

Baltimore City Health Department Baltimore Substance Abuse Systems SAMHSA/BJA

Baltimore City Drug Treatment Court Enhancement Project

Final Report

October 1 2010 to March 31, 2014

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Table of Contents

Executive Summary	iii
Report Overview	1
Program Description	2
Data Used to Assess Implementation Fidelity and Program Outcomes	2
Implementation Fidelity	2
Program Outcomes	3
DTC Participants	4
Demographics	4
Drug Court Participation Descriptives	6
Criminal History	8
Comparison of Treatment vs. Control Groups	. 11
Referrals	. 13
Process Evaluation Results	. 14
Overall Data Collection Standards	. 14
IOP/OP Buprenorphine	. 16
Halfway House	. 17
Transitional Housing	. 19
HCAM Health Care Case Management	. 19
CMM Conflict Resolution Training	. 21
Process Evaluation Results Summary	. 22
Outcome Evaluation Results	
Reduce Criminal Justice Involvement	. 23
Reduce Substance Use/Abuse	. 25
Increase Engagement and Sustainment in Substance Abuse Treatment	. 27
Increase Housing Stability	. 29
Increase Access to Health Insurance	. 30
Strengthen Relationships	. 31
Recidivism Research Design	. 33
Recidivism Analysis and Results	. 34
Results: Logistic Regression	
Services Received Overall	. 34
Services Received - Transitional Housing	
Services Received - Conflict Resolution Training	. 38
Results: Cox Regression	. 40
Services Received Overall	
Services Received - Conflict Resolution Training	
Limitations and Conclusion	. 45

Table of Tables

Table 1: Demographic Descriptives of DTC Participants N=814	5
Table 2: Participation Descriptives of DTC Participants N=814	7
Table 3: Criminal History Descriptives N=790	9
Table 4: Significant Differences between Treatment and Control Groups N=814	. 12
Table 5: Referrals to Services	. 13
Table 6: Process Evaluation Results - Overall Data Collection Standards	. 15
Table 7: Process Evaluation Results – IOP/OP Buprenorphine	. 16
Table 8: Process Evaluation Results - Halfway House	. 18
Table 9: Process Evaluation Results - Transitional Housing	. 19
Table 10: Process Evaluation Results - HCAM Health Care Case Management	. 20
Table 11: Process Evaluation Results - CMM Conflict Resolution Training	. 21
Table 12: Outcomes - Goal 1 Reduce Criminal Justice Involvement	. 24
Table 13: Outcomes - Goal 2: Reduce Substance Use/Abuse	. 25
Table 14: Outcomes - Objective 1: Increase Engagement and Sustainment in SA Treatment	. 28
Table 15: Outcomes - Objective 2: Increase Housing Stability	. 30
Table 16: Outcomes - Objective 3: Increase Access to Health Insurance	
Table 17: Outcomes - Objective 4: Strengthen Relationships	
Table 18: Regression: Services on Recidivism - Treatment vs. Control Group	. 36
Table 19: Regression: Transitional Housing on Recidivism - Housing vs. No Housing	. 37
Table 20: Regression: Conflict Resolution Training on Recidivism vs. No Training	. 39
Table 21: Cox Regression: Participated in Services vs. No Services	. 41
Table 22: Cox Regression: DTC Participants - Conflict Resolution Training vs. No Training .	. 42
Table 23: Survival Differences Year 1 & 2 - Conflict Resolution Training vs. No Training	. 44

Table of Appendices

Appendix A: Referral Process Map	. 46
Appendix B: Implementation Standards and Data Source	. 47
Appendix C: Program Outcomes and Data Source	. 51
Appendix D: Dashboard Summary Report	. 56
Appendix E: Conversion Odds Ratio to Probability – Treatment vs. Control Group	
Appendix F: Conversion of Hazard Rates to Relative Risk Worksheet	. 60

Executive Summary

During this four-year service enhancement project jointly funded by SAMSHA and the Bureau of Justice Assistance, there were 268 new or existing Drug Treatment Court (DTC) clients served. Clients received one or more of the following services: buprenorphine-enhanced intensive and standard outpatient addiction treatment, halfway house addiction treatment, transitional housing, health-insurance focused case management, and conflict resolution training and mediation services.

Many more clients were referred for services than actually received services due to clients not meeting eligibility criteria or clients not complying with service requirements. Among the successful outcomes among participating clients were:

- 1. 94% of clients did not get re-arrested for 90 days after receiving the first enhancement service.
- 2. 92% of clients did not test positive for drug use during the 90 or more days prior to discharge from the DTC program.
- 3. 48% of clients who received buprenorphine-enhanced outpatient treatment remained in treatment for at least 90 days.
- 4. 62% of clients who received halfway house treatment did not test positive for drug use during the first 90 days of treatment.
- 5. There was a 35% increase in housing stability among clients.

A recidivism analysis was conducted comparing DTC participants who received services to those who did not. Controlling for factors that could otherwise explain the results, we found that participation in conflict resolution training reduced the likelihood of arrest, conviction, and sentence of incarceration of 1 or more days post-admittance to DTC or post-service provision. Those who participated in conflict resolution training also lasted a longer period of time (or "survived") without an arrest and without an arrest leading to a conviction than those who did not participate in conflict resolution training.

This report details services offered through the project, goals and objectives established by project partners, and the degree to which goals and objectives were met. There are some data limitations to these findings. Of particular note is the lack of discharge GPRA interviews, as well as possibly incomplete DTC phase, urinalysis, and treatment encounter data in SMART. Nonetheless, participants appear to have benefited from the additional services provided, although it must be noted that it is unknown what services were provided to DTC participants separate and outside from of this project so replication would be helpful to confirm these results.

Report Overview

This report provides an analysis of implementation and outcome data collected for the Baltimore City Health Department/bSAS/SAMHSA/BJA Baltimore City District Drug Treatment Court (DTC) Enhancement project in accordance with the Program Development and Evaluation (PDE) plan¹ created using a researcher-practitioner collaboration model called the Program Development Evaluation (PDE) method. The report period will cover from October 1, 2010 to March 31, 2014. Implementation measures will be broken out by year, while outcomes will be summarized for the entire period.

The PDE method, developed by Drs. Gary and Denise Gottfredson, is a general method created to assist organizations in developing, implementing, and improving any type of program and is expected to increase both fidelity of implementation and eventual success at achieving stated goals. The PDE method incorporates 9 steps, strengthens the relationship between practitioner and researcher by creating a shared vision, a problem-solving orientation, a definition of roles and responsibilities, and ensuring ongoing communication. Collaboration is crucial to the PDE method - none of these steps can be conducted in absentia by either the researcher or practitioner – from goals to objectives to theory to implementation – all require active participation of all parties to establish and periodically revise the evaluation plan. To create the PDE plan for this program, two half-day workshops were conducted in January and February 2011 with the contracted stakeholders and a focused PDE workshop was conducted with IOP/OP Buprenorphine and Halfway House providers in June 2011. A fourth workshop was held with transitional house partners in December 2011. The PDE plan was also revised in March 2012 and October 2012, in order to meet the changing needs of the project.

This report includes a summary of this enhanced services, including a discussion of the data sources for this report. Then program descriptives of everyone who was active in the Baltimore City DTC in October 2010 and then explores the significant differences between those who received one or more enhanced services (the "treatment" group), and those who did not (the "control" group) are explored. Then the results of the examination of the process standards (by year), followed by the goals and objective outcomes.

