Evaluation of the First Judicial District Court Adult Drug Court: Quasi-Experimental Outcome Study Using Historical Information

prepared for: The First Judicial District Court, the Administrative Office of the Court and the Children Youth and Families Department

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Introduction

The goal in conducting this preliminary outcome study is to better understand the effectiveness of drug courts in terms of whether they "work" in reducing the incidence of crime as measured by new referrals of participants after they leave the program when compared to a matched comparison group. In the future we would like to conduct another study after more clients have entered and left the drug court program. This would have two benefits. First, a larger study group would allow us to conduct more sophisticated analyses and second, would allow a longer exposure time to measure recidivism. Additionally, we would like to include additional measures of success. Additional measures of success would concentrate on changes in substance use and increases in measures of social stability (i.e. family, employment). We were not able to include these types of outcome measures in this study. We are also interested in conducting a cost study.

Outcome studies are useful for a number of reasons. First, knowledge involving client success and a program can be used in an interactive manner to create a self-correcting system and improve programs. Second, both funding sources and service providers have a vested interest in utilizing scarce resources in the most effective manner. Programs that are effective in reducing future contact with the criminal justice system should be replicated. Third, outcome evaluation findings, if valid and reliable, can be used to make programs more useful to the target population.

The methodology used in conducting this study follows guidelines suggested by the federal Drug Court Program Office (DCPO) in their publication "Drug Court Monitoring, Evaluation, and Management Information Systems" (June 1998) as well as generally accepted guidelines for impact/outcome evaluations. The design focuses on using a matched historical comparison group. Comparison group members were matched on variables including sex, race/ethnicity, age, type of offense, the presence of a substance abuse history, and drug court eligibility criteria (i.e. no violent felony convictions and the current offense is not a violent felony). Comparison group members were also matched in time. This means comparison group members were taken from the same time period as the drug court group so that we can control for what might be occurring in the larger community (e.g. a new District Attorney or change in laws). Another matching variable was geographic location (i.e. Santa Fe or Espanola). Successful drug court graduates and those who did not successfully graduate are part of this study. The size of both groups are approximately the same size and were dependent on the number of participant who had left the drug court at the time this study was begun. Information collected in the drug court client management database is used for the drug court treatment group. This includes referral information, demographic data, substance abuse history data, criminal history data, current offense data, school information, all services received, and exit information. Subsequent official arrest histories have also been collected.

The comparison group is comprised of drug court eligible individuals who for various reasons (e.g. were never referred) did not become drug court clients. These individuals

are those who typically are under the supervision of the local probation department. Information collected for the comparison group is, to the extent possible, comparable. This consists of demographic data, substance abuse history data, criminal history data, current offense data, and exit from probation information. Both the drug court group and comparison group data is taken from official records and does not consist of any self-report information.

Using historical information only allows us to collect official information that is available for the drug court and comparison group. It is our experience that historical information for the comparison group is more limited than what is available for the drug court group. This primarily occurs because each New Mexico drug court uses an Institute for Social Research designed client management information system that routinely collects the information necessary to complete this type of study, while information for the comparison group is typically maintained in hard copy files that typically contain less information and often in different formats.

Outcome evaluation is typically the comparison of actual program outcomes with desired outcomes (goals). For criminal justice programs outcome evaluation measures typically focus on recidivism rates. Other types of outcomes that can be measured include changes in substance abuse and improvements in social indicators (e.g. employment, family relationships and living arrangements). Studies using historical information are limited to those measures that can be obtained through official sources. This is a weakness of this type of study. A strength of this type of study is it is relatively inexpensive to complete and requires much less time than other types of studies. We have chosen to focus on a number of different outcomes. These include:

- recidivism defined as official re-arrest post-program for any offense.
- time to re-arrest in-program and post-program

Our primary goal is to help answer the broad question, which is not yet answerable, is do drug courts work? Perhaps as important, another question is: For which type of clients does drug court work best? Or, put another way: What is it about drug courts that work?

This report contains several sections including the research design, data collection, the data analysis, findings, and a conclusion with recommendations and implications will be delivered to DCPO. This report will be useful for the program in assessing its effectiveness and improving its operations and at the state and national level for further discovering if drug courts work and what it is about drug courts that are most effective.

