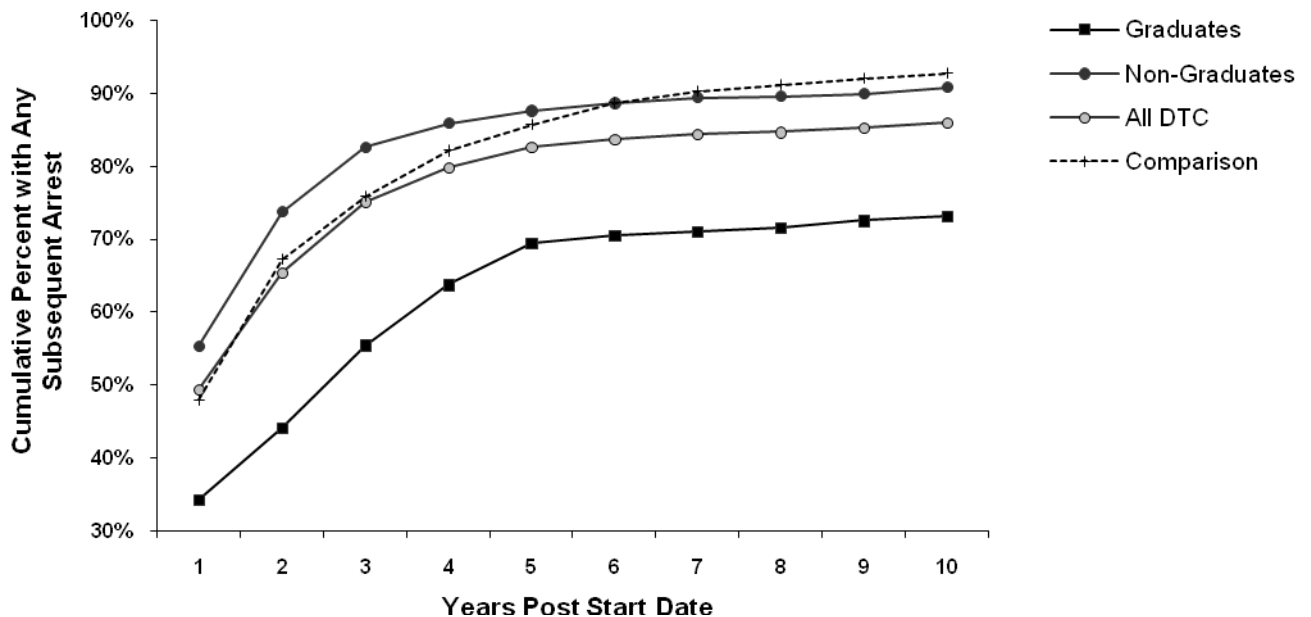
Recidivism was analyzed each year during the follow-up period and cumulatively over the full 10-year follow-up period.

In almost all analyses, DTC graduates had better outcomes (lower recidivism rates, fewer new arrests) than non-graduates and the comparison group. When looking at all DTC participations (graduates and non-graduates together) the results were less consistent.

Recidivism Research Question 1: Is DTC participation associated with lower cumulative recidivism rates over the course of a 10-year follow-up time period?

YES. As shown in Figure B, by the 2nd year after program entry, a slightly (but not significantly) smaller percent of DTC participants than the comparison group had at least one subsequent arrest. **Beginning at Year 6 on, this difference is significant, with a smaller proportion of the all DTC group re-offending compared to the comparison group.**

Figure B. Cumulative Recidivism Rates Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison



Also, in Years 2 and 3 (cumulatively), the all DTC group had significantly fewer chronic re-offenders (defined as 3 or more new arrests) than the comparison groups; the two groups were equivalent during the other follow-up years.

Recidivism Research Question 2: Is DTC participation associated with lower annual¹ recidivism rates over a 10-year follow-up period?

NO. There were no significant differences between the all DTC and comparison groups during any individual 1-year follow-up periods. A significantly smaller proportion of graduates re-offended² compared to non-graduates over each 1-year period.

¹ Annual recidivism rates show the rate of re-offending for each distinct year period, in contrast to the cumulative method showing new arrests adding up over each subsequent year.

² The follow-up periods are measured from the DTC start date (or equivalent).

Recidivism Research Question 3: Do DTC participants have reduced number of arrests after program participation compared to before participation?

YES, but not significantly more than the comparison group.

Recidivism Research Question 4: Does participation in Drug Treatment Court reduce the number of re-arrests compared to traditional court processing?

YES and NO. The all DTC group had a significantly lower average number of arrests than the comparison group during Year 2, but was statistically equivalent to the comparison group during every other 1-year period.

DTC participants overall had significantly lower average numbers of property crimes cumulatively from Year 1 through 5.

DTC participants had higher average numbers of person crimes at all time points and cumulatively at 10 years.

Recidivism Research Question 5: Does participation in Drug Treatment Court reduce levels of substance abuse as measured by drug re-arrests?

YES and NO. Although DTC participants had a statistically equivalent cumulative number of drug arrests in every follow-up period post DTC start, they had slightly (though not significantly) more cumulative drug re-arrests starting in Year 5.

DTC participants had a statistically equivalent cumulative numbers of drug arrests (compared to the comparison group) in every follow-up period post DTC start; however, **beginning at Year 5, a significantly smaller proportion of the all DTC group had any drug re-arrest compared to the comparison group.**

Recidivism Research Question 6: What individual and programmatic factors influence program success and reduced recidivism over time?

Participant Characteristics Related to Program Success (Graduation): Participants who started DTC later in the program's history were more likely to graduate. Also, graduates had significantly fewer months of program participation on average than non-graduates.³

Participant Characteristics Related to Higher Recidivism: Younger participants and individuals with more arrests prior to DTC participation were more likely to re-offend.

Of the recidivism study cohort, **28% successfully graduated** and 72% were not successful. Participants who started DTC later in the program's history and who remained for fewer months were more likely to graduate (there appears to be **an important threshold of DTC service—13 to 14 months**—after which the participants become less and less likely to graduate.

Younger participants and individuals with more arrests prior to DTC participation were more likely to re-offend. Younger participants had the highest number of cumulative new arrests as well as having a higher proportion of their age group with at least one new arrest. When controlling for the other variables, the **odds of re-offending decreased 7% with each additional year older the participant was** at DTC start.

³ Note: DTC participants who did not graduate had longer lengths of stay in the program, probably because they were having difficulty meeting program requirements.

DTC graduates had more time in the community (less time in jail or prison) and a greater duration of time before their first new arrest after their DTC start date, than the non-graduates.

The number of prior arrests (before DTC start) significantly predicted subsequent recidivism for DTC participants. Each additional prior arrest in the 2-year period before DTC led to a 48% increased odds of having a subsequent arrest in the 10-year follow-up period.

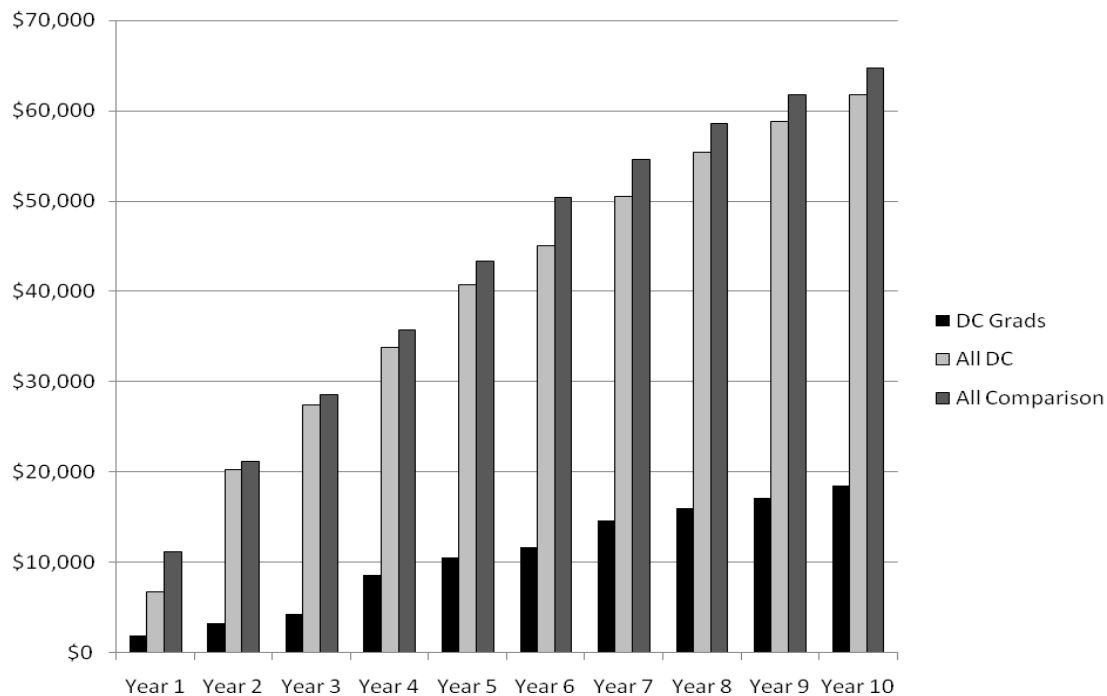
Like for graduation, the optimal length of stay—approximately 13 to 14 months—was associated with no cumulative subsequent arrests.

Overall, there were some positive impacts identified in the outcome study, and some benefits that were retained over time (such as reductions in property offenses). While the graduates and non-graduates looked demographically similar, graduates had notably better outcomes than the non-graduates and the comparison group.

Results: Cost-Benefit Summary

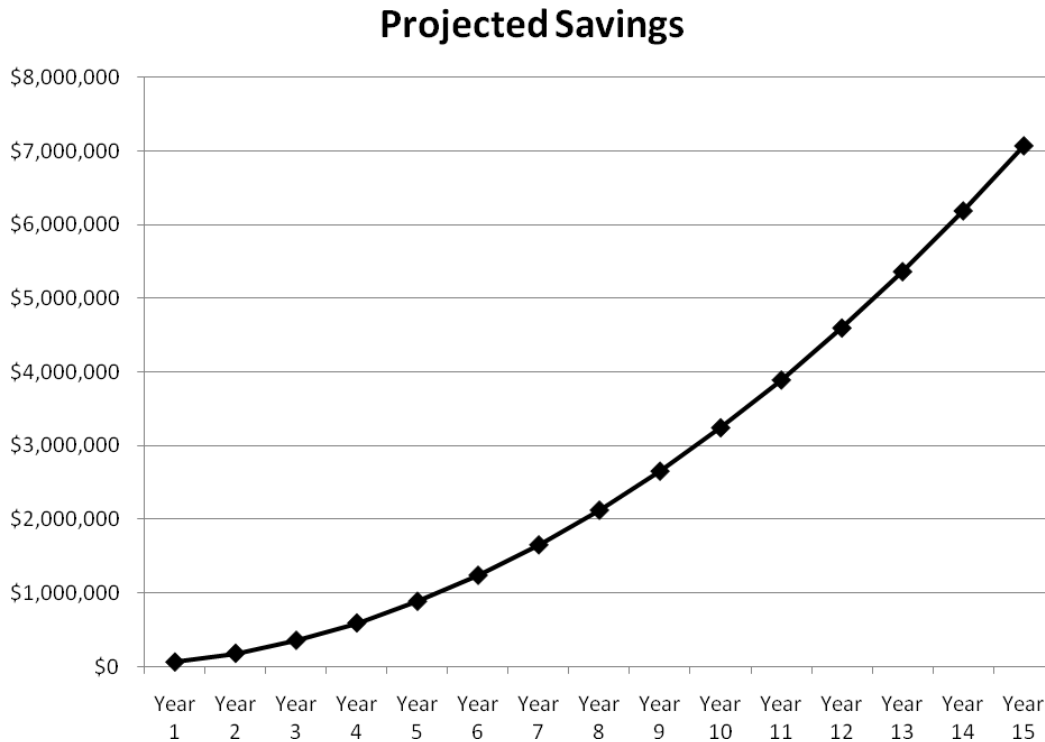
Overall, the DTC results in cost savings, especially for program graduates. Outcomes for DTC participants over 10 years cost the criminal justice system \$61,756 per participant, which is \$2,945 less than for comparison group members. The majority of the cost in outcomes for DTC participants over the 10 years from DTC entry was due to time in prison for participants who were unsuccessful at completing the program. The amount of prison experienced by non-graduates (647 days) was greater than that experienced by similar offenders who had not participated in DTC (541 days), indicating the possibility of heavier sentences for those who attempted DTC and were not successful. The program may want to examine the sentencing process for participants who are unsuccessful in the program.

Figure C. Criminal Justice Recidivism Cost Consequences per Person Over 10 Years: Graduates, All DTC, and Comparison



In spite of these prison costs, the DTC program had **criminal justice system outcome cost savings of \$2,945 per participant after 10 years**. Outcome cost savings were **\$46,207** per graduate after 10 years, so there is a clear benefit to the taxpayer in working to engage offenders and helping them successfully complete the DTC program. Overall, these results demonstrate that the DTC program uses fewer criminal justice system resources than traditional court processing.

Figure D. Projected Criminal Justice Cost Savings (one new DTC cohort per year)



Recommendations

1. Review whether heavier sentences are being used for DTC participants who are unsuccessful at completing the program compared to other similar offenders who do not participate.
2. Continue to work on increasing the drug court graduation rate.
3. Consider making the DTC judge a longer term, voluntary position. Also work to maintain consistency in team members whenever possible.
4. Work on improving program data quality, through use of the new program-specific database.
5. Set aside time to discuss the findings and recommendations in this evaluation, both to enjoy the recognition of the team's accomplishments and to determine whether any program adjustments are warranted.

Summary and Conclusions

This study describes a cohort of participants from the Baltimore City District Court Adult Drug Treatment Court program and their subsequent criminal justice involvement over a 10-year follow-up period. The results clearly indicate that graduates of the program were greatly impacted by the DTC and in almost all of the measures had significantly better outcomes and notable cost savings compared to a comparison group of individuals who were eligible for DTC but who did not participate in the program at any time. However, individuals who did not complete the DTC program successfully had only limited areas where they demonstrated more positive outcomes than the comparison group (fewer new arrests in some years, and fewer property arrests) and by other measures they appeared to have worse outcomes (more arrests for person crimes). Interestingly, demographic characteristics and prior criminal histories were essentially equivalent for the graduates and non-graduates, which means there are some other as yet unmeasured reasons why some DTC participants were successful and others were not.

Despite the unexceptional recidivism outcomes of the DTC group as a whole, there were some notable outcome differences. For example, the all DTC group (both graduates and non-graduates) had less jail and prison time, as well as less time on probation and parole, which provides another proxy of the severity of their subsequent criminal justice involvement, and which translates into an overall savings of system resources.

One factor that may have impacted the results of this study is the expansion and refinement of treatment services that occurred in Baltimore City since the program's inception. Since the program began, the City implemented a single substance abuse treatment authority (Baltimore Substance Abuse Systems), the Detention Center created a residential substance abuse treatment program (ACT-SAP), the program experienced an expansion in treatment and program capacity in the early part of this decade, and the City implemented a Mental Health Court. These resources may have made treatment more accessible to the comparison group as well as to the DTC group.

In addition to these system changes, the program has undergone several changes internally that have the potential to enhance outcomes for participants in later cohorts than those in this study. At the time this study's participants were in the program there was not a program coordinator and there were not pre-court team meetings. These program enhancements have been demonstrated to improve participant outcomes in other studies (Carey, Finigan, & Pukstas, 2008).

This study found that the cohort of individuals selected for the 10-year follow-up recidivism study were in the program during the time of its lowest graduation rates, rates that have increased significantly since that time. This finding may in part explain better outcomes of a previous study of a later cohort of this court's participants as well as indicate that there were issues occurring during the time of the study period that are reflected in this study's outcome results. The program has worked to serve a challenging population, dually diagnosed with both a mental health issue and a substance abuse problem, and is in the process of implementing several strategies to improve their opportunities for success, including hiring a social worker and increasing the number of case managers.

Overall, the DTC program has demonstrated some success in its main goals of reducing recidivism among its participants over an extended follow-up period. Future studies will illustrate if these program's maturation and enhancements will continue to improve participant outcomes in the future.

BACKGROUND

In the past 20 years, one of the strongest movements in the United States focused on reducing substance abuse among the 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 December 2007, there were 2,147 adult and juvenile drug courts active in all 50 states, the District of Columbia, Northern Mariana Islands, Puerto Rico, and Guam (NADCP, 2008).