Then, given the lack of data available to assess a number of the goal and objectives (see below for a discussion of this issue), this report concludes with a recidivism analysis comparing the treatment and control group using two types of regression analysis on three measures of recidivism -- post-DTC admittance arrest, conviction, and sentence to at least 1 day of incarceration. The first type of analysis is logistic regression, which predicts which of the three possible outcomes (arrest/no arrest; conviction/no conviction; or incarceration/no incarceration) are going to occur, while accounting for information contained in other variables which could explain that outcome (e.g., older offenders are less likely to recidivate, thus one would want to "control" for age in the analytic model). The second analytic method was Cox Regression survival analysis was used to compare on the *risk* of failure of the treatment group and the control group in their time to failure from the time of admittance to DTC to July 2014.² The

¹ A copy of the PDE Plan is available upon request.

² The last date of any criminal activity in the DPSCS CJIS data was 7/10/2014.

survival analysis seeks to determine whether those who did not receive one or more enhanced services "failed" (e.g., were rearrested) sooner than those who did receive one or more services.

Program Description

The Baltimore City District Drug Treatment Court (DTC) enhancement project provides ancillary services to 100 new and/or existing DTC clients annually. The project sought to provide:

- a) 28 Buprenorphine IOP/OP Treatment slots (14 over 6-month period)
- b) 10 DTC participants to live at Halfway House
- c) 50 DTC participants to live in transitional housing
- d) Health Insurance Focused Case Management for 100 clients
- e) Recovery mediation and/or Conflict Resolution Training for 50 DTC participants

Note that DTC participants can participate in one or more services throughout their engagement in the program.

Referrals to these services are generated by several sources, but the central initiator/coordinator of a referral is the DTC Case Manager. With the exception of referrals to IOP/OP Buprenorphine, the DTC Case Manager manages referrals to all other services. Initially, the case managers generated referral forms specific to each service from a database created by Choice Research Associates (CRA) which captured key information about each participant in the DTC Program who is referred to one or more enhanced services. However, in the second year of the project, CRA took over maintenance of the database. Referrals were faxed from the DTC Case Manager to the providers and to CRA staff, who input the information into the database and generated a referral form. The referral forms were then emailed to the provider and the DTC Case Manager. Updates on referrals were provided by the service partners and were processed in the same way. (See Appendix A for an illustration of the referral process).

IOP/OP Buprenorphine referrals are generated through the Assessment and Placement (A&P) unit of the Department of Public Safety and Correctional Services Division of Probation and Parole. They in turn advised the DTC Case Manager of the referral, who then provided a written referral form to CRA. In addition, both HCAM and CMM conducted outreach activities at various locations where DTC participants congregate, thus a portion of referrals for these services are initiated from HCAM and CMM directly. In this case, again, the referrals were sent to CRA for processing and tracking.

Data Used to Assess Implementation Fidelity and Program Outcomes

Implementation Fidelity

See Appendix B for a list of all implementation standards and the data source used to assess. As of this reporting period, there are 5 implementation standards with respect to data collection practices of the partners and 33 implementation standards within 5 interventions to evaluate the implementation of the DTC Enhancement program. Of these standards, data were available to assess 31 of 33 (93%) of these process measures.

Data used to assess program progress was obtained from the DTC Referral Database, the CMM Recovery Database, the Choice Research Associates Tracking Database (CRAT), and data extracted from the HCAM IRIS system. In addition, extracts were obtained from the SMART system e-court modules.

Program Outcomes

Please see Appendix C for a detailed list of the long goals and short-term objectives for this project and the data used to assess program progress. There are 2 long-term goals (reduce criminal justice involvement and reduce substance use/abuse among DTC participants) and within those 2 goals, there are 21 specific goals. Of these goals, only 12 of 21 (57%) goals can be assessed due to missing data issues; the reasons for this limitation are explained further below. There are also 4 short-term objectives in the PDE (increase engagement and sustainment in substance abuse treatment, increase housing stability, increase access to health insurance, and strengthen relationships) and among these 4 objectives there are 30 specific measures of these objectives. Of those 30, data are available to assess 25 measures (83%).

Data to measure the criminal justice goals and objectives were obtained from the Department of Public Safety and Correctional Services (DPSCS) Criminal Justice Information System (CJIS) criminal history records. For the other goals and objectives, data sources included SMART e-court module urinalysis data, SMART e-court treatment encounter data, the DTC Referral database and treatment data provided by bSAS for DTC participants who received one or more referrals in this time period from Maryland Alcohol and Drug Abuse Administration (ADAA). Data from the SAMHSA Services Accountability Improvement System (SAIS) which captures all the Government Performance and Results Act (GPRA) interviews were also included in this analysis.

For 5 of the 30 goals which cannot be reported upon because of a lack of data there are two principal reasons for this issue. The primary issue has to do with the lack of discharge GPRAs completed for this project. At the beginning of this project, CRA obtained permission from SAMHSA to delay the GPRA discharge interview until the participant graduated or was terminated from DTC This made sense from a data perspective (e.g., allowing us to capture all of the interventions provided over the entire participation period rather than just those provided in the 6 month period from the intake to the discharge GPRA. Consequently, there was discharge GPRA data for only 12 participants.³ Most of the goals and objectives that cannot be assessed are those that relied on GPRA discharge data to assess change from the intake and 6 month follow-up interviews.

³ Had we realized how difficult this would be, we would have gone with a different strategy (e.g., conducting the discharge GPRA either 12 months from the date of first service, and/or more closely monitoring the DTC graduation activity so that we could interview individuals before they departed from DTC.) Although we asked the service partners to provide updated contact information of each participant at intake and at discharge from services, this standard was largely unmet (see Table 6 Data Collection Standard #1).

In addition to this missing discharge data, the remaining goals and objectives were to be measured comparing data from the 6 month GPRA to the intake GPRA. We were going to assess areas such as self-reported arrests, arrests for drugs, use of alcohol and drugs, and number of night spent in jail. However, among those who completed the 6 month GPRA, there were very few self-reported activities of this nature – most individuals said they were never arrested in the last 30 days nor did anyone admit to consuming substances. For instance, among the 279 intake interviews, only 11 people admitted they had been arrested for drugs in the prior 30 days; in the follow-up interview, only 2 people reported an arrest for drugs. Given how few people responded, there is insufficient variation to have any reliability in the results, so we are unable to assess these areas as originally planned. This lack of reporting may be related to the fact that the DTC Case Manager completes the interview with the participant – and the participant is likely to be hesitant to admit to activities which could result in problems with the drug court.

Finally, in addition to the process and outcomes based on the PDE, this report will incorporate findings from the two focus groups conducted in July 2013 of DTC participants – one group of DTC graduates, and one group of actively engaged DTC participants. The DTC participants are described below.

DTC Participants

Demographics

There were 814 individuals engaged in the DTC program in the period from October 2010 through March 31, 2014 (Table 1). At the time of their admission date, DTC clients ranged in age from 20 to 74 years old, with an average age of 46 years old. Approximately two-thirds are men (71%), and the majority of participants are African America/Black (85%). Most (96%) have not served, nor are currently serving, in the military. In terms of education, on average, DTC participants completed 10.9 years of education (ranging from 5 to 16 years of education). Specifically, half (51%) of DTC participants had less than a high school degree or GED, 41% had a high school degree or GED, 6% attended some college or completed training, and the remaining 2% had an Associate's Degree or higher.

