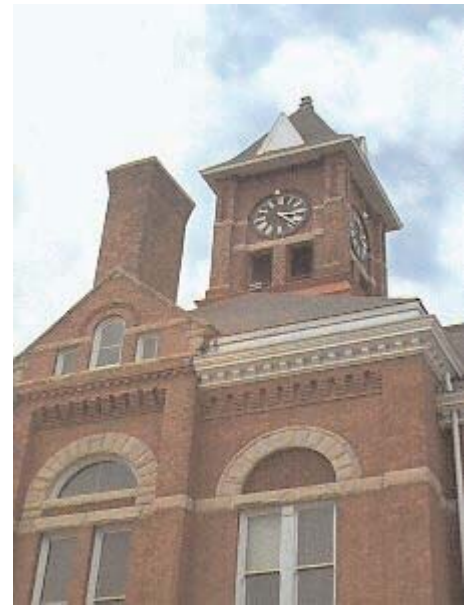


**Barry County
Adult Drug Court
Outcome and Cost Evaluation
*FINAL REPORT***



Submitted to:

**Michigan Supreme Court
State Court Administrative Office**

Submitted by:

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September 2006



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Barry County Adult Drug Court Outcome and Cost Evaluation

Final Report

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September 2006



*Research designed to promote effective decision-making by policymakers
at the national, state and community levels*

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EXECUTIVE SUMMARY

Background

In the past fifteen years, one of the most dramatic developments in the movement to reduce substance abuse among the U.S. criminal justice population has been the spread of drug courts across the country. In a typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives that operate outside of their traditional adversarial roles including addiction treatment providers, prosecuting attorneys, public defenders, law enforcement officers, and parole and probation officers who work together to provide needed services to drug court participants. “The emergence of these new courts reflects the growing recognition on the part of judges, prosecutors, and defense counsel that the traditional criminal justice methods of incarceration, probation, or supervised parole have not stemmed the tide of drug use among criminals and drug-related crimes in America” (Hora, Schma, & Rosenthal, 1999, p. 9).

In the drug treatment court movement, Michigan has been a pioneering force. The Michigan Community Corrections Act was enacted in 1988 to investigate and develop alternatives to incarceration. Four years later, in June 1992, the first women’s drug treatment court in the nation was established in Kalamazoo, Michigan. The Drug Court in Barry County began in 2001 as a response to the high number of drunk drivers coming before the court. Over time, the Barry County Adult Drug Court has emerged as a powerful force in the community in combating increasing jail and prison populations as well as social and public health problems stemming from a variety of substance abuse issues. In 2005, the Michigan Supreme Court, State Court Administrative Office contracted with NPC Research to perform outcome and cost evaluations of two Michigan adult drug courts; the Kalamazoo Adult Drug Treatment Court and the Barry County Adult Drug Court. This document describes the evaluation and results for the Barry County Adult Drug Court (BCADC).

There are three key policy questions that are of interest to program practitioners, researchers and policymakers that this evaluation was designed to answer.

1. Do drug treatment court programs reduce substance abuse?
2. Do drug treatment court programs reduce recidivism?
3. Do drug treatment court programs produce cost savings (in terms of avoided costs)?

Research Design and Methods

Information was acquired for this evaluation from several sources, including observations of court sessions and team meetings during site visits, key informant interviews, agency budgets and other financial documents. Data was also gathered from BCADC and other agency files and databases.

NPC Research identified a sample of participants who entered the BCADC from the implementation of the program through July 1, 2004 (allowing time for outcomes post program entry). A comparison group was identified from two sources (1) those individuals who were eligible for Drug Court at the time of implementation, but whom could not be admitted into the program due to capacity issues at startup and (2) individuals arrested on a Drug Court eligible charge during the study period but who received traditional court processing for a variety of reasons (for example,

failure to be referred, inability to meet program requirements, unwillingness to participate, or receiving a better “deal”). Both the participant and comparison group were examined through existing administrative databases for a period up to 24 months from the date of Drug Court entry. The two groups were matched on age, gender, ethnicity, prior drug and alcohol use history and criminal history including prior arrests and time in jail. Both groups were examined through existing administrative databases for a period up to 24 months from the date of Drug Court entry. The methods used to gather this information from each source are described in detail in the main report.

Results

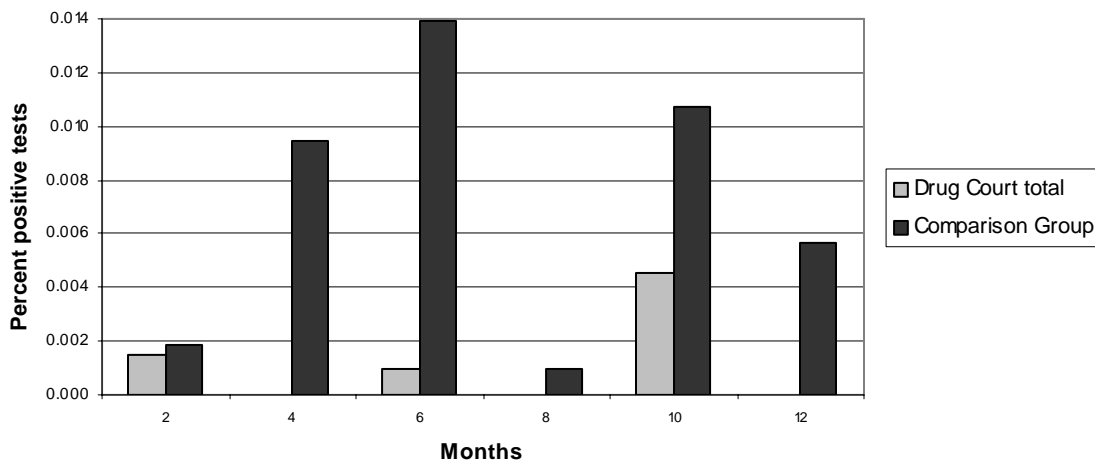
In order to best highlight the results of this evaluation, we can apply the three key policy questions listed above to the specific drug treatment court program in Barry County.

1. Did the Barry County Adult Drug Court reduce participant drug abuse?

Yes. BCADC participants consistently showed less drug use than the comparison group.

Figure 1 illustrates the percent of positive drug tests over time for the Drug Court and comparison groups. The participant group includes graduates, terminated participants, and active participants. This figure shows a consistently smaller percentage of positive drug tests for BCADC participants following program entry. In fact, for some time periods there are no positive drug tests for BCADC participants at all while positive drug tests for comparison group members remain much higher.

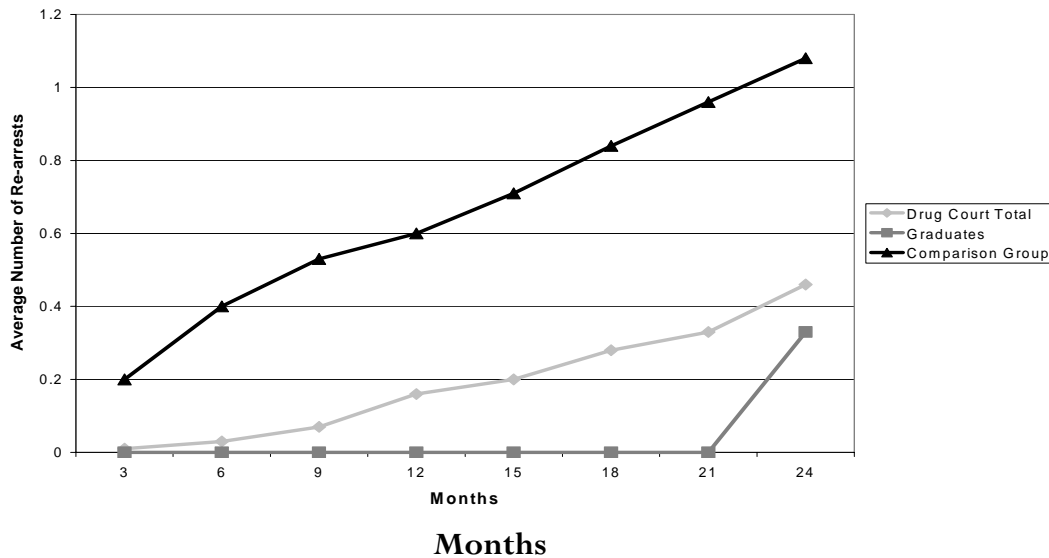
Figure 1. Percent of Positive Tests Over 12 Months for BCADC Participants and the Comparison Group



2. Did the Barry County Adult Drug Court reduce recidivism?

Yes. BCADC program participants were significantly less likely to be re-arrested than offenders who were eligible for the program but did not participate.

Barry County Adult Drug Court participants (regardless of whether they graduate from the program) were re-arrested less than half as often as comparison group members who were eligible for drug court but did not attend. Graduates were re-arrested approximately a third as often as the comparison group, and overall were re-arrested very rarely. In fact, for the first 21 months after program entry, the drug court graduates did not commit any new offenses at all.

Figure 2. Average Number of Re-Arrests per Person Over 24

In addition, in the 24 months following entry to the Program, the recidivism rate for drug court participants was quite low. Only 4% of the graduates and 26% of the all Drug Court participants were re-arrested while 50% of the comparison group sample were re-arrested in the 2-year period. This is particularly impressive considering the BCADC is one of 11 “priority population” courts in the state that targets high-risk prison bound offenders.

3. Are there cost savings (avoided costs) that can be attributed to the BCADC program?

Yes. Due to positive outcomes for drug court participants (including fewer re-arrests, less probation time and fewer new court cases), there were substantial avoided costs for drug court participants.

Barry County Drug Court participants showed a cost savings of over \$3,000 per participant over a 2-year period. When this per participant savings is multiplied by the 108¹ offenders who have participated in the Drug Court Program since implementation (in May 2001), the total Program cost savings (for outcomes over a 24-month period) is **\$353,160**.

These cost savings are those that have accrued in just the two years since program entry. Many of these savings are due to positive outcomes while the participant is still in the program, so savings are already being generated from the time of entry into the program. If Drug Court participants continue to have positive outcomes in subsequent years (as has been shown in other drug courts, e.g., Carey et al., 2005; Finigan, Carey, and Cox 2006) then these cost savings can be expected to continue to accrue over time, repaying the program investment costs and providing further avoided costs to public agencies.

In sum, the Barry County Adult Drug Court was successful in decreasing participant drug abuse, reducing participant recidivism and producing cost savings for the taxpayer.

¹ As of March 2006, 108 offenders have entered and either graduated or been terminated from the program.

INTRODUCTION

Background

In the past fifteen years, one of the most dramatic developments in the movement to reduce substance abuse among the U.S. criminal justice population has been the spread of drug courts across the country. The first drug court was implemented in Florida in 1989. There are now well over 1,000 drug courts operating in all 50 states, the District of Columbia, Puerto Rico and Guam. The purpose of drug courts is 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. “The emergence of these new courts reflects the growing recognition on the part of judges, prosecutors, and defense counsel that the traditional criminal justice methods of incarceration, probation, or supervised parole have not stemmed the tide of drug use among criminals and drug-related crimes in America,” (Hora, Schma, & Rosenthal, 1999, p. 9).

In the typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives that operate outside of their traditional adversarial roles including addiction treatment providers, prosecuting attorneys, public defenders, law enforcement officers, and parole and probation officers who work together to provide needed services to drug court participants.

Drug courts have been shown to be effective in reducing recidivism (GAO, 2005) and in reducing taxpayer costs due to positive outcomes for drug court participants (Carey and Finigan, 2004; Carey et al., 2005). Some drug courts have even been shown to cost less to operate than processing offenders through business-as-usual operations (Carey and Finigan, 2004; Carey et al., 2005).

In the drug treatment court movement, Michigan has been a pioneering force. The Michigan Community Corrections Act was enacted in 1988 to investigate and develop alternatives to incarceration. Four years later, in June 1992, the first female drug treatment court in the nation was established in Kalamazoo, Michigan. Since then, Michigan has implemented 49 drug courts, including specialized courts for adults, juveniles, family dependency, and DUI offenders. Additionally, there are at least 15 courts in various stages of planning and implementation in the state. The Drug Court in Barry County began as a response to the high number of drunk drivers coming before the court. Over time, the Barry County Adult Drug Court (BCADC) has emerged as a powerful force in the community in combating increasing jail and prison populations as well as social and public health problems stemming from a variety of substance abuse issues.

This report contains the process description, outcome evaluation, and cost-benefit evaluation for the BCADC, performed by NPC Research. Given the documented successes of drug courts and their rapid expansion across the country, there has been interest in standardizing the drug court model. The National Association of Drug Court Professionals led this effort in their groundbreaking publication, *Defining Drug Courts: The Key Components* (NADCP, 1997). In this work, they prescribe ten operational characteristics that all drug courts should share as the main components that make up the drug court model. These components can be operationalized to use as benchmarks for program performance. These include practices such as drug testing, judicial interaction with participants, and the integration of alcohol and other drug treatment services with justice system case processing. The ten key components for drug courts can be used as guides for evaluation in determining how well the program has implemented the drug court model as described by NADCP. Although a complete process evaluation of the BCADC was not

conducted by NPC Research, focal points of the ten components were used to shape a process description as well as the outcome research questions. The first section of this report is a description of the methods used to perform the evaluation including the protocols used to obtain information on the Drug Court process, such as site visits, key stakeholder interviews, document reviews, use of state and local administrative databases, and an examination of the Drug Court database. The second section of this report contains a process description of the BCADC and the results of the outcome and cost evaluations.

METHODOLOGY

Process Description Methodology

RESEARCH STRATEGY

NPC Research begins a program evaluation by gaining an understanding of the environmental context. This includes the organizational structure of the drug court itself, the organization of the agencies that interact through drug court, and the organization of the county. For the Barry County Adult Drug Court, this information was collected through site visits, phone calls and interviews with people at the agencies involved, and documents shared during site visits.

The process description of the Barry County Adult Drug Court evaluation was a relatively small part of the overall evaluation, as a detailed process evaluation was completed in 2004² and a new process evaluation is beyond the scope of this project. Using the 10 Key Drug Court Components as a framework, the current process description was designed to help the evaluation team gain a complete understanding of how the Barry County Adult Drug Court functions internally and within the broader systems of treatment and criminal justice. This information is integral to NPC's ability to interpret the outcome and cost results for the Drug Court Program.

SITE VISITS

The evaluation team traveled twice to the Drug Court in Hastings, MI to observe and sometimes participate in team meetings and court sessions and to meet with key personnel at each of the agencies involved. Contact with the Drug Court was also maintained through regular email and phone calls. Those considered key personnel are those knowledgeable about drug court processes or program participants, and those knowledgeable about the database(s) that contain information about program participants. At the BCADC this includes the Drug Court Judge, the Drug Court Coordinator, personnel from the Department of Corrections, Community Corrections, the Hastings Police Department, the Prosecuting Attorney, the Trial Court, Sheriff, the contracted defense attorney, and the treatment providers. Site visits also provide an opportunity to observe Drug Court sessions. These observations gave the evaluation team first-hand knowledge of the structure, procedures, and routines of the BCADC.