Research Design

The First Judicial District Court entered into a contract with the Institute for Social Research in October 2000 to conduct a quasi-experimental historical comparison study comparing drug court clients with a matched group of individuals on probation. This study includes all drug court clients between January 1997 and December 2000 who were clients for 90 days or longer. We decided to only include clients with 90 days or more in the treatment group rather than all clients because we wanted to control for exposure to the program in the belief that clients at this point have received a benefit. This decision

was a subjective one on the part of the research team and was approved by the drug court. We only included individuals who entered and left the drug court program by December 31, 2000 in order to allow at least nine months for measuring re-arrest. During this time, 121 clients exited the program. Seventy-nine clients who had more than 90 days of service became part of the treatment group.

Based on available data, we attempted to match the drug court graduates to a similar group of probation clients. In principle, we wanted a sample of probation clients who were similar in terms of criminal history, ethnicity and gender who also exited probation similarly (i.e. terminated and successfully completed probation). In other words, we wanted a comparison group of people who were otherwise eligible for drug court but for whatever reason did not participate in the program.

The comparison group originated from archived New Mexico Corrections Department (NMCD) Probation and Parole Division (PPD) files. Archived files are files of offenders who are no longer on probation and have been boxed and are stored in a warehouse. We were granted access to probation files by the Director of the PPD.

After gaining access to the files and becoming acquainted with the local filing system we compiled a list of potential comparison group members by reviewing "control cards" for offenders being supervised by PPD in Santa Fe. Control cards are maintained by PPD and contain the name of the offender, their begin date of supervision, the end date of supervision, whether they are on probation or parole, whether they are a felon or not and the offender's home address. We rejected anyone who was a parolee, who did not begin and finish probation based on the study dates, who did not match the drug court group regarding where they lived and who was not a convicted felon (no misdemeanants were accepted into the comparison group). This initial review of PPD control cards resulted in a list of approximately 350 potential comparison group individuals.

This list was provided to PPD staff who then requested the files from the warehouse where they are archived. It took approximately three weeks to generate the list of potential individuals, request and receive the files. The files were delivered to the PPD office in Santa Fe and research team members were sent to that office to begin reviewing them more completely and to begin collecting identified comparison group members data from the files. A copy of the codebook is attached as Appendix A.

The review of archived files initially focused on further identifying comparison group members for eligibility in the comparison group.

The following criteria were followed in the selection of the comparison group. A number of independent factors could exclude an offender from being included in the comparison group.

All Comparison Group Members:

- Were matched to the First Judicial District Court Drug Court clients who exited between May 1997 and December 31, 2000.
- Were matched to the First Judicial District Court Drug Court clients by gender.

- ethnicity, and referring offense.
- Did not have prior violent felony convictions or current misdemeanor violent convictions.
- Were matched to the First Judicial District Court Drug Court clients on status at discharge.
- Were matched to the First Judicial District Court Drug Court clients on primary drug of choice.
- Were matched to the First Judicial District Court Drug Court clients on where they lived (Santa Fe or Espanola).

We excluded any potential comparison group member who had an indicated history of mental health problems. We were not able to match participants on marital status, employment at intake into either the comparison group or drug court group or by years of education. We were also not able to match on length of stay because the average length of stay in drug court is less than probation. This is discussed further later.

We were not able to match drug court clients with probation comparison offenders as well as we would have liked. This occurred for primarily one reason. It appears that this drug court program and jurisdiction to a certain degree operate as a "last chance" for potential drug court clients. In conversations with drug court team staff we were informed that this is part of their operating philosophy. The process of matching probation offenders to drug court clients appears to at least partially support this idea. We were not always able to match drug court clients by current offense. This primarily occurred on drug possession and drug distribution. This is discussed further later.

Because we were told how this program operates as a last chance for many clients we agreed to collect data on a similar group of individuals who received prison sentences rather than drug court. At the time this report was completed we had not been granted access to the information to complete this analysis. We believe that if we were able to complete this portion of the study we would discover there are offenders who receive prison sentences who are eligible for drug court.

When possible, we attempted to include comparison group members as similar as to a drug court client as possible using a one to one match, although this was not always possible. We matched 70 probation clients with the 79 drug court clients. The comparison group was composed of a less serious group of individuals than the drug court group.

Once the two comparison groups were chosen, we requested a criminal history report from the First Judicial District Court. This request was relayed to the Law Enforcement Records Bureau at the New Mexico Department of Public Safety where New Mexico State criminal histories were completed. Upon review of the returned state criminal histories we discovered that we had not received a history for all those individuals requested. This discrepancy was confirmed with the Drug Court Coordinator who informed us those individuals with missing criminal histories did not have one in the system. This does not seem possible since every individual in the study had at a minimum the arrest that resulted in their status as a drug court client or probationer. In

the analysis cases that did not have a criminal history were dropped. The use of New Mexico State criminal histories did not allow us to report arrests that occurred outside the state. We would have preferred federal criminal histories.