DTC participants also provided their housing status at the time of their most recent admission to DTC. The majority of participants (78% or 575 of 735 who provided this information) live in a private residence (an apartment, house, or room); 4% were in transitional housing or residential treatment, 8% were incarcerated and 10% of the DTC population was homeless. The amount of time individuals had been in this living situation varied, among the 684 DTC participants who provided this information, on average 68 months, ranging from 1 to 684 months. These data were categorized into years, finding that 34% had been living in their situation for 1 year or less, 28% from 1 to 3 years, 11% from 3 to 5 years, and 27% for more than 5 years. Finally, the employment status of DTC participants reveals that the majority (58%) are unemployed, 7% work or attend school full time, 2% work or attend school part time or are employed seasonally, 24% are either retired or are otherwise not looking for work, and the remaining 10% are unable to work due to disability or are incarcerated.

	N	Freq.	Percent	Range	Mean (SD ⁴)
Age as of DTC Admission Date	757			20 to 74	46.28 (9.8)
Gender	814				
Male		577	71%		
Female		237	29%		
Race	757				
African American/Black		643	85%		
White		114	15%		
Marital Status	460				
Married		40	9%		
Separated/Divorced/Widowed		96	21%		
Single/Never Married		324	70%		
Veteran or Currently in Military	731				
Yes		21	4%		
No		710	96%		
Education – Highest Level In Years	705			5 to 16	10.9 (1.5)
11th or Less		363	51%		
High School/GED		287	41%		
Some College/Training		41	6%		
Associates Degree or Higher		14	2%		
Housing Status at Admission	735				
Private Residence		575	78%		
Transitional Housing or Treatment		31	4%		
Incarcerated		58	8%		
Homeless (Shelter, On Street)		71	10%		
Housing – Time Living in Housing Situ	ation				
Time (In Months)	684			1 to 684	68.0 (105.4)
Time (Categorized In Years)	684				
1 Year or Less		235	34%		
1 to 3 Years		190	28%		
3 to 5 Years		75	11%		
More than 5 Years		184	27%		

Table 1: Demographic Descriptives of DTC Participants N=814

⁴ SD stands for "Standard Deviation" which indicates how much the responses varied among the individuals on that question – a larger SD means more variation, a smaller SD indicates more consistency.

	Ν	Freq.	Percent	Range	Mean (SD ⁴)
Employment Status at Admission	752				
Unemployed		434	58%		
Work or Attend School Full Time		51	7%		
Work/School Part Time/Seasonal		17	2%		
Other - Not Looking/Retired		178	24%		
N/A – Incarcerated, Disabled		72	10%		

Drug Court Participation Descriptives

Table 2 provides the number of DTC participants who were required to attend drug treatment at admissions to DTC (21% or 148 of 718 with data on this question), the length of time participants were engaged in DTC (for open cases, through March 31, 2014), and the number of DTC participants discharged in this reporting period (560 of 814 or 69%).

Among the 254 DTC participants whose cases were still open as of March 31, 2014, they had been engaged in DTC on average 769 days (ranging from 53 to 2,391 days). Among the 560 whose cases closed in this period, they had been in the DTC for an average of 789 days, ranging from 4 to 2,567 days.

Of the cases that closed in this period, 50% closed because the DTC participant completed the program successfully (278 of 559 cases that listed a reason for case closure); while 32% were terminated from DTC for treatment or other non-compliance, while 18% were closed for "neutral" reasons – such as the client was unable to comply with court obligations due to physical or mental health or other reasons.

Table 2 also provides information about the housing and employment status of individuals at discharge. Among the 425 with housing status information, 56% were housed in a private residence at discharge, 13% were in transitional housing or in treatment, 29% were incarcerated, and 2% were homeless. Again, as evidenced in the admittance data, the amount of time individuals had been in this living situation varied, among the 389 DTC participants who provided this information, on average 18 months, ranging from 0 to 456 months. Again, these data were categorized into years, finding that 79% had been living in their situation for 1 year or less, 9% from 1 to 3 years, 5% from 3 to 5 years, and 7% for more than 5 years. The employment status of 370 DTC participants with data at discharge reveals that approximately a quarter (23%) are unemployed, 20% work or attend school full time, 12% work or attend school part time or are employed seasonally, 9% are either retired or are otherwise not looking for work, and the remaining 36% are unable to work due to disability or are incarcerated.

· · · · · ·	Ν	Freq.	Percent	Range	Mean (SD)
At Admission, Required to Attend Drug Treatment	718				
Yes		148	21%		
No		570	79%		
Time in DTC – In Days	814				
Open Cases (as of 3/31/2014)		254		53 to 2,391	769 (495)
Closed Cases		560		4 to 2,567	789 (392)
Discharged from DTC by 3/31/2014	814				
No		254	31%		
Yes		560	69%		
Reason Cases Closed	559				
Completed All Court Obligations		278	50%		
Neutral Disposition - Client unable to comply with court obligations due to physical or mental health/other reasons		101	18%		
Terminated – Treatment/ Other Court Non-Compliance		180	32%		
Housing Status at Discharge	425				
Private Residence		238	56%		
Transitional Housing or Treatment		56	13%		
Incarcerated		124	29%		
Homeless (Shelter, On Street)		7	2%		
Housing – Time Living in Housing Situ	ation at I	Discharg	e		
Time (In Months)	389			0 to 456	17.9 (45.7)
Time (Categorized In Years)	389				
1 Year or Less		307	79%		
1 to 3 Years		35	9%		
3 to 5 Years		20	5%		
More than 5 Years		27	7%		
Employment Status at Admission	370				
Unemployed		86	23%		
Work or Attend School Full Time		73	20%		
Work/School Part Time/Seasonal		46	12%		
Other - Not Looking/Retired		31	9%		
N/A – Incarcerated, Disabled		134	36%		

 Table 2: Participation Descriptives of DTC Participants N=814

Criminal History

Table 3 provides a number of measures of criminal history for the 790 DTC participants based calculated or summarized data from the Department of Public Safety and Correctional Services (DPSCS) CJIS criminal history data. Among those who participated in DTC during the evaluation period, the most common type of offender is a person offender (72%), followed by drug (19%), property (5%), and sex offender (3%). Note that this offender class is based on the most serious conviction over their criminal career and not on the most frequent type of crime or most recent offense committed.⁵ The length of criminal career was based on the first date of arrest recorded in CJIS to the date of admittance to drug court, and spanned a range from as little as 118 days to over 38 years. On average, DTC participants had been criminally involved for over 19 years.

The prior arrest history reflects this longevity. Study participants had an average of 18 arrests (ranging from 1 to 88), 10 prior convictions and an average conviction rate of 58% overall. Among those convictions, approximately 18% were for felony level offenses and the maximum seriousness category averaged 3.8, translating into between a level IV and Level V offense (ranging from the most serious category of level I to least serious, level VII).⁶ Level IV offenses include manufacture and/or distribution of controlled dangerous substances, second and third degree burglary, escape from confinement, and robbery. Level V offenses include: second degree assault; assault and battery; CDS possession/possession with intent narcotics; felony theft, uttering, and forgery.