KEY INFORMANT INTERVIEWS

Key informant interviews were a critical component of NPC's understanding of the BCADC process. NPC Research interviewed the Drug Court Coordinator, Drug Court Judge, treatment providers, and probation and law enforcement representatives. At the time of this evaluation, the position of the Prosecuting Attorney was in transition and the evaluation team was unable to conduct an interview. NPC Research, under a grant from the Administrative Office of the Courts of the State of California, designed a drug court typology interview guide in 2001 to provide a consistent method for collecting structure and process information from drug courts. This guide was modified slightly to specifically address the BCADC Program. The information gathered through this guide helped the evaluation team focus on important and unique characteristics of the Barry County Adult Drug Court.³

² Customized Business Solutions completed the "Barry County Adult Drug Court Program Evaluation" on March 31, 2004.

³ A copy of this guide can be found at the NPC Research Web site – www.npresearch.com

The topics for this typology interview guide were chosen from three main sources: the evaluation team's extensive experience with drug courts, the American University Drug Court Survey, and a paper by Longshore, et al., (2001), describing a conceptual framework for drug courts. The typology interview covers a large number of areas including specific drug court characteristics, structure, processes, and organization, with each topic contributing to an understanding of the overall drug court typology. The topics in the typology interview guide include eligibility guidelines, drug court program process (e.g., phases, treatment providers, urinalyses, fee structure, rewards/sanctions), graduation, aftercare, termination, non-drug court process, the drug court team and roles, and drug court demographics and other statistics.

The questions in the typology guide were asked during the site visits and through multiple phone calls with the same individuals. This served three purposes: 1) It allowed us to spread the interview questions out over time, minimizing the length of the interview at any one point in time; 2) It provided us an opportunity to connect with key players throughout the duration of the project, maximizing our opportunities to obtain information; and 3) It allowed us to keep track of any changes that occurred in the Drug Court process from the beginning of the project to the end.

DOCUMENT REVIEW

The evaluation team solicited documentation from the Drug Court Program that furthered their understanding of the Program's policies and procedures. These documents included written program descriptions, participant handouts, the 2004 program evaluation, and program progress reports.

ADMINISTRATIVE DATA ANALYSIS

A Drug Court Program database has been used by the BCADC to capture basic information since 2003. The database used by the BCADC is based on a program developed by the Justice Research Center in Pacific Grove, CA and the State Justice Institute. The database allows the BCADC to record information on client demographics, drug court hearings, drug testing, substance abuse and criminal history, case notes, outcomes, and follow-up information. While this database was used primarily for the outcome and cost evaluations, as described below, it also provided valuable data for the process description. This database provided the evaluation team with information on the characteristics of clients served by the Drug Court, the monitoring and sanctioning processes, drug testing, and the frequency of Drug Court hearings. To gather this information on participants involved in the program prior to 2003, the evaluation team extracted data from the Drug Court paper files. Additional information on Program entry, exit, and phase changes was gathered from documents kept by the Drug Court Coordinator.

Outcome/Impact Evaluation Methodology

RESEARCH STRATEGY

NPC Research identified a sample of participants who entered Drug Court from the implementation of the program through July 1, 2004, allowing for the availability of at least 18 months of post-program entry data for most participants. A comparison group was identified from 2 sources (1) those individuals who were eligible for Drug Court at the time of implementation, but whom could not be admitted into the program due to capacity issues at startup (2) individuals arrested on a Drug Court eligible charge during the study period but who received traditional court processing for a variety of reasons (for example, failure to be referred, inability to meet program requirements, unwill-

ingness to participate, or receiving a better “deal”). All groups were examined through existing administrative databases for a period up to 24 months⁴ from the date of Drug Court entry (or, in the case of the comparison group, an equivalent date calculated to be comparable to the Drug Court participant entry date). The evaluation team utilized data sources on criminal activity and treatment utilization, described below, to determine whether there was a difference in re-arrests as well as other outcomes of interest between the Drug Court and comparison groups and within the Drug Court group.

OUTCOME STUDY QUESTIONS

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

1. Does participation in drug court reduce the number of re-arrests for those individuals compared to traditional court processing?
2. Does participation in drug court reduce levels of substance abuse?
3. How successful is the program in bringing program participants to completion and graduation within the expected time frame?
4. What participant characteristics predict successful outcomes (program completion, decreased recidivism)?
5. What combination and types of services predict successful outcomes (program completion, decreased recidivism)?

DATA COLLECTION AND SOURCES

Administrative Data

The majority of the data necessary for the outcome evaluation were gathered from the administrative databases described in Table 1, below. NPC staff members have experience extracting data from these databases and adapted procedures developed in previous projects for data collection, management, and analysis. Once all data were gathered on the study participants, the data were compiled and cleaned and then moved into SPSS 14.0 for statistical analysis. The evaluation team is trained in a variety of univariate and multivariate statistical analyses using SPSS. These quantitative data were used to answer the study questions outlined above. In addition, because the sample sizes were small for some analyses, the data for the outcome evaluation were also examined and reported in qualitatively. Although some differences were not significant, where differences were noted, it is highly likely that a larger sample size would have yielded significant results.

⁴ A set of data covering the complete 24-month period from the initial hearing was available for most participants but was not possible for all participants due to the timing of the outcome evaluation data collection, which was completed in March 2006.

DATA SOURCES

Barry County Drug Court Case Management System (CMS)

As described above, this data system was developed by the Justice Research Center. The database allows the BCADC to record information on client demographics, drug court hearings, drug testing, case notes, outcomes, and follow-up information. The CMS data and data extracted from pre-2003 paper records were the primary sources of Drug Court utilization data for the evaluation. Data on drug testing for Drug Court clients was also collected from the day reporting logs kept by the Drug Court Coordinator.

Barry County Substance Abuse Services Records (BCSAS)

Treatment data for the Drug Court participants were obtained from administrative records at the Barry County Substance Abuse Services office. These records included dates, general types of services provided (individual session, intensive outpatient session, or group session), and substance abuse assessment information.

Offender Management Network Information System (OMNI)

In 1998, the Michigan Department of Corrections (MDOC) implemented a case management and tracking system called the Offender Management Network Information System (OMNI). The OMNI system allows the MDOC to monitor prisoner and sentencing information as well as probation and parole activity. The system was fully functional in Barry County in 2002. Data on probation and parole activities, including drug testing for the comparison and Drug Court groups, were collected from OMNI. Dates and length of prison terms were also collected from the MDOC.

Michigan Computerized Criminal History System (CCH)

The Michigan Computerized Criminal History System (CCH) is a statewide computerized information system administered by the Michigan State Police (MSP) and designed to assist Michigan's criminal justice agencies. The CCH stores Michigan criminal justice information, such as arrest, charge, and judicial records, from multiple sources in a single database. The evaluation team worked with the MSP to gather data on arrests that did and did not lead to prosecution, charges related to that arrest, and the court information stemming from the arrest. These data were used to generate estimates of the number of arrests leading to new court cases for both the participant and comparison groups following the drug court arrest.

Michigan State Treatment Episode Data Set (TEDS)

In any study of a drug court, it is important to gather information about individuals' substance abuse treatment histories during and following drug court. In Michigan, agencies that provide treatment that is paid for through some source of public funds are required to submit reports of their treatment activities to the Michigan Department of Community Health (MDCH). This includes information on costs, services, consumer demographics, and administrative activities. MDCH provided NPC evaluation staff with dates of treatment episodes, general types of treatment provided (e.g., outpatient), and other substance abuse treatment related data.

JAMIN

The Barry County Sheriff's office uses a data management system called the Jail Administration Management Information Network (JAMIN) to track jail data. This data includes arrest codes and

dates of arrests, booking, entry, and release from jail. Data from 1998 through December 2005 were extracted from this system and provided to NPC Research by the contractors that administer the JAMIN system. These data matched well with the statewide CCH data, but also included arrests that were prosecuted under city ordinances. Therefore, these data were used to determine the recidivism and criminal history of the Dug Court and comparison groups for matching the two groups and for outcome purposes.

Table 1. Barry County Adult Drug Court Evaluation Data Sources

Data Type	Source
Demographic characteristics	CMS, OMNI, JAMIN, CCH
Urinalyses and other drug tests	CMS, Day reporting logs, OMNI, BCSAS
Criminal justice history	JAMIN
Jail time served	JAMIN
Date of program admission and discharge	CMS
Probation and parole dates	OMNI
Prison time served	OMNI
Statewide treatment data for Drug Court and comparison groups	TEDS
Court Cases	CCH

SAMPLE SELECTION

As described above, it was necessary to select a cohort of individuals who had participated in Drug Court and a cohort of individuals who had not for the comparison group.

The Drug Court Participant Group

A sample was chosen from the Barry County Adult Drug Court participants that included individuals who began the program from January 1, 2002 through July 1, 2004. This range was chosen to exclude any potential confounds that might occur during the period immediately following program implementation (May 2001). It also allows for the availability of at least 18 months, and in many

cases 24 months, of outcome data for most participants since the data collection for this evaluation ranged from December 2005 through March 2006. Finally, by choosing this range, the sample primarily includes individuals who have completed the program, either successfully or unsuccessfully, providing an accurate basis for program costs from entry to exit.

The Comparison Group

Ideally, a comparison cohort is made up of offenders who are similar to those who have participated in drug court (e.g., similar demographics and criminal history), but have not participated in the drug court program. A group of this type was selected by several methods.

At the time of implementation, the BCADC could not accommodate all eligible participants, forcing the program to turn away approximately 20 eligible individuals. These individuals were included in the comparison group. Additional individuals were selected for the comparison group based on Drug Court eligible charges. Conversations with the Drug Court staff and the Judge indicated that the staff and the Judge often use the Basic Information Records (BIR) provided by the Department of Corrections (DOC), for the initial identification and screening of possible Drug Court participants. The evaluation team worked with the Drug Court staff and the DOC to identify a sample of participants who were arrested on Drug Court eligible charges but who did not enter the Program. The Drug Court Program staff provided the evaluation team with 5 charges that commonly lead participants to Drug Court. These charges included OUIL 3rd Offense, several drug possession charges, and charges of breaking and entering. The Michigan DOC ran a search using their database to identify individuals arrested in Barry County on those charges, but filtering out those with a history of assault charges, between 2002-2004. The results of this search returned both individuals who had participated in Drug Court and those who did not. The Drug Court participants were filtered out and the remaining individuals were added to the list of 20 start-up comparison group members. This potential comparison group was then matched on several demographic and criminal history characteristics to the Drug Court group. The matching process and results are presented in the outcome results section of this report.

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 courts, when a drug court 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 transactions. In addition, the TICA approach recognizes that these transactions take place within multiple organizations and institutions that work together to create the program of interest. These organizations and institutions contribute to the cost of each transaction that occurs for program participants. TICA is an intuitively appropriate approach to conducting costs assessment in an environment such as a drug court, which involves complex interactions among multiple taxpayer-funded organizations.

Cost to the Taxpayer

In order to maximize the study's benefit to policy makers, 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 court 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 (either through tax-related expenditures or the results of being a victim of a crime perpetrated by a substance abuser) 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.

COST EVALUATION METHODS

The cost evaluation involves calculating the costs of the program, the costs of "business-as-usual" or traditional court processing for cases that were drug court eligible, and the costs of outcomes. In order to determine if there are any benefits (or avoided costs) due to drug court program participation, it is necessary to determine what the participants' outcome costs would have been had they not participated in drug court. One of the best ways to do this is to compare the costs of outcomes for drug court participants to the outcome costs for similar individuals arrested on the same charges who did not participate in drug court. The costs to the Barry County criminal justice system (cost-to-taxpayer) incurred by participants in Drug Court were compared with the costs incurred by those in Barry County who were eligible for but did not enter Drug Court.

TICA Methodology

The TICA methodology is based upon six distinct steps. Table 2 lists each of these steps and the tasks involved.

Step 1 was performed during the site visits, through analysis of BCADC documents, and through interviews with key informants. Steps 2 and 3 were performed through observation during the site visits and by analyzing the information gathered in Step 1. Step 4 was performed through extensive interviewing of key informants, direct observation during the site visits, and by collecting administrative data from the agencies involved in Drug Court. Step 5 was performed through interviews with Drug Court and non-drug court staff and with agency finance officers. Step 6 involved calculating the cost of each transaction and multiplying this cost by the number of transactions. All the transactional costs for each individual were added to determine the overall cost per individual. This was generally reported as an average cost per individual including "investment" costs for the Drug Court Program, and outcome/impact costs due to re-arrests, jail time and other recidivism costs. In addi-

tion, due to the nature of the TICA approach, it was also possible to calculate the cost for drug court processing for each agency.

The direct observation of the program process and the specific program transactions occurred during two site visits to Barry County. The key informant interviews using the Typology Interview Guide were also performed during the site visits (see the Drug Court Typology Guide on the NPC Web site – www.npcresearch.com) and through interviews via phone and email. Cost data were collected through interviews with Drug Court staff and budgetary officers as well as from budgets either found online or provided from agency staff.

The specific transactions used in this cost evaluation were somewhat limited due to budget constraints. The costs to the criminal justice system outside of Drug Court Program costs consist of those due to new arrests, subsequent court cases, probation, prison, parole, bookings, jail time served, non-Drug Court treatment (outpatient, intensive outpatient, and residential) and victimizations. Program costs include all Program transactions including Drug Court sessions, case management, drug tests, assessments, group and individual treatment sessions, and intensive outpatient treatment sessions.

Table 2. The Six Steps of TICA

	Description	Tasks
Step 1:	Determine flow/process (i.e., how clients move through the system)	Site visits/direct observations of program practice Interviews with key informants (agency and program staff) using a program typology and cost guide (See guide on www.npcresearch.com)
Step 2:	Identify the transactions that occur within this flow (i.e., where clients interact with the system)	Analysis of process information gained in Step 1
Step 3:	Identify the agencies involved in each transaction (e.g., court, treatment, police)	Analysis of process information gained in Step 1 Direct observation of program transactions
Step 4:	Determine the resources used by each agency for each transaction (e.g., amount of judge time per transaction, amount of attorney time per transaction, # of transactions)	Interviews with key program informants using program typology and cost guide Direct observation of program transactions Administrative data collection of # of transactions (e.g., # of court appearances, # of treatment sessions, # of drug tests)
Step 5:	Determine the cost of the resources used by each agency for each transaction	Interviews with budget and finance officers Document review of agency budgets and other financial paperwork
Step 6:	Calculate cost results (e.g., cost per transaction, total cost of the program per participant)	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 program and outcome costs. (These calculations are described in more detail below)

RESULTS

The results presented in this report include a detailed process description of the Barry County Adult Drug Court's current operations. Points of interest, issues, or successes experienced by the Drug Court are highlighted within the text as either "comments" or "observations." "Comments" contain information gathered from interviews with Drug Court staff, while "Observations" contain information from evaluator observations of Drug Court processes. This is followed by a presentation of the outcome and cost results and a discussion of the policy implications of these results.