Data Analysis and Discussion

This study considers drug court clients with 90 or more days of service and who entered and exited between January 1997 and December 2000, a thirty-six month period.

According to the database maintained by the First Judicial District Court drug court program a total of 121 individuals entered and exited the program between January 1997 and December 2000. Of these clients 42 (34.7%) were in the program less than 90 days and so did not become part of the study, which provided us a sample of 79 clients. As noted earlier we decided to only include clients with 90 days or more in the study because we wanted to control for program effect. Of this number we were able to match 62 using the criminal histories requested from and provided by the drug court program. Because of missing criminal histories it was necessary to drop 17 clients from the analyses. We do not know why criminal histories were not provided for these 17 individuals. By definition every individual should at least have the offense for which they are either in drug court or on probation.

Using the methods discussed earlier to construct the comparison group we were able to identify and collect limited data on 79 individuals (a copy of the comparison group data collection codebook is attached as Appendix B). Fifty of the 70 comparison group members were matched with criminal histories.

In the end result 112 of the 158 total drug court and comparison study group were matched with criminal histories. This sample size does not allow us to conduct more sophisticated analyses than what are presented below. This has potential ramifications because we cannot with statistical confidence profile the differences between the two groups. While this is true we can say with statistical confidence that the drug court group and comparison group vary regarding their re-arrest patterns. It would be very beneficial to replicate this study in the next 1-2 years when more drug court clients have exited the program. The following tables are an analysis of the 112 matched individuals in the study group.

Table 1 – Referring Offense				
Referring				
Offense	Drug	g Court	Com	parison
	N	%	N	%
Drug Possession	21	33.9	13	26.0
Drug Distribution	7	11.3	3	6.0
Burglary	13	21.0	8	16.0
Contributing to the				
Delinquency of a				
Minor	5	8.1	3	6.0
Embezzlement	5	8.1	2	4.0
Forgery and				
Counterfeiting	4	6.5	3	6.0
DWI	1	1.6	7	14.0
Other	6	9.7	11	22.0

Missing – 1, p=.141, df=7

Table 1 documents the referring offense for the drug court and comparison group. A larger number (28) and percent (45.2%) of the individuals in the drug court group were referred for drug possession and drug distribution offenses than the comparison group. These differences, while not statistically significant, indicate individuals in the drug court group were referred for more serious offenses. Of particular interest is the number of individuals referred for drug distribution in the drug court group. This is the third largest group of individuals and the fourth largest (with two others) for the comparison group. We were not able to match the number of drug distribution cases in the drug court group with the comparison group, which lends some support to the idea that the drug court operates as a "last chance" prior to going to prison for some individuals. This should be further explored.

Table 2 – Disposition at Exit						
Disposition at						
Exit	Drug	g Court	Com	parison		
	N	%	N	%		
Graduate	22	37.3	19	38.0		
Absconded/Terminated	37	62.7	31	62.0		

Missing -3, p=.939, df=1

Both the drug court and the comparison group were very similar in terms of the number of individuals who successfully completed either drug court or probation and those who did not.

Table 3 – Length of Stay		
	Drug Court	Comparison
Average Length of Stay		
In Days	276.5	461.7

The average length of stay for comparison group individuals is greater by 185.2 days (40.1%). Differences in length of stay between probation comparison group and the drug court group occur primarily because the programs are different in terms of designed program length. Drug Courts are typically designed to be a year or less in length while minimum probation sentences for felons are 18 months in length. This finding is not a surprise. Of particular interest is further studying length of stay as it relates to cost. We believe drug courts are typically more costly when only program costs are considered. It would be worthwhile to compare average daily costs by average length of stay. This information was not available for this report.

Table 4 – Primary Substance of Abuse at Intake							
Primary							
Substance	Drug	g Court	Com	parison			
	N	%	N	%			
Alcohol	7	12.3	23	46.0			
Marijuana	13	22.8	12	24.0			
Cocaine	19	33.3	9	18.0			
Opiate	14	24.6	3	6.0			
Other	4	7.0	3	6.0			

Missing -5, p=.001, df=4

Slightly less than 50% of the comparison group's primary substance of abuse at intake into probation was alcohol, followed by marijuana (24%), cocaine (18%), and opiates (6%). This varied significantly at the p=.001 level from the drug court group. One-third of the drug court group's primary substance of abuse at intake was cocaine, followed by opiates (24.6%) and marijuana (22.8%). Only 12.3% of the drug court group's primary substance of abuse at intake into drug court was alcohol. This table indicates the drug court group's primary substance of abuse at intake was a more serious drug when compared to the comparison group of probationers. When combined with referring offense this supports the idea that a more serious type of client is served by the drug court program. The "other" category includes benzodiazepenes, prescription, and other drugs.