Table 3 also provides arrest information broken down to provide charge data. Participants in DTC had an average of 35 charges (ranging from 1 to 156 charges) in their criminal career, with 13 charges resulting in a conviction (ranging from 1 to 71 charges convicted), thus 40% of all charges resulted in a conviction. Among these charges, 19% were for felony level offenses, and the most serious charge category averaged 4.4 – nearing between a level III and Level IV offense. Level III offenses include first degree assault, first degree burglary, robbery with a dangerous weapon, and manufacture and/or distribution of narcotics. A breakdown by different types of offenses includes both the number of charges overall, within a range, and the number of those charges that lead to a conviction. Note that the offenses listed include person crimes (including weapons charges) and sex crimes (including prostitution). Given that weapons (due to their potential lethality) add a level of seriousness to the offense, and that the majority of those charged with a sex offense are those who engage in prostitution, both weapons and prostitution charges and convictions are provided separately.

⁵ In determining the most serious conviction, person offenses were privileged over drug and property types of offenses. For the purpose of offense seriousness, DUI/DWI offenses, eluding police, etc., although designated as traffic for the offense type, were still considered as person offenses and thus were privileged over property, drug and other types of offenses. Thereafter, seriousness was determined based on the specific charges in accordance with the State of Maryland criminal law statutes.

⁶ Each charge was coded by offense seriousness category from I (most serious) to VII (least serious) (which was reverse coded so that a higher value indicated a more serious crime) in accordance with Maryland State statutes. The source for statute classification information was from the <u>Maryland State Commission on Criminal</u> <u>Sentencing Guidelines Manual Guidelines Offense Table</u> Appendix A, updated February 2006, with updates from the 2012 and 2014 manual.

The final section of Table 3 is prior incarceration history. In this sample, 89% of the 780 participants who had been sentenced, had been incarcerated for one or more days during their career.⁷ They've experienced from 1 to 33 periods of incarceration, on average serving 5.7 times. The total time imposed over the course of the participant's career ranges from 0 days to 104 years, with an average time imposed of 8 years. The average sentence per incarceration period is 67 days, but ranges up to 2.7 years.

	Ν	Freq.	Percent	Range	Mean (SD)
First Time Arrested	790			0 to 1	.04 (.06)
Offender Class (Serious Conviction)	790				
Person		322	41%		
Sex		104	13%		
Drug		360	46%		
Property		4	<1%		
Criminal Career					
Length of Career (in months) ⁸	790			<1 to 464	232 (102)
Length of Career (in days)	790			118 to 14126	7069 (3101)
Arrest, Charge, and Conviction History					
Total Number of Prior Arrests	790			1 to 88	18.0 (11.4)
Total Number Prior Convictions - Arrest	790			1 to 45	10.1 (6.2)
Prior Arrest Conviction Rate	790			0 to 1	.59 (.16)
Proportion of Prior Felony Convictions	790			0 to 1	.18 (.18)
Most Serious Category - Convictions	790			1 to 6	3.8 (.84)
Total Number of Prior Charges	790			1 to 156	35.5 (23.5)
Total Number Prior Convictions - Charges	790			1 to 71	13.2 (8.6)
Average Charges Per Prior Arrest	790			1 to 6	1.9 (.58)
Prior Charges Conviction Rate	790			0 to 1	.40 (.15)
Proportion of Prior Felony Charges	790			0 to 1	.19 (.12)
Most Serious Category - Charges	790			1 to 7	4.4 (.96)
Charge & Conviction History By Type of	Offense				
Person Offenses (Including Weapons)					
Total Number of Charges	571			1 to 57	6.2 (6.4)
Total Number of Convictions	571			0 to 16	1.3 (1.8)

 Table 3: Criminal History Descriptives N=790

⁷ Calculated from sentencing data by subtracting the sentence suspended from sentence imposed. However, there is no ability to discern in the CJIS data those sentences that were served consecutively from those served concurrently, thus these figures likely overestimate the amount of time actually served.

⁸ Length of criminal career was calculated based on first date of arrest in CJIS data to the date of admittance to DTC.

	Ν	Freq.	Percent	Range	Mean (SD)
Weapons Only Offenses					
Total Number of Charges	300			1 to 16	2.0 (1.7)
Total Number of Convictions	300			0 to 3	.35 (.61)
Sexual Offenses (Including Prostitution)					
Total Number of Charges	187			1 to 21	4.1 (4.0)
Total Number of Convictions	187			0 to 17	2.9 (3.3)
Prostitution Only Offenses					
Total Number of Charges	158			1 to 20	4.3 (4.0)
Total Number of Convictions	158			0 to 16	3.3 (3.2)
Drug Offenses					
Total Number of Charges	782			1 to 74	18.0 (11.9)
Total Number of Convictions	782			0 to 25	7.3 (4.3)
Property Offenses					
Total Number of Charges	702			1 to 99	10.0 (11.8)
Total Number of Convictions	702			0 to 44	2.9 (4.5)
Traffic Offenses					
Total Number of Charges	126			1 to 14	1.6 (1.8)
Total Number of Convictions	126			0 to 2	.26 (.51)
Total "Other" Charges					
Total Number of Charges	220			1 to 17	2.12 (2.1)
Total Number of Convictions	220			0 to 10	.72 (1.08)
Total Violation Probation/Parole					
Total Number of Charges	470			1 to 18	2.7 (2.4)
Total Number of Convictions	470			0 to 13	2.2 (2.0)
Incarceration History	1	1			1
Sentenced to Incarceration Rate	780			0 to 1	.89 (.31)
Prior Times Incarcerated	780			1 to 33	5.74 (5.05)
Total Time Imposed (in days)	780			0 to 38193	2972 (4227)
Average Incarceration Sentence (in days)	780			0 to 1001	67 (94)

Comparison of Treatment vs. Control Groups

Demographic, DTC participation, and criminal history data were compared between the 329 individuals who received a referral (the "treatment" group), and the 485 who did not (the "control" group). Significant differences among these groups are detailed in Table 4.

Those in the treatment group were significantly more likely to be male (78% vs. 66%) than those in the control group, and were significantly younger than the control group by 2.3 years. In addition, those in the treatment group were more likely to be unemployed at admission (60% vs. 49% of the control group. In terms of participation in DTC, fewer of the treatment group were required to attend treatment at admission than the control group (16% vs. 24%) and the treatment group were in DTC for a significant shorter time – 241 days fewer than the control group as of their date of discharge or the end of the project period – March 31, 2014. On average, those who received services had been engaged in DTC for 639 days vs. those who did not receive services had been in DTC for 881 days. This difference makes sense given that the referrals are generated by the case managers, and DTC participants have more frequent contact with the court and the case managers in the earlier phases of the program.

In addition to these demographic and DTC participation differences, the treatment and the control groups differed in criminal history. Generally speaking, those who received one or more referrals for enhanced services were more serious offenders than those who did not. For example, the treatment group had more prior arrests (20.2 vs. 16.6); more convictions (11.3 vs. 9.3); had been incarcerated for 1 or more days more often (6.6 vs. 5.1 times incarcerated); and had more felony convictions (22% vs. 17%) in their criminal career than had the control group. This is likely a reflection of their significant longer criminal career – the treatment group had been engaged in the criminal justice system for approximately 20 years compared to the control group who had been active for 18 years.