Barry County, Michigan

Barry County is a rural county in southwestern Michigan growing at the rate of about 1% per year. As of the 2000 census, Barry County had a population of 56,755 (estimated at 59,892 in 2005), with over 70% of the population over the age of 18. Hastings, the County seat and largest city in the County with a population of roughly 7,000, has been named one of the best 100 small towns in America.

According to the 2004 Barry County Trial Court Annual Report, despite a 14.6% decrease in felony cases in the county, both drunk driving cases and abuse and neglect cases increased from 2003 to 2004 (44.6% and 111% increase, respectively). Drug and alcohol use has emerged as a major issue for the community, particularly as methamphetamine manufacturing and use grows increasingly common. Problems with methamphetamine have burgeoned to such an extent that in 2004, Barry County applied for and received federal funds to assemble a task force designed to counter all aspects of the methamphetamine problem in the County.

The commitment of Barry County's community leaders in supporting alternatives to incarceration for nonviolent offenders with substance abuse problems is longstanding. In an effort to stem the "revolving door" of OUIL offenders (drunk drivers) through the Court and Corrections systems, Judge James Fisher initiated the process to establish a Drug Court in Barry County. The Barry County Adult Drug Court, located in Hastings, originally targeted repeat drunk drivers but has expanded to include treatment and Court monitoring for a range of substance abuse problems.

The BCADC began operations in 2001. Since then, the Program has served nearly 150 individuals, helping many of them take back control of their lives and relationships, while preserving the goal of protecting public safety. The BCADC received a positive process evaluation in 2004 that cited the exceptional level of teamwork and cohesiveness among the agencies serving Drug Court participants. The current evaluation seeks to quantify these results by providing a thorough analysis of the outcomes and cost-benefits of the Program.

Barry County Adult Drug Court Process Description

The following information was gathered from interviews, Barry County Adult Drug Court documents (such as the policy manual), observations of the Barry County Adult Drug Court, and a prior process evaluation completed in 2004 by Customized Business Solutions. The majority of the information was gathered from the interviews and, as much as possible, the evaluators have attempted to represent the information in the same words in which it was given.

Overview

The Barry County Adult Drug Court opened its doors in 2001. In response to the high number of drunk driving offenses coming through the court system, the BCADC was designed to specifically target OUIL (operating a vehicle while under the influence of liquor) third time offenders, but it also serves users of other drugs. The recent popularity of methamphetamine in the County has led to an increase of clients with methamphetamine use problems. The BCADC has implemented some innovative techniques to help its participants become and remain drug free. The Program's use of the SleepTime Monitor, an electronic wrist monitor that tracks participants' sleep patterns for signs of drug and alcohol use, is particularly unique and has received national attention. Barry County has also recently incorporated a licensed physician into the Program to serve clients on an as needed basis, particularly those with drug problems that are accompanied by significant physical complications, such as methamphetamine. These and other Drug Court operations are described more fully in the remainder of the process description.

Implementation

The impetus for the establishment of Barry County's Adult Drug Court came when Judge James Fisher began to notice that a large number of individuals arrested on OUIL and other drug-related charges for whom he had recommended treatment as part of their sentence returned to his court without having received treatment. Judge Fisher recognized that the case management of the Department of Corrections was focused on keeping individuals out of prison and was not focused on ensuring that the offenders seek and receive treatment for their drug and alcohol problems. In contrast, Judge Fisher advocated for timely and responsive interventions for non-violent offenders with substance abuse problems. A colleague in Kalamazoo encouraged Judge Fisher to consider establishing a drug court program in Barry County as a response to these issues. After attending a state conference, Judge Fisher applied for a planning grant in 2000 from the federal government and received funding through an Edward Byrne Memorial Grant. Approximately one year later, after spending time building the staff, policies, and procedures of Barry County's program, the Barry County Adult Drug Court began serving clients in May 2001.

Capacity and Enrollment

The BCADC serves approximately 80 clients annually. At any single point in time, the BCADC can accommodate between 60-65 individuals. During start-up, the Program was only able to admit 40 persons resulting in the turning away of roughly 20 individuals from the Program. However, since the Program has been fully up and running, the BCADC has been able to accommodate all eligible participants who desire to participate. As of December 2005, 139 individuals had enrolled in the Program; 61 (44%) of these clients graduated, 36 (26%) were unsuccessfully discharged, 39 (28%) were active, and 3 (2%) were on bench warrant status. Consistent with the demographic make-up of Barry County, the vast majority of participants are White and male. Nearly 41% of the participants are single, 38% are divorced or separated, and only 21% are married. Given the emphasis of the Drug Court on OUIL offenders, it is not surprising that the most common drug of choice for participants is alcohol.

Drug Court Goals

The overarching purpose of the BCADC is to focus on providing treatment and support groups with the goal of helping Drug Court participants live a clean and sober lifestyle. The Drug Court is concerned with coupling treatment with rules and accountability to help participants take responsibility

for their return to being productive citizens. In the service of achieving this mission, the BCADC has four stated primary goals:

1. Reduce the incidence of OUIL offenses and problems associated with these offenses.
2. Reduce the number of individuals who are substance abuse dependent.
3. Reduce the flow of drug-associated criminal behavior and decrease its impact on the individual, their family, and the community.
4. Lower Barry County's prison commitment rate by enrolling more serious offenders.

Eligibility Criteria

Offenders may be eligible for the Barry County Adult Drug Court if they:

- Are aged 18 or over and living in Barry County.
- Have committed a drug related crime with the exclusion of marketing illegal drugs.
- Do not have a history of violent or assaultive felony convictions.
- Do not have a criminal record indicating a history of drug delivery or sexual crimes.
- Did not use a weapon during the offense.
- Do not have any pending felony charge(s) or a detainer for Immigration or parole/probation violation.

The BCADC specifically targets OUIL offenders, particularly those with a third offense or higher, although since inception individuals have been included who abuse a range of substances. More recently, the BCADC has begun to focus attention on methamphetamine users due to the chronic and repeated nature of their offenses.

Individuals may come to Drug Court through a new felony offense (first time or repeat offenders) or a probation violation. Parole violators are not eligible for the Barry County Adult Drug Court. The Prosecuting Attorney, Defense Attorney, or Judge may refer an individual to Drug Court although the Judge makes final decisions about admittance. The pre-sentencing report provided by the MDOC is often used by the referring parties to determine whether an individual is a good candidate for Drug Court as it includes information regarding prior offenses, history of drug or alcohol abuse, etc. When an individual is referred to the Program, the Drug Court Probation Officers conduct an initial screening. The screening form determines whether a person is logistically capable of meeting the frequent obligations of Drug Court. The screening process is fairly comprehensive, asking about the individual's physical and mental health history, treatment history, and personal situation. During the screening process, potential participants are given information about the Program in the form of a standardized orientation packet and asked to consider whether they are willing and able to participate. Even if it is determined that the individual fails to meet the eligibility criteria, the Drug Court team can recommend them for consideration by the Judge. Judge Fisher has the capability of waiving an individual into Drug Court, even if the individual has a history that would typically make them ineligible, if he believes the individual would benefit from the accountability provided by the Program. Likewise, the Judge has the power to exclude an individual if he believes they would be unable to comply with the rules of Drug Court (for example, if there are transportation issues or other demands that could interfere).

The BCADC is a post-plea program. All Drug Court participants are sentenced to Drug Court as a term of their probation.

Incentives for Offenders to Enter (and Complete) the BCADC Program

The BCADC program allows participants to remain a free member of society while working on their substance use problems. Any jail time that would have been imposed at the time of sentencing is suspended while the participant is in Drug Court as long as they maintain satisfactory progress. Upon completion of the Program, some clients may have their charges dropped or reduced. Any charge reductions or dismissals are negotiated during the initial referral process by the client, their defense attorney, and the Prosecuting Attorney. A strong incentive for all Drug Court participants is avoiding incarceration and the opportunity to focus on gaining control of their substance use issues and their lives while living in the community.

Drug Court Program Phases

There are two primary phases plus an informal Aftercare in the Barry County Adult Drug Court. The Program requires a minimum of 18 months, with each phase consisting of specific treatment objectives, and therapeutic and rehabilitative activities. In general, Phase I is more focused on helping the participant establish a treatment program and stability, while Phase II is focused on establishing community ties in the form of employment or school, maintaining sobriety, and becoming financially accountable to the Program and any victims of the crimes they committed.

During Phase I, participants are required to submit to random drug testing 3 times per week, meet with their Drug Court Probation Officer once every two weeks, attend Drug Court sessions bi-weekly, attend a 12-step orientation class and continue to attend the 12-step meetings or IOP sessions at least 3 times per week, obtain a 12-step sponsor, attend treatment as scheduled by the treatment provider, and follow up with any referrals to specialized treatment. It is likely that participants will wear the electronic sleep-monitoring bracelet at some point. Participants must also be employed, go to school, or participate in community service, and finally, they must abide by a 10pm curfew. After 6-9 months of successful participation in Phase I and completion of a treatment program, participants may be advanced to Phase II.

During Phase II, the participant must submit to random drug testing and attend monthly meetings with their Drug Court Probation Officer and monthly Drug Court sessions. Many clients wear the electronic sleep monitor for the first 30 days of Phase II or in the case of a relapse. The BCADC considers treatment during Phase II “Aftercare treatment” and some participants continue receiving substance abuse treatment services. Participants continue to attend 12-step program meetings. Other requirements include following a 12am curfew, obtaining a GED, and payment of Drug Court fees and restitution (if applicable).

The Drug Court Team considers the time after graduation “Aftercare,” although there is not a formal Aftercare component of the Program. Most Drug Court participants have one year to 18 months of probation remaining following their discharge from Drug Court. The purpose of the Aftercare on probation is to maintain ties with participants and monitor their progress for one year to 18 months following discharge from the Program. The Michigan Department of Corrections administers drug testing and monitors probationers’ behavior, allowing the Drug Court staff and the Court to check substance use tests, participant progress, employment, and general adjustment. Further, the Drug Court staff sends follow-up evaluations (up to 3) to all discharged Drug Court clients.

Treatment Overview

Barry County Substance Abuse Services (BCSAS) is the primary treatment provider for Drug Court participants. BCSAS facilitates recommendations for treatment and provides treatment for all Barry County residents, regardless of their insurance status. Drug Court participants can be referred to other agencies in the community for additional services, such as residential treatment. These agencies include Community Mental Health Services (for co-morbid mental health disorders), Project Rehab, Great Lakes, Clearview, Recall the Mission (a year-long program through Kalamazoo Gospel Mission), and James Gilmore Jr.

The treatment services available to Drug Court participants are individualized to suit the unique needs of each participant. BCSAS offers outpatient and intensive outpatient (IOP) services. Individual treatment sessions, group sessions, and family therapy are also available. In addition, participants can be offered or can be referred to cognitive behavioral treatment classes, mental health services, and self-help groups such as Women's Place (non-therapeutic, empowerment orientated group for women). Clients are also put in contact with local 12-step groups.

Comment: There has been a recent increase of collaboration between the Michigan Department of Corrections (MDOC) and BCSAS to obtain services and funding for clients that need more intensive services. This increased collaboration has resulted in greater access to services for Drug Court participants in need.

Other Drug Court Services

Drug Court, in partnership with the Office of Community Corrections, has developed several programs that are available to Drug Court participants both in the community and in the County Jail. The building housing the Drug Court Office has several classrooms used for conducting GED and basic adult education classes. Cognitive behavioral therapy is also available through this partnership. The BCADC staff can assist clients needing aid with domestic or sexual abuse services and emergency housing for domestic abuse victims. The Drug Court staff can also offer referrals to anger management classes, and parenting, dental, and food services. Participants may be referred to Works First and Michigan Works, two employment oriented organizations. The Hastings Chamber of Commerce assists the Drug Court by helping to place participants with non-profit organizations for community service work.

Team Meetings

Key staff meet prior to each Drug Court session in a "staffing meeting" to update and advise the Judge on participants' progress. The individuals involved with these meetings consist of only those staff intimately involved with the Drug Court and who would have input regarding what course of action the Judge might take with the participant in Court. The Judge, Drug Court Coordinator, two Drug Court Probation Officers, the Substance Abuse Coordinator from BCSAS, and State Probation Officer are the primary members involved with the staffing meeting.

Comment: The Team works well together and communicates well with each other. The staff feels comfortable verbalizing their opinions and can usually come to an agreement. Although the Judge has ultimate authority, it feels like it is a collaboration.

Observation: The Team appears to have a deep level of respect for each other, likely born of years of working together. Although the Judge is deferred to, he clearly solicits and values the recommendations of everyone involved in the staffing meeting. The Team spends a significant amount of time deliberating over each participant scheduled to come before the

Judge that day. They are concerned with the recovery and ongoing improvement of each Drug Court participant. Further, they each bring a unique perspective and are clearly willing to pool resources to secure services for the participants in need.

There are also bi-monthly meetings of the Drug Court Advisory Board. The function of this Board is to focus on the development of Drug Court policies. The Board members consist of the Drug Court Judge, Circuit Court Administrator, MDOC Probation Officer, Prosecuting Attorney, County Sheriff, City Police Chief, Defense Attorney, Drug Court Coordinator, Drug Court Probation Officers, and Substance Abuse Representative.

Provider and Team Communication with Court

Members of the Drug Court Team, including the treatment provider, have an open and easy communication with the Court. In addition to the staffing meetings that take place prior to each Drug Court session, the Team has access to the Judge in the event of a participant violation. This open system is in place for the allowance of swift imposition of sanctions, as well as the continued high quality functioning of the Program's processes.

Drug Court Sessions

Drug Court sessions are held twice a week – on Wednesday at 4pm and Thursday at 11am. Both sessions last about the same amount of time (usually between 30-45 minutes). The Drug Court sessions are held twice weekly at different times of day in a concerted effort to accommodate the schedules of Drug Court participants. Court is open to anyone that wishes to attend. All staff members who attend the staffing session also attend Court.

Observation: The Drug Court staff are concerned with doing everything possible to ensure the success of participants. This includes recognizing that some individuals have employment and family obligations that may prohibit them from attending Court at certain times.

The Drug Court Team

Judge. The Drug Court Judge in Barry County is part of the Team. Judge James Fisher is the Circuit Court Judge who was responsible for the implementation of the BCADC. The position of Drug Court Judge does not rotate through other judges and Judge Fisher rarely misses a Drug Court session. The Judge attends Drug Court twice a week, participates in the staffing meeting, and administers sanctions/rewards to participants. He is also involved with community outreach and public speaking about Drug Court.

Judge Fisher has a close relationship with the participants and considers himself a father figure. He knows each client, is familiar with their family members, and is keenly aware of each participant's unique situation and particular issues. Yet, despite his personal interest and interaction with Drug Court participants, the Judge maintains a professional demeanor and distance. The Judge earns the respect of participants by holding them accountable for their actions while rewarding them for their successes.