Table 5 – Gender				
Gender	Drug	Court	Com	parison
	N	%	N	%
Male	39	62.9	36	72.0
Female	23	37.1	14	28.0

p=.309, df=1

The majority of individuals in both groups were male.

Table 6 – Race/Ethnicity					
Race/Ethnicity	Drug Court Comparison				
	N	%	N	%	
Anglo	9	15.0	15	31.3	
Hispanic	49	81.7	32	66.7	
Native American	2	3.3	1	2.1	

Missing -4, p=.128, df=2

The majority of clients served in both groups self-identified as Hispanic. The percentage of Anglo clients in the comparison group was twice the percentage of Anglo clients in the drug court group. These differences are not statistically significant.

Table 7 – Average Age in Years					
Drug Court Comparison					
Average Age in					
Years	32.6	30.7			

Average age for the entire group was 31.7 years old (range 19-55, std. dev. 9.7). The drug court group had a average age of 32.6 years old (range 19-54, std. dev. 10.0) while the comparison groups average age was 30.7 years old (range 19-55, std. dev. 9.3). Both groups were similar in age with an average difference of 1.9 years.

Table 8 – Marital Status	S			
Marital Status	Drug	g Court	Com	parison
	N	%	N	%
Married/Widowed	13	21.0	9	20.5
Divorced/Separated	7	11.3	8	18.2
Single/Never Married	42	67.7	27	61.4

Missing -6 p=.598 df=2

A majority of individuals in both groups self-identified as single/never married. There were no statistical differences in marital status between the two groups.

Table 9 – Employment Status					
Drug Court Comparison					
	N % N %				
Employed	41	97.6	34	91.9	
Unemployed	9	2.4	11	8.1	

Missing – 17, p=.247, df=1

The vast majority of individuals in both groups were employed at exit from their respective groups.

Table 10 – Living Arrangements					
	Drug	Court	Comparison		
	N	%	N	%	
Living Alone	1	3.6	12	32.4	
Living with Parents or					
Children	22	78.6	10	27.0	
Living with					
Boyfriend/Girlfriend					
or Spouse			13	35.1	
Other	5	17.9	2	5.4	

Missing - 47, p=.000, df=3

This table reports the living arrangements of both groups. Almost 80% of the drug court group lived with their parents or children at intake into the drug court program while only 27% of the comparison group comprised of probationers lived with their parents or children. Surprisingly, none of the drug court clients lived with a spouse or boyfriend/girlfriend. Findings from this table indicate a larger percentage of the drug court clients at intake had more stable living arrangements. The difference between these two groups is statistically significant.

Table 11 – Education				
Education	Drug	g Court	Com	parison
	N	%	N	%
Less than High School	14	22.6	24	53.3
High School Diploma	37	59.7	9	20.0
More than High				
School	11	17.7	12	26.7

Missing -5 p=.000 df= 2

This table documents educational level for both groups at the time of exit either from the drug court or the comparison group. Overall individuals ranged in education from 6th grade to a single individual self-reporting a Ph.D. in the comparison group. Drug court members differed significantly from comparison group members in educational status at exit. More than 50% of the comparison group members had less

than a high school education while less than 25% of the drug court group had less than a high school education.

The mean education in years for the entire study group was 11.7. A total of 19 individuals had some college, three self-reported a college degree and one reported having a Ph.D. The drug court group's average education in years was 11.8 and the comparison group's was 11.6. When average education is considered the two groups appear to be very similar with an average difference in education of 0.2 years

Table 12 – Dependents						
Dependents	Drug Court Comparison					
	N % N %					
Yes	28	54.9	28	59.6		
No	23	45.1	19	40.4		

Missing – 14, p=.641, df=1

The final variable we compared the two groups on was the number of self-reported dependents. Both groups were very similar and there was not a statistical difference between the groups when comparing whether or not individuals had a dependent.

The number of dependents in both groups ranged from 0 to 6. The average number of dependents was 1.1. The average number of dependents was 1.0 for the drug court group and 1.3 for the comparison group.

Using the information presented in the above tables a useful profile of the drug court group can be developed and compared to the probation comparison group. This is necessary in order to better understand how comparable the two groups are and to place the recidivism findings in context.