Drug courts are designed to guide offenders identified as drug-addicted into treatment that will reduce drug dependence and improve the quality of life for them and their families. 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.

In the typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives operating outside their traditional roles. The team typically includes a drug court coordinator, substance abuse 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 blend the resources, expertise and interests of a variety of 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 (including fewer re-arrests, less time in jail and less time in prison) (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 business-as-usual (Carey & Finigan, 2004; Carey et al., 2005).

The first drug court in Maryland was the Baltimore City District Court Adult Drug Treatment Court (DTC), implemented in 1994. This program was established with the goal of identifying people with a substance abuse addiction and offering them a program with treatment rather than incarceration. In addition to the district court program which focuses on misdemeanor cases (which began its drug treatment court first), the circuit court began a program for felony cases later the same year. Participants in both courts are supervised by Maryland Department of Public Safety and Correctional Services, Division of Parole and Probation (DPSCS).

In 2001, NPC Research, under contract with the Administrative Office of the Courts of the State of Maryland, began cost studies of adult and juvenile drug courts across the state. The results presented in this report include the costs associated with the Baltimore City District Adult Drug Treatment Court (DTC) program, and the outcomes of its participants, compared to a sample of similar individuals who received traditional court processing. This study selected a cohort of DTC participants from early in the program's history and followed them for 10 years to look at the extent to which the program had an impact on them over time. Individuals with similar criminal charges as the DTC group during the same time period were identified and then a comparison group was developed that matched the DTC group on criminal history and demographic characteristics, but who had never participated in one of Baltimore City's Court programs for adult offenders.

DESCRIPTION OF THE BALTIMORE CITY DISTRICT COURT ADULT DRUG TREATMENT COURT

A process evaluation of the Baltimore City District Court Adult Drug Treatment Court (DTC) was conducted in 2007.⁴ NPC staff gathered information from multiple sources, including the program's policies and procedures, participant handbook, interviews with key agency partners, focus groups with past and current program participants, and observations of the court sessions and team meetings to assess the program's implementation of the 10 Key Components of Drug Courts, standards established by the National Association of Drug Court Professionals (1997). In comparing the program to the 10 Key Components, evaluation staff are able to provide an outside perspective about program functioning and suggestions for ways to contribute to program improvement.

For this report, a brief description of the Baltimore City District Court Adult Drug Treatment Court is provided, as well as a summary of the major changes that have occurred between implementation in 1994 and the 10-year follow-up period for a cohort of Drug Treatment Court (DTC) participants who entered the program between 1995 and 1998.

Baltimore, Maryland

The largest city in the state, Baltimore is situated in central Maryland, approximately 40 miles northeast of Washington, D.C. Baltimore has a population of 637,455 according to the 2007 Census estimate.⁵ The median age for the area is 35 years and the racial/ethnic composition is approximately 64% Black, 31% White, 2% Asian, 1% "some other race" and 1% "two or more races."⁶

According to the 2007 Census estimate, 21% of individuals and 17% of families in Baltimore City were living below poverty level, which is more than twice that of the state of Maryland, which had 8% of individuals living below poverty level during the same time period. Data released recently by the city health department indicates there is a 20-year difference in the life expectancy between some of Baltimore City's poorest and wealthiest neighborhoods (Linskey, 2008). However, according to the City of Baltimore Health Department's most recent report on intoxication deaths associated with drugs of abuse, the number of deaths decreased significantly in 2008; by 50% compared to the third quarter of 2007 (City of Baltimore Health Department, 2009). Baltimore's Commissioner of Health noted that rates this low had not been reported in 13 years. While it is not clear what is causing this decline, the health department speculates that various efforts, including increased access to treatment and coordination with the criminal justice system, may be having a positive impact on the number of drug overdose cases in Baltimore.

Drug Treatment Court Implementation & Development

The Baltimore City District Court Adult Drug Treatment Court (DTC) was implemented in 1994, with the goal of identifying people with a substance abuse addiction and offering them a program with treatment rather than incarceration. While the district court focuses on misdemeanor cases,

⁴ The complete process evaluation report can be downloaded from the NPC Research Web site at: www.npcresearch.com/Files/Baltimore_City_Adult_District_Process_Report_0907.pdf

⁵ Demographic data were retrieved from the U.S. Census Bureau at www.census.gov in January 2009.

⁶ The total of these percents do not equal to 100% due to rounding.

a similar program in the circuit court focuses on felony cases. Participants in both courts are supervised by Maryland Department of Public Safety and Correctional Services, Division of Parole and Probation (DPSCS). In addition to Drug Treatment Court, a similar program offering diversion to circuit court drug offenders, called the Felony Diversion Initiative, began in 2003.

DRUG TREATMENT COURT TEAM

The DTC team includes a judge, program coordinator, assistant state's attorney, assistant public defender, parole and probation agents, and treatment providers from the Baltimore Substance Abuse Systems. The main goals of the DTC are to:

- Provide pre-trial, drug-dependent detainees with close criminal justice supervision;
- Provide the judiciary with a cost-effective sentencing option; provide the criminal justice system with a fully integrated and comprehensive treatment program;
- Reduce long-term criminal justice costs by reducing drug-motivated street crime; and
- Facilitate the academic, vocational, and pro-social skill development of criminal defendants.

The DTC program capacity has ranged from 300 to 900 over the years, depending on the resources available to support treatment. As of August 2008, the DTC population of active participants numbered 484. Case managers are expected to carry a maximum caseload of 50 participants each.

DTC hearings are held 4 times weekly with a staff meeting held prior to the court session. At pre-court meetings, parole and probation agents provide a report on each participant who will be appearing for the upcoming session. Discussions generally focus on participants who are not doing well and what should be done to address the problems these individuals are experiencing. In addition to the team meetings, working group meetings are held monthly to discuss policy issues, treatment provider group meetings are held quarterly to discuss any issues related to referrals or participant mental health concerns, and advisory committee meetings are convened monthly to discuss overall policies for both the circuit and district Drug Treatment Court programs.

In this program, the administrative judge for the district court assigns the drug treatment court judge by rotation from a pool of district court judges. The length of each rotation is 12 to 18 months. The Assistant Public Defender and the Assistant State's Attorney advise new judges as they rotate in. In NPC's 2007 process evaluation, a respondent noted that when judges return into the system, they often handle their cases differently as a result of the drug court experience—often their sentences are tailored to promote drug court, and they also make more referrals to the DTC program.

ELIGIBILITY & DRUG TREATMENT COURT ENTRY

Criminal charges that qualify a participant for Drug Treatment Court at the district court level primarily include possession, prostitution, and theft. Participants entering the DTC must not have any convictions within the last 5 years for crimes of violence (as defined in the Maryland code), drug king pin (as defined in the Maryland code), assault or battery, or possession or use of a firearm. They cannot have past convictions for child abuse, rape, sex offenses, or homicides. There can be no firearm involvement with regard to the offense that brought them to Drug Treatment Court. They must be 18 years of age or older and a resident of Baltimore City, with residents of Baltimore County considered on a case-by-case basis.

Prospective participants must have a serious or chronic substance abuse problem, with the emphasis placed on taking people with heroin or cocaine use. They must not have any serious psychiatric disorders assessed prior to DTC entry. If a psychiatric disorder is identified after entry, the individual is referred to the appropriate services and, depending on the severity of the mental health issue, may be transferred to Mental Health Court. Prospective participants must not be on active parole or mandatory supervision release and they must be assessed by the Division of Parole and Probation (DPP) as suitable for, and amenable to, treatment.

DRUG TREATMENT COURT STEP PROGRAM MODEL

The DTC program moves participants through a Substance Abuse Treatment and Education Program (STEP), combining treatment and court requirements that begin with intensive services and supervision and decrease in intensity as the participant progresses through each step. The program includes a range of substance abuse treatment modalities, depending on the participants' needs; frequent drug testing; referrals for employment support; and assistance locating safe, drug-free housing.

Incentives and Sanctions

DTC participants are rewarded for meeting program requirements, such as attending treatment and parole and probation meetings as scheduled, testing negative for drugs, and showing up on time for court appearances.

Individuals who are doing well in the DTC program can receive a range of incentives. Individuals are always encouraged by applause, they may also receive a small gift such as a pen or coin purse, or they may receive a reduction in the number of required urinalysis tests (UAs) as a reward. Pens and certificates are awarded to participants when they have completed their first 90 days in DTC and have remained drug-free. Participants who are doing well are usually brought up first during DTC sessions so that they can get out of court sooner, which serves as another type of reward.

Sanctions are given to DTC participants for non-compliant program performance. Non-compliant behaviors include having positive drug tests, tampering with drug tests, missing treatment sessions, missing appointments with parole and probation, and missing UA appointments. Sanctions include being lectured or reprimanded by the judge, being asked to sit on the witness stand for a period of time designated by the judge for one or more DTC sessions, writing an essay, or receiving jail detention.

Graduation and Unsuccessful Completions

In order to graduate from DTC, participants must 1) be employed, 2) have completed 20 hours of community service, 3) have participated in the program for a minimum of 12 months, and 4) have at least 9 months of clean UAs. In the DTC program, the motion to terminate probation is made and granted at a later date following graduation. At that time, graduates receive a Probation Before Judgment (PBJ) finding, which removes the conviction from their records.

Participants can be discharged from the program for absconding for a considerable period of time, receiving new felony charges, or exhibiting chronic non-compliance. Once discharged, their record reflects a probation violation. A sentence, which may or may not be their original sentence, is imposed by the sitting judge and they are sent to jail.

Changes in the Program Over Time

A number of notable changes have taken place within Baltimore City's treatment and criminal justice systems and the DTC program, since the program began in 1994:

- In 1995, Baltimore Substance Abuse Systems, Inc. (BSAS) became the single substance abuse authority for the city, administering public funds, monitoring prevention and treatment programs, collecting client data, and collaborating with other agencies to improve services. After the transfer of treatment oversight from the Baltimore City Health Department to BSAS, Baltimore began to increase treatment funding with the goal of providing ready access to treatment for all who request it. The signature program of this effort—the Mayor's Initiative—was launched in Fiscal Year 1998 and created new treatment slots with city revenues drawn from the Health Department budget and with federal grant dollars allocated to treatment by the Baltimore City Department of Housing and Community Development and the Housing Authority of Baltimore.
- In 1996, the Baltimore City Detention Center began offering supplemental addiction services, called ACT-SAP (Addicts Changing Together Substance Abuse Program), to detainees. This program, located in the jail, includes acupuncture, detoxification, counseling, and education.
- The type of assessment to help determine DTC eligibility and decision-making has changed over time. From 1994 to 2003, prospective DTC participants were given the Psychopathology Checklist-Revised (PCL-R)⁷ [Hare, 2003], along with the Addiction Severity Index (ASI) [McLellan, Cacciola, Alterman, Rikoon, & Carise, 2006]. However, when the licensed psychologist working for the DTC program left in 2003, he was replaced by an unlicensed psychologist who began to use the Level of Supervision Inventory-Revised (LSI-R)⁸ [Lowenkamp, Holsinger, Brusman-Lovins, & Latessa, 2004] instead of the PCL-R.
- In 2001, the Baltimore Drug Treatment Court programs (District and Circuit) expanded their capacity from 600 to 900 participants, through \$900,000 in treatment funding obtained from the state.
- In 2002, Baltimore City implemented a mental health court. Individuals from the DTC who are identified after they begin program participation as having a serious mental health issue are sometimes transferred to the mental health court for service.
- For a year starting July 2004, DTC participants were referred to a 12-week computer training program as part of a federally funded research project through John Hopkins Bayview Medical Center.
- A week-long electrical skills program, called JumpStart, was also offered in 2005, for a total of 4 weeks in June, July, and September.

⁷ The PCL-R is designed to assess a person's tendency to take charge and manipulate situations and requires a licensed psychologist to administer. A result of high scores on this assessment generally indicates that a person will not do well in group treatment settings, and therefore are considered a less-than-ideal candidate for drug court.

⁸ The LSI-R assesses for risks and individual needs for services. The LSI-R does not require a licensed psychologist for test administration; however, the LSI-R does still require sufficient training experience in implementation and interpretation.

- At the request of Judge Hueston in 2006, the DTC began holding pre-court meetings.
- Prior to 2006, a single DTC coordinator, who was employed by the Baltimore City Police Department under a 3½ year Byrne grant, served both the district and circuit DTC programs. After July 2006, the DTC coordinator was employed by the Baltimore City Circuit Court. Until 2007, one DTC coordinator was responsible for coordinating both the circuit and district DTC programs for Baltimore City. Currently, each program has its own coordinator.
- Through a Bureau of Justice Assistance grant, the DTC program began a partnership with the Goodwill Industries of the Chesapeake, Inc.'s Jobs Program in 2007.
- In Fiscal Year 2007, Baltimore City lost approximately 600 treatment slots as a result of BSAS allowing block grant funded programs to reduce their treatment capacity to better meet rising personnel and operating costs.

OUTCOME EVALUATION

The purpose of an outcome evaluation is to determine whether the program has achieved positive results for its participants. In the case of drug court programs, one of the policy questions of interest is whether drug courts reduce recidivism. Are program participants avoiding the criminal justice system? Or more specifically, how often are participants being re-arrested and spending time on probation and in jail?

In this evaluation, both short and long-term outcomes were assessed. This section of the evaluation examined the program's graduation rates over a 10-year follow-up period, whether Drug Treatment Court participants were re-arrested less often than similar individuals who did not participate in DTC, whether DTC participants had fewer days in jail or prison, whether DTC participants reduced their drug use, and what participant characteristics predict whether or not they successfully completed the program.

This section of the report includes a description of the research strategy and methods used for studying participant outcomes, followed by a presentation of the outcome results. The first part of the outcomes section describes the characteristics of participants in the DTC program since inception, whether and how these characteristics have changed over time, and program acceptance rates. This section also describes graduation rates since inception and compares participant characteristics among graduates and non-graduates. Finally, this section describes the characteristics of participants who entered the DTC more than once.

The second part of the outcome evaluation section examines whether DTC participants reduced their drug use and describes the participant characteristics that predict whether or not they successfully completed the program. This second part also compares a cohort of DTC participants who entered the program between 1995 and 1998 to a group of individuals who had similar characteristics to a DTC cohort but did not participate in DTC, to determine whether DTC participants were re-arrested and/or incarcerated less often than similar individuals who did not participate in DTC.

The 1995 to 1998 cohort was selected so that a long-term follow-up period could be included. Because this DTC program is one of the earliest in the country, it is very unusual to have the opportunity to look at this many years of program history. The study did not include participants from the first year of program operation to allow for the program to work out any implementation details it needed to during its first year. While some of the participants in this cohort actually had a longer available follow-up period, the numbers were small, so the research team decided to use the same follow-up period for all members of this cohort to increase statistical power. In addition, this decision allowed us to utilize one comparison group for the full DTC group.

Outcome Evaluation Methods

RESEARCH STRATEGY

The primary criminal justice system outcome of interest to drug treatment court programs is the recidivism of DTC participants after beginning, or completing, the programs. Re-arrests are defined in this study as any criminal arrest (this study does not include non-criminal events, such as traffic citations). NPC Research staff identified a sample of participants who entered the DTC between January 1995 and June 1998. This time frame allowed for the availability of at least 10 years of recidivism data post-program entry for all sample participants.

An additional indicator of the success of a drug treatment court program is the rate of program participant graduation. Therefore, the graduation rates were calculated for DTC and compared to the national average for drug court programs, which is around 50% (Belenko, 2001).

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

DESCRIPTIVE STUDY QUESTIONS

The descriptive outcome evaluation is designed to address the following study questions:

1. What were the characteristics of individuals who participated in DTC between 1994 and 2008?
2. What were the characteristics of individuals who graduated from DTC between 1994 and 2008?
3. What were the characteristics of individuals who had a repeated episode in DTC between 1994 and 2008?

RECIDIVISM STUDY QUESTIONS

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

Does participation in Drug Treatment Court reduce the number of re-arrests for those individuals compared to traditional court processing? Specifically:

1. Is DTC participation associated with lower cumulative recidivism rates over the course of a 10-year follow-up time period?
2. Is DTC participation associated with lower annual⁹ recidivism rates over a 10-year follow-up period?
3. Do DTC participants have reduced number of arrests after program participation compared to before participation?
4. Does participation in Drug Treatment Court reduce the number of re-arrests compared to traditional court processing?
5. Does participation in Drug Treatment Court reduce levels of substance abuse as measured by drug re-arrests?
6. What individual and programmatic factors influence program success and reduced recidivism over time?