Drug Court Coordinator. The Drug Court Coordinator (Program Director) is the point of contact for the Drug Court Team, which means that he is in constant contact with Team members outside of Court, and provides the various agencies with information about the Drug Court and its clients. The Coordinator's role is to coordinate the activities of the Drug Court Probation Officers and office staff with the needs of the Drug Court participants. His duties include case management, grant writing,

data tracking and compiling for reports, administrative decisions (hiring and firing), and crisis management for participants. The Coordinator has been pivotal in developing policies, procedures, and materials for Drug Court. He is also instrumental in coordinating the activities of the planning and staffing meetings. In Barry County, the Coordinator also runs the OCC (Office of Community Corrections). There is some overlap in his duties for Drug Court and the OCC, as the OCC has many programs in which Drug Court clients participate (for example, day reporting for drug testing). The Coordinator spends between 50-60% of his time on Drug Court activities.

Drug Court Probation Officers. As County probation officers, the Drug Court Probation Officers coordinate their efforts with state probation officers who also monitor Drug Court clients. The Drug Court Probation Officers are the clients' main liaisons to the rest of the Drug Court Team. These key team members are responsible for the initial intake and orientation of all Drug Court participants and make referrals and monitor all services that are needed by clients in accordance with their treatment plan. Court orders are enforced by the Drug Court Probation Officers. They are also responsible for monitoring drug testing and coordinating with other agencies when tests at their locations come back positive. Further, the Drug Court Probation Officers act to generally support the clients in working through their substance abuse problems. They are often the first people to provide positive reinforcement for compliance with Program directives.

Treatment Counselor. The Substance Abuse Coordinator from Barry County Substance Abuse Services (BCSAS) takes an active role in the Drug Court Team. Although BCSAS is only one of several treatment locations for Drug Court participants, the Substance Abuse Coordinator is responsible for aggregating the progress reports from the various providers for the Judge prior to each staffing meeting. In addition to attending the staffing meetings, she also attends each Drug Court session. The Substance Abuse Coordinator facilitates substance abuse recommendations for new Drug Court clients and clients who relapse, and provides instructions on how to acquire recommended treatment.

Probation. Participants are supervised by State Probation Officers through the Michigan Department of Corrections in addition to the County Probation Officers in the Drug Court office. All Drug Court participants are seen by a single Probation Officer at MDOC. This officer attends staffing meeting and Drug Court sessions, offering her assessment of Drug Court clients' progress with their probation requirements. The addition of this member to the Team is particularly useful when the team explores alternative programs, such as boot camp, that might be available to the client. The Probation Officer tends to have knowledge of and access to these resources and can facilitate the participation of the client in these programs. Further, the Probation Officer can offer insight into the client's terms of probation and update the team on consequences for the client should he/she prove unsuccessful in Drug Court.

Defense Attorney. The role of the Defense Attorney is to provide legal advice, ensure that the rights of the clients are protected, advocate at staffing for the clients, and refer clients to Drug Court. Roughly 90% of Drug Court participants use court-appointed attorneys as their defense attorney. The Defense Attorney worked with the Prosecutor's office to develop the screening form that the Barry County Adult Drug Court uses to determine eligibility. The Defense Attorney is committed to Drug Court and has taken steps to educate other defense attorneys and community members on the Drug Court Program. When possible, the Defense Attorney attends team meetings and graduations.

Prosecuting Attorney. The Prosecuting Attorney's main role in Drug Court is to identify and refer potential Drug Court participants and to ensure that public safety is protected. The position of the Prosecutor in Barry County was recently filled after some months of vacancy. It is not yet clear how the new Prosecutor will interact with the Court, however, the previous Prosecutor was highly in-

involved with Drug Court, sitting on the Advisory Board and taking an active role in determining eligibility. The former Prosecutor also attended Drug Court sessions on occasion to observe and follow up on the progress of participants.

Law Enforcement. Law enforcement officials have a unique role in the BCADC. The Drug Court has an MOU in place with the Hastings City Police Department, Barry County Sheriff's Department, and the Michigan State Police that allows for non-intrusive home visits to check on curfew conformity and drug use. For a visit to be relatively non-intrusive, home visits are not performed more than twice weekly unless there are extenuating circumstances. Home visits may be conducted at the request of Drug Court personnel or at the discretion of the law enforcement agency. Law enforcement has the authority to take participants into custody if they are found violating the terms of their Drug Court participation. For the most part, the home visits are only reported to the Drug Court staff if a violation is discovered.

If a participant lives within Hastings city limits, the home visits are most likely performed by the City Police; if the participant lives outside Hastings, the Sheriff is most likely to conduct home visits. The MSP rarely perform home visits. The Sheriff's office estimates that most home visits occur between 10 pm and midnight and last approximately 5 minutes.

Comment: In an effort to create closer partnerships between law enforcement personnel and the Drug Court, the Drug Court and Sheriff's office have recently proposed that law enforcement become more involved with Drug Court and conduct a greater number of spontaneous home visits.

Observation: To facilitate this partnership, it could be useful if all home visits were reported to the Drug Court Office and documented, regardless of the outcome. This practice could provide additional evidence of participant compliance with Drug Court directives, perhaps even allowing added opportunities for reward or praise for positive home visits.

Drug Court Team Training

Members of the Barry County Adult Drug Court Team have attended Drug Court training conferences and workshops. During the planning and implementation process, the Drug Court Judge, Coordinator, Drug Court Probation Officers, Substance Abuse Coordinator, Prosecuting Attorney, and Sheriff attended out-of-state training. Key members of the Drug Court Team, including the Coordinator, Probation Officer, and Judge have attended annual conferences of the Michigan Association of Drug Court Professionals and at times, the national conference. Barry County Drug Court staff have also participated in training at various community support agencies, such as the Michigan Department of Corrections, the Office of Community Corrections, the State Court Administrators Office, and the Barry County Probate Court. Team members also use each other as resources, sharing articles and other materials on a more informal basis.

Drug Court Fees

There is a one-time fee of \$200 assessed at the time of sentencing for all Drug Court participants. These fees are added to court costs and BCADC participants are required to pay any restitution owed and Drug Court fees prior to graduation. Other costs to the participants are related to positive or "washed" urine analysis tests. If participants test positive or if their urine is diluted to the point that it is unable to be tested, participants are responsible for the \$40 cost of the test.

Drug Testing

Barry County has an extensive and comprehensive drug testing system. Participants are tested by multiple agencies using a variety of methods. The Drug Court Program has embraced the use of technology, which enables Program Probation Officers to more effectively monitor the use patterns of the Drug Court participants. Over the years, the Drug Court staff has tested several electronic monitoring systems. At present, the Program uses an electronic sleep monitoring system designed to detect sleep patterns associated with alcohol and drug use. These monitors are worn on the wrist and are not removable. At any time, up to 30 participants can be on the wrist monitor. All Drug Court participants report to the Program office prior to each Drug Court session. If they are on the wrist monitor, the information from the monitor is downloaded by the Program Probation Officer. If sleep patterns indicate the probability of use, a urine sample is taken and sent to a lab for testing. In the case that a participant is not wearing a monitor, they are tested for drug and alcohol use with a 7-panel instant urine test or a breathalyzer test. The Drug Court staff may also call a participant in for testing at random or if they suspect use.

Drug Court participants are also tested for drug use about once per week at Barry County Substance Abuse Services. Clients are tested at random when they arrive for treatment. If a client tests positive for drug use, the outcome is noted and reported to the Drug Court staff and the Judge. Local law enforcement officials are also involved with drug testing. The Drug Court office has agreements in place with Hastings City Police, Barry County Sheriff, and the Michigan State Police that allow home visits to clients. During home visits, law enforcement can perform breath tests. If the test is positive, the client may be taken into custody until the following working day when they are usually brought to the attention of the Drug Court staff and brought before the Judge.

Rewards

Praise is the most frequently used reward in the BCADC. The Judge and Drug Court Probation Officers offer verbal encouragement and accolades when a participant is doing well in the Program. The Judge is also known to make concessions, such as the opportunity for a participant to go on vacation, for positive behavior. Although the Drug Court Team may make recommendations to the Judge about freedoms or rewards, the Judge makes the ultimate decisions on rewards and sanctions. Advancement to the next stage, dismissal or reduction of criminal charges, and graduation are all rewards built into the structure of the Program. Also, as participants advance in the Program, certain restrictions are loosened as a reward. For instance, the frequency of Drug Court appearances and meetings with Case Managers are reduced.

Sanctions

For the most part sanctions are imposed by the Judge, but decided through a collaborative effort with the Drug Court Team. The Team recognizes the importance of immediacy in sanctioning non-compliant behavior. When a participant commits an infraction, as soon as he/she comes to the office, the Probation Officer walks them over to the Judge to be sanctioned. However, in the event that the Judge is unavailable, he has given the Drug Court staff the power to begin implementing some sanctions. In the case of a positive drug test, whether during a home visit or a urine test at one of the agencies, the participant is usually before the Court within 24 hours of the reported result to receive his/her sanction. Sanctions are graduated and Drug Court Team makes an effort to recommend a fair sanction for the severity of the infraction. Non-compliant behaviors include displaying negative attitudes; drug use; refusal or failure to attend Drug Court sessions, treatment, or supervision meetings; or not coming to the office for electronic monitor downloads. Sanctions include (in order of severity)

warnings and reprimands from the Judge, community service, a written thesis, referral to cognitive behavioral therapy or other classes, demotion to an earlier phase, increased frequency of drug testing or wearing of the SleepTime monitor, increased supervision, more frequent Drug Court appearances, incarceration, and finally, discharge from the Program.

Observation: The Judge capitalizes on the strength of his relationship with participants by using admonishments in Court as a sanction for non-compliance.

Unsuccessful Termination

Unsuccessful termination from the BCADC may result from repeated non-compliance with Drug Court requirements (such as drug test violations) or lack of progress. Incurring a new felony while enrolled in Drug Court results in immediate termination from the Program. When a participant is terminated from the Program, they are returned to regular Court processing. Most terminated participants are given the sentence they would have been given if they had not attended Drug Court.

Comment: The Judge believes in the benefits of the Drug Court Program and understands that success in the Program may only come after the experience of repeated failures. Therefore, he tends to be patient with participants and uses termination only after all other possible avenues have been exhausted.

Graduation

Requirements for graduation from the Barry County Adult Drug Court include being clean for 90 days prior to graduation, payment of restitution or fees, and general compliance with the entirety of the court order leading the client to Drug Court. Most clients spend at least 18 months in Drug Court before graduating. Graduations are held about once per month. The scope of the ceremony depends on the number of participants graduating. The Drug Court office sends formal invitations for the graduation to the participants, their family members, various community organizations (such as law enforcement) involved with Drug Court, and all members of the Drug Court Team (such as the treatment provider and the Judge). Active Drug Court participants generally must attend graduations. However, attendance requirements vary so that at times only participants scheduled to attend Court that day are required to attend graduation whereas other times all Drug Court participants are required to attend. All graduation ceremonies are treated as special occasions, complete with refreshments such as cake or pizza. Smaller ceremonies are usually attended by sponsors and families while larger ceremonies may include guest speakers as well.

Data Collected by the Drug Court for Tracking and Evaluation Purposes

Data on Drug Court participants is kept in a variety of forms and locations. The Drug Court office keeps participant court files, which includes the Basic Information Report (BIR) from the Department of Corrections, drug testing history, court dates, court notes, and the date and type of sanctions. Much, but not all, of this information is transferred to the electronic management system used by the Drug Court. The BCADC staff also keeps an Excel file containing Drug Court entry and exit dates, phase dates, docket numbers, general criminality information, some demographics, discharge notes, and follow-up notes. Intake forms are also kept on file at the Drug Court office that include eligibility notes, whether a Judge waiver was required to enter the Program, and drug history.

Data on Drug Court participants is kept at other offices as well. The Department of Corrections uses their OMNI system to track each client's activities for the entire term of probation. Barry County Substance Abuse Services uses a cover sheet in each client's file to easily refer to treatment dates

and types of treatment provided. An AS400 system is used by the Court to track the case history for each participant.

Despite the multitude of data potentially available for tracking and evaluation purposes, at the time of this evaluation, there was no centralized data management system used consistently by all the agencies involved with Drug Court participants or the Drug Court office. The BCADC team had implemented the Community Corrections Automated Management Information System (CCAMIS) utilized by other drug courts in Michigan in an effort to better track the Program's participants, however, this system proved an inadequate fit with Barry County's data. The State Court Administrative Office rolled out the Michigan Drug Court Case Management Information System, a web-based case management tool administered through Advanced Computer Technologies, in the winter of 2006. The BCADC staff has begun utilizing this system to capture all data elements associated with Drug Court, such court action and drug testing. This system should help the office more easily and effectively manage data for reports, case management, and evaluation purposes.

Drug Court Funding

At present, the BCADC is funded almost entirely by grants. Initial and continued funding for the implementation phase and current operations of the Drug Court comes from an Edward Byrne Memorial Grant. Additional funding for the Program is sourced through a grant from the Michigan State Court Administrative Office (SCAO). The local government of Barry County provides financial support as well. Funding is currently an important issue in Barry County, as drug courts are eligible for the Byrne Memorial Grant for 4 consecutive years and SCAO funding for 5 years beginning in FY 2002/2003. Barry County is currently actively involved in exploring funding options for the future continued success of the Program. There is the possibility that drug court programs in the state may be funded by the state legislature as drug court programs are being recognized nationally as evidence-based practices. Many states, such as Maryland and Indiana, are funding drug courts as an established court process.

Outcome Evaluation Results

PARTICIPANT AND COMPARISON GROUP MATCHING

Barry County Adult Drug Court participants ranged in age from 18 years to 76 years at Drug Court entry, while comparison group members ranged from 18 to 54 years. Efforts were made to match the two groups based on characteristics that were meaningful for this evaluation. The groups were compared on gender, ethnicity, average age at drug court entry (or the proxy entry assigned to the comparison group),⁵ criminality 2 years prior to drug court entry, reported prior drug or alcohol history, and days spent in jail 2 years prior to drug court entry. There were 87 individuals in the final participant sample and 148 comparison group members. Table 3 describes the participant and comparison group demographics as well as other characteristics.

⁵ A proxy drug court start date was calculated for the comparison group by adding the median number of days between the drug court conviction and drug court entry for the Drug Court group to the conviction date for the comparison group. The median (and mode) for time between drug court entry and conviction was 50 days.

Table 3. Participant and Comparison Group Characteristics

	Drug Court N = 87	Comparison N = 148
Gender	74% male 26% female	79% male 21% female
Ethnicity	96% White	97% White
Average age at Drug Court entry	34.80	32.27
Average number of arrests 2 years prior to DC entry date	2.07	1.92
Average number of drug-related arrests 2 years prior to DC entry date	1.33	1.31
Reported drug history prior to drug court arrest (0 = no history; 1 = yes history)	.68	.59
Reported alcohol history prior to drug court arrest (0 = no history; 1 = yes history)	.66	.54
Average number of jail days associated with arrests 2 years prior to DC entry date	30	40

Note: T-tests and chi-square showed no significant difference between the two groups on these variables ($p > .05$)

OUTCOME RESEARCH QUESTION RESULTS

The following results are provided in the order of the research questions described above. These results describe the recidivism experienced by the drug court participants and the comparison group in terms of average number of re-arrests as well as re-arrest rate, the drug use over time in both groups measured by drug test results and drug related re-arrests, the success of the BCADC in bring participants to program completion in the intended length of time, and any participant characteristics or program services that predict successful outcomes.