	Trea	Treatment Group		Co	ntrol Gro	oup	Significant
	Ν	Mean	SD	Ν	Mean	SD	Difference
Demographics							
Gender – Proportion Male	329	.78	.42	485	.66	.47	.12***
Age as of Intake	311	44.9	10.1	446	47.2	9.5	-2.3**
Unemployed at Admission	329	.60	.49	485	.49	.50	.11**
DTC Participation							
Time in DTC (in Days)	329	639	322	485	881	460	-241***
Required to Attend Treatment	297	.16	.37	421	.24	.42	.08*
Criminal History							
Arrests Prior Career Total	318	20.2	11.8	472	16.6	11.0	3.6***
Prior Unique Arrests Convicted	318	11.3	6.5	472	9.3	5.9	2.0***
Average Prior Charges Per Arrest	318	2.1	0.58	472	1.9	0.59	0.14**
Prior Charges Career	318	40.7	23.6	472	32.1	22.9	8.6***
Charges Prior Convicted Career Total	318	14.8	8.7	472	12.1	8.5	2.6***
Prior CHARGES Conviction Rate	318	0.4	0.14	472	0.4	0.16	-0.03**
Criminal Career (Days)	318	7478	3192	472	6794	3012	684**
Prior SUMMED Time Imposed (Days)	318	3755	4806	472	2383	3666	1373***
Prior Max Time Imposed (Days)	318	1189	1351	472	759	995	431***
Prior Average Time Imposed (Days)	318	78	93	472	59	93	19.69**
Average Incarceration Rate Career	318	0.9	0.3	472	0.9	0.35	0.06*
Prior Times Incarcerated Career	318	6.6	5.4	472	5.1	4.7	1.6***
Prior Prison SUMMED Sentence Imposed (Days)	318	9966	9105	472	6765	7019	3201***
Career Max Serious Cat Prior Charges	318	4.6	0.93	472	4.2	0.96	0.36***
Average Felony Prior Charges	318	0.21	0.12	472	0.17	0.12	0.04***
Prior Most Serious Offense Category	318	3.21	1.28	472	3.03	1.23	0.19*
Career Max Serious Cat Prior Convictions	318	4.03	0.86	472	3.70	0.81	0.33***
Average Felony Prior Convictions	318	0.22	0.18	472	0.17	0.18	0.05**

Table 4: Significant Differences between Treatment and Control Groups N=814

***Difference between those in the treatment group to control group is significant p<.000 **Significant p<.01 * Significant p<.05

Referrals

Within this reporting period, according to the DTC referral database, there were 541 referrals generated by the DTC Case Managers among 329 DTC participants. Summary measures of the number of referrals according to the partner records are listed in Table 5. (See also Appendix D for the Dashboard Summary Report including a breakdown of referrals by specific providers). HCAM is the most frequent referral with 185 referrals from DTC, followed by 113 referrals to CMM Conflict Resolution Training, 90 referrals to Halfway House Level 3.1 substance abuse treatment, 77 referrals to Transitional Housing, 49 DTC participants were referred for IOP/OP Buprenorphine, and 27 were referred for CMM Mediation.

Among the 329 DTC participants, 9 had no record of a referral in the DTC database⁹, while the remaining 320 individuals were provided between 1 and 5 referrals over their DTC participation, averaging 1.69 referrals per person.

Of those 541 referrals, 381 referrals resulted in service provision to DTC participants. As noted below, 126 referrals to HCAM resulted in services, as were 86 Halfway House referrals, 72 Transitional House, 67 Conflict Resolution Training , 29 IOP/OP Buprenorphine and 1 referral resulted in mediation. There are many reasons why individuals did not receive services post-referral including ineligible for service (e.g., HCAM where the person already had health insurance) or the participant did not show up to obtain the service. Overall, among the 268 unique individuals who received a referral resulting in service, they received from 1 to 4 referrals, averaging 1.45 referrals per person.

Service	Number of Referrals	Referrals Resulting in Service Provision
Healthcare Access MD	185	126
Community Mediation MD - Mediation	27	1
Community Mediation MD - Conflict Resolution Training	113	67
Transitional Housing	77	72
Halfway House Level 3.1	90	86
IOP/OP Buprenorphine	49	29
Total Referrals:	541	381

Table 5: Referrals to Services

⁹ While no referrals were documented, GPRAs were completed on 7 of the 9. Therefore, we assume there was an "intent to treat", and as such, these individuals are included in the analysis.

Process Evaluation Results

Table 6: Process Evaluation Results – Overall Data Collection StandardsTable 6 through Table 11 provide the results of the implementation standards analysis for overall data collection standards and by type of referral. See also Appendix B for the list of standards and data sources.

Overall Data Collection Standards

Table 6 details the findings of the process evaluation for 5 overall data collection standards. The first three standards are related to the Client Contact Update form to be completed by the project partners and faxed to CRA. We believed having each partner complete this form at intake and then again at discharge (or near the end of service provision) for each DTC participant would significantly improve our chances at conducting the discharge GPRA interviews because we would have current and varied information for each individual. While this form was discussed in the second PDE session, partners were formerly notified in Mid-July 2011 of the need to complete this form. For this reason, the standards are assessed only for the period from Mid-July to March 31, 2014.

Unfortunately, the first standard was not met in any year of the project. Of the 97 referrals in year 1, only 15% of contact forms were supplied at intake; of the 187 referrals in year 2, 43% had a completed contact form; and of the 257 referrals in year 3, contact forms were submitted for 21%. Compliance with the second standard varied. In year 1, overall, of the contact forms that were submitted, 98% of contact forms were submitted within 7 days of completion; in year 2, 76% and in year 3, 93% of the contact forms were submitted within 7 days. The standards for provision of client contact forms at the end of service provision was also not met in any year of the project. Only 29% of forms in year 1 were submitted, while in years 2 and 3 only 1 form out of 444 referrals was sent by the partners.

The next data collection standard is whether DTC Case Managers advise partners of a referral within 3 business days of that referral. This measure was calculated based on referrals to HCAM, transitional housing, and halfway house as Community Mediation conducted their own outreach for conflict resolution training and Buprenorphine IOP/OP referrals were generated by Parole and Probation (P&P). Although the standard of 100% was not met, in most cases, referrals were submitted within 3 business days. For example, in years 1 and 2, 93% of referrals were submitted within this time frame, as were 85% of referrals in year 3.

Finally, the last data collection standard – that the DTC Case Managers will notify CRA of all closed cases within 3 business days was not able to be assessed. This reason for this was related to when the switchover to CRA maintaining the referral database rather than the DTC Case Managers. When this occurred, the referral and case notification dates were changed from expecting the DTC Case Manager to inform the service partner to informing CRA, and unfortunately, CRA failed to include a specific variable to track DTC discharge separately.