DATA COLLECTION AND SOURCES

NPC staff members adapted procedures developed in previous drug court evaluation projects for data collection, management, and analysis of the DTC data. These data included probation and parole records, days spent in prison and jail, criminal justice histories in the form of arrest records, court case information and program data from multiple sources. The initial data sets contained records numbering in the millions on thousands of participants. Once all data were ga-

⁹ Annual recidivism rates show the rate of re-offending for each distinct year period, in contrast to the cumulative method showing new arrests adding up over each subsequent year.

thered on the study participants, 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 (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 Table 1.

Table 1. DTC Evaluation Data Sources

Database	Source	Example of Variables
District Court State Attorney's DTC Unit Access database (electronic data)	Baltimore City State Attorney's Office	Acceptance status, time spent in DTC, discharge status.
District Court DTC Judge's notes (electronic data)	Baltimore City District Adult Drug Treatment Court	Acceptance status, time spent in DTC, discharge status.
Drug treatment court participant notes (historical binders)	Baltimore City District Adult Drug Treatment Court	Drug of choice, time spent in DTC, discharge status.
Offender Based State Correctional Information System (OBSCIS I & II) [electronic data]	Maryland Department of Public Safety and Correctional Services (DPSCS)	Demographics, DTC and probation program data, prison data.
Criminal Justice Information System (CJIS) [electronic data]	Maryland Department of Public Safety and Correctional Services (DPSCS)	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) for subsequent court cases
Maryland Judiciary Case Search (online electronic data)	Maryland Judiciary	DTC information for Circuit Court cases, subsequent court cases.

Baltimore City State's Attorney's Access Database

Data were provided by the Office of The State's Attorney, Drug Court Unit in the Borgerding District Court House that included program acceptance status, time spent in DTC, and discharge status.

Baltimore City Drug Treatment Court—District Court Judge's Notes

Judge's notes in both paper and electronic form were mined for discharge status and drug of choice information.

Maryland Department of Public Safety and Correctional Services

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

Maryland Judicial Information System

The Maryland Administrative Office of the Courts provided data from their JIS system on court cases heard in the Baltimore City District Court System.

Maryland Judiciary Case Search

The Maryland Judiciary Case Search was used to find case information for DTC participants who had a subsequent charge through the circuit court.

SAMPLE SELECTION

For the descriptive outcomes, the entire population of district DTC participants entering the program since inception (1994) through August 2008 was selected. For the recidivism outcomes, a cohort of district DTC participants who entered the program from January 1, 1995, to June 30, 1998, was selected.

All participant information was obtained from a database kept by the State Attorney's office, which includes individuals referred to and accepted into the DTC program. The evaluation team obtained additional case information from the DTC Judge's database of court hearing notes on accepted cases.

Administrative data gathered for this study from both of these sources were originally (15 years ago) collected for program monitoring and functions, rather than for research or evaluation purposes. These data could not be considered reliable, but provided the only source of participant information, program start and end dates, and completion status from that time period. As data on treatment services received were not available and to correct for issues of missing or inaccurate program end dates, a sample of DTC participants who appear to have had time to receive adequate services or a reasonable "dosage" of the program were selected. The minimum and maximum numbers of months of service were selected to represent one standard deviation ($sd = 7$) below the mean number of months of service for all program graduates during the study time period (1/1/1995-6/30/1998; mean = 18 months) and two standard deviations above the mean number of months of service. The sample of DTC participants from the study time period who received at least 11 months of service but no more than 32 months were selected ($n = 694$) regardless of their completion status (graduated or completed unsuccessfully) and are used for all

of the outcomes and cost analyses. Five hundred and fourteen participants were excluded for having less than 11 or more than 32 months of service.

Sixty-five DTC participants were excluded from the final sample because they did not have any match in the arrest data including the DTC-eligible arrests, which was necessary for the calculation of recidivism periods. Another eight DTC participants were excluded from the final sample because they were deceased during their DTC participation. It should be noted that vital statistics data were not obtained on any of the remaining DTC or comparison group members and therefore this study does not control for other individuals in both groups who may have passed away during the follow-up time period.

This report examines outcomes over 10 years for program participants and does not attempt to examine the relationship between services received (other than length of stay in the program and completion status) and recidivism or substance use outcomes. The DTC program does not collect services data on participants currently, and did not at the time of this study. As a result no service data from this time period were unavailable. The local probation office entered data into a state-wide data system during this time period but these data were unavailable for this study. State-wide treatment data were also not recorded during this time period.

For the outcomes analyses, the refined cohort of DTC graduates and non-graduates who received an adequate amount of service from the program was matched to a comparison group.

Comparison Group

A comparison group was identified from a list of individuals arrested on a DTC-eligible charge who had DTC-eligible criminal histories. The DTC participants and comparison individuals were matched on age, gender, race/ethnicity, indication of prior drug use, type of charge for the eligible arrest (drug or other) within the study window and criminal history, including number of prior arrests and prior drug arrests. DTC-eligible charges include drug charges, prostitution, theft, and assault. The comparison group excluded any offenders who had been “rejected” by the state’s attorney’s office and any individuals who participated in either the DTC or local circuit court DTC programs. Any differences in the data used for matching between the DTC and comparison group were controlled for in the subsequent outcome analyses.

Both groups were examined through existing administrative databases for a period up to 10 years from the date of DTC entry. For comparison group members, an equivalent “start date” was calculated by adding 67 days (the median number of days from DTC-eligible case arrest to DTC entry that had been calculated from the DTC participants) to the eligible arrest date. The evaluation team utilized the data sources described in Table 1, to determine whether there was a difference in re-arrests, incarceration and other outcomes of interest between the DTC and comparison groups.

All individuals who were studied for the outcomes report had 10 years of follow-up, which included 694 DTC participants (193 graduates and 501 non-graduates) and 860 comparison individuals.

DATA ANALYSES

Once all data were gathered on the study participants, the data were compiled, cleaned and moved into SPSS 15.0 for statistical analysis. The evaluation team is trained in a variety of univariate and multivariate statistical analyses using SPSS. Significant findings are at a level of $p < .05$ unless otherwise indicated.

Descriptive Study Questions

The analyses used to answer specific questions are described below.

What were the characteristics of individuals who participated in DTC between 1994 and 2008?

Descriptive statistics were performed to identify the number of participants who were screened and entered the program by year as well as their characteristics, including gender, race/ethnicity, age at DTC entry, drug of choice, and length of stay in the program. Next, in order to compare changes over time, crosstabs were performed to identify any significant differences between years on gender, race/ethnicity, and drug of choice. Independent samples t-tests were performed to identify any significant differences between program years on participants' age at DTC entry and length of stay in the program.

What were the characteristics of individuals who graduated from DTC between 1994 and 2008?

Descriptive statistics were performed to identify the number of participants who graduated from the program by year compared to the total number of participants who started and left the program during the year. In order to compare changes over time, crosstabs were performed to identify any significant differences between years on gender, race/ethnicity, and drug of choice. Independent samples t-tests were performed to identify any significant differences between years on age at DTC entry and length of stay in the program.

What were the characteristics of individuals who had a repeated episode in DTC between 1994 and 2008?

Descriptive statistics were performed to identify the number of participants who had multiple screens and/or entries into the DTC program. Descriptive statistics were also used to identify the characteristics of these cases, including gender, race/ethnicity, age at DTC entry, drug of choice, length of stay in the program for each episode, and program completion outcome for each episode.

These cases were then examined for any patterns in their subsequent participation in the District Court DTC, Circuit Court DTC, and Circuit Court Felony Diversion Initiative (FDI) programs as well as outcomes from any subsequent episodes.

Recidivism Study Questions

Recidivism is defined as statewide arrests, along with related local District and Circuit Court cases, post-sentencing jail time, prison time, probation episodes, and parole episodes.

The analyses used to answer specific questions are described below.

1. Does participation in Drug Treatment Court reduce the number of re-arrests for those individuals compared to traditional court processing?

Univariate analysis of variance was performed to compare the mean number of re-arrests for all DTC participants with the comparison group. The means reported are adjusted based on gender, age at index case arrest, race/ethnicity, and number of prior arrests (both total and drug ar-

rests). The non-adjusted means for graduates and non-graduates 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 DTC, may have discharged from the program and are therefore not equivalent to DTC graduates.

Crosstabs were run to examine differences in recidivism rates between DTC and the comparison groups. Chi-square analyses were used to identify any significant differences in re-arrest rates between DTC and comparison group participants.

2. Does participation in Drug Treatment Court reduce levels of substance abuse?

The 10-year means for re-arrests with drug charges were calculated for all DTC participants and the comparison group. Univariate analysis of variance was performed to compare the means of all DTC participants with the comparison group. The reported means were adjusted based on gender, age at index case arrest, race/ethnicity, time at risk during the time period of interest and number of prior arrests (both total and drug arrests). As explained above, the actual mean of graduates is included for reference but should not be compared directly with the comparison group.

3. What participant characteristics predict program success and decreased recidivism?

Graduates and non-graduates were compared on the basis of demographic characteristics and number of arrests during the 2 years prior to DTC entry to determine whether any significant patterns predicting program graduation or recidivism could be found. In order to best determine which demographic characteristics were related to successful DTC completion, chi-square and independent samples t-tests were performed to identify which factors were significantly associated with program success. Chi-square and independent samples t-test were also performed to identify which factors were significantly associated with recidivism. A logistic regression model was used, including all variables in the model to determine if any factors were significantly related to being re-arrested above and beyond the other factors.

Outcome Results: Descriptive Study

DESCRIPTIVE RESEARCH QUESTION 1: PARTICIPATION

What were the characteristics of individuals who participated in DTC between 1994 and 2008?

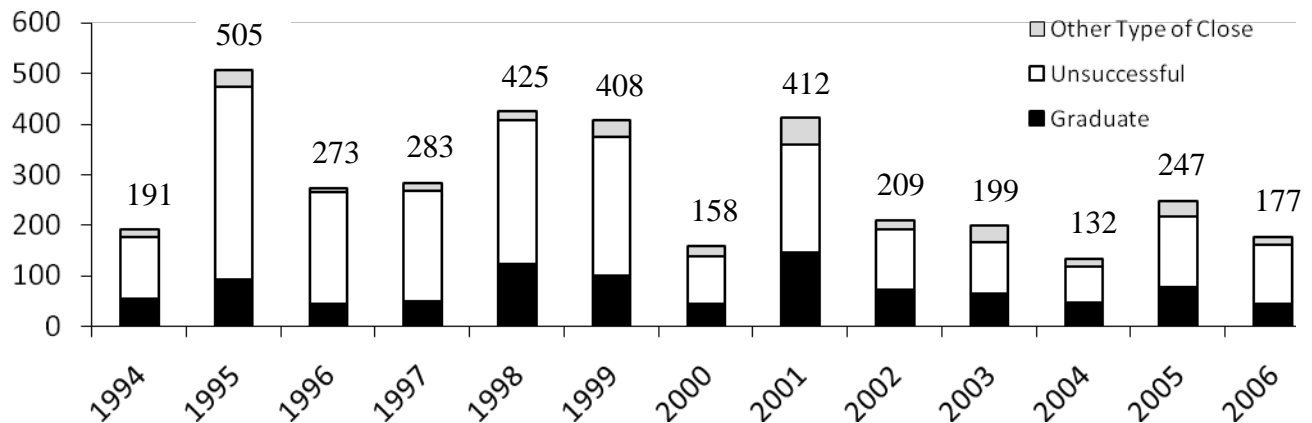
Overall, the DTC program has served approximately **4,131 individuals** with a total of 4,274 program participation episodes between program inception in 1994 through August 2008.

The data on individuals who were screened and not accepted are incomplete; however, there are program records for 4,084 people with a total of 4,296 screenings who were found to be ineligible for the program.¹⁰ Nearly 200 individuals were screened and not accepted more than once, while 11 people were screened and not accepted 3 times. In August 2008, data showed approximately 470 active participants.

Admissions to the program fell in 2000 to fewer than 200 new participants and then returned to over 400 new participants in 2001 (Figure 1). Starting in 2002, new admissions returned more consistently to a level of approximately 200 new admissions per year.

¹⁰ Reasons for why the individuals were not accepted into the program were not available.

Figure 1. Number of New DTC Participants by Year of Entry with Closing Status



DESCRIPTIVE RESEARCH QUESTION 2: PROGRAM COMPLETION

How many individuals have graduated from DTC between 1994 and 2008?

Participants' outcome status is represented by one of three categories: (1) *graduates* include participants who graduated or satisfactorily completed the program; (2) *unsuccessful participants* failed to appear or were closed unsatisfactorily; or (3) *others* include transfers to other jurisdictions, participants whose probation term ended, voluntary withdrawals from the program, or individuals who died prior to program completion.

Since the program's inception, **25% of participants (n = 955) have graduated or satisfactorily completed the program**, 65% (n = 2,475) were unsuccessful, and 10% (n = 359) ended their participation in other ways, e.g., their jurisdiction ended, they were transferred, they voluntarily withdrew, or they were deceased. Of participants who ended their participation in these other ways, 185 had their probation term end, 88 voluntarily withdrew, 2 transferred to another program or jurisdiction, 11 were deceased, and 73 had "other" designated for their closing status.

Figure 1 illustrates the pattern of closing types over time, which includes the proportion of participants who graduated, completed unsuccessfully, and had other closing types. The number of graduates fluctuates year to year and was highest among those who started the program in 2001. Graduation rates for this program (see Table 2) ranged from a low of 16% for the individuals who began the program in 1996 to a high of 35% in 2001, 2002, and 2004. Interestingly, the graduation rates for this program were at their lowest, 16-18%, during 1995 to 1997, the period of this study's outcome cohort.

Several local initiatives increased treatment capacity in Baltimore City in 1998 and 2001, which may be related to the increased graduation rates of 32-35% for individuals seen in 2001 through 2005.

Patterns of gender, race/ethnicity, and age of program participants vary across years since the program's inception. Table 2 describes the characteristics of DTC participants by year of entry. Although the overall proportion of participants who were women in DTC since 1994 is about one third (35%) of DTC participants, the percentage of women has ranged from a high of 50% of all participants who entered the program in 1994, to a low of 27% of all participants who entered the program in 2006. A significantly larger percentage of women entered the program in 1994

and 2002, and a significantly smaller percentage of women entered the program in 1997 and 2006. However, the vast majority of DTC participants have been men.

The majority of DTC participants are also African-American, ranging from a high of 95% of all participants who entered the program in 2001 to a low of 85% of all participants who entered the program in 2002. The program admitted significantly more African-American individuals in 2001, but this group still made up the majority of DTC participants in all years.

Table 2. DTC Program Participant Gender, Race,¹¹ and Age by Year of Entry

	Female	Male	African-American	Caucasian	Mean Age at Entry	Graduation Rate
1994	50%*	50%	91%	9%	33**	28%
1995	38%	62%	90%	10%	32	18%
1996	30%	70%	90%	10%	35	16%
1997	28%	72%*	91%	9%	34	17%
1998	38%	62%	88%	12%	34	29%
1999	33%	67%	89%	12%	35	25%
2000	33%	67%	90%	10%	36	28%
2001	37%	63%	95%*	5%	37	35%
2002	43%*	57%	85%	15%*	37	35%
2003	34%	66%	86%	14%	38	32%
2004	36%	64%	86%	14%	38	35%
2005	31%	69%	87%	13%	40	32%
2006	27%	73%*	88%	12%	41	25%
2007	31%	69%	89%	11%	42	Not available***
2008	38%	62%	90%	11%	42**	Not available***

* Significantly higher proportion of characteristic within group and between years.

** These two numbers, 33 and 42, were significantly different; that is, participants at the beginning of the program were, on average, significantly younger than the participants were last year.

*** A majority of participants who began the program in these years do not yet have ending status recorded, so the graduation rates cannot currently be calculated accurately.

The average age of participants at DTC entry has gradually but significantly increased over time, from an average of 33 years among participants who entered in 1994 to an average of 42 years among participants who entered in 2008.

¹¹ Due to the small numbers of DTC participants who were identified American Indian or Native American (n = 3), they were omitted from these analyses. Neither the local program data nor the state criminal justice data include complete self-reported data for race and ethnicity. These numbers may include those who identify as Latino or Hispanic.

Participants' drugs of choice were available in program administrative data from 1994 to 2004, for 50% of those individuals who entered DTC during that time period (1,639 participants).¹² Table 3 depicts the primary drug of choice over time for program participants.