RESEARCH QUESTION #1: RECIDIVISM

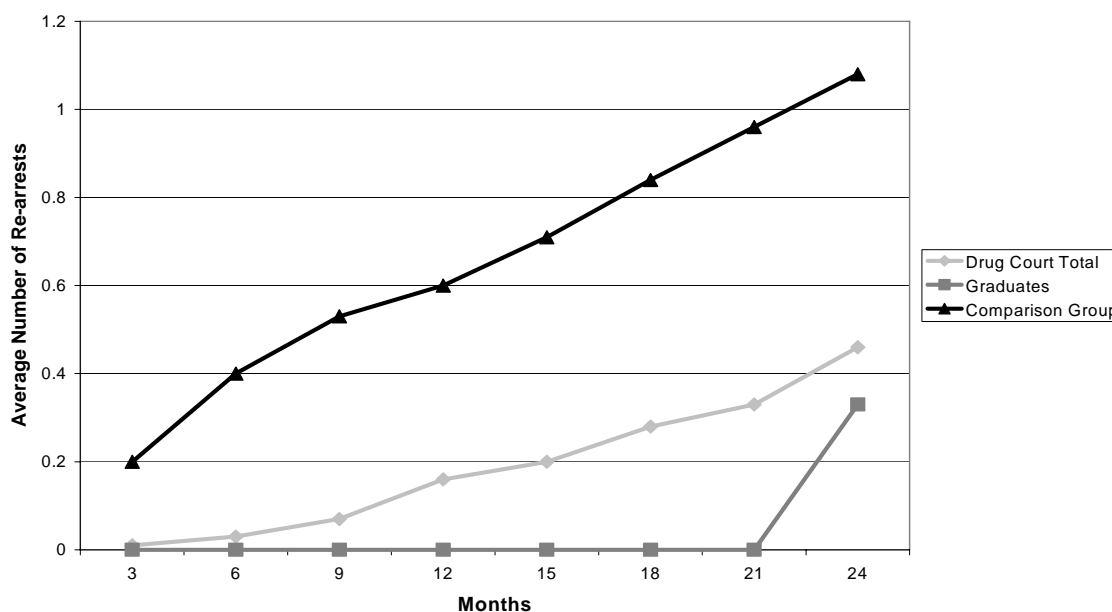
Does participation in drug court reduce the number of re-arrests for those individuals compared to traditional court processing?

Figure 1 shows the average number of re-arrests for 24 months after entering the Drug Court program for BCADC graduates, all BCADC participants, and the comparison group. The difference in recidivism between Drug Court and comparison group members is statistically significant at each time point ($p < .05$). This is especially interesting considering that the drug court participants actually had a slightly higher (although not significantly higher) arrest rate in the two years prior to the Drug Court start date.

Barry County Adult Drug Court participants (regardless of whether they graduate from the program) were re-arrested less than half as often as comparison group members who were eligible for drug court but did not attend. Graduates were re-arrested approximately a third as often as the comparison group, and overall were re-arrested very rarely. In fact, for the first 21 months after program entry,

the drug court graduates did not commit any new offenses at all. In the 24 months following entry to the Program, the recidivism rate for drug court participants was quite low. Only 4% of the graduates and 26% of the all Drug Court participants while 50% of the comparison group sample were re-arrested in the 2-year period. This is particularly impressive considering the BCADC is one of 11 “priority population” courts in the state that targets high-risk prison bound.

Figure 1. Average Number of Re-Arrests per Person Over 24 Months



To present a more descriptive picture of the criminality of the groups, arrests were coded as drug-related (e.g., possession), property-related (e.g., larceny), or person-related (e.g., assault). In addition, the arrests were coded as a felony or misdemeanor according to the most serious charge associated with each.⁶

In the 2 years following drug court entry, the Drug Court group had significantly fewer drug related arrests as well as misdemeanor and felony arrests than the comparison group. Drug Court participants overall had half the number of new person and property crimes than those who did not participate in drug court. Drug Court graduates had no new person or property crimes at all.

There has been some question about whether drug court programs, which redirect offenders from incarceration into treatment, endanger public safety. These results are strong support that drug court programs actually protect public safety more effectively than traditional court processing.

⁶ 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 4 do not reflect the total average arrests in Figure 1.

Table 4. Average Number of Re-Arrests by Classification Over 24 Months (Per Person)

	Drug Court Total	Graduates	Comparison Group
<i>Drug Related Arrests</i>			
1-year average	.01	.00	.20
2-year average	.01	.00	.30
<i>Property Related Arrests</i>			
1-year average	.03	.00	.06
2-year average	.09	.00	.10
<i>Person Related Arrests</i>			
1-year average	.03	.00	.07
2-year average	.09	.00	.14
<i>Misdemeanor Arrests</i>			
1-year average	.02	.00	.14
2-year average	.04	.00	.28
<i>Felony Arrests</i>			
1-year average	.14	.00	.46
2-year average	.34	.07	.80

RESEARCH QUESTION #2: REDUCING SUBSTANCE ABUSE

Does participation in drug court reduce levels of substance abuse?

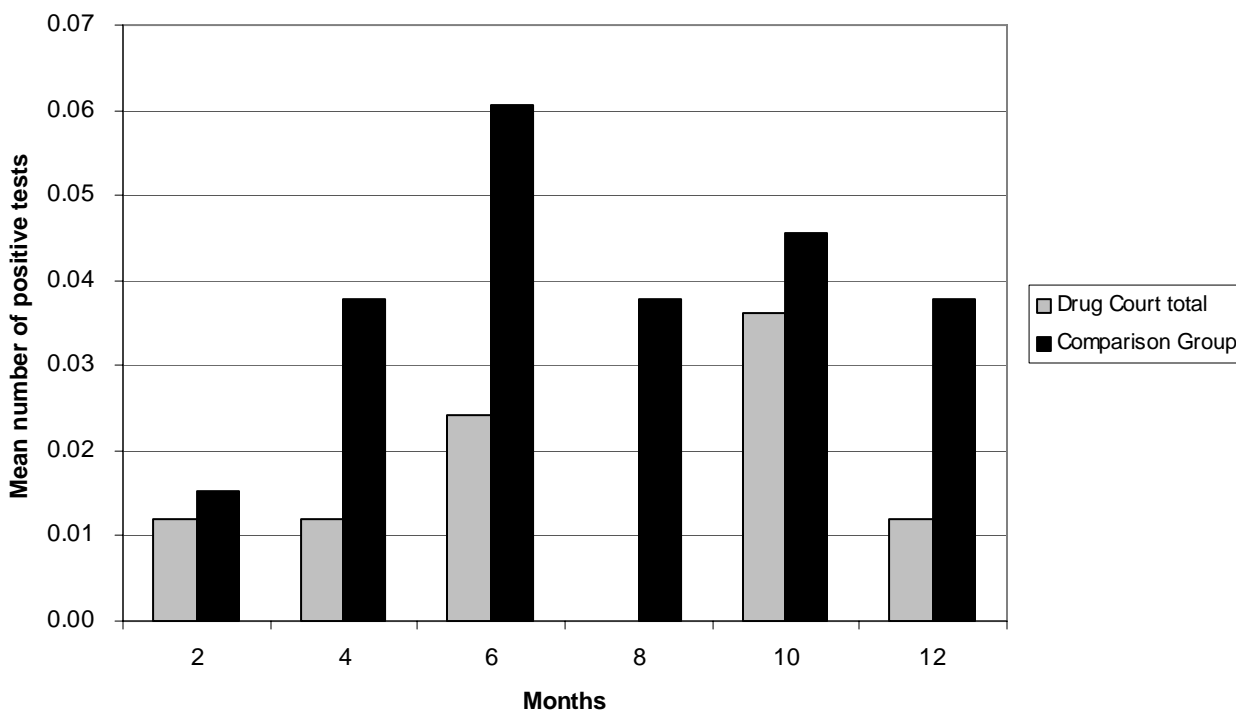
Drug testing information was gathered from multiple sources in Barry County. One source was the OMNI database utilized by the Department of Corrections. This database contains drug test information for both Drug Court and comparison group participants thus presenting a unique opportunity to determine whether participation in Drug Court reduced levels of substance abuse for Program participants compared to the substance use patterns for a comparison group.⁷

Figure 2 depicts the mean numbers of positive urinalyses over the 12-month period after drug court entry. These were calculated for each 2-month block from the program entry date for all Drug Court and comparison group participants. Although it is somewhat suspect to use the number of positive UAs over time as an indicator of reduced level of substance abuse (because reduction in positive UAs is required for continued enrollment in the program), all participants were included in this analysis, so graduates, current participants, terminated participants, and the comparison group were represented. However, these numbers must be interpreted with caution due to the small number of positive drug tests as well as the small sample size, a single positive drug test can lead to what ap-

⁷ The OMNI data only reflects urinalyses (UAs) and not any other types of drug tests, such as breathalyzers.

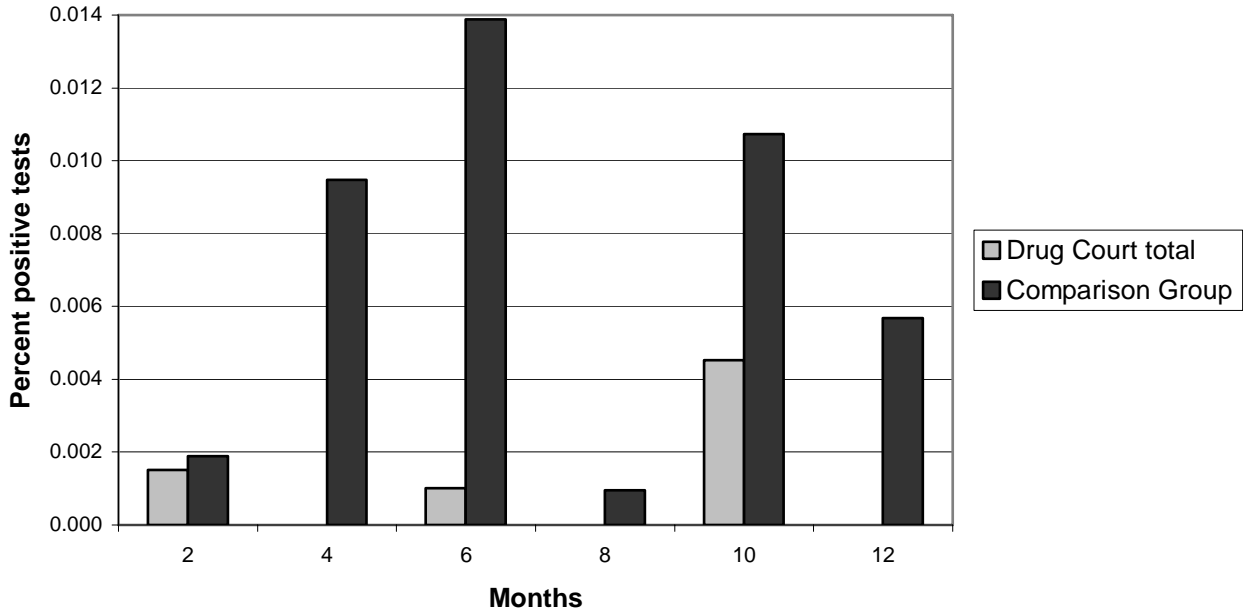
pears to be a substantial increase. For instance, an increase in positive tests between months 8-10 for the Drug Court group can be attributed to a single individual having 2 positive tests.

Figure 2. Mean Number of Positive Tests Per Person over 12 Months



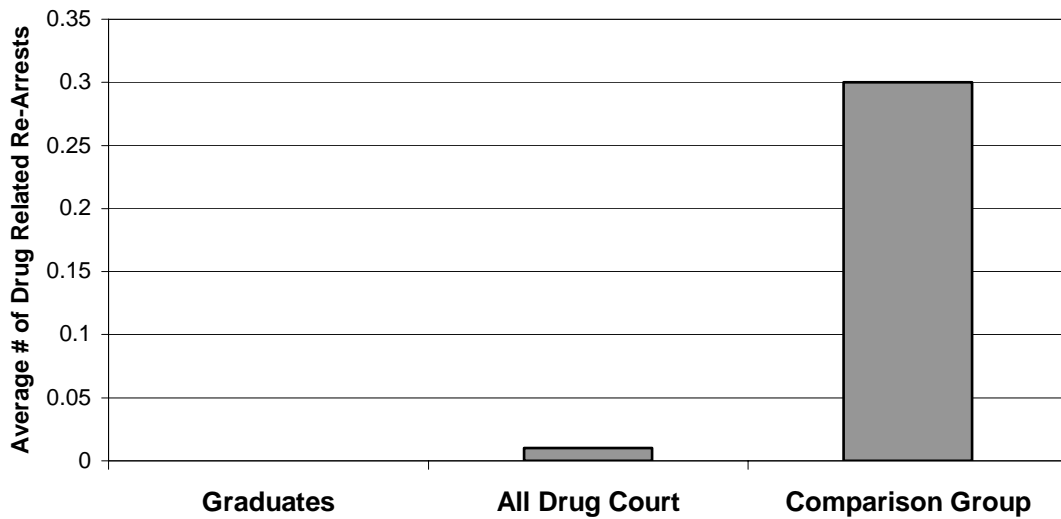
A second analysis to determine whether there was a reduction in drug use is to examine the percentage of positive UAs over 12 months in the Program. The percent of positive UAs was calculated in 2-month blocks similar to the analysis above. Figure 3 indicates that the percent of positive tests to total tests is small for both groups, but that the comparison group had a consistently higher percentage of positive tests than the participant group as a whole. In fact, for some time periods there are no positive drug tests at all for drug court participants. However, the drug court participants did experience a spike in positive tests around the 10th month of participation. One possible explanation for this increase is that many participants transitioning to Phase II of Drug Court wear the SleepTime monitor for the first 30 days of Phase II. This transition usually happens between 6-9 months after starting the Program. This increased monitoring could lead to better diagnoses of whether participants are still struggling with use. However, overall this analysis indicates that drug court participants decrease their substance use over time and demonstrate less use than similar offenders who do not participate in drug court.

Figure 3. Percent of Positive Tests over 12 Months



Whether the BCADC is effective at reducing substance use can also be measured by looking at the number of re-arrests for drug related crimes. The 2-year averages for the BCADC graduates, all participants and the comparison group can be found in Figure 4. As previously noted, Drug Court participants were re-arrested significantly fewer times for drug-related crimes than the comparison group. The graduates were not re-arrested for any drug-related crimes in the 24 months following Program entry.

Figure 4. Average Number of Drug Related Re-Arrests at 24 Months



RESEARCH QUESTION #3: PROGRAM COMPLETION

How successful is the program in bringing program participants to completion and graduation within the expected time frame?