Almost two-thirds of all drug court clients had either a drug possession, drug distribution or burglary offense that resulted in their becoming a drug court client while more than 50% of the comparison group had a drug possession, burglary or DWI offense. These differences while not statistically significant are substantive. Drug court clients spend on average 40% fewer days under supervision when compared to the probationers. When primary substance of abuse is reviewed drug court clients were statistically different and were more likely to use more serious drugs (cocaine and opiates) than comparison group members (alcohol and marijuana). The majority of individuals in both groups were male with a slightly larger percentage of females in the drug court group. A majority of individual's in both group's self-identified as Hispanic. A larger percentage of the clients in the probation comparison group self-identified as Anglo when compared to the drug court group. The drug court and comparison group were very similar when age was considered. Both groups on average were in their early thirties. The majority of individuals in both groups were employed, single/never married and had few dependents. Drug court individuals as a group had more stable living arrangements and were more likely to have a high school education when compared to the comparison group. These differences were statistically significant.

The above tables and discussion point to a more serious drug court group when compared to the probation comparison group. This conclusion leads to a relevant suggestion. First, as suggested by drug court program staff, additional time and effort should be expended to explore the possibility of creating a comparison group of individuals who were sentenced to prison. We were not able to complete this task in time for this report.

Recidivism

Recidivism can be defined in numerous ways, including an arrest for any new offense, an arrest for a similar offense or the same offense (i.e. DWI), and a conviction. For this study we have chosen to define recidivism as an arrest for any offense following an individuals exit from the drug court program or comparison group of probationers. The following does not consider an arrest while under supervision.

It is important to note exposure time for re-arrest varied for the study group from between nine months to approximately three years. This occurs because individuals from both groups exited from either the drug court program or probation comparison group on different dates between May 1997 and December 2000.

Table 13 – Re-arrest				
Re-arrest	Drug Court		Comparison	
	N	%	N	%
Yes	7	11.3	12	24.0
No	55	88.7	38	76.0

p=.075 df=1

Differences in re-arrest between the drug court and probation comparison group were statistically significant. While 24% of the comparison group was re-arrested only 11.3% of the drug court group was re-arrested. Additionally, the average time in days to rearrest was greater for the drug court group (315.3 days, std. dev. 247.1) when compared to the comparison group (271.8 days, std. dev. 278.8) by 43.5 days. The average number of arrests was also higher for the comparison group. Drug court group individuals who were re-arrested had an average of 1.4 arrests while the probationer comparison group who were re-arrested had a average of 2.0 arrests.

This table indicates clients in the drug court program were re-arrested at a rate that was less than half of the probation comparison group. This is a positive finding for the drug court program. This finding is made more positive by the fact the drug court group was comprised of a more serious group of offenders when primary drug of choice and referring offense were considered. Members of the drug court had more serious offenses and the primary substance of abuse was often times a more serious drug. In addition to being re-arrested at a lower rate the average length of time to re-arrest was longer and the average number of re-arrests was lower.

Conclusion

In conclusion, this study has shown that drug court individuals were re-arrested at a lower rate than probation clients. Not only were they arrested at a lower rate but they were rearrested fewer times and their average time to re-arrest was longer. Of great importance is the fact this occurred even though the drug court group was a more serious group of offenders and used more serious drugs. This finding is counter-intuitive and serves to begin answering the question regarding the success of this drug court program in particular and drug court programs in general. The small sample size does not limit the significance of this finding. This study has established an important baseline for the First Judicial District Court Adult Drug Court Program.

This preliminary outcome study also provides a starting point for further study regarding the effectiveness of drug courts. Further time and attention should focus on "what about drug courts work", more detailed and complete analyses and a cost study. Additionally, the cost study should identify the cost analysis components that are effective.

More detailed analyses would focus on collecting more complete data on both drug court clients and a comparable group of probationers and individuals who are incarcerated. This could include treatment information and self-report information regarding drug use after exit from drug court and probation/prison as well as improvements in living arrangements, education, employment, medical health and mental health. It would also be worthwhile to look at longer time periods post-program than what was included this report. Benefits logically extend and may in fact increase with longer time periods.

The findings in this report provide some interesting information on cost issues. While short term in-program average costs for drug court are greater than comparable probation due to increased supervision and treatment some part of this cost may be offset by longer lengths of stay in probation, higher re-arrest rates and individuals who go to prison.

Appendix A

Historical Comparison Group Data Collection Codebook