Table 3. DTC Program Participant Primary Drug of Choice¹³

	Heroin	Cocaine	Other¹⁴
1994	65%*	33%*	1%
1995	69%*	30%*	2%
1996	81%	19%	0%
1997	84%	16%	0%
1998	76%	22%	2%
1999	85%	14%	1%
2000	80%	20%	0%
2001	86%*	14%*	0%
2002	83%	17%	1%
2003	84%	14%	1%
2004	84%	14%	3%

* Significantly different proportion of characteristic within group and between years.

The majority of DTC participants had an indication that heroin was their primary drug of choice across all years of program operation. Earlier in the DTC program however, a significantly larger percentage of DTC participants had an indication that cocaine was the primary drug of choice compared to more recently, ranging from a high of 33% of participants on cocaine who entered the program in 1994, to a low of 14% of participants who entered the program in 2004. Heroin and cocaine together represent the drugs of choice of the vast majority of participants, with other substances ranging from 0 to 3% of participants. These findings support the goal of DTC of serving offenders with a serious or chronic substance abuse problem, with an emphasis on heroin and cocaine users.

¹² Drug of choice data were collected from anecdotal records and notes from the DTC Judges. Substance use assessment data were not available.

¹³ Not all rows equal 100% due to rounding.

¹⁴ Other drugs include alcohol, prescription drugs, ecstasy, marijuana, and "other."

DESCRIPTIVE RESEARCH QUESTION 3: REPEATED EPISODES

What were the characteristics of individuals who had a repeated episode in DTC between 1994 and 2008?

- Of the 4,132 individuals who participated in the DTC program through August 2008, 737 (18%) had a repeat episode in this program, or a previous or subsequent contact with one of the other Drug Treatment Court programs in Baltimore City. Contact is defined as a screening for eligibility or an actual admission to one of the programs. Ninety-eight individuals had three contacts with Baltimore City Drug Treatment Programs, 15 had four contacts, and 2 had five contacts. These “repeaters” are 67% male, 94% African-American, had an average age of 34 with a range of 18 to 56 at the start of their first episode, and almost exclusively have heroin and cocaine listed as their drug of choice. A small number of individuals had alcohol or marijuana as their second drug of choice.
- 276 individuals (7%) were screened by the DTC program and found to be ineligible and then were later accepted into the DTC program at a second screening that resulted from a new charge or probation violation. Of these individuals, 79 (29% of the 276) went on to graduate from the program.
- 157 DTC participants (4%) had more than one instance of participation in the DTC program with 5 people participating in the program 3 times. Ten participants had graduated the first time and then graduated again and 5 had graduated and did not graduate in subsequent episodes. For those who did not graduate during their first episode, 16 did graduate in a subsequent episode. These individuals are 43% female, are more often heroin and cocaine users, and have an average age of 34 at the start of their first episode. The average time between program completion from the first episode of DTC participation and the start of a second episode is 5 years.

What were the characteristics of DTC participants who had a subsequent Drug Treatment Court episode in another Baltimore City drug offender program?

- 200 DTC participants (almost 5%) also had an episode of program participation in the Circuit Court Drug Treatment Court program. Twenty-two DTC participants (0.5%) have participated in the Circuit Court’s Felony Diversion Initiative program.
- 22 DTC graduates had a subsequent episode of program participation in either FDI or the Circuit Court Drug Treatment Court program. Seven graduates had previously participated in the Circuit Drug Treatment Court program or FDI program. About one-third of these DTC program repeaters were women and almost all were African-American.
- The average length of time between program participation episodes for DTC participants with a subsequent episode of program participation in either DTC, the Circuit Court Drug Treatment Court program or FDI, is about 4½ years after they completed the first episode of service.

Outcome Results: Recidivism Study

Differences described in this section are statistically significant at $p < .05$ unless otherwise stated. In this section, the sample sizes used are 694 in the DTC group and 860 in the comparison group. Table 4 provides the demographics for the study sample of DTC participants and the comparison group. Independent samples t-tests and chi-square analyses showed no significant differences between the two groups on the matching characteristics described in the table.

Table 4. Drug Treatment Court Participant and Comparison Group Characteristics

	All DTC Participants (n = 694)	Comparison Group (n = 860)
Gender		
Male	68%	69%
Female	32%	31%
Ethnicity		
Caucasian	8%	7%
African-American	92%	93%
Age at Drug Treatment Court start (or equivalent)		
Mean	33 years	33 years
Median	32 years	32 years
Range	18 – 59 years	18 – 59 years
Drug of Choice ¹⁵		
Heroin	76%	Unavailable
Cocaine	24%	
Other	1%	
Type of charge in Drug Treatment Court-eligible arrest		
Drug charge	73%	74%
Property charge	25%	28%
Person charge	6%	6%
Other charges*	18%	5%
Mean number of arrests in the 2 years prior to program entry (or equivalent)	2.7 (range 1 – 14)	2.8 (range 1 – 12)
Mean number of <u>drug</u> arrests in the 2 years prior to program entry (or equivalent)	1.36 (range 0 – 8)	1.45 (range 0 – 5)

¹⁵ Information on drug of choice for the Drug Treatment Court group was available for about half of the participants in our outcome study sample and was obtained from the DTC Judge's notes. This information was not available for the comparison group.

RECIDIVISM RESEARCH QUESTION 1: CUMULATIVE RECIDIVISM RATES OVER 10 YEARS

Is DTC participation associated with lower cumulative recidivism rates over the course of a 10-year follow-up time period?

YES. As shown in Figure 2, by the second year after program entry, a slightly (but not significantly) smaller percent of DTC participants than the comparison group had at least one subsequent arrest. **Beginning at Year 6 on, this difference is significant, with a smaller proportion of the all DTC group re-offending compared to the comparison group.**

Figure 2. Cumulative Recidivism Rates Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison

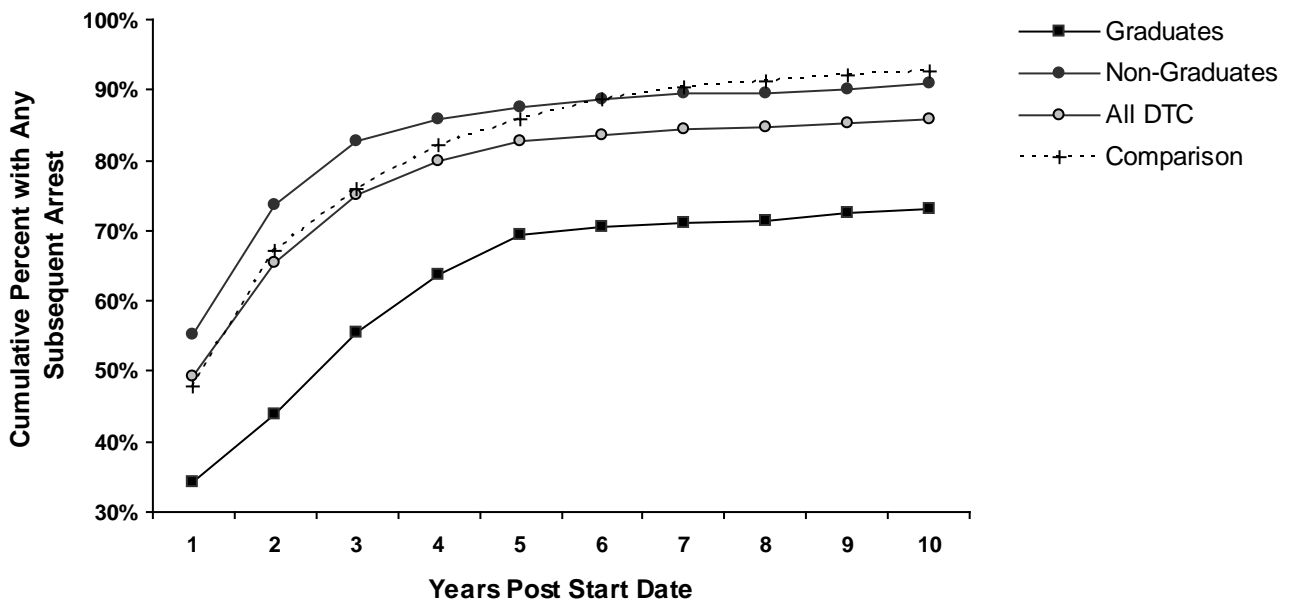
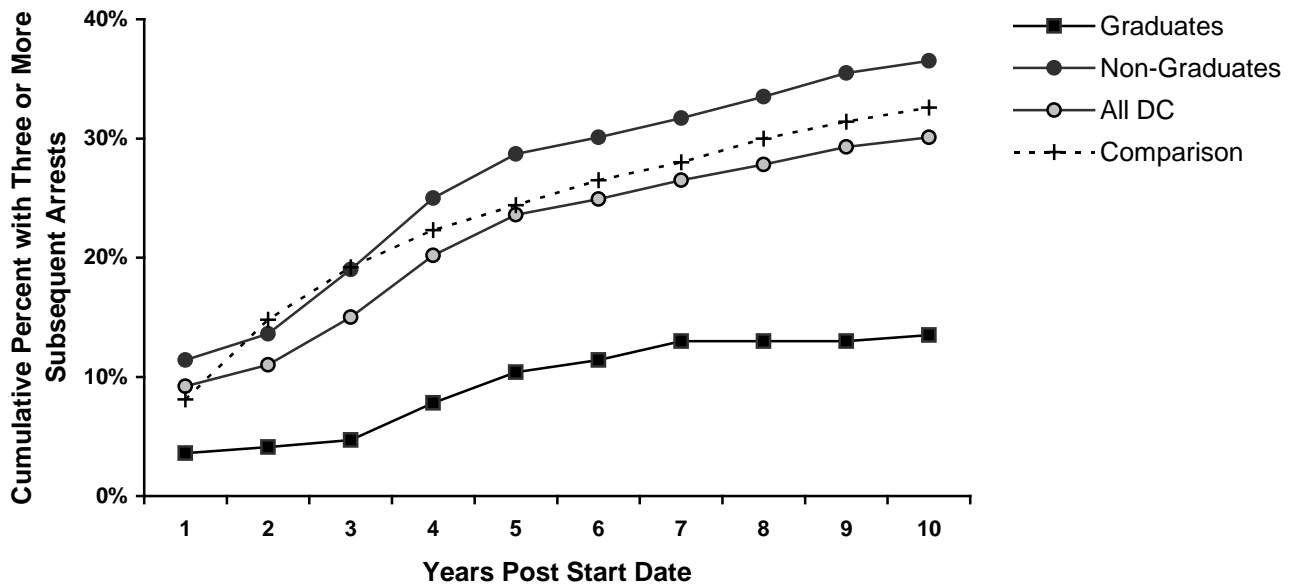


Figure 3 provides the percent of participants and comparison group members who had three or more subsequent re-arrests over 10 years. The difference between all DTC and comparison groups was significantly different during cumulative follow-up periods at Year 2 and Year 3, but remained statistically equivalent at each cumulative follow-up period. A significantly smaller percentage of graduates became chronic re-offenders compared to non-graduates over each cumulative follow-up period.

Figure 3. Cumulative Recidivism Rates for Chronic¹⁶ Offenders Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison



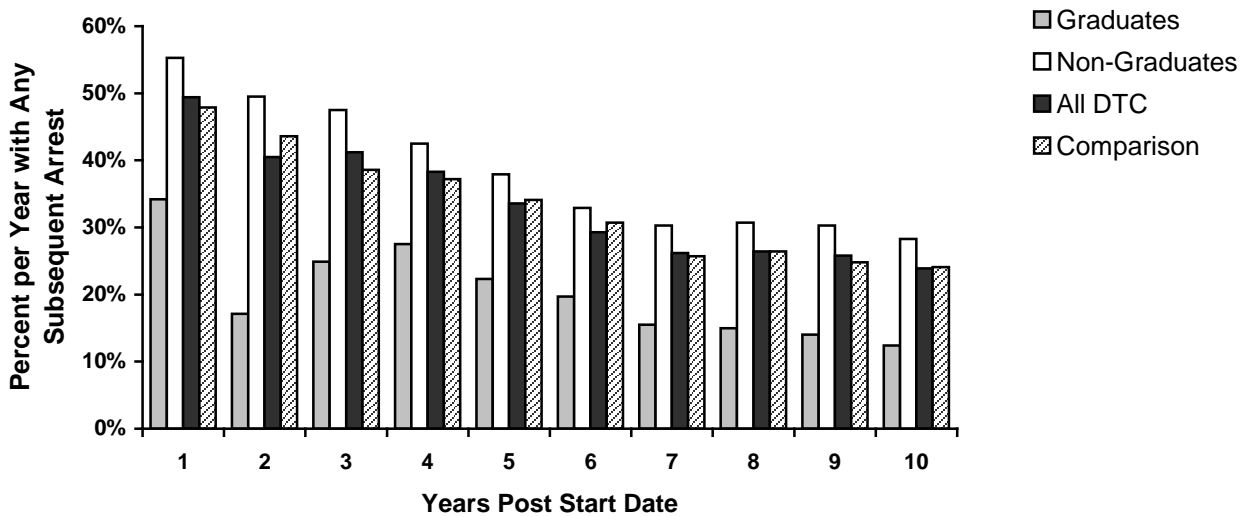
¹⁶ Chronic recidivism is defined as three or more subsequent re-arrests.

RECIDIVISM RESEARCH QUESTION 2: ANNUAL RECIDIVISM RATES OVER 10 YEARS

Is DTC participation associated with lower annual¹⁷ recidivism rates over a 10-year follow-up period?

NO. There were no significant differences between the all DTC and comparison groups during any individual 1-year follow-up periods. A significantly smaller proportion of graduates re-offended¹⁸ compared to non-graduates over each 1-year period.

Figure 4. Recidivism Rate per Year Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison



¹⁷ Annual recidivism rates show the rate of re-offending for each distinct year period, in contrast to the cumulative method showing new arrests adding up over each subsequent year.

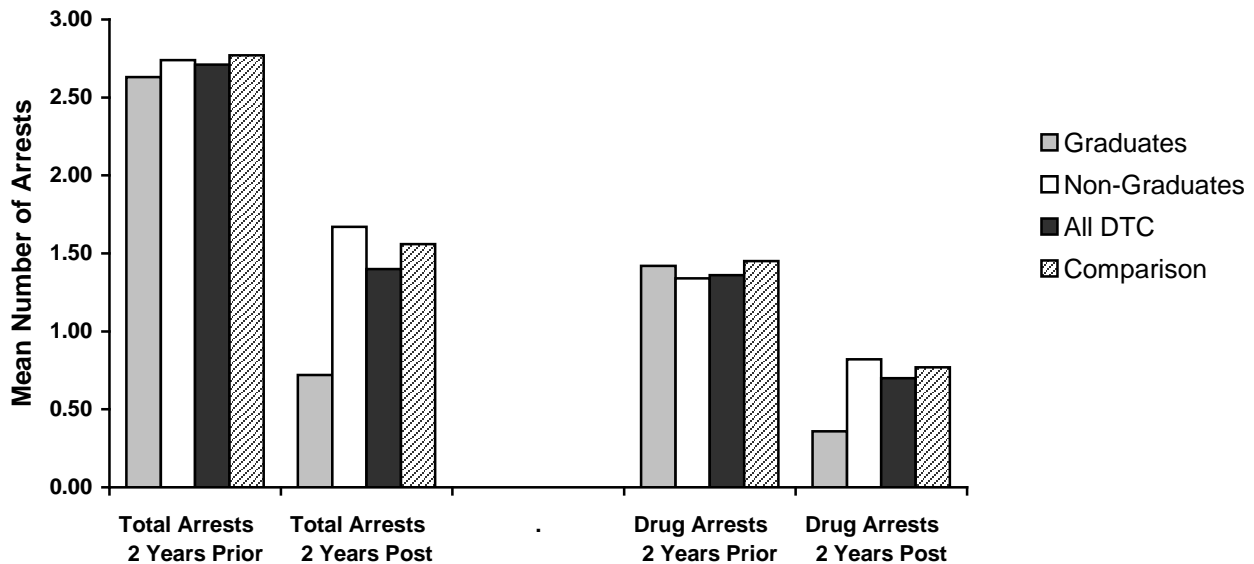
¹⁸ The follow-up periods are measured from the DTC start date (or equivalent).

RECIDIVISM RESEARCH QUESTION 3: PRE-POST CHANGES IN NUMBER OF ARRESTS

Do DTC participants have reduced number of arrests after program participation compared to before participation?

YES, but not significantly more than the comparison group.