Whether a program is bringing its participants to completion in the intended time frame is measured by program graduation (completion) and retention rate, and by the amount of time participants spend in the program. Program *graduation rate* is the percentage of participants who graduated from the program out of a cohort of participants who have all left the program by either graduating or terminating unsuccessfully. Program *retention rate* is the percentage of individuals who have either graduated or are still active out of the total number who have entered the program. The BCADC program graduation rate for our sample ($n = 87$) is 66%. In addition, as of March 2006, the retention rate for all offenders who entered the program since its inception ($n = 139$) is 72%. These program completion and retention rates are high even compared to other drug court programs in the U.S., which consistently have better completion and retention rates than other offender and non-offender based drug treatment programs (Cooper, 1997; Cooper, 2004), for example a study of nine drug courts in California showed an average retention rate in these programs of 56% (Carey et al., 2005).

To measure whether the program is following its expected time frame, the average amount of time in the program was calculated for participants who had enrolled in the BCADC Program between January 2002 and July 1, 2004 and had been discharged by December 9, 2005. The BCADC is intended to be an 18-month program from entry to graduation. The average length of time of participation in Drug Court was 498 days (16.5 months). Graduates spent an average of 558 days in the program or just over 18.5 months and ranged from 442 to 742 days in the program. Participants who were unsuccessfully discharged spent on average, just over one year in the Program (366 days). These results show that the BCADC Program is on target with its intended time to Program completion.

RESEARCH QUESTION #4: PREDICTORS OF PROGRAM SUCCESS

What participant characteristics predict program success and decreased recidivism?

Graduates and unsuccessfully discharged participants were compared on the basis of demographic characteristics and drug of choice to determine whether any significant patterns predicting Program graduation or recidivism could be found. The following analyses include participants who entered the Program from January 2002 through July 1, 2004, and who were discharged from the Program as of December 9, 2005. Of the 87 persons who entered the Program during that time period, 26 (29.9%) were terminated from the Program, 57 (65.5%) had graduated from the Program. This is a somewhat small sample size with which to conduct statistical analyses. Nevertheless, such analyses were conducted when appropriate and the results are interpreted in both a quantitative and qualitative manner. Any significant findings should be interpreted conservatively due to the sample size and investigated further as the Program continues to grow over time.

Program Success

A logistic regression analysis was conducted with the following independent variables used to predict the probability of successful Program completion: sex, race (white/non-white), age at Drug Court entry, highest grade completed, whether the individual had insurance or not, whether the individual had a monthly income over \$75, the number of dependents, and whether the individual had a history of drug abuse, alcohol abuse, or mental health treatment.

The only significant predictor of Program success was a reported history of drug abuse, indicating that participants were 6.7 times more likely [CI (1.22-36.43), $p < .05$] to graduate if they did not

have a reported history of drug abuse. There was a small mean-level difference in the success of participants who had previously received some mental health treatment. Those who were unsuccessfully discharged were more likely to have previously received some mental health treatment. Other non-significant, yet interesting patterns showed that 29% of graduates were married as compared to 15% of terminated participants. Graduates and terminated participants were also similar in whether they had health insurance (in both groups, roughly 40% did not; although 37% of graduates vs. 23% of terminated participants had private insurance) and whether they were active members of a religious group (37% of graduates and 28% of terminated participants were not). Participants in the graduate and terminated groups were remarkably similar in all other demographic characteristics.

Participants were similar as well in their criminality two years prior to starting Drug Court. The graduate and terminated participants had roughly the same number of prior arrests (graduate mean = 2.00, terminated mean = 2.31), however, the terminated group had significantly more arrests related to property crimes (mean = .50) than the graduates (mean = .11). Likewise, another finding that approached, but did not reach statistical significance, was a difference in felony arrests prior to Drug Court (graduate mean = 1.02; terminated mean = 1.58;).

Drugs of choice were not significantly different for graduates compared to unsuccessfully discharged participants but a comparison of straight percentages show some possible trends. Unfortunately, data on drugs of choice were missing for nearly 40% of the Drug Court sample. Of those for whom this data were available, 42% of graduates reported alcohol as their primary drug of choice compared to 31% for terminated participants. Other drugs of choice were very similar for both groups. Marijuana, at roughly 25%, was the most commonly reported secondary drug of choice for both graduated and terminated participants. Age at first use is another potential indicator of the severity of the drug problem. Again, this data was not complete, but graduates reported an older age of initiation with their first drug use (mean = 18 years) versus terminated participants (mean = 14 years).

In sum, graduates were less likely to report a history substance abuse and mental health treatment and were less likely to have been previously arrested for property crimes or felonies. Graduates were more likely to be married, have alcohol as their primary drug of choice and to be older when they first used drugs. However, most of these findings were non-significant and the majority of characteristics between the two groups were very similar, indicating that the BCADC serves offenders with varying demographics, criminal history and drugs of choice equally.

As the BCADC implements the new statewide data management system, it is recommended that drug preference and drug history be more consistently recorded. Although the Program originally sought primarily to serve participants with alcohol abuse problems, there is some anecdotal evidence that users of other drugs, particularly methamphetamine, will continue to grow in Barry County as it is growing in all parts of the United States. Recent research suggests that due to the organic damage sustained by methamphetamine users, specialized services may be required to treat methamphetamine addiction. Evaluations of other drug courts have shown a lower rate of success among methamphetamine users (Carey, Marchand, and Waller, 2006; Carey and Marchand, 2005). Barry County should closely watch the Drug Court Program for changes in the drug demographic of its participants to determine that its current services meet the needs of a potentially changing participant group.

Recidivism

Very few of the participant characteristics described above were statistically related to re-arrests after Drug Court entry. Correlations between the participant characteristics and re-arrests 24 months

after Drug Court entry showed that only age had a significant relationship with re-arrests. The correlation between age at Drug Court entry and re-arrest was $-.25$ ($p < .05$), indicating that participants who were younger at the time they started Drug Court were more likely to be re-arrested after beginning Drug Court. Interestingly, there was a significant mean difference in re-arrests between those individuals who retained or were appointed an attorney. Those who retained a private attorney had a significantly lower average number of re-arrests. The ability to retain an attorney could be construed as an indicator of financial well-being. It is possible (although additional financial data are needed to investigate this) that those individuals with more financial means at their disposal are less likely to recidivate. Criminality was not significantly influenced by drug preference, although as mentioned previously, such data were missing for approximately 40% of the sample.

Generally, there were few significant differences in participant characteristics with which to predict Program success or recidivism for Drug Court participants. This indicates that the Barry County Adult Drug Court serves persons with a variety of needs and life experiences equally well.

RESEARCH QUESTION #5: PROGRAM SERVICES AS PREDICTORS OF SUCCESSFUL OUTCOMES

What combination and types of services predict successful outcomes including program completion and decreased recidivism?

As with many other drug court programs, the types of services received are tailored toward the specific needs of the participants, (participants are not randomly assigned to different drug court services). In addition, it was difficult to determine from the available data what types and combinations of services were offered. However, the evaluation team was able to examine sanction days and frequency and type of treatment at Barry County Substance Abuse Services for patterns that led to Program success and/or recidivism.

Not surprisingly, the number of days spent in jail for sanctions was significantly higher for terminated participants than graduates. On average, terminated participants spent approximately 51 days in jail for sanctions as compared to 15 days for graduates. This could be interpreted as terminated participants were struggling to comply with Program directives, and thus were more likely to spend time in jail for sanctions. It is interesting to note that the purpose of a sanction is to help participants realize the consequences of their actions and reorient participants toward appropriate goals, which include reducing drug use and criminal activity and successful completion of the drug court program. However, the significant difference in jail time between those who were successful and those who were not could indicate that extensive time in jail is not a particularly effective sanction for the Program. The extent to which jail is used as a sanction should be further investigated to determine whether it is more effective at certain points in the Program, whether it ceases to be effective as a sanction after a certain number of days, and whether the high cost of extended jail sanctions (see the costs due to jail sanctions in Table 5 in the cost results) is justified by a desired outcome.

Treatment patterns differed little between participants who were successful in the Program and those who were not. Graduates had slightly more intensive outpatient sessions (IOP), group sessions, and individual treatment sessions, but this is likely due to the increased tenure of graduates in the program. However, the BCADC Program has few treatment requirements, other than to complete the recommended course of treatment by the provider. It is recommended that BCADC begin tracking more closely the frequency and type of treatment services received by its participants, as well as other community services in which the participants partake. These would include cognitive behavioral and GED courses offered at the Drug Court Office location and any other community pro-

grams. Understanding treatment utilization could provide some insight into why some participants are successful in the Program whereas others are not.

Recidivism was not significantly influenced by sanction days or type, frequency of substance abuse treatment, or whether an individual had spent time on the SleepTime Monitor.

As more participants are served by the BCADC, it is expected that patterns may emerge that can provide feedback to the staff on the types of services that are most effective. At the time of the evaluation, the data to analyze this question appropriately was not sufficiently available. The use of the State Court Administrative Office's (SCAO) new Drug Court Case Management tool should assist the BCADC in collecting systematic data that can be used in the future to answer some of these questions more effectively. Areas to focus on that could yield interesting differences and results are sanctions and non-compliant behavior, rewards, treatment utilization, program referrals, day reporting and use of the SleepTime monitor.

Cost Evaluation Results

As described in the methodology section, the Transactional and Institutional Cost Analysis (TICA) approach was used to calculate the costs of each of the transactions that occurred while participants were engaged in the Program. Transactions are those points within a system where resources are consumed and/or change hands. In the case of drug courts, when a participant appears in court or has a drug test, resources such as judge time, defense attorney time, court facilities, and urine cups are used. Program transactions calculated in this analysis included drug court appearances, case management, outpatient treatment sessions (individual, group, and intensive outpatient), residential treatment, and drug tests. The costs for this study were calculated including taxpayer costs only. All cost results provided in this report are based on fiscal year 2006 dollars.

PROGRAM COSTS

Program Transactions

A ***Drug Court Session***, for the majority of drug courts, is one of the most staff and resource intensive program transactions. In Barry County, these sessions include representatives from the Circuit Court (Judge and Court Reporter), the Prosecuting Attorney, the contracted Defense Attorney, the Department of Corrections (Probation Agent), Community Corrections (Drug Court Coordinator, Probation Officers), Substance Abuse Services (Clinical Supervisor/Therapist), Community Mental Health (Program Manager), the Hastings Police Department, and the Sheriff (Bailiff). The cost of a ***Drug Court Appearance*** (the time during a session when a single participant is interacting with the judge) is calculated based on the average amount of court time (in minutes) each participant uses during the court session. This incorporates the direct costs of each Drug Court Team member present during sessions, the time Team members spent preparing for or contributing to the session, the agency support costs, and the overhead costs. The average cost for a single drug court appearance is **\$129.45** per participant. This cost per appearance is consistent with the per appearance costs of other adult drug courts studied by NPC Research. For example, courts in California and Oregon have appearance costs ranging from \$97 to \$156 (Carey and Finigan, 2004; Carey, et al., 2005; Carey, Marchand and Waller, 2005).

Case Management is based on the amount of staff time dedicated to case management activities during a regular work week and is then translated into a total cost for case management per participant

per day.⁸ The main agencies involved in case management for Drug Court in Barry County are the Department of Corrections, Community Corrections, Substance Abuse Services, Community Mental Health, the Hastings Police Department, and the Sheriff. The per day cost of case management is **\$4.50** per participant. Case management costs in the BCADC program fall within the range of costs found in other studies. For example, case management from cost analyses in California (Carey, et al., 2005) varied widely – from just over \$1.00 per day to over \$11.00 per day.

Assessments are conducted by Substance Abuse Services and are **\$150.00** per assessment. Assessments for drunk driving charges are paid by the offender (taxpayers pay nothing), except for people with less than \$35,000 per year income, in which case the fee is subsidized \$45.00 (so taxpayers pay \$45.00 per assessment). Over 80% of Drug Court clients make less than \$35,000 per year, so the \$45.00 subsidy was multiplied by .80 to arrive at an assessment cost to the taxpayer of **\$36.00** for a drunk driving charge.

Outpatient Treatment Sessions are provided by multiple agencies, although two main providers are used most often. Substance Abuse Services provides individual, group, family, and intensive outpatient treatment sessions, while Community Mental Health provides individual and group treatment sessions.⁹ Since this cost analysis is focused on public funds, the cost of treatment in this instance is only the amount paid for by the public funds. Individual and family treatment at Substance Abuse Services is **\$73.00** per session, group treatment is **\$18.00** per person per session, and Intensive Outpatient treatment is **\$95.00** per person per day. All costs are billed rates that include all salary, support, and overhead costs associated with the session.

Drug Tests are performed by the Department of Corrections/Community Corrections (**\$15.09** per instant UA test, **\$60.35** per lab UA test, and **\$0.02** per PBT test, and **\$2.49** per day for the SleepTime wrist monitor), Community Mental Health (**\$22.80** per UA test)¹⁰, and Substance Abuse Services (**\$4.92** per UA test). These are all billed rates that include the cost of materials, salary, support, and overhead costs associated with the test. Drug Court participants are supposed to pay for any positive UA lab tests they may have, but since accurate accounting for how often payment actually occurs wasn't available, the cost for these tests are still included in the calculations. Any payments made by Drug Court participants serve to further reduce the cost to taxpayers.

Jail Days as a Sanction are provided by the Barry County Sheriff's Department. Jail bed days are **\$43.66** per person per day. This rate was calculated by the Barry County Jail Administrator and includes all staff time, food, medical, and support/overhead costs.

Program Costs

Table 5 presents the average number of Program transactions (Drug Court appearances, treatment sessions, etc.) per participant and the total cost for each type of transaction (number of transactions times the cost per transaction). The sum of these transactions is the total per participant cost of the Program. These numbers include the average of all Drug Court participants (N = 83) except those who were currently active, regardless of completion status. It is important to include participants

⁸ Case management includes home visits, meeting with participants, evaluations, phone calls, paperwork, answering questions, consulting with therapists, documentation, file maintenance, schedule maintenance, residential referrals, and providing resources and referrals for educational and employment opportunities.

⁹ Individual treatment at Community Mental Health is \$87.00 per session and group treatment is \$9.00 per person per session. However, NPC was unable to obtain CMH administrative data on treatment sessions so these costs were not included in the analysis. This means that treatment costs were underestimated slightly.

¹⁰ NPC was unable to obtain CMH data on UAs, so these costs were not included in the analysis.

who terminated as well as those who graduated as all participants use Program resources, whether they graduate or not.