	Standard		Standard Met? , No and/or Explana	
	Standard	Year 1 N=97	Year 2 N=187	Year 3+ N=257
1.	All DTC Partners will obtain Client Contact Update Forms for 100% of DTC clients at intake.	No -15% (15 of 97)	No – 43% (81 of 187)	No – 21% (53 of 257)
2.	DTC Partners will fax 100% of Client Contact Update Forms to CRA within 7 days of completion	CMM: No - 86% (6 of 7) HCAM: Yes - 100% (36 of 36) Overall: 98%	CMM: No - 96% (25 of 26) HCAM: No - 70% (28 of 40) Recovery Network: No - 53% (8 of 15) Wells House: Yes - 100% (1 of 1) Overall: 76%	CMM: No - 89% (33 of 37) HCAM: Yes - 100% (10 of 10) Recovery Network: Yes - 100% (3 of 3) Wells House: Yes - 100% (1 of 1) Damascus: Yes - 100% (2 of 2) Overall: 93%
3.	All DTC Partners will obtain Client Contact Update Forms for 60% (TBD) of DTC clients at or near the end of service provision/discharge.	No -29% (28 of 97)	No – <1% (1 of 187)	No – 0% (0 of 257)
4.	DTC Case Managers will submit 100% of referrals to partners within 3 business days of referral	No – 93% (71 of 76)	No – 93% (118 of 127)	No – 85% (126 of 149)
5.	DTC Case Managers will notify CRA of all closed cases within 3 business days	N/A	No Data Available to Assess	No Data Available to Assess

 Table 6: Process Evaluation Results – Overall Data Collection Standards

IOP/OP Buprenorphine

Standards related to provision of IOP/OP Buprenorphine services are detailed in Table 7 below. Two of the four standards can be assessed with the data available. The first standard, that 60% of those referred to IOP/OP will meet the eligibility criteria is based on among those who showed up to their appointment, and were enrolled into treatment. In years 2 and 3 this standard was met (86% and 82% were eligible for services) while in year 1, only 1 of the 2 (50%) were eligible. The second standard could not be assessed because we anticipated that assessment would be conducted by P&P (as they were the generators of the referral), thus the database did not include a means to obtain this information from the IOP/OP provider. However, the likelihood is that for all of those engaged into service by the IOP/OP provider that they were subject to some form of assessment in order to ensure that they were suitable for treatment.

That leads to the third standard -- 100% of those assessed by IOP/OP providers as appropriate for IOP/OP Buprenorphine will be admitted within 14 days of referral. Among those enrolled into treatment, in years 1 and 2, 100% were admitted within 14 days. However, in year 3, 73% (16 of 22 individuals) enrolled into services were admitted in this time frame. The final standard of notification from the IOP/OP provider to DTC Case Manager and P&P agent was unable to be assessed because similar to standard 5 of the overall data collection standards, CRA failed to revise the database to collect this information at the time of the transition of maintenance of the database from DTC to CRA.

	Standard	Standard Met? Yes, No and/or Explanation				
	Standard	Year 1 N=3	Year 2 N=10	Year 3+ N=36		
1.	60% of those referred to IOP/OP Buprenorphine will meet the eligibility criteria.	No – 50% (1 of 2)	Yes - 86% (6 of 7)	Yes - 82% (22 of 27)		
2.	100% of those referred to IOP/OP Buprenorphine will be assessed by the IOP/OP treatment provider within 10 days.	No Data Available to Assess		ssess		
3.	100% of those assessed by IOP/OP providers as appropriate for IOP/OP Buprenorphine will be admitted within 14 days of referral.	Yes – 100% (1 of 1)	Yes – 100% (6 of 6)	No – 73% (16 of 22)		
4.	The treatment provider will notify the DTC case manager and Parole & Probation agent by phone within 3 business days for all DTC participants that are discharged (either voluntary drop out and/or termination which can occur up to 30 days after the last face to face meeting).	No Data Available to Assess				

Table 7: Process Evaluation Results – IOP/OP Buprenorphine

Halfway House

There are 7 standards to address provision of services for halfway house services as indicated in Table 8. Four of the 7 standards were met. Halfway house providers complied with program parameters in terms of timely enrollment, assessment, meeting with the primary clinician to develop treatment plan goals and objectives and provision of a comprehensive care plan at the end of services. The providers were somewhat less successful at notifying the DTC case manager and P&P agent of the termination or drop out of a participant. In year 1, they made the notification for 75% of these cases, in year 2, they did so for 59%, and year 3, for 76% of cases.

The halfway house providers were also less successful at meeting the goals of monthly meetings with their primary clinician to assess progress toward the treatment plans. This standard was measured based on individual counseling sessions recorded in SMART E-court Encounter and Treatment data and were reviewed to assess if the meetings were conducted monthly. For year 1, of the 3 halfway house participants, 2 (67%) meet monthly with their clinician for individual counseling; as did 89% (16 of 18) in year 2; and 77% (23 of 30) in year 3.

The last standard was assessed using urinalysis UA data recorded in the SMART e-court drug testing data. Among the providers, only Damascus met the standard they set of regular UA testing in the first year – but then did not meet it for year 2 or year 3. None of the other providers met the standard. It is important to note that there were a number of individuals in halfway houses without any UA testing data recorded in SMART. For instance, Wells Housing was missing test data for 7 participants, A Step Forward was missing data for 12 participants, Damascus had no record in SMART of testing 15 individuals and Recovery Network was missing data for 5 participants. It is unknown if this is an issue of data not being entered into SMART or if the UA tests were not done. For this analysis, we assume the testing was not completed.

For example, for Wells House, their stated standard was to test individuals once a week for the duration of treatment. While the 2 participants in year 1 and the 4 participants in year 2 had UA data in SMART, they were not tested once a week for their entire stay at Wells House. In year 3, among their 15 participants, 6 (40%) met the testing standard, 2 did not meet the standard and 7 had no data in SMART, so presume they also did not meet the standard. Recovery Network set their testing standard at 3 times a week, and while in year 2, 6 of 10 participants had data in SMART and were tested, none were tested 3 times a week. Similarly, in year 3, 7 of 8 participant were UA tested during their stay in the facility, but none were tested 3 times a week.

	ble 8: Process Evaluation Results - Halfway Ho	Standard Met? Yes, No and/or Explanation		
	Standard	Year 1 N=3	Year 2 N=31	Year 3+ N=52
1.	100% of DTC clients eligible for halfway house services (Level 3.1) will be enrolled into treatment within 7 days of a DTC referral (provided space is available).	Yes - 100%	Yes – 100%	No - 98%
2.	90% of DTC clients admitted to the halfway House will be assessed within 3 business days of client's admission.	Yes - 100%	Yes-97%	Yes – 98%
3.	90% of DTC clients admitted to Halfway House will meet with the primary clinician within 7 days of admission for initial development of treatment plan goals and objectives.	Yes - 100%	Yes - 100%	Yes – 90%
4.	90% of DTC clients, upon completion, will receive comprehensive continuing care plan prepared by primary clinician.	NA – None Successfully Discharged	Yes – 100% (12 of 12)	Yes – 100% (31 of 31)
5.	The Halfway house will notify the DTC case manager and Parole & Probation agent (by phone) within 3 business days for all DTC participants that are discharged (after either voluntary drop out and/or termination).	No – 75% (3 of 4)	No – 59% (10 of 17)	No – 76% (16 of 21)
6.	90% of DTC clients will meet at least monthly with their primary clinician to assess progress towards treatment plan goals and objectives.	No – 67% (2 of 3)	No – 89% (16 of 18)	No – 77% (23 of 30)
7.	90% of DTC clients will be tested for illicit subst	tance use based	on following sche	edule
•	Wells House: once a week No record of UA for 7 participants	N=2 No - 0%	N=4 No-25%	N=15 No – 40% No Data: 7
•	A Step Forward: three times a week No record of UA for 12 participants	N=0 N/A	N=8 No - 0% <i>No Data: 5</i>	N=9 No - 0% <i>No Data: 7</i>
•	Damascus: once a month No record of UA for 15 participants	Yes – 100% (1 of 1)	No = 55% (5 of 9) No Data: 3	No = 15% (3 of 20) No Data: 12
•	Recovery Network: three times a week No record of UA for 5 participants	N=0 N/A	N=10 No - 0% No Data: 4	N=8 No - 0% No Data: 1

Table 8: Process Evaluation Results - Halfway House

Transitional Housing

There are 3 standards for transitional housing providers (see Table 9). For the first standard while in the first two years those referred not all those referred met the eligibility criteria, in year 3, 100% were eligible.