Figure 5. Arrests 2 Years Before and 2 Years After Drug Treatment Court Start (or Equivalent) Date: Graduates, Non-Graduates, All DTC, and Comparison



As shown in Figure 5,¹⁹ the average number of total prior arrests in the 2 years pre-DTC start (or an equivalent date for the comparison group) was statistically equivalent between graduates (2.6) and non-graduates (2.7), as well as between the all DTC (2.7) and comparison (2.8) groups.

The mean number of prior drug arrests in the 2 years before DTC start was also statistically equivalent between graduates and non-graduates, as well as between all DTC and comparison groups.

The DTC and comparison groups had significantly fewer total and drug re-arrests in the 2 years after their start date, compared to the 2 years before their start date. However, the differences between the DTC and comparison groups in the 2 years post start date were not significantly different (either in total arrests or in drug arrests).

¹⁹ Figure 5 displays actual means for the DTC and comparison groups prior to DTC start (“pre”) and after DTC start (“post”). In other parts of this report, means are statistically adjusted to account for any minimal differences in key matching criteria (such as arrests) between the DTC and comparison group, to make sure the comparison is accurate on the outcomes of interest. In Figure 5, however, actual (unadjusted) means are displayed because the question of interest is whether or not actual numbers of arrests changed from pre to post.

RECIDIVISM RESEARCH QUESTION 4: NUMBER OF RE-ARRESTS OVER 10 YEARS

Does participation in Drug Treatment Court reduce the number of re-arrests compared to traditional court processing?

YES and NO. The all DTC group had a significantly lower average number of arrests than the comparison group during Year 2, but was statistically equivalent to the comparison group during every other 1-year period.

Although DTC participants had slightly fewer cumulative re-arrests in the 2nd and 3rd years post DTC start, they had a slightly higher number of cumulative re-arrests in years 7 through 10.

Figures 6 and 7 below describe the subsequent arrests in detail over time. Figure 6 shows the average number of new arrests in each 1-year period after the DTC start date (or equivalent, for the comparison group). Figure 7 then takes this information and looks cumulatively over time.

Figure 7 illustrates the average cumulative number of re-arrests for 10 years after entering the DTC program for DTC graduates, non-graduates, all DTC participants, and the comparison group. The reported average number of re-arrests for all DTC versus the comparison group was controlled for age at start (or equivalent date), race (African-American or Caucasian), gender, total prior arrests, total prior drug arrests, and total prior person-related arrests.

There were no significant differences between the all DTC and comparison groups during any cumulative time period.

Figure 6. Mean Number of Re-Arrests per Year Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison

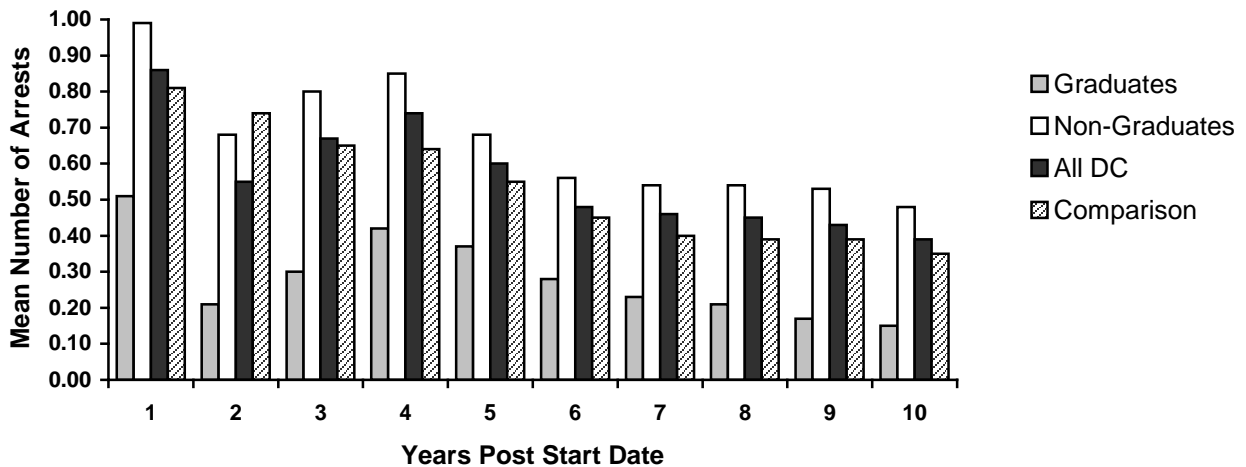
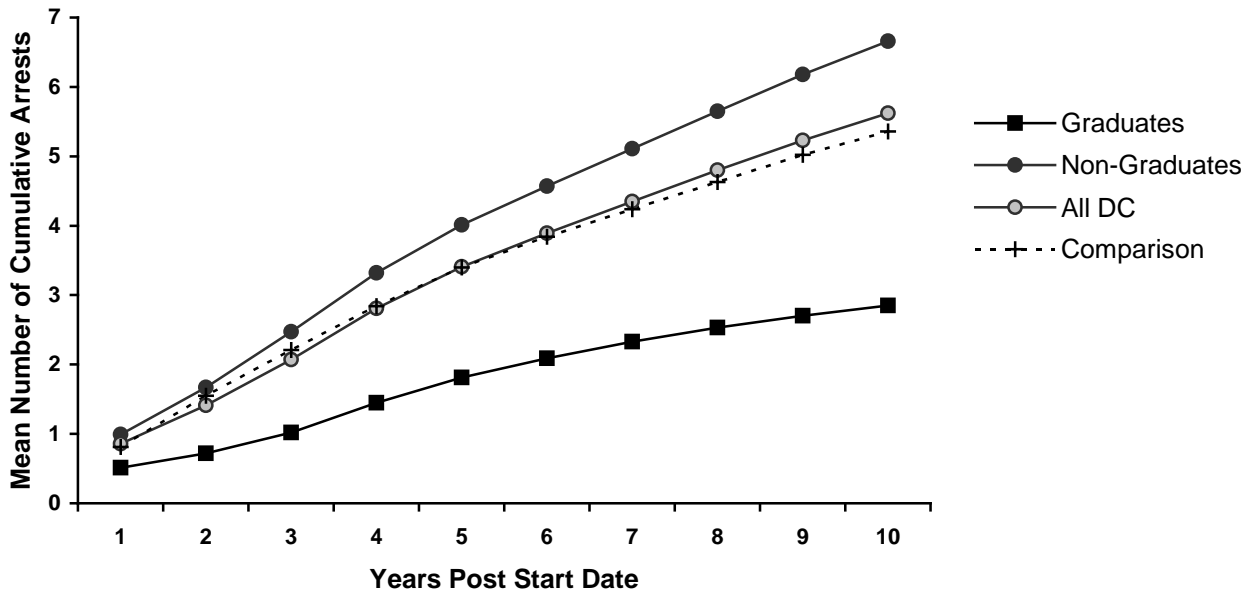


Figure 7. Cumulative Mean Number of Re-Arrests Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison



To present a more descriptive picture of the criminality of the groups, arrests were coded as drug charges (e.g., possession), property-related (e.g., larceny), and/or person-related (e.g., assault).²⁰ Table 5 presents the results of these analyses.

Table 5. Cumulative Mean Number of Re-Arrests per Person by Arrest Type and Group at 10 Years

	Graduates (n = 193)	Non- Graduates (n = 501)	All DTC Participants (n = 694)	Comparison Group (n = 860)
Mean number of drug arrests in the 10 years post DTC entry or equivalent	1.4	3.7	3.1	2.9
Mean number of property arrests in the 10 years post DTC entry or equivalent	.8	2.1	1.7	2.0
*Mean number of person arrests in the 10 years post DTC or equivalent	.6	.7	.6	.5

*Significant difference between all DTC participants and the comparison group.

²⁰ 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 numbers in Table 5 do not reflect the total average arrests in Figure 6.

DTC participants overall had significantly **lower average numbers of property crimes cumulatively from Year 1 through 5**, with graduates having significantly lower numbers of property crimes at all time points. Their means were smaller at all other time points as well, but the differences in later years were not statistically significant. Graduates also had significantly fewer drug and property re-arrests than non-graduates (and the comparison group). On the other hand, **DTC participants had significantly higher average numbers of person crimes at all time points and cumulatively at 10 years**, and for this category of crimes, the graduates' smaller numbers were not significantly different from non-graduates.

RECIDIVISM RESEARCH QUESTION 5: REDUCING SUBSTANCE ABUSE

Does participation in Drug Treatment Court reduce levels of substance abuse as measured by drug re-arrests?

YES and NO. Although DTC participants had a statistically equivalent cumulative number of drug arrests in every follow-up period post DTC start as shown in Figure 8, they had slightly (though not significantly) more cumulative drug re-arrests starting in Year 5.

Because treatment and drug testing data were not available for this study, the number of new drug arrests is used as a proxy for substance abuse. Figures 8 and 9 below illustrate the patterns of drug re-arrests for the study groups over time. Figure 8 describes the cumulative average number of drug arrests for each group over the 10-year study period. Figure 9 displays the cumulative percentage of individuals in each group that had any new drug arrest after the DTC start date (or equivalent).

Figure 8. Cumulative Mean Number of Drug Re-Arrests Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison

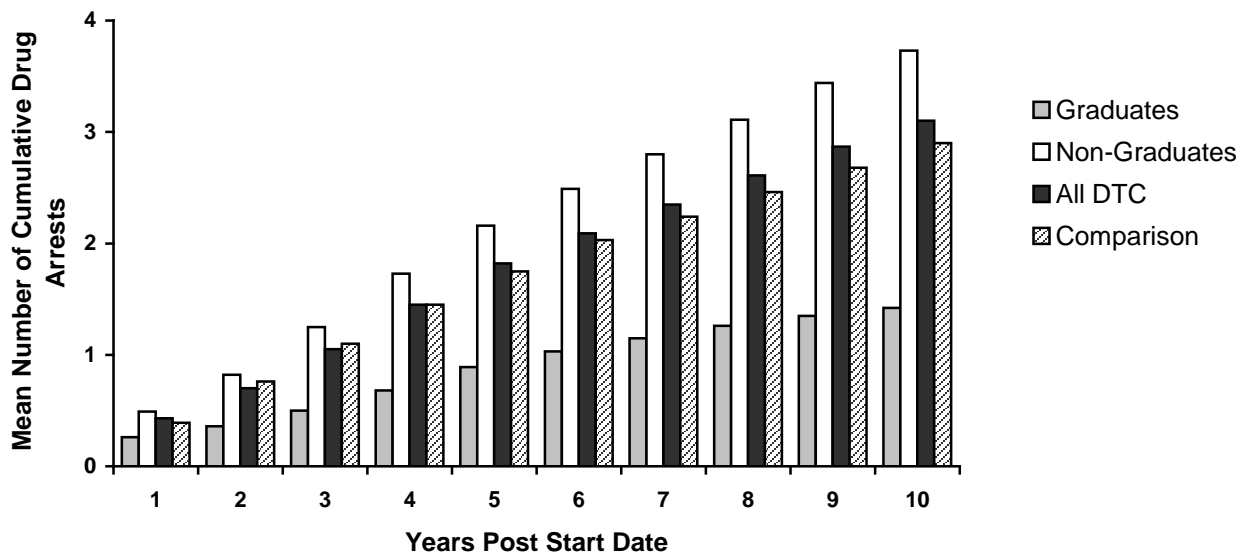
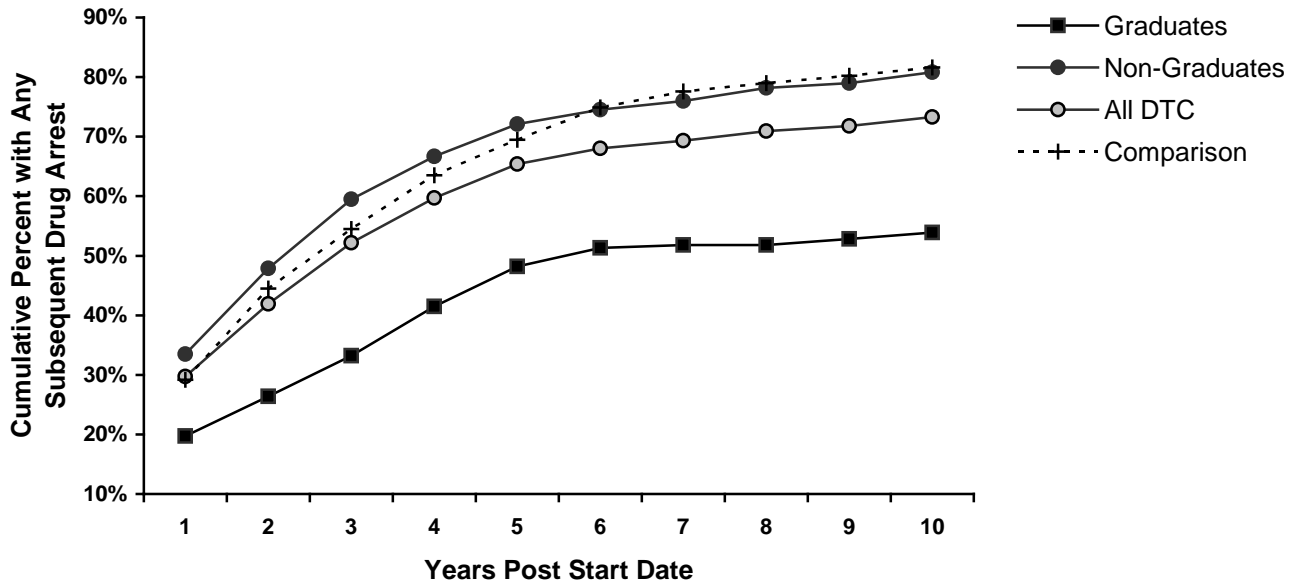


Figure 9. Cumulative Drug Arrest Rates Over 10 Years: Graduates, Non-Graduates, All DTC, and Comparison



As shown in Figure 9, **beginning at Year 5, a significantly smaller proportion of the all DTC group had any drug re-arrest compared to the comparison group.** Until Year 5, there was no difference between the DTC group and the comparison group, but by the 5th year, a larger percent of the comparison group had accumulated at least one drug re-arrests than the DTC group.

RECIDIVISM RESEARCH QUESTION 6: PREDICTORS OF PROGRAM SUCCESS AND RECIDIVISM

What individual and programmatic factors influence program success and reduced recidivism over time?

Participant Characteristics Related to Program Success (Graduation): Participants who started DTC later in the program’s history were more likely to graduate. Also, graduates had significantly fewer months of program participation on average than non-graduates.²¹

Participant Characteristics Related to Higher Recidivism: Younger participants and individuals with more arrests prior to DTC participation were more likely to re-offend.

As shown in Table 6, graduates and non-graduates were compared on demographic characteristics and criminal history to determine whether there were any patterns in predicting program graduation or recidivism. There were several significant differences between the graduates and non-graduates, including year of DTC start, average number of months involved with the program, average number of months from start date to first subsequent arrest, and number of months spent in jail or prison.

²¹ Note: DTC participants who did not graduate had longer lengths of stay in the program, probably because they were having difficulty meeting program requirements.

Table 6. Characteristics of DTC Graduates Compared to Non-Graduates

	Graduates (n = 193)	Non- Graduates (n = 501)	Significant?²²
Gender			
Male	71%	67%	No
Mean age at DTC start	34	33	No
Race			
African-American	92%	93%	No
Year of DTC Start			
1995	26%	74%	No
1996	20%	80%	Yes
1997	28%	73%	No
1998	42%	58%	Yes
Mean number of total prior arrests in 2 years before DTC entry	2.6	2.8	No
Mean number of total prior <u>drug</u> arrests in 2 years before DTC entry	1.4	1.3	No
Number of months of program involve- ment			
Mean	18	19	Yes
Range	11 – 32	11 – 32	
Number of months from start date to first subsequent arrest			
Mean	26	15	Yes
Range	0 – 151	0 – 130	
Number of months in jail or prison over 10 years			
Mean	3	20	Yes
Range	0 – 71	0 – 113	

Program Success

Analyses were performed to determine if there were any participant demographic or criminal history characteristics that were related to successful DTC completion, including gender, age, race/ethnicity, length of time in the program, and number of arrests in the 2 years before DTC entry. Table 6 shows the results for graduates and non graduates.

²² “Yes” indicates significantly different.

Of the 694 people in the DTC sample, 193 (28%) graduated and 501 (72%) were unsuccessfully discharged from the DTC program. This is lower than the national average, which is approximately 50% (Belenko, 2001). While there was variability in graduation rates over time, in general the program became more successful as it matured, with each year increasing the odds of graduation for participants by 25% when controlling for differences among participants who entered each year, such as number of prior arrests and demographics.