Table 5. Average Program Costs per Participant (all Drug Court participants)

Transaction	Transaction Unit Cost	Avg. # of Program Related Transactions	Avg. Cost per Participant ¹¹
Drug Court Appearances	\$129.45	20.40	\$2,641
Case Management	\$4.50	498 Days ¹²	\$2,241
Drug Assessment (SAS)	\$150.00	0.30	\$45
Alcohol Assessment ¹³ (SAS)	\$36.00	0.29	\$10
Individual or Family Treatment Sessions (SAS)	\$73.00	8.30	\$606
Group Treatment Sessions (SAS)	\$18.00	1.50	\$27
Intensive Outpatient Treatment Sessions (SAS)	\$95.00	5.02	\$477
Instant UA Drug Tests (DOC)	\$15.09	21.21	\$320
Lab UA Drug Tests (DOC)	\$60.35	2.84	\$171
PBT Breathalyzer Tests (DOC)	\$0.02	3.14	\$0
SleepTime Wrist Monitor (DOC)	\$2.49	31.73 Days	\$79
UA Drug Tests (SAS)	\$4.92	5.23	\$26
Jail Days as a Sanction (Sheriff)	\$43.66	25.39	\$1,109
Total Drug Court			\$7,752

Table 5 illustrates the cost to the taxpayer of the Drug Court Program. On average, in drug court programs studied by NPC, the program cost per participant ranged from \$4,000 to just over \$12,000 depending on the intensity of the program and the extent to which the programs used public funds for their services (Carey and Finigan, 2004; Carey, et al., 2005).

The average cost per participant of the Drug Court Program (\$7,752) is in the mid-range of the program costs found in other drug courts studied by NPC. The cost of Drug Court appearances is the most expensive transaction for the BCADC. This is partly due to the involvement of many agencies and the relatively high number of agency employees that attend or contribute to Drug Court sessions. This high involvement may increase session costs, but also has the benefit of more straightforward

¹¹ Average costs per participant for this column have been rounded to the nearest whole dollar amount.

¹² Case management is calculated by number of days in drug court, so the average number of transactions in this case is the average number of days spent in the drug court program.

¹³ Drug assessments are \$150. Assessments for drunk driving charges are \$36, which takes into account a \$45 subsidy for clients making less than \$35,000 per year (the 20% of Drug Court participants making more than this amount pay for their assessment in its entirety out of their own pocket). Since 80% of participant would qualify for this subsidy, 80% of \$45 is \$36.

decision-making and communication amongst agencies, smoother operations, and may produce better outcomes. A study performed in nine courts in California found that higher agency involvement in drug court programs was related to lower recidivism and lower outcome costs for drug court participants. The higher cost of drug court sessions may also be due to the relatively small number of participants seen during each session, which leads to more time spent per participant. This may change if the court increases its capacity and enrollment. However, the additional time spent in Court with each participant may serve to reinforce to the participant that the Judge and other members of the staff care about what is happening with the participant.

Case management is the next highest cost to the BCADC Program. Intense case management and supervision of participants is one of the essential elements of drug courts, so this isn't an uncommon finding. The involvement of law enforcement is less common in case management so this may be contributing to the higher per participant cost of this transaction. However, as described earlier, more agency involvement has been shown to be related to lower outcome costs (Carey et al., 2004).

Jail days in the form of sanctions is also a substantial Program cost. The average of 25.39 days includes both graduates and participants who terminated unsuccessfully. Although several participants spent little or no time in jail as a sanction, many participants spent upward of 60 days in jail, with some exceeding 100 days. Although jail time is a common sanction in many drug courts, it is unusual to use such a high number of days as a sanction. The benefit of this degree of jail time is not clear. In fact, as described in the outcome results above, most of those who had extended jail time as a sanction were those who eventually terminated. This indicates that jail may not be the most effective sanction. One reason it may be less effective to use extended jail time as a sanction is due to the difficulties it presents participants who are attempting to re-establish work and family relationships. Another reason to avoid jail sanctions is the cost associated with jail. Although short-term jail can be an effective message to participants of the results of inappropriate behavior, the costs of long-term jail may not be worth the benefits.

In the program description and outcome evaluation portion of this report, it was noted that the BCADC Program is committed to its participants, looking into all alternatives prior to unsuccessful discharge. Most alternative sanctions are less costly than incarceration and can be even more effective in teaching a positive lesson to non-compliant participants. For example, some drug courts have spent time researching a variety of local community service options so that drug court participants can be assigned service that is more meaningful for them and is appropriate to the skills of the participants, such as assisting in building homes for Habitat for Humanity, rebuilding bicycles for charity, delivering meals to the hungry, and cleaning up in neighborhoods where the participant has caused harm (Carey and Waller, 2005; Carey, Marchand and Waller, 2006). Giving back to the community has proved to be a powerful and positive learning experience for drug court participants (Goldkamp, White and Roberson, 2002).

The BCADC Program spends an average of \$596 per participant on drug testing. It is worth noting that of the 950 recorded instances of day reporting among our Drug Court sample, there were 195 times when the individual was not tested based on the data downloaded from the SleepTime monitor. There were 30 additional records of "no test" that occurred due to monitor hookup or removal. Although it is difficult to quantify, it is likely that over time the Program will save money by not performing tests when the monitor information is being used.

Program Costs per Agency

Another useful way to examine Program costs is to quantify them by agency. Table 6 provides the BCADC per participant costs by agency. Because Community Corrections has the most staff dedi-

cated to the Drug Court Program, it reasonably follows that it also has the largest proportion of the cost.

The second largest proportion belongs to Substance Abuse Services for treatment services. It is expected that treatment costs should be a large proportion of any drug court costs. The cost of the treatment provider is closely followed by the cost of the Sheriff, mainly due to the jail sanction days that this agency provides.

Table 6. Average Program Cost per Participant by Agency

Agency	Average Agency Cost per Participant ¹⁴
Circuit Court	\$526
Prosecuting Attorney	\$223
Defense Attorney	\$724
Dept. of Corrections	\$769
Community Corrections	\$2,305
Substance Abuse Services	\$1,698
Community Mental Health	\$183 ¹⁵
Hastings Police Department	\$80
Sheriff	\$1,244
Total	\$7,752

Traditional Court Processing Transactions

Arrests/bookings are conducted by multiple agencies. This evaluation used an average of arrest and booking cost information from the Hastings Police Department, the State Police, and the Sheriff, as the arresting agency could not be determined from the arrest data. The cost of a single arrest and booking is **\$153.26** (\$130.97 for the Hastings Police Department, \$196.19 for the State Police, and \$132.63 for the Sheriff). Each rate was calculated by determining the positions, activities, and time involved in a typical arrest, and then assigning salary, benefits, and support/overhead costs to those activities to come up with a cost for one arrest.

The cost of an average **court case** for people who go through traditional court processing is **\$237.44**. This was calculated by dividing the total budget expenditures of the Circuit Court and District Court

¹⁴ Average agency costs per participant have been rounded to the nearest whole dollar amount.

¹⁵ This does not include CMH costs for UA testing, or individual or group treatment sessions, as NPC was unable to obtain administrative data on these items.

by the total number of cases for one year. This is an average for all types of court cases and includes a high number of low-level cases; therefore this cost probably underestimates the cost of the court cases experienced by the offenders in the study population. However, it was beyond the scope of this study to perform the detailed data collection necessary to determine the costs of every type of court case. Further, NPC has found through previous studies (e.g., Carey and Finigan, 2004; Carey et al., 2005) that simply dividing the court budget by the number of cases heard by the court is a reasonably accurate way to determine the cost of an average court case by comparing this average cost to the costs calculated through detailed time studies of traditional court case processing.

Drug and alcohol treatment outside of the Drug Court Program was pulled from the Michigan State Treatment Episode Data Set (TEDS). The treatment in this dataset includes outpatient treatment sessions, intensive outpatient treatment sessions, and residential treatment. Treatment costs were calculated based on unit costs provided with the TEDS dataset. ***Residential treatment*** is **\$137.30** per person per day.¹⁶ ***Outpatient treatment episodes*** are **\$701.75** per person per admission, and ***intensive outpatient treatment episodes*** are **\$771.05** per person per admission.

Jail Day Costs were provided by the Barry County Sheriff's Department. Jail bed days are **\$43.66** per person per day. This rate was calculated by the Barry County Jail Administrator and includes all staff time, food, medical, and support/overhead costs.

Community Corrections provides ***probation*** supervision at a rate of **\$4.30** per person per day. This was based on the yearly cost of probation calculated by the Department of Corrections in a manner consistent with NPC's TICA methodology including direct costs, as well as support and jurisdictional overhead costs.

Investment Costs in the Drug Court Eligible Case for Drug Court Participants

In addition to the costs of the Drug Court Program, there were costs associated with the case that led to drug court that were not directly associated with Program participation. Since they are a cost to the taxpayer and are a part of the system that leads to drug court participation, NPC includes these costs in "investment" costs. Table 7 presents the average number of investment transactions per participant and the total cost for each type of transaction (number of transactions times the cost per transaction). The sum of these transactions is the total per participant investment cost for Drug Court eligible case, outside of the costs of the drug court program. These numbers include the average of all Drug Court participants (N = 83) except those who were currently active, regardless of completion status.

¹⁶ The administrative data NPC received from the Michigan State Treatment Episode Data Set (TEDS) on non-Drug Court treatment showed an average of zero residential treatment days for the comparison group. Because of this, residential treatment does not show up in the Traditional Court Processing Investment Costs Table.

Table 7. Average Investment Costs per Participant (all Drug Court participants)

Transaction	Transaction Unit Cost	Avg. # of Program Related Transactions	Avg. Cost per Participant ¹⁷
Arrest/Booking ¹⁸	\$153.26	1	\$153
Jail Days (Sheriff)	\$43.66	7.52	\$328
Probation Days (Community Corr.)	\$4.30	590.14	\$2,538
Total Drug Court			\$3,019

Probation days are the most expensive investment transaction for the BCADC. Drug Court participants are required to be on probation in addition to their program participation while in Drug Court and they often continue to serve probation time on their original Drug Court case following their discharge from the Program. During this time, participants see probation officers, receive drug testing, and other services from the Department of Corrections and Community Corrections. This is a substantial portion of the total investment cost per BCADC participant of \$3,019. It is unusual for drug court participants to continue regular probation activities while active in a drug court program as the high level of supervision provided by the program (through treatment, case management and the court) is generally considered to be sufficient. In addition, one of the incentives that many drug courts provide to participants is the termination of probation upon successful completion of the program. If the BCADC were to add this incentive and eliminate the use of regular probation while offenders were active in Drug Court, Corrections would experience significant savings (in the form of opportunity resources) due to Drug Court participation.

Investment Costs in the Drug Court Eligible Case for Traditional Case Processing (Non-Drug Court)

Table 8 presents the average number of traditional court processing transactions per comparison offender and the total cost for each type of transaction (number of transactions times the cost per transaction). The sum of these transactions is the total per offender cost of traditional court processing. These numbers include the average of all comparison group participants (N = 148).

The cost to the taxpayer of traditional court processing per person is \$3,949. Probation is by far the most expensive transaction, followed by jail days and treatment. The treatment data gained from TEDS probably underestimates the actual treatment costs by at least 43%, based on NPC’s comparison of treatment data received by drug court participants from BCSAS and data obtained from TEDS on the same participants.

¹⁷ Average costs per participant for this column have been rounded to the nearest whole dollar amount.

¹⁸ This includes the arrest costs for the Hastings Police Department, the Barry County Sheriff, and the Michigan State Police. The arrest data obtained by NPC did not show what agency made each arrest, so an average of the cost of an arrest at each agency was used.

Table 8. Average Traditional Court Processing Investment Costs per Person

Transaction	Transaction Unit Cost	Avg. # of Transactions	Avg. Cost per Participant ¹⁹
Arrest/Booking ²⁰	\$153.26	1	\$153
Court Case	\$237.44	1	\$237
Outpatient Treatment Episodes	\$701.75	0.94	\$660
Intensive Outpatient Treatment Episodes	\$771.05	0.07	\$54
Jail Days (Sheriff)	\$43.66	17.25	\$753
Probation Days (Community Corr.)	\$4.30	486.58	\$2,092
Total			\$3,949

The drug court eligible case cost for drug court participants (\$3,019) is lower by \$930 than the case costs for offenders who did not participate in the drug court program (\$3,949), so there is some benefit to the taxpayer in investment costs of choosing the Drug Court process over traditional court processing. However, overall the investment costs in the Drug Court Program (including both Program costs and other costs related to the drug court eligible case) is \$6,822 greater than traditional court process alone. However, the savings in outcome costs presented in the next section show how the positive outcomes for drug court participants can repay this investment and then continue to produce cost benefits (savings) to the criminal justice system and the taxpayer.

OUTCOME COSTS

This section describes some of the payoffs in monetary terms due to the positive outcomes experienced by Drug Court participants. The specific outcome transactions examined include re-arrests, subsequent court cases, subsequent treatment (residential and outpatient), probation, prison, parole, and jail time for Drug Court Program participants and comparison group offenders. These outcome transactions occurred over a 2-year period from the time of Drug Court Program entry. Lower recidivism and lower costs for Drug Court participants compared to those offenders who did not participate indicate that the Program can provide a return on its investment.

The outcome numbers reflect data through March 15, 2006. Outcomes were counted in one and 2-year periods from the date of Program entry. Data from the entire sample of 148 comparison group members and 87 Drug Court members were included in these analyses, although some members of both groups fell just short of 24 months of outcome data.²¹

¹⁹ Average costs per participant for this column have been rounded to the nearest whole dollar amount.

²⁰ This includes the arrest costs for the Hastings Police Department, the Barry County Sheriff, and the Michigan State Police. The arrest data obtained by NPC did not show what agency made each arrest, so an average of the cost of an arrest at each agency was used.

²¹ Because a full 24 months was not available for all members of the sample, it is possible that the outcome estimates for either group may be underestimated. This is more likely with the drug court group since it has a larger amount of missing data.

Outcome costs were calculated using information from the Hastings Police Department, the State Police, the Sheriff, the Department of Corrections, Circuit Court, District Court, Prosecuting Attorney, Defense Attorney, and Community Mental Health. The methods of calculation were examined to ensure that all direct costs, support costs and overhead costs were included as specified in the TICA methodology followed by NPC Research.

Outcome Transactions

Arrests/bookings are conducted by multiple agencies. This evaluation used an average of arrest and booking cost information from the Hastings Police Department, the State Police, and the Sheriff, as the arresting agency could not be determined from the arrest data. The cost of a single arrest and booking is **\$153.26** (\$130.97 for the Hastings Police Department, \$196.19 for the State Police, and \$132.63 for the Sheriff).

Jail Days occur at the Barry County Sheriff Department. The cost of a jail bed is **\$43.66** per person per day, and the cost per **County Jail Booking** is **\$27.49**. One county jail booking occurs for each instance of incarceration. The cost of a jail day was calculated by the Barry County Jail Administrator and includes all staff time, food, medical, and support/overhead costs. The cost of a County Jail Booking was calculated by determining the positions, activities, and time involved in a typical booking, and then assigning salary, benefits, and support/overhead costs to those activities.

Probation supervision information was provided by Community Corrections. Probation costs are **\$4.30** per person per day. This was based on the yearly cost of probation calculated by the Department of Corrections in a manner consistent with NPC's TICA methodology including direct costs, as well as support and jurisdictional overhead costs.