For the second standard – conducting the intake within 2 business days, while the providers did not always meet this standard, on average, they were generally assessed within 3 days, although 2 cases to 2 to 3 weeks and the remaining intakes were conducted within 1 week.

Finally, for notification to DTC and P&P, the transitional house providers were met this standard less often – in year 1, they contacted DTC and P&P for 67% of the cases, for year 2, 63% of the cases, and in year 3, only 33% of the 42 participants in transitional housing.

		Standard Met? Yes, No and/or Explanation		
	Standard	Year 1 N=7	Year 2 N=28	Year 3+ N=42
1.	100% of those referred to transitional housing will meet the eligibility criteria.	No – 86% (6 of 7)	No – 86% (24 of 28)	Yes – 100% (42 of 42)
2.	The transitional housing provider will conduct an intake of 100% of DTC participants referred to them within 2 business days.	No – 67% (4 of 6)	No – 75% (18 of 24)	No – 79% (33 of 42)
3.	The transitional house provider will notify the DTC case manager and Parole & Probation agent within 3 business days for all DTC participants who either voluntarily leave or are terminated from the program.	No – 67% (2 of 3)	No – 63% (5 of 8)	No – 33% (5 of 15)

Table 9: Process Evaluation Results - Transitional Housing

HCAM Health Care Case Management

There are 7 implementation standards for HCAM (see Table 10). The first standard measured the time between DTC referral to the intake/assessment by HCAM. This measure excluded 10 individuals who were referred to HCAM but who refused services on the same day. Generally, HCAM did not complete the assessment within the stated 14 day timeline. In year 1, of the 64 referrals, 37 intakes (58%) were completed in the timeframe; in year 2, 60% were completed; and in year 3, 50% were completed within 14 days. The second standard was that 85% of those who were eligible for the service would have a completed application for health insurance within 30 days of intake. HCAM exceeded this standard across all 3 years, with 98%, 98%, and 100% of applications completed within 30 days.

The third and fourth standards are related to client contact including that the HCAM Advocate would have an attempted and completed contacts with the client every 30 days until case closure. The third standard – attempted contact with 100% of HCAM clients - was not met. Of those eligible for services, 65% in year 1, 44% in year 2, and 38% in year 3 had, on average, a monthly attempted contact with the Advocate. The fourth standard – 50% would have a monthly completed contacts – was met in year 1 (54%), but not in year 2 (39%) or year 3 (31%).

Standard 5 is related to provision of requested resource information (excluding insurance) at intake. While HCAM came close to meeting this measure in year 2 (88%) and year 3 (83%), they didn't meet the standard in year 1 (78%). Finally, standards 6 and 7 assess whether HCAM responded to DTC participant's request for medical and mental health appointments. While HCAM did not meet standard 6, they came close (with 85% of clients in year 1 and 89% in years 2 and 3) who requested a medical appointment, having an appointment scheduled). HCAM had very few requests for a mental health appointment – a total of 4 requests, but none of these appointments were scheduled.

	Standard	Standard Met? Yes, No and/or Explanation		
	Standard	Year 1 N=64	Year 2 N=61	Year 3+ N=50
1.	70% of DTC participants referred to HCAM will meet and conduct an assessment with the HCAM Drug Court Advocate within 14 Days.	No - 58% (37 of 64)	No - 60% (36 of 61)	No - 50% (25 of 50)
2.	85% of DTC/HCAM clients gone through intake and are eligible for services complete an application within 30 days of intake.	Yes – 98% (42 of 43)	Yes – 98% (45 of 46)	Yes – 100% (32 of 32)
3.	100% of DTC/HCAM clients will have an attempted contact with HCAM Advocate every 30 days from date of intake until case closure.	No – 65% (28 of 43)	No – 44% (20 of 46)	No – 38% (12 of 32)
4.	50% of DTC/HCAM clients will have a completed contact with HCAM (defined as a phone, face-to-face conversation, or mail [unreturned]) every 30 days until case closure.	Yes – 54% (23 of 43)	No – 39% (18 of 46)	No – 31% (10 of 32)
5.	90% of DTC/HCAM clients who request resource information at intake will receive 100% of the requested information.	No – 78% (7 of 9)	No – 88% (23 of 26)	No - 83% (19 of 23)
6.	100% of DTC/HCAM clients who request a medical appointment will have an appointment scheduled by HCAM Advocate.	No – 85% (11 of 13)	No – 89% (17 of 19)	No - 89% (8 of 9)
7.	100% of DTC/HCAM clients who request a mental health appointment will have an appointment scheduled by HCAM Advocate.	N/A	No – 0% (0 of 3)	No – 0% (0 of 1)

Table 10: Process Ev	aluation Results -	HCAM Health	Care Case N	Management

CMM Conflict Resolution Training

Finally, the results of process standards for CMM Conflict Resolution Training are provided in Table 11. The service was not offered until year 2, and these standards are based on the evaluations completed by those who participated in the training at the end of the second day of training. While 100% of those who took the training in year 2 completed an evaluation form, evaluation forms are missing for 10 of the 31 (32%) of year 3 participants. Nonetheless, all 7 program standards were met or exceeded.

In terms of the meeting the CMM administrative standards, these results varied by year and by standard. For example, in year 2, the standard that the CMM liaison would submit a referral form to the DTC Case Manager to determine if a GPRA was required was not met in Year 2 or 3. While Administrative Standard #2 was not met, the CMM Liaison came close with 97% of required GPRA interviews completed within 2 days of the training. And while over 60% of those in year 2 completed both Part 1 and Part 2 of the training, only 47% did so in year 3.

	Standard	Standard Met? Yes, No and/or Explanation	
	Stanuaru	Year 2 N=36	Year 3+ N=31
	% of DTC participants will agree or strongly agree with the lowing statements: (First Session)	Evals: N=36	Evals: N=21
1.	The skills I learned today will help me be more effective in dealing with conflicts with my family.	Yes - 100%	Yes - 90%
2.	The skills I learned today will help me be more effective in dealing with conflicts with my friends.	Yes - 97%	Yes - 90%
3.	The skills I learned today will help me be more effective in dealing with conflicts with people I need to engage with in the course of daily life.	Yes - 94%	Yes – 90%
4.	The skills I learned today will help me more effective in understanding other people during conflict.	Yes - 94%	Yes - 90%
5.	The skills I learned today will help me be better able to effectively speak for my own needs during conflict.	Yes - 100%	Yes - 90%
6.	The skills I learned today will help me ask questions in a way that opens dialogue.	Yes - 100%	Yes - 81%
7.	The skills I learned today will help me keep my relationships with my support system strong.	Yes - 100%	Yes – 95%