To see whether there was an optimal length of stay in DTC, all DTC participants were put into groups based on the number of months they had spent in the program, from 11 to 32. There was not a clear linear pattern of impact on graduation, though approximately **13 to 14 months in the program emerged as the threshold (statistically optimal) length of stay associated with graduation.** Though graduation rates for each month vary up and down, when looking at the pattern overall from 11 to 32 months, each additional month of stay in the program is associated with 4% lower odds of graduation. This finding may reflect lower engagement in the program by those individuals who remain on “active” status for long periods of time but do not graduate.

As shown in Table 7, further analyses showed that, when controlling for differences between DTC graduates and non-graduates, the only characteristics significantly related to program success were year of start and length of stay in the program, indicating that individuals who entered the program later during the study cohort were more likely to graduate and individuals who stayed in the program for a long period of time were less likely to graduate.

Table 7. Demographic and Court-Related Variables That Predict Graduation

Variable	DTC participants with these characteristics were more likely to graduate	Was characteristic a significant predictor of graduation? (n = 694)
Gender		No
Race		No
Age		No
Mean # of total prior arrests in 2 years prior to start		No
Mean # of prior <u>drug</u> arrests in 2 years prior to start		No
Year of start	Began in later years during our cohort	Yes
Length of stay in program in months	Had lengths of stay closer to the optimal period (13-14 months)	Yes

Recidivism

Participant characteristics and arrest history were also examined in relation to whether or not individuals were ever arrested in the 10 years following DTC entry. Chi-square and independent samples t-tests were performed to identify which factors were significantly correlated with recidivism. As shown in Table 8, several characteristics predicted whether DTC participants would re-offend.

Table 8. Demographic and Court-Related Variables That Predict Recidivism

Variable	DTC participants with these characteristics were more likely to be re-arrested	Was characteristic a significant predictor of recidivism 10 years post DTC entry? (n = 694)
Gender		No
Race	African-American	Yes (but No, when controlling for total number of priors)
Age	Younger at program start	Yes
Mean # of total prior arrests in 2 years prior to start	More priors	Yes
Mean # of prior <u>drug</u> arrests in 2 years prior to start		No
Year of start		No
Length of stay in program in months	Had lengths of stay closer to the optimal period (13-14 months)	Yes (but No, when controlling for graduation status)

When these factors were entered into a logistic regression model, and each variable was controlled for, race, age at start, average number of total arrests in the 2 years prior to DTC start, and length of stay in the program were significant predictors of subsequent re-arrests at 10 cumulative years of follow-up. African-Americans were more than twice as likely to have a re-arrest compared to Caucasians. However, when race and total number of prior arrests in the 2 years prior to start were entered in the model as an interaction term, race became a non-significant predictor of subsequent recidivism. That is, African-American participants had greater numbers of prior arrests, so race also predicted recidivism; however, there was not an impact of race above the effect of prior criminal history.

Participants who were younger at DTC start were more likely to have a re-arrest. A greater proportion of participants who began the program when they were 24 to 29 were re-arrested over time compared to older participants. Fewer individuals who started the program when they were 36 to 41 years of age or 48 to 53 years of age had new arrests over time. For the cumulative 10-year period, the youngest group (those who started the program at age 18 to 23) had on average the highest cumulative number of new arrests, while the group ages 48 to 53 had the smallest

number of new arrests. When controlling for the other variables, the odds of re-offending decrease 7% with each additional year older the participant is at DTC start.

Individuals who had more total arrests in the 2 years prior to DTC start were more likely to have a subsequent arrest. Each additional prior arrest in the 2-year period before DTC led to a 48% increased odds of having a subsequent arrest in the 10-year follow-up period.

Individuals who were in the program longer were slightly more likely to have a re-arrest in the 10-year follow-up period as well. Controlling for other variables, each additional month in the program increased the odds of a participant having a subsequent arrest in the 10-year follow-up period by 7%. However, when graduation status and length of stay were entered in the model as an interaction term, (as described earlier in this report, graduates reoffended significantly less often than non-graduates) length of stay became a non-significant predictor of subsequent recidivism. This shows that graduation status (specifically not graduating), is a better predictor of recidivism than length of stay.

In addition, there appears to be an optimal length of stay—approximately 13 to 14 months—which is associated with no cumulative subsequent arrests. This is the same length of stay that was associated with graduation.

Outcome Evaluation Summary

The outcome component of this study included both descriptive research questions and impact research questions related to recidivism and program completion. The results are summarized below.

DESCRIPTIVE OUTCOME SUMMARY

Overall, the DTC program served approximately **4,131 individuals** with a total of 4,274 program participation episodes between program inception and August 2008, a month when the program recorded approximately 470 active participants. New admissions to the program have ranged from 132 to 505 per year, with an average of approximately 200 new admissions per year.

Since the program's inception, **25% of participants (n = 955) have graduated** or satisfactorily completed the program, 65% (n = 2,475) were unsuccessful, and 10% (n = 359) ended their participation in other ways, such as being transferred to another jurisdiction, being deceased, or other unspecified reasons.

Most participants have been men. The proportion of women admitted each year to the program has ranged from 27% to 50% but overall is about 35%. The majority of DTC participants are African-American. The proportion of African-American participants has ranged from 85% to 95% per year. The average age of participants at DTC entry date has gradually but significantly increased over time, from an average of 33 years at DTC entry among participants who entered in 1994 to an average of 42 years at DTC entry among participants who entered in 2008. Most participants' drug of choice is heroin (ranging from 65% to 86% of participants in any given year), followed by cocaine, with little documented use of other substances.

Of the 4,132 individuals who participated in the DTC program through August 2008, 737 (**18%**) **had a subsequent episode** in this program, or a previous or subsequent contact with one of the other Drug Treatment Court programs in Baltimore City.

RECIDIVISM OUTCOME SUMMARY

This portion of the outcome analyses were based on a cohort of **694 DTC participants** who entered the DTC program from January 1, 2005, through July 31, 2008, and a **comparison group of 860 offenders eligible for DTC but who received traditional probation** rather than DTC. Their criminal histories were examined prior to DTC participation (or equivalent) and after their entry into the DTC program (or equivalent date) for the following 10 years.

Recidivism was analyzed each year during the follow-up period and cumulatively over the full 10-year follow-up period.

In almost all analyses, DTC graduates had better outcomes (lower recidivism rates, fewer new arrests) than non-graduates and the comparison group. When looking at all DTC participants (graduates and non-graduates together) the results were less consistent:

- Beginning at Year 6 on, a significantly smaller proportion of the all DTC group reoffended—cumulatively—compared to the comparison group (prior to that time there was not a significant difference in re-offending between the all DTC group and the comparison group).
- In Years 2 and 3 (cumulatively), the all DTC group had significantly fewer chronic re-offenders (defined as 3 or more new arrests) than the comparison groups; the two groups were equivalent during the other follow-up years.
- There were no significant differences in recidivism rates between the all DTC and comparison groups during any individual 1-year follow-up periods.
- All groups (all DTC, graduates alone, non-graduates alone, and comparison group) had significantly fewer arrests in the 2 years after their DTC start date (or equivalent) compared to the 2 years prior; the comparison group and all DTC groups were not statistically different.
- Although DTC participants had slightly fewer cumulative re-arrests in the 2nd and 3rd years post DTC start compared to the comparison group, they had a slightly higher number of cumulative re-arrests in years 7 through 10.
- DTC participants overall had significantly lower average numbers of property crimes cumulatively from Year 1 through 5.
- DTC participants had higher average numbers of person crimes at all time points and cumulatively at 10 years.
- DTC participants had a statistically equivalent cumulative numbers of drug arrests (compared to the comparison group) in every follow-up period post DTC start; however, beginning at Year 5, a significantly smaller proportion of the all DTC group had any drug re-arrest compared to the comparison group.
- Of the recidivism study cohort, 28% successfully graduated and 72% were not successful. Participants who started DTC later in the program's history and who remained for fewer months were more likely to graduate (there appears to be an important threshold of DTC service—13 to 14 months—after which the participants become less and less likely to graduate and more likely to re-offend).

- Younger participants and individuals with more arrests prior to DTC participation were more likely to re-offend. Younger participants had the highest number of cumulative new arrests as well as having a higher proportion of their age group with at least one new arrest. When controlling for the other variables, the odds of re-offending decreased 7% with each additional year older the participant was at DTC start.
- DTC graduates had more time in the community (less time in jail or prison) and a greater duration of time before their first new arrest after their DTC start date, than the non-graduates.
- The number of prior arrests (before DTC start) significantly predicted subsequent recidivism for DTC participants. Each additional prior arrest in the 2-year period before DTC led to a 48% increased odds of having a subsequent arrest in the 10-year follow-up period.

Overall, there were some positive impacts identified in the outcome study, and some benefits that were retained over time (such as reductions in property offenses). While the graduates and non-graduates looked demographically similar, graduates had notably better outcomes than the non-graduates and the comparison group.

COST EVALUATION

The DTC cost evaluation was designed to address the following study question:

How do recidivism rates and the related criminal justice system costs differ between DTC participants and a comparison group over the course of a 10-year follow-up time period?

Cost Evaluation Methodology

COST EVALUATION DESIGN

Transaction and Institutional Cost Analysis

The cost approach utilized by NPC Research 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 from multiple agencies. Transactions are those points within a system where resources are consumed and/or change hands. In the case of drug treatment courts, when a participant appears in court or has a drug test, resources such as judge time, defense attorney time, court facilities, and urine cups are used. Court appearances and drug tests are program transactions, while subsequent jail and probation days are outcome transactions. The TICA approach recognizes that these transactions take place within multiple organizations and institutions that work together. These organizations and institutions contribute to the cost of each transaction that occurs for program participants. TICA works well for conducting costs assessment in an environment such as Drug Treatment Court (DTC) because it takes into account the 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 central core of the cost-to-taxpayer approach in calculating benefits (avoided costs) for drug treatment court programs specifically is the fact that untreated substance abuse will cost various tax-dollar funded systems money that could be avoided or diminished if substance abuse were treated. In this approach, any cost that is the result of untreated substance abuse and that directly impacts a citizen (through tax-related expenditures) is used in calculating the benefits of substance abuse treatment.

Opportunity Resources

Finally, NPC's cost approach looks at publicly funded costs as "opportunity resources." The concept of opportunity *cost* from the economic literature suggests that system resources are available to be used in other contexts if they are not spent on a particular transaction. The term opportunity *resource* describes these resources that are now available for different use. For example, if substance abuse treatment reduces the number of times that a client is subsequently incarcerated, 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,

who, perhaps, possesses a more serious criminal justice record than does the individual who has received treatment and successfully avoided subsequent incarceration.

COST EVALUATION METHODS

The cost evaluation involves calculating the costs of outcomes (or impacts) after program entry (or the equivalent for the comparison group). In order to determine if there are any benefits (or avoided costs) due to DTC program participation, it is necessary to determine what the participants' outcome costs would have been had they not participated in DTC. One of the best ways to do this is to compare the costs of outcomes for DTC participants to the outcome costs for similar individuals that were eligible for DTC but who did not participate. The comparison group in this cost evaluation is the same as that used in the preceding outcome evaluation.

TICA Methodology

The TICA methodology is based upon six distinct steps. Table 9 lists each of these steps and the tasks involved.

Step 1 (determining the criminal justice process) was performed during the prior process evaluation, through site visits, analysis of court and drug court documents, and interviews with key stakeholders. Step 2 (identifying outcome transactions) and Step 3 (identifying the agencies involved with transactions) were performed by analyzing the information gathered in Step 1. Step 4 (determining the resources used) was performed through interviewing of key stakeholders and by collecting administrative data from the agencies involved. Step 5 (determining the cost of the resources) was performed through interviews with drug court and non-drug court staff and with agency finance officers, as well as analysis of budgets found online or provided by agencies. Step 6 (calculating cost results) involved calculating the cost of each transaction and multiplying this cost by the number of transactions. All of the transactional costs for each individual were added to determine the overall outcome cost per drug court participant/comparison group individual. This figure was generally reported as an average cost per person for outcome/impact costs due to re-arrests, jail time and other recidivism costs. In addition, due to the nature of the TICA approach, it was also possible to calculate outcome costs per agency.

The costs to the criminal justice system for this analysis consist of those due to new arrests, subsequent court cases, jail time served, prison time served, and probation/parole time served.

Table 9. The Six Steps of TICA

	Description	Tasks
Step 1:	Determine flow/process (i.e., how participants move through the criminal justice system)	Site visits/direct observations Interviews with key stakeholders (agency and program staff)
Step 2:	Identify the outcome transactions (e.g., re-arrests, jail time)	Analysis of process information gained in Step 1
Step 3:	Identify the agencies involved in each transaction (e.g., court, 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 police officer time per arrest, number of transactions)	Interviews with key stakeholders using typology and cost guide Administrative data collection of number of transactions (e.g., number of jail days, number of re-arrests)
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 outcome per participant)	Indirect 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 to determine the total average cost per transaction type These total average costs per transaction type are added to determine the outcome costs (These calculations are described in more detail below)

Cost Evaluation Results

COST RESEARCH QUESTION: OUTCOME/RECIDIVISM COSTS OVER 10 YEARS

Is participation in the DTC associated with reduced criminal justice system costs compared to individuals participating in traditional court processing?

YES. As shown in Tables 11 and 12, DTC participants had lower average criminal justice system outcome costs (\$61,756) after 10 years than comparison group members (\$64,701), for a total cost savings of \$2,945 per participant. DTC graduates had outcome costs of \$18,494 after 10 years.

As described in the cost methodology, 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 drug court 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, jail time, prison time, and probation/parole 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 COSTS

This section describes the cost outcomes experienced by DTC and comparison group participants as a result of offender participation in DTC compared to traditional court processing. Outcome costs were calculated for 10 years from the time of program entry for both groups (the average [mean] number of days between DTC arrest and DTC entry for the DTC sample was added to the arrest dates for comparison group members so that an equivalent “program entry” date could be calculated for the comparison group). For each outcome transaction, the same data sources were used for both groups to allow for a valid outcome cost comparison. Lower costs for DTC participants compared to offenders who did not participate in DTC (comparison group members) indicate that the program is providing a return on investments in the DTC.²³

The outcome costs experienced by DTC graduates are also presented below. Costs for graduates are included for informational purposes but should not be directly compared to the comparison group. If the comparison group members had entered the program, some may have graduated while others would not have completed the program successfully. The drug court graduates as a group are not the same as a group made up of both potential graduates and potential non-graduates.

The outcome costs discussed below were calculated using information gathered by NPC from the Baltimore City District Court, Baltimore City Circuit Court, Baltimore City State’s Attorney’s Office, Maryland Office of the Public Defender, Baltimore City Detention Center, Baltimore City Police Department, Maryland Division of Parole and Probation, and Maryland Department of Public Safety & Correctional Services.

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 because this methodology accounts for all jurisdictional and agency institutional commitments involved in the support of agency operations, the costs that appear in NPC’s analysis may not correspond with agency operating budgets. This primarily results from the situation in which transactions include costs associated with resource commitments from multiple agencies. The resource commitments may take the form of fractions of human and other resources that are not explicated in source agency budget documents.

²³ Note that some possible costs or cost savings related to the program are not considered in this study. These include the number of drug-free babies born, health care expenses, and drug court participants legally employed and paying taxes. In addition, the cost results that follow do not take into account other less tangible outcomes for participants, such as improved relationships with their families and increased feelings of self-worth.

OUTCOME TRANSACTIONS

Following is a description of the transactions included in the outcome cost analysis.

The Baltimore City Police Department is the primary law enforcement agency in Baltimore City and conducts the vast majority of the law enforcement arrests in the city, so the cost model of a Baltimore City Police Department arrest episode was used for this analysis. The cost model of *arrest* episodes was constructed from activity and time information provided by multiple representatives of the Department. The model of arrest practice was combined with salary, benefits and budgetary information for the Baltimore City Police Department to calculate a cost per arrest episode. The cost of a single arrest is **\$203.78**.

To construct the cost model for *subsequent court cases*, the budgets of the Baltimore City Circuit Court, Baltimore City District Court, Baltimore City State's Attorney's Office and Maryland Office of the Public Defender were analyzed. Caseload data from the Maryland Judiciary 2006-2007 Statistical Report were also used in determining the cost of a court case. The cost of an average *Circuit Court case* was found to be **\$3,284.84** and the cost of an average *District Court case* was found to be **\$1,400.35**. These costs take into account a broad range of case types, from dismissals through trials.