Prison Days and **Parole** are the responsibility of the Department of Corrections. The cost of a prison bed is **\$81.93** per person per day, and the cost of parole is **\$5.19** per person per day. These rates were obtained from the Department of Corrections and were calculated in a manner that coincides with NPC's TICA methodology including direct costs, as well as support and jurisdictional overhead costs.

Subsequent Court Case costs are shared by the Circuit Court, District Court, Prosecuting Attorney, contracted Defense Attorney, Department of Corrections, and the Sheriff. The cost of an average court case at the Circuit Court is **\$314.76** and the cost of a average court case at the District Court is **\$160.11**. An average of these two costs (**\$237.44**) was used because the data NPC received from the Michigan Computerized Criminal History System (CCH) on subsequent court cases did not differentiate between District Court or Circuit Court cases.

Residential Treatment is contracted out to various treatment agencies. The cost to the taxpayer of residential treatment per person is **\$137.30** per day. This rate was calculated using cost and usage data from the Michigan Department of Community Health in a manner consistent with NPC's TICA methodology.

Outpatient Treatment Sessions are also provided by multiple treatment agencies. The cost of one outpatient treatment episode is **\$701.75**. The cost of one **Intensive Outpatient Treatment** episode is **\$771.05**. These rates were also calculated using cost and usage data from the Michigan Department of Community Health in a manner consistent with NPC's TICA methodology.

Victimizations were calculated from the National Institute of Justice's *Victim Costs and Consequences: A New Look (1996)*.²² The costs were updated to fiscal year 2005 dollars. Property crimes are \$11,302 per event and person crimes are \$36,613 per event.

Table 9 presents the average number of these outcome transactions (e.g., the average number of re-arrests, the average number of prison days) incurred per person for Drug Court Program graduates, all participants (both graduated and terminated combined), and for the comparison group.

Table 9. Average Number of Outcome Transactions per Participant for 2 Years Post Drug Court Entry

Transaction	Graduates	All Drug Court Participants	Comparison Group
Re-arrests	0.05	0.43	1.06
Jail Bookings	0.05	0.43	1.06
Jail Days	2.30	20.95	30.03
Probation Days	161.48	154.04	90.49
Prison Days	0.00	11.34	27.04
Parole Days	0.00	2.59	12.68
Subsequent Court Cases	0.40	0.55	0.83
Residential Treatment Episodes	0.00	0.00	0.16
Outpatient Treatment Episodes	0.43	0.50	0.23
Intensive Outpatient Treatment Episodes	0.24	0.25	0.06
Victimizations (property crimes)	.00	.09	.10
Victimizations (person crimes)	.00	.09	.14

As Table 9 reveals, for the majority of transactions, Drug Court participants are experiencing far fewer contacts with the system. There are two areas of note where this is not the case. Drug Court participants spend more time on probation and more time in treatment after participating in the BCADC Program. The higher amount of probation time is most likely indicative that the Drug Court

²² The costs for victimizations were based on the National Institute of Justice's *Victim Costs and Consequences: A New Look (1996)*. This study documents estimates of costs and consequences of personal crimes and documents losses per criminal victimization, including attempts, in a number of categories, including fatal crimes, child abuse, rape and sexual assault, other assaults, robbery, drunk driving, arson, larceny, burglary, and motor vehicle theft. The reported costs include lost productivity, medical care, mental health care, police and fire services, victim services, property loss and damage, and quality of life. In our study, arrest charges were categorized as violent or property crimes, and therefore costs from the victimization study were averaged for rape and sexual assault, other assaults, and robbery and attempted robbery to create an estimated cost for violent crimes, arson, larceny and attempted larceny, burglary and attempted burglary, and motor vehicle theft for an estimated property crime cost. All costs were updated to fiscal year 2005 dollars using the consumer price index (CPI) for the relevant geographical area.

participants are not spending time in jail or prison. Higher numbers of outpatient treatment episodes after drug court participation are common for drug court participants and are generally interpreted to indicate that participants have learned that treatment works and are engaging in treatment as needed rather than criminal activities (Carey and Finigan, 2004; Carey et al., 2005).

Outcome Costs

Table 10 provides the costs associated with the outcomes described in Table 9 (above). It presents the total outcome costs for each type of transaction (number of transactions times the cost per transaction) for Drug Court Program graduates, all participants (both graduated and terminated combined), and for the comparison group.

Table 10. Average Outcome Costs per Participant 2 Years Post Drug Court Entry²³

Transaction	Transaction Unit Cost	Graduates	All Drug Court Participants	Comparison Group
Re-arrests	\$153.26	\$8	\$66	\$162
Jail Bed Days	\$43.66	\$100	\$915	\$1,311
Jail Bookings	\$27.49	\$1	\$12	\$29
Probation	\$4.30	\$694	\$662	\$389
Prison Days	\$81.93	\$0	\$929	\$2,215
Parole	\$5.19	\$0	\$13	\$66
Subsequent Court Cases	\$237.44	\$95	\$131	\$197
Residential Treatment	\$137.30	\$0	\$0	\$22
Outpatient Treatment Episodes	\$701.75	\$302	\$351	\$161
Intensive Outpatient Treatment Episodes	\$771.05	\$185	\$193	\$46
Victimizations (property crimes)	\$11,302	\$0.00	\$1,017	\$1,130
Victimizations (person crimes)	\$36,613	\$0.00	\$3,295	\$5,126
Total		\$1,385	\$7,584	\$10,854

Overall, in the 2 years after Drug Court entry, Drug Court participants, particularly graduates cost the taxpayers substantially less per participant than similar individuals who did not attend the Drug Court Program. This represents an overall benefit to the taxpayer due to the investment in the Drug Court Program.

The areas of greatest savings are in prison time and in person victimizations. Also, there are some savings due to less time in jail for drug court participants. Savings due to less time on parole exist

²³ Average costs per participant have been rounded to the nearest whole dollar amount.

but will probably be more substantial over time, as many of the offenders sentenced to prison in our sample have not yet been released.

It is interesting to note that the drug court participants did not experience savings in probation costs. However, if probation was assigned in place of prison due to Drug Court participation, this was definitely the lower cost alternative.

As described earlier, higher costs due to subsequent treatment demonstrate that drug court participants continue to consider treatment a valid option even after their time in the Drug Court Program. This can be considered a success for the drug court model if participants are choosing treatment over criminal activity.

Figure 5. Total Outcome Costs Averaged per Participant 2 Years Post Drug Court

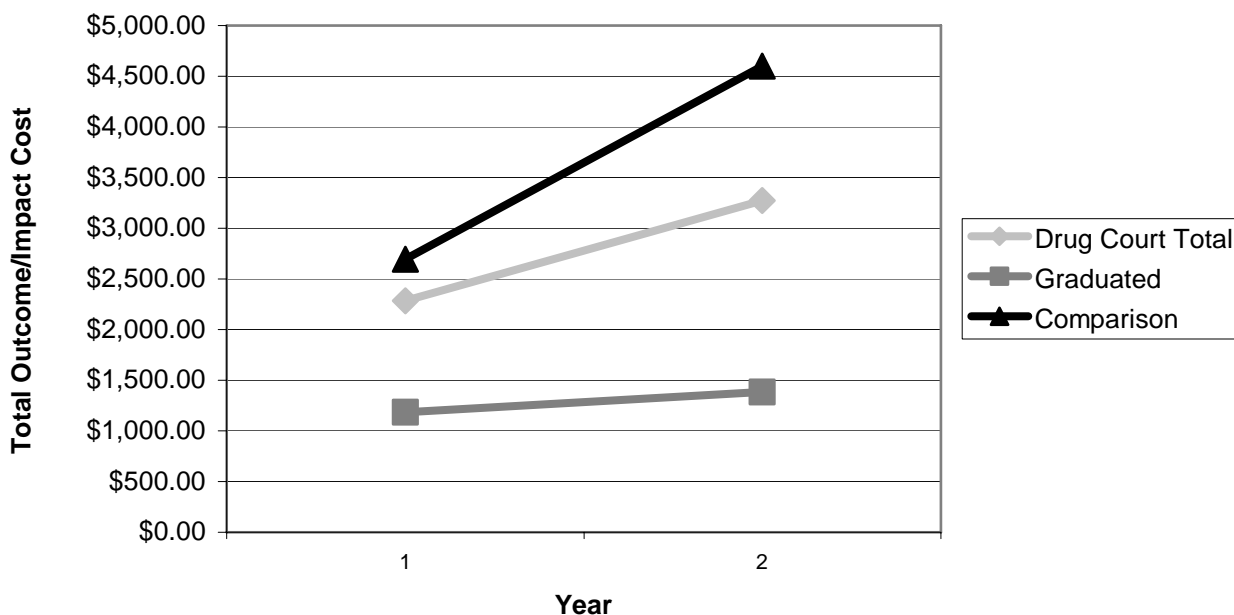


Figure 5 demonstrates that cost savings accrue over time. Costs in the second year for drug court participants are substantially lower than costs for the comparison group. This is most noticeable for the graduates, as the average outcome costs in the first and second year were extremely low (under \$1,400 per graduate) with a large proportion of those costs due to subsequent treatment and very little due to new crime.

Outcome Costs by Agency

Table 11 presents the outcome costs by agency. Law Enforcement outcome transactions include re-arrests, jail days, jail bookings, and subsequent court cases. Community Corrections is only involved in the probation transaction. Department of Corrections transactions include prison days, parole, and subsequent court cases. The Circuit/District Court, Prosecuting Attorney, and Defense Attorney are all involved only in the subsequent court case transaction. Treatment transactions include residential treatment, outpatient treatment episodes, and intensive outpatient treatment episodes.

Table 11. Average Outcome Cost per Participant by Agency

Agency	All Drug Court Participants	Comparison Group	Cost Difference (Savings)
Circuit/District Court	\$84	\$126	\$42
Prosecuting Attorney	\$26	\$39	\$13
Defense Attorney	\$11	\$16	\$5
Department of Corrections	\$947	\$2,289	\$1,342
Community Corrections	\$662	\$389	(- \$273)
Treatment	\$544	\$229	(- \$315)
Law Enforcement	\$998	\$1,510	\$512
Total	\$3,272	\$4,598	\$1,326

Table 11 illustrates that the largest expenditure across both groups is by Department of Corrections, which also experiences the largest savings. The costs can be attributed primarily to lower prison expenditures in the drug court group. The lower number of re-arrests for drug court participants led to reasonably large savings per participant. Defense Attorney costs are low across the board, as are Prosecuting Attorney costs but both agencies see savings on drug court participants. Community Corrections spends more on drug court participants due to more probation supervision time and the treatment system also spends more on drug court participants as would be expected based on the higher use of treatment services noted previously.

Table 12. BCADC Outcome Cost Savings 2 Years Post Drug Court Entry²⁴

Transaction	Cost per Drug Court Participant	Cost per Comparison Group Member	Difference in Cost (Savings)
Re-arrests	\$66	\$162	\$96
Jail Bed Days	\$915	\$1,311	\$396
Jail Bookings	\$12	\$29	\$17
Probation	\$662	\$389	- \$273
Prison Days	\$929	\$2,215	\$1,286
Parole	\$13	\$66	\$53
Subsequent Court Cases	\$131	\$197	\$66
Residential Treatment	\$0	\$22	\$22
Outpatient Treatment Episodes	\$351	\$161	- \$190
Intensive Outpatient Treatment Episodes	\$193	\$46	- \$147
Person Victimitizations	\$3,295	\$5,126	\$1,831
Property Victimitizations	\$1,017	\$1,130	\$113
Total Per Participant	\$7,584	\$10,854	\$3,270
Total all participants for 2 years (n=108)			\$353,160

Table 12 displays the benefits or cost savings experienced per participant and overall for the BCADC program due to positive outcomes for its participants. Barry County Drug Court participants showed a cost savings of over \$3,000 per participant over a 2-year period. When this per participant savings is multiplied by the 108²⁵ offenders who have participated in the Drug Court Program since implementation (in May 2001), the total Program cost savings (for outcomes over a 24-month period) is **\$353,160**.

Note that these cost savings are those that have accrued in just the two years since program entry. Many of these savings are due to positive outcomes while the participant is still in the program, so savings are already being generated from the time of entry into the program.

It was not possible to cost outcomes beyond 24 months as most participants did not enter the Program longer than two years ago. If Drug Court participants continue to have positive outcomes in subsequent years (as has been shown in other drug courts, e.g., Carey et al., 2005; Finigan, Carey, and Cox 2006) 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.

²⁴ Average costs per participant have been rounded to the nearest whole dollar amount.

²⁵ As of March 2006, 108 offenders have entered and either graduated or been terminated from the Program.

SUMMARY/CONCLUSIONS

The Barry County Adult Drug Court was established in May of 2001 as a diversion program for non-violent, substance-abusing offenders, particularly those with a history of drunk driving offenses. Since its inception, the BCADC has served nearly 150 participants, of whom 44% successfully completed the Program. The Drug Court Team is a close-knit group of individuals led by a dedicated Judge. This team goes far beyond the minimum requirements to seek out services, community connections, and alternatives to incarceration for those participants willing to commit to the Drug Court Program. This includes using innovative techniques, such as the SleepTime monitor to track substance use, and alternating Court dates to accommodate participants' schedules, to help participants succeed in the Program.

The outcome and cost-benefit analyses were based on a cohort of BCADC participants who entered the Program from January 1, 2002 through July 1, 2004 and a matched comparison group. The outcome results indicated that participants in the Drug Court were re-arrested half as often as the comparison group in the 24 months following Drug Court entry. In particular, only 4% of graduates were re-arrested. This provides clear evidence that the BCADC has been successful in reducing recidivism for its population of drug-addicted, high-risk prison bound offenders.

Overall, the Program has also been successful in reducing drug use among its participants. The number and percentage of positive drug tests declined over the course of 1 year. This decline in positive testing was corroborated by a decrease in drug-related re-arrests for the Drug Court participants.

The average cost for the BCADC Program was \$7,752 per participant. This amount is consistent with the range of costs found in other drug courts (\$4,000 to \$12,000) studied by NPC Research (Carey and Finigan, 2004; Carey, et al., 2005). The majority of these costs were due to court costs, case management, treatment, and use of jail time for a sanction. As the Program continues to grow and refine its processes, particularly its sanction process, the costs will likely decrease.

The outcome costs indicate that participation in Drug Court offers a cost-benefit to the Michigan taxpayer due to a reduction in subsequent re-arrests and associated incarceration and victimizations. Over a 2-year period, the Drug Court Program cost outcomes were **\$7,584 per participant** compared to **\$10,854 per offender** that did not participate in Drug Court. When this per participant savings is multiplied by the 108²⁶ offenders who have participated in the Drug Court Program since implementation (in May 2001), the total Program cost savings (for outcomes over 24-month period from program entry) is **\$353,160**.

As the existence of the Program continues the savings generated by drug court 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 BCADC is both beneficial to participants and beneficial to the Michigan taxpayers.

²⁶ As of March 2006, 108 offenders have entered and either graduated or terminated from the program.

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