The cost per day of *jail* in Baltimore City was calculated based on information from the Baltimore City Detention Center. Jail bed days at the Detention Center are **\$87.00** per person, which includes all staff time, booking costs, food, medical, and support/overhead costs.

Prison facilities in Maryland are operated by the Maryland Department of Public Safety & Correctional Services, Division of Corrections (DOC). To represent the daily cost of prison time served by members of the DTC and comparison groups, information in the Department's 2008 annual report, including budget, facilities, and average daily population data were analyzed. The resulting prison cost per day (an average of all facilities operated by DOC) is **\$85.15**.

Adult probation and parole services in Baltimore City are provided by the Maryland Division of Parole and Probation, a unit of the Department of Public Safety & Correctional Services, at a cost of **\$4.09** per day for case supervision. This information was provided by a representative of the Department of Public Safety & Correctional Services.

OUTCOMES AND OUTCOME COST CONSEQUENCES

Table 10 represents the criminal justice system outcome events for DTC graduates, all DTC participants (both graduates and non-graduates), and the comparison group over a period of 10 years.

Table 10. Average Number of Outcome Transactions Over 10 Years: Graduates, All DTC, and Comparison

Transaction	DTC Graduates (n = 193)	All DTC Participants (n = 694)	Comparison Group (n = 860)
Arrests	2.85	5.62	5.36
Circuit Court Cases	0.59	1.25	1.28
District Court Cases	3.33	5.45	4.86
Jail Days	4.80	15.98	22.39
Probation/Parole Days	641.62	1,071.66	1,129.37
Prison Days	97.12	506.17	540.59

DTC participants show smaller numbers across every transaction, except for District Court cases and arrests. DTC participants had fewer Circuit Court cases, jail days, probation/parole days, and prison days than individuals in the comparison group. From these results, an interpretation can be reasonably asserted that participation in DTC is associated with positive effects in program participant outcomes in comparison to similar offenders who did not participate in the program. From looking at the Circuit Court and District Court cases, it can also be reasonably asserted that the higher number of arrests for drug court participants were due to less serious offenses, as the drug court group had a smaller number of Circuit Court cases than the comparison group, but a higher number of District Court cases than the comparison group.²⁴ The smaller number of jail, probation/parole, and prison days for the drug court group, even with the slightly higher number of arrests, also supports that assertion.

The small average numbers for graduates in every outcome transaction also show that the majority of the arrests, court cases, jail days, probation/parole days, and prison days for all DTC participants are due to participants who have been discharged from the program.

Table 11 represents the cost consequences associated with criminal justice system outcomes for DTC graduates, the all DTC group, and the comparison group.

²⁴ In Maryland, the Circuit Courts generally handle more serious criminal cases and major civil cases, while the District Courts generally handle traffic and misdemeanor criminal and civil cases.

Table 11. Criminal Justice System Outcome Costs Over 10 Years: Graduates, All DTC, and Comparison

Transaction	Transaction Unit Cost	DTC Graduates (n = 193)	All DTC Participants (n = 694)	Comparison Group (n = 860)
Arrests	\$203.78	\$581	\$1,145	\$1,092
Circuit Court Cases	\$3,284.84	\$1,938	\$4,106	\$4,205
District Court Cases	\$1,400.35	\$4,663	\$7,632	\$6,806
Jail Days	\$87.00	\$418	\$1,390	\$1,948
Probation/Parole Days	\$4.09	\$2,624	\$4,383	\$4,619
Prison Days	\$85.15	\$8,270	\$43,100	\$46,031
Total		\$18,494	\$61,756	\$64,701

Tables 10 and 11 reveal that drug court participants cost less for every transaction, except for arrests and District Court cases. The cost for prison is by far the most expensive outcome transaction for both DTC participants and the comparison group.

The total average cost savings after 10 years is **\$2,945** per drug court participant, regardless of whether or not the participant graduates. Because the DTC program continued to serve a new cohort of about 200 new participants annually, this average savings of \$294.50 per participant per year (\$2,945 divided by 10) results in an average yearly savings of **\$58,900** per cohort per 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. If the drug court expands to include greater numbers of participants, this savings will grow further. After 10 years the savings for *one cohort* totals **\$589,000**.

DTC graduates, on average, show outcome costs that are \$46,207 (or 250%) lower than comparison group members and \$43,262 (or 234%) lower than all drug court participants. From these results, it is clear that successful completion of the DTC program results in significant outcome cost savings.

OUTCOME COSTS BY AGENCY

Of particular interest to state and local policymakers and managers are the financial impacts on the agencies that support the operation of the DTC program. Table 12 represents these financial impacts for agencies of Baltimore City and the State of Maryland.

**Table 12. Criminal Justice System Outcome Costs by Agency Over 10 Years:
Graduates, All DTC, and Comparison**

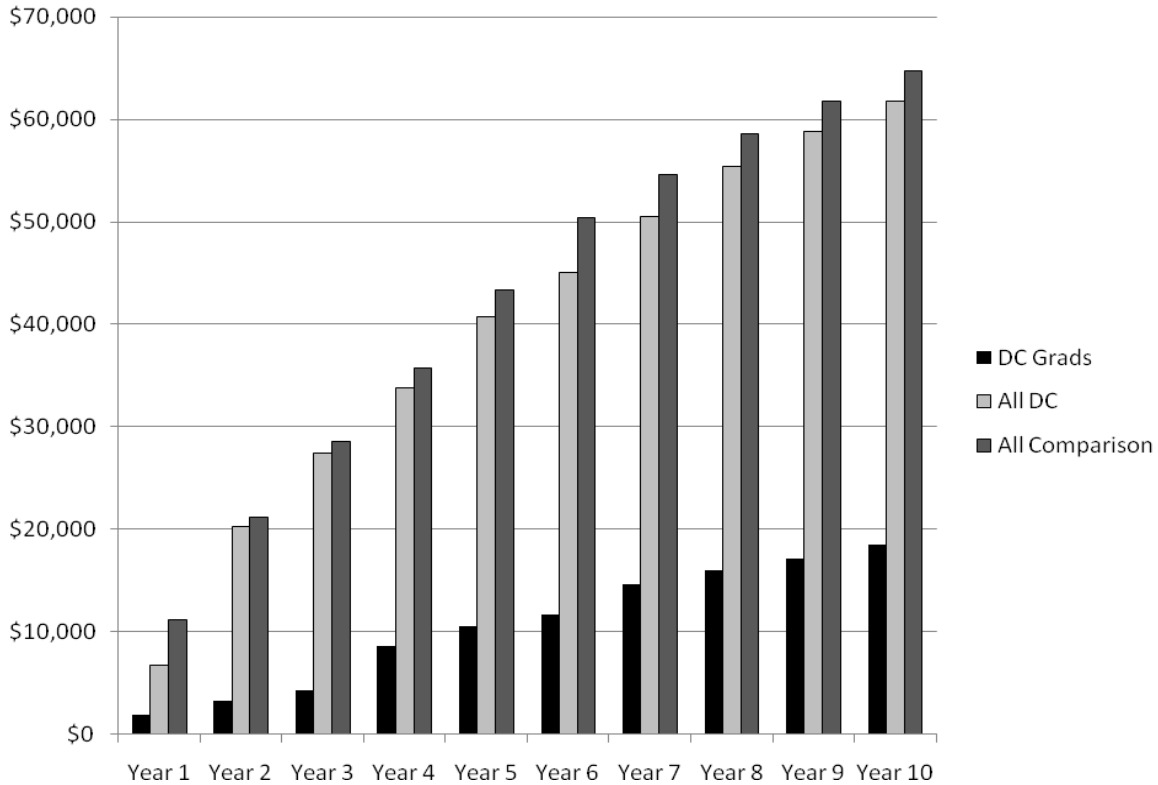
Jurisdiction/Agency	DTC Graduates (n = 193)	All DTC Participants (n = 694)	Comparison Group (n = 860)	Difference (Benefit)
Baltimore City District Court	\$1,936	\$3,168	\$2,825	-\$343
Baltimore City Circuit Court	\$406	\$859	\$880	\$21
Baltimore City State's Attorney	\$2,295	\$4,177	\$3,969	-\$208
Baltimore City Detention Center	\$418	\$1,390	\$1,948	\$558
Baltimore City Police Department	\$581	\$1,145	\$1,092	-\$53
Maryland Office of the Public Defender	\$1,964	\$3,534	\$3,337	-\$197
Maryland Division of Parole and Probation	\$2,624	\$4,383	\$4,619	\$236
Maryland Department of Public Safety & Correctional Services	\$8,270	\$43,100	\$46,031	\$2,931
Total	\$18,494	\$61,756	\$64,701	\$2,945

As shown in Table 12, cost savings are realized as the result of the DTC for some agencies impacted by the program, but not for others. The Baltimore City Circuit Court, Baltimore City Detention Center, Maryland Division of Parole and Probation, and Maryland Department of Public Safety & Correctional Services all realize cost savings, but the Baltimore City District Court, Baltimore City State's Attorney, Baltimore City Police Department, and Maryland Office of the Public Defender do not. The Maryland Department of Public Safety & Correctional Services is by far the greatest beneficiary of the DTC program. While this agency may not see any change in its budget or prison population due to the BCDTC, opportunity resources have been made available in the form of prison beds that can be filled by another person, who, perhaps, possesses a more serious criminal justice record than a DTC participant.

Looking at outcome costs by jurisdiction, Baltimore City agencies are shown to have an overall outcome cost loss of \$25 per participant over 10 years, while the State of Maryland agencies have a combined outcome cost savings of \$2,970 per participant over 10 years.

In terms of their comparative recidivist experiences, DTC participants are shown to cost **\$2,945** (or **4.8%**) less per participant than members of this study's comparison group. Due to lower rates of recidivism, DTC graduates show outcome costs of just \$18,494 after 10 years. Figure 10 provides a graph of the costs for each group over 10 years.

Figure 10. Criminal Justice Recidivism Cost Consequences per Person Over 10 Years: Graduates, All DTC, and Comparison



Note that these cost savings are those that have accrued in the 10 years since program entry. Some 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 the program.

If DTC participants continue to have positive outcomes in subsequent years (as has been shown in other drug treatment 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.²⁵

Figure 11 displays a graph of the cumulative cost savings (the difference between the DTC participants and the comparison group) over the 10 years post-DTC entry.

²⁵ NPC was unable to estimate DTC program costs as part of the 10-year outcome cost analysis due to inaccessible, unreliable, or nonexistent DTC and other services data from the 1995-1998 time period. Most program records for individuals in our cohort were simply not available. Because of these factors, NPC was not able to determine DTC program costs or the specific point at which the outcome cost savings repay the DTC program investment costs, as is typical in a full cost-benefit analysis.

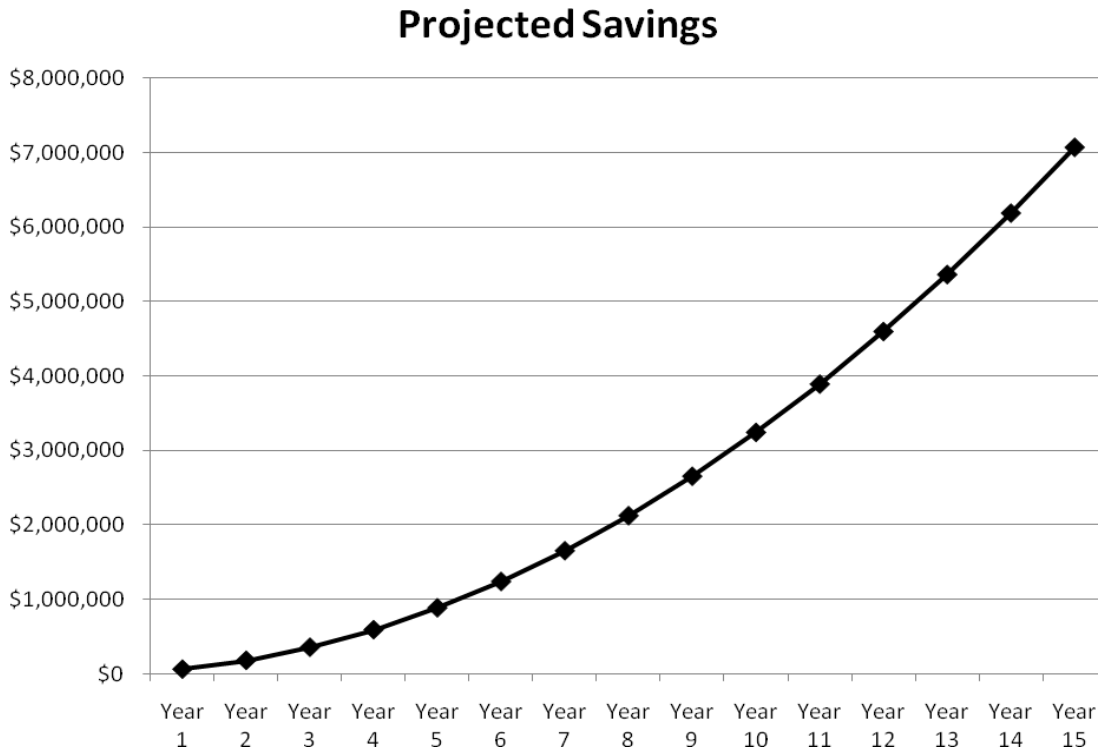
**Figure 11. Cost Savings Post-Drug Treatment Court Entry:
Difference Between All DTC and Comparison**



While there is a savings of \$4,434 in the 1st year after entry, the cumulative savings drop to just under \$1,000 by Year 2, when most of DTC participants in the study sample are no longer in the program. The cost savings then grow steadily until Year 6, when the cumulative cost savings reach a high of \$5,360 per participant. After Year 6, the cumulative cost savings gradually level off, reaching \$2,945 in savings by Year 10. It is possible that after 6 years, the benefits of DTC participation gradually wear off, although there is still a long-term benefit in the nearly \$3,000 of outcome cost savings per DTC participant when compared to the comparison group. It is when DTC graduates are examined that the long-term benefits of the DTC program are especially apparent. On average, the criminal justice outcome cost savings per graduate are \$46,207 when compared to comparison group members and \$43,262 when compared to all DTC participants.

The savings also grows with the number of participants that enter each year. If the DTC program continues to admit a cohort of about **200** new participants annually, this savings of \$2,945 per participant over 10 years (resulting in an average annual savings of **\$58,900** per cohort) can then be multiplied by the number of years the program remains in operation and for additional cohorts per year. This accumulation of actual and projected savings is demonstrated in Figure 12. After 15 years of operation, the accumulated savings for the DTC program come to over **\$7,000,000**.

Figure 12. Projected Criminal Justice Cost Savings (one new DTC cohort per year)



As the existence of the program continues, the savings generated by DTC 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 DTC is both beneficial to DTC participants and to Maryland taxpayers.

Cost-Benefit Summary

Overall, the DTC results in cost savings, especially for program graduates. Outcomes for DTC participants over 10 years cost the criminal justice system \$61,756 per participant, which is \$2,945 less than for comparison group members. The majority of the cost in outcomes for DTC participants over the 10 years from DTC entry was due to time in prison for participants who were unsuccessful at completing the program. The amount of prison experienced by non-graduates (647 days) was greater than that experienced by similar offenders who had not participated in DTC (541 days), indicating the possibility of heavier sentences for those who attempted DTC and were not successful. The program may want to examine the sentencing process for participants who are unsuccessful in the program.

In spite of these prison costs, the DTC program had criminal justice system outcome cost savings of **\$2,945** per participant after 10 years. Outcome cost savings were **\$46,207** per graduate after 10 years, so there is a clear benefit to the taxpayer in working to engage offenders and helping them successfully complete the DTC program. Overall, these results demonstrate that the DTC program uses fewer criminal justice system resources than traditional court processing.

RECOMMENDATIONS

Drug courts are complex programs designed to deal with some of the most challenging problems that communities face. Drug courts bring together multiple and traditionally adversarial roles plus stakeholders from different systems with different training, professional language, and approaches. They take on groups of clients that frequently have serious substance abuse treatment needs. Adults with substance abuse issues involved in the criminal justice system must be seen within an ecological context; that is, within the environment that has contributed to their attitudes and behaviors. This environment includes their neighborhoods, families, friends, and formal or informal economies through which they support themselves. The drug treatment court must understand the various social, economic and cultural factors that affect them.

The DTC has been responsive to community needs and strives to meet the challenges presented by substance abusers. Because this evaluation looks at a cohort of participants who were served early in the program's history, and now over 10 years ago, some of the practices and resources in place at that time have changed or been augmented. A process evaluation of this court in 2007 identified several areas where program practices could be improved to more closely align it with current knowledge about effective practices in drug courts that may further reduce recidivism and support participants in reaching their treatment goals.

Key recommendations for the DTC are listed below.

1. Review whether heavier sentences are being used for DTC participants who are unsuccessful at completing the program compared to other similar offenders who do not participate.

The majority of the cost in outcomes for DTC participants over the 10 years from DTC entry was due to time in jail and prison for participants who were unsuccessful at completing the program. The amount of prison experienced by non-graduates (647 days) was greater than that experienced by similar offenders who had not participated in DTC (541 days), indicating the possibility of heavier sentences for those who attempted DTC and failed. The program may want to examine the sentencing process for participants who are unsuccessful in the program. In addition, the program may want to consider alternatives to the use of jail and prison as sanctions and ensure that jail is not being used as a response to relapse (focus instead on increasing treatment responses). Alternatives may be more effective and have the potential to be substantially less expensive.

For additional ideas and examples of incentives, sanctions and other responses, see Appendix A, which contains a sample list of rewards and sanctions used by drug courts across the United States.

2. Continue to work on increasing the drug court graduation rate.

Since the program's inception, 25% of drug court program participants completed the DTC program successfully. This is substantially lower than the national average of 50% (Cooper, 2000). Program staff report that the team is working diligently to identify explanations for the low graduation rates and to create solutions to this problem. For example, this program takes participants with mental health issues as well as substance abuse problems. Because these individuals are ineligible for mental health court, DTC is the only available service for them. This population has a more difficult time succeeding in the program than other participants. To address the needs of

this group, the program has hired a social worker, who assesses whether the individual will be able to meeting the challenges of DTC, and is in the process of hiring two more case managers (bringing the total to five), to provide additional support services both for new and continuing participants.

In order to graduate, participants must comply with the program practices and requirements. Therefore, for programs to increase their graduation rates, they must increase the number of participants that comply with program requirements. One perspective drug court staff can take in dealing with a highly challenged population is understand that it may be necessary to provide some additional assistance to participants for them to learn how to successfully meet program requirements. This perspective should lead teams to continually consider the question, “how can we help as many participants as possible to understand the lessons this program has to teach?” To successfully increase graduation rates, drug court teams must ask themselves, “What are the challenges to participants in being able to meet program requirements and what can we do to help more participants to meet those challenges?”

Participants suggested the following practical assistance would aid them in complying with program requirements: Additional mentoring/support group sessions (their specific suggestion was that more people would attend the Friends in Recovery Mentoring (FIRM) group if there were more meetings, more time to meet, and a better place to meet) and flexibility with court/program requirements. Participants mentioned that it was difficult to find a good job that was flexible enough to accommodate DTC participation, and also difficult to attend school at the same time as DTC. Because this program requires employment for graduation, having a team discussion about how to help participants find employment, balance employment and other DTC requirements, and allow flexibility with other DTC requirements when possible to allow for work or school engagement would be useful. One concrete suggestion related to flexibility was to allow participants to provide their UA samples in the morning if they are at the program for an appointment, rather than having to come back again in the afternoon during their scheduled time. Participants also suggested that having alcohol and drug free recreational activities would be very supportive and helpful.

3. Consider making the DTC judge a longer term, voluntary position. Also work to maintain consistency in team members whenever possible.

The process evaluation of this program indicated that the DTC judge is assigned by the Administrative Judge and rotates every 12 to 18 months. Studies of other similar programs (Carey, Finigan, & Pukstas, 2008), demonstrate better participant outcomes (and resulting cost savings) in programs where judges have more drug court experience (either longer time with the program or repeated episodes of service). In the current study, there were significant differences in participant outcomes based on the year the participant started in the program, which could be related to the judge they were involved with, a judge gaining experience, or a judge turning over during that year.

Also, overall, participants who entered the program later in the cohort of years this study included had more positive outcomes, which could signify the maturation of the program and the benefit of the team members’ experience. It is likely that by this time, the team had worked out the details of how to implement a DTC program and had developed relationships and procedures to help the program run more smoothly.

4. Work on improving program data quality.

Some of the challenges in conducting this study were the limitations imposed by the lack of program-specific data and missing or inaccurate information about program participants from the sources where it was available due to the historic nature of the study (data were collected from 14 years ago). Because there were no program data available, information from other sources were accessed and pieced together to create a picture of an individuals' participation in the program. We attempted to download information from HATS, but the exports failed. Fortunately, the State's Attorney's Office had maintained some records for their own use, and with this information were able to identify program participants and the approximate dates of their participation. These data did not include State Identification (SID) Numbers and names are not always consistently recorded across different systems, so we were unable to find some of the DTC participants in the other criminal justice data sources. The study was limited because of inaccessible details about the program services received, including the number and results of drug tests and incentives and sanctions received. In addition, the reasons for program completion and treatment data were not available for the time period of this study. It is possible that with more complete data, the study would have been able to provide the program with more informative results about the intensity of services provided and the characteristics that may have helped to define how much of the program participants actually received.

As a result of this study, the program has begun to maintain this type of information. NPC staff created a program database that includes the program's currently available information as a starting point and program staff have begun confirming these existing data and adding new information about participants (Appendix B includes a list of recommended data elements for drug court programs). This process will facilitate program monitoring and improvement, as well as strengthen future evaluation studies. Ideally, this information should be uploaded and/or entered into the Statewide Maryland Automated Records Tracking (SMART) data system. The program may also want to request that the HATS data system provide an export of its data, for historical program monitoring purposes and to provide for future evaluations and/or research purposes. The program intends to use this new system to monitor the number of active participants, its graduation rate, and other key outcomes, and will use it to facilitate record keeping and statistical reporting for state and federal requirements.

The evaluation team is available to provide support related to implementing the database and other data management systems if needed.

5. Set aside time to discuss the findings and recommendations in this evaluation, both to enjoy the recognition of the team's accomplishments and to determine whether any program adjustments are warranted.

Discussion of this information as a team will help to identify program priorities and areas of potential improvement for the future. In addition, program data should be included with other program aspects for review by the Advisory Committee at least once per year and used to assess the program's functioning and any areas that may benefit from adjustment.

SUMMARY AND CONCLUSIONS

This study describes a cohort of participants from the Baltimore City District Court Adult Drug Treatment Court program and their subsequent criminal justice involvement over a 10-year follow-up period. The results clearly indicate that graduates of the program were greatly impacted by the DTC and in almost all of the measures had significantly better outcomes and outstanding cost savings compared to comparison group of individuals who were eligible for DTC but who did not participate in the program at any time. However, individuals who did not complete the DTC program successfully had only limited areas where they demonstrated more positive outcomes than the comparison group (fewer new arrests in some years, and fewer property arrests) and by other measures they appeared to have worse outcomes (more arrests for person crimes). Interestingly, demographic characteristics and prior criminal histories were essentially equivalent for the graduates and non-graduates, which means there are some other as yet unmeasured reasons why some DTC participants were successful and others were not.

Despite the unexceptional recidivism outcomes of the DTC group as a whole, there were some notable outcome differences. For example, the all DTC group (both graduates and non-graduates) had less jail and prison time, as well as less time on probation and parole, which provides another proxy of the severity of their subsequent criminal justice involvement, and which translates into an overall savings of system resources.

One factor that may have impacted the results of this study is the expansion and refinement of treatment services that occurred in Baltimore City since the program's inception. Since the program began, the City implemented a single substance abuse treatment authority (Baltimore Substance Abuse Systems), the Detention Center created a residential substance abuse treatment program (ACT-SAP), the program experienced an expansion in treatment and program capacity in the early part of this decade, and the City implemented a Mental Health Court. These resources may have made treatment more accessible to the comparison group as well as to the DTC group.

In addition to these system changes, the program has undergone several changes internally that have the potential to enhance outcomes for participants in later cohorts than those in this study. At the time this study's participants were in the program there was not a program coordinator and there were not pre-court team meetings. These program enhancements have been demonstrated to improve participant outcomes in other studies (Carey, Finigan, & Pukstas, 2008).

This study found that the cohort of individuals selected for the 10-year follow-up recidivism study were in the program during the time of its lowest graduation rates, rates that have increased significantly since that time. This finding may in part explain better outcomes of a previous study of a later cohort of this court's participants as well as indicate that there were issues occurring during the time of the study period that are reflected in this study's outcome results. The program has worked to serve a challenging population, dually diagnosed with both a mental health issue and a substance abuse problem, and is in the process of implementing several strategies to improve their opportunities for success, including hiring a social worker and increasing the number of case managers.

Overall, the DTC program has demonstrated some success in its main goals of reducing recidivism among its participants over an extended follow-up period. Future studies will illustrate if these program's maturation and enhancements will continue to improve participant outcomes in the future.

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**APPENDIX A: EXAMPLES OF REWARDS AND SANCTIONS USED
BY OTHER DRUG COURTS**

EXAMPLES OF REWARDS AND SANCTIONS USED BY OTHER U.S. DRUG COURTS

Drug Court Responses to Participant Behavior (Rewards and Sanctions) Ideas and Examples

The purpose of rewards and sanctions in drug court programs is to help shape participant behavior in the direction of drug court goals and other positive behaviors. That is, to help guide offenders away from drug use and criminal activity and toward positive behaviors, including following through on program requirements. Drug court teams, when determining responses to participant behavior, should be thinking in terms of behavior change, not punishment. The questions should be, “What response from the team will lead participants to engage in positive, pro-social behaviors?”

Sanctions will assist drug court participants in what *not* to do, while rewards will help participants learn they should do. Rewards teach that it can be a pleasant experience to follow through on program requirements and in turn, to follow through on positive life activities. It is important to incorporate both rewards and sanctions, as sanctions will only demonstrate to participants what behaviors are inappropriate but will not help them learn the behaviors that are appropriate.

Below are some examples of drug court team responses, rewards and sanctions that have been used in drug courts across the United States.

Rewards

- No cost or low cost rewards.
- Applause and words of encouragement from drug court judge and staff.
- Have judge come off the bench and shake participant’s hand.
- A “Quick List.” Participants who are doing well get called first during court sessions and are allowed to leave when done.
- A marker board or magnetic board posted during drug court sessions where participants can put their names when they are doing well. There can be a board for each phase so when participants move from one phase to the next they can move their names up a phase during the court session.
- Decrease frequency of program requirements as appropriate—fewer self-help (AA/NA) groups, less frequent court hearings, less frequent drug tests.
- Lottery or fishbowl drawing. Participants who are doing well have their names put in the lottery. The names of these participants are read out in court (as acknowledgement of success) and then the participant whose name is drawn receives a tangible reward (candy, tickets to movies or other appropriate events, etc.).
- Small tangible rewards such as bite size candies.
- Key chains or other longer lasting tangible rewards to use as acknowledgements when participants move up in phase.
- Higher cost (generally tangible) rewards.
- Fruit (for staff that would like to model healthy diet!).
- Candy bars.
- Bus tickets when participants are doing well.
- Gift certificates for local stores.

- Scholarships to local schools.
- Tokens presented after specified number of clean days given to client by judge during court and judge announces name and number of clean days.

Responses to Noncompliant Behavior (including sanctions)

- Require participants to write papers or paragraphs appropriate to their noncompliant behavior and problem solve on how they can avoid the noncompliant behavior in the future.
- “Showing the judge’s back.” During a court appearance, the judge turns around in his or her chair to show his/her back to the participants. The participant must stand there waiting for the judge to finish their interaction. (This appears to be a very minor sanction but can be very effective!)
- “Sit sanctions.” Participants are required to come to drug court hearings (on top of their own required hearings) to observe. Or participants are required to sit in regular court for drug offenders and observe how offenders are treated outside of drug court.
- Increasing frequency of drug court appearances.
- Increasing frequency of self-help groups, (for example, 30 AA/NA meetings in 30 days or 90 AA/NA meetings in 90 days).
- Increasing frequency of treatment sessions.
- One day or more in jail. (Be careful, this is an expensive sanction and is not always the most effective!)
- “Impose/suspend” sentence. The judge can tell a participant who has been noncompliant that he or she will receive a certain amount of time in jail (or some other sanction) if they do not comply with the program requirements and/or satisfy any additional requirements the staff requests by the next court session. If the participant does not comply by the next session, the judge imposes the sentence. If the participant does comply by the next session, the sentence is “suspended” and held over until the next court session, at which time, if the participant continues to do well, the sentence will continue to be suspended. If the participant is noncompliant at any time, the sentence is immediately imposed.
- Demotion to previous phases. (This has been reported in some programs to be a demoralizing occurrence for participants and may lead to termination rather than improved behavior.)
- Community service. The best use of community service is to have an array of community service options available. If participants can fit their skills to the type of service they are providing and if they can see the positive results of their work, they will have the opportunity to learn a positive lesson on what it can mean to give back to their communities. Examples of community service that other drug courts have used are: helping to build houses for the homeless (e.g., Habitat for Humanity), delivering meals to hungry families, fixing bikes or other recycled items for charities, planting flowers or other plants, cleaning and painting in community recreation areas and parks. Cleaning up in a neighborhood where the participant had caused harm or damage in the past can be particularly meaningful to the participants.
- Rather than serve jail time, or do a week of community service, the participant pays a fee (\$25) to work in the jail for a weekend (2 days). The fact that they have to pay and sacrifice a weekend is an effective deterrent. If they cannot pay the \$25 they spend the weekend in jail.

**APPENDIX B: SUGGESTED LIST OF DATA ELEMENTS FOR DRUG
TREATMENT COURT PROGRAMS**

Drug Treatment Court Data Elements Worksheet

Notes:

DRUG TREATMENT COURT PROGRAM (OR PROGRAM PARTNERS) DATA:

	Variable/Data element	Where located/ who collects? (electronic/ written records?)	When agency began collect- ing or plans to begin?	Notes
	DEMOGRAPHICS & ID (collect from all possible sources)			
1	Name			
2	Identification numbers (e.g., SSN, state ID, FBI ID, DL#, DC case number, state TX number)			
3	Birth Date			
4	Gender			
5	Race/Ethnicity			
	CLIENT INFORMATION			
6	Employment status at drug court entry			
7	Employment status at drug court exit			
8	Highest grade of school completed at time of drug court entry			
9	Number and ages of children			
10	Housing status at entry			
11	Housing status at exit			
12	Income at entry (if			

	Variable/Data element	Where located/ who collects? (electronic/ written records?)	When agency began collecting or plans to begin?	Notes
	self-supporting)			
13	Income at exit (if self-supporting)			
14	Other demographics			
15	Drug court entry date			
16	Drug court exit date			
17	Date of drug court-eligible arrest, VOP, or modification of sentence			
18	Charge for DC arrest			
19	Arresting agency			
20	Court case number for case leading to drug court participation			
21	Date of referral to drug court program			
22	Drug court status on exit (e.g., graduated, revoked, terminated, dropped out)			
23	If participation in drug court is revoked or terminated, reason			
24	Dates of entry into each phase			
25	Criminal justice status on exit (e.g., on probation, charge expunged, etc.)			
26	Dates of UAs			
27	Dates of positive UAs			
28	Dates of other drug			

	Variable/Data element	Where located/ who collects? (electronic/ written records?)	When agency began collecting or plans to begin?	Notes
	tests			
29	Dates of other positive drug tests			
30	Agency provided test results			
31	Drugs of choice (primary and secondary)			
32	Dates of drug court sessions			
33	Attitude toward treatment/readiness to change at entry			
34	Dates of services received with types of service received (see examples below) [Note: If dates are not available, then we would at least need the different types of services received and approximate time periods or the number of times the individual received a particular service].			
34a	<input type="radio"/> Group A&D sessions			
34b	<input type="radio"/> Individual A&D sessions			
34c	<input type="radio"/> Mental health services			
34d	<input type="radio"/> Anger management classes			
35	Agency providing TX			
36	Mental health or A&D diagnoses			

	Variable/Data element	Where located/ who collects? (electronic/ written records?)	When agency began collecting or plans to begin?	Notes
37	Aftercare services (dates and types), if applicable			
38	Dates of re-arrests/re-referrals during program participation			
39	Charge(s)/allegation(s) associated with re-arrests/re-referrals during program participation			
40	Outcome(s) of re-arrests/re-referrals (conviction, dismissed, etc.) during program participation			
41	Other noncompliant behavior (types, dates) during program participation			
42	Probation violations during program participation			
43	Rewards and sanctions (dates, types, and duration)			
44	Detention/jail time as a sanction			