Table 11: Process Evaluation Results - CMM Conflict Resolution Training

	Standard		d Met? r Explanation
	Stanuaru	Year 2 N=36	Year 3+ N=31
CN	AM Conflict Resolution Training Administrative Standards		
1.	The CMM Liaison will submit a referral form to the DTC case manager not later than 4 business days prior to the training for 100% of DTC clients who agree to participate so to obtain the SMART ID# for that individual and to determine if they have previously completed a GPRA Intake Interview.	No – 3%	No – 87%
2.	100% of DTC participants who agree to participate in Conflict Resolution Training will have a completed GPRA intake interview. For 100% who have not previously completed the GPRA interview, the CMM Liaison will complete the GPRA interview within 2 days prior to Part I training.	No – 97%	No – 97%
3.	100% of those who complete Part I of the Conflict Resolution Training will complete a post training evaluation form.	Yes – 100%	Yes - 100%
4.	60% of those who complete Part I of the Conflict Resolution Training will complete Part II of the Conflict Resolution Training	Yes - 64%	No-47%
5.	100% of those who complete Part II of the Conflict Resolution Training will complete a post training evaluation form.	Yes - 100%	Yes - 100%

Process Evaluation Results Summary

Over the 3 plus years of this project, the Service Partner providers and DTC Case Managers met many of the implementation standards decided upon in the PDE workshops. However, it may be that some of the standards were too ambitious – and should this project be replicated or continued – then these results should be reviewed and possibly revise the standards to reflect the challenges in provision of services in the context of drug court environment and with this typically difficult to serve population. Nonetheless, of the 31 standards with data to assess, approximately 15 were met; many other standards came close.

What is also clear is that generally the process went smoother in years 2 and 3 than in year 1. This is to be expected given the general difficulty in launching a new program or service. In addition, in this time period, the DTC Case Manager Supervisor changed twice – at the end of year 1 the supervisor departed DTC, and was replaced by an interim supervisor for approximately one year. A permanent supervisor was brought in at the end of year 2 of the project. In addition, there were staff changes among the DTC case managers over the years of the program – necessitating repeat training for the project.

What is also apparent from these findings is that missing data hindered the ability to assess these standards. Several data points were missing due to evaluator error, and other data – principally SMART e-court treatment provision and urinalysis testing - was missing. Future programs should be encouraged to review data systems on an ongoing basis¹⁰ to encourage complete data capture and to ensure the evaluation has sufficient information to assess critical benchmarks.

Outcome Evaluation Results

As noted in the discussion of data available to assess program outcomes above, only 12 of the 21 goals, and 25 of 30 objectives can be assessed. The goals and objectives that can be measured are detailed below.

Reduce Criminal Justice Involvement

As noted in Table 12 below, the first goal of this project was to reduce criminal justice involvement among those DTC participants who received one or more enhanced services. The first goal was that 50% of DTC program participants would not be rearrested for any criminal charge within 3 months of intake. This was assessed in two ways – among those who received 1 or more services would not be arrested within 90 days of the first date of service *and* among all DTC participants from date of admittance to DTC. In both cases, these goals were met. Specifically, 94% of those who received an enhanced service (252 of 268) were not rearrested within 90 days of receiving the first enhanced service. Among all DTC participants, 91% (736 of 814) were not arrested within 90 days of admittance to DTC.

The second goal was to assess how completion of phase 2 of the DTC would benefit DTC participants. This goal stated 85% of DTC program participants who complete phase 2 will not be rearrested for drug-related offenses from completion of phase 2 through graduation of the DTC program. Here again, this goal was met, but should be viewed cautiously as the data required to assess whether someone completed Phase 2 was based on data within the SMART Court Activity Report, and it appears that not all the phase transitions were recorded. As such, those who had a date of completing a phase, and did not have a start date for the next phase, the end date of the prior phase was substituted for the missing subsequent phase. The issue is that this method obviates those occasions where individuals were moved back in the phases (e.g., from Phase 2 back to Phase 1).

Nonetheless, among those who received a referral for 1 or more enhanced services and there was a record that they completed Phase 2 (or started Phase 3), 90% (167 of 186) were not rearrested for a drug related offense from the completion of Phase 2 through graduation. Likewise, among the 292 DTC participants overall with a Phase 2 completion record indicator, 91% (265 of 292) did not have a drug offense from completion of Phase 2 through discharge from DTC.

¹⁰Several times over the course of this program, Baltimore Substance Abuse Systems, Inc. (bSAS) staff and staff from the University of Maryland Institute for Governmental Research and Service's SMART data unit worked with this evaluator with data to ascertain if complete data from the providers in the project were entered into SMART. While the breadth and scope of the data improved, it remains that missing data is a challenge, and limitation, to this evaluation.

The remaining goals in this section could not be assessed due data issues, as detailed above.

Tal	Table 12: Outcomes - Goal 1 Reduce Criminal Justice Involvement			
	Goal 1: Reduce Criminal Justice Involvement of DTC Participants	Met Goal?		
a)	50% of DTC program participants will not be rearrested for any criminal of intake into the DTC program.	charge within 3 months		
	• Among those who received 1 or more services, 50% will not be rearrested within 90 days of the first date of service.	Yes – 94% (252 of 268)		
	• Among all DTC Participants, 50% will not be rearrested within 90 days of admittance to DTC.	Yes – 91% (736 of 814)		
b)	85% of DTC program participants who complete phase 2 will not be rearr offenses from completion of phase 2 through graduation of the DTC prog	e		
	• Of the 186 who received a referral for 1 or more services <i>and</i> there was a record of Phase II completion in SMART Court Activity report	Yes – 90% (167 of 186)		
	• Of the 292 DTC participants with a record of phase II completion in SMART Court Activity Report	Yes – 91% (265 of 292)		
c)	The number of self-reported times arrested in the past 30 days will be reduced for at least 50% of program participants in the 6 month GPRA follow-up, compared to GPRA intake.	Unable to Assess - Insufficient Variation in the Data		
d)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days will be reduced for at least 30% of program participants in the GPRA discharge interview, compared to the 6 month GPRA follow-up.	Unable to Assess - Insufficient Data		
e)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days will be reduced for at least 20% of program participants in the GPRA discharge interview, compared to GPRA intake.	Unable to Assess - Insufficient Data		
f)	The number of self-reported times arrested in the past 30 days for a drug-related offense will be reduced for at least 50% of program participants in the 6 month GPRA follow-up, compared to GPRA intake.	Unable to Assess - Insufficient Variation in the Data		
g)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days for a drug-related offense will be reduced for at least 30% of program participants in the GPRA discharge interview, compared to the 6 month GPRA follow-up.	Unable to Assess - Insufficient Data		
h)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days for a drug-related offense will be reduced for at least 20% of program participants in the GPRA discharge interview, compared to GPRA intake.	Unable to Assess - Insufficient Data		

	Goal 1: Reduce Criminal Justice Involvement of DTC Participants	Met Goal?
i)	The number of self-reported nights spent in jail/prison (may be for arrests or sanctions) in the past 30 days will be reduced for at least 20% of program participants in the 6 month GPRA follow-up, compared to GPRA intake.	Unable to Assess - Insufficient Variation in the Data
j)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported nights spent in jail/prison (may be for arrests or sanctions) in the past 30 days will be reduced for at least 30% of program participants in the GPRA discharge interview, compared to the 6 month GPRA follow-up.	Unable to Assess - Insufficient Data
k)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported nights spent in jail/prison (may be for arrests or sanctions) in the past 30 days will be reduced for at least 50% of program participants in the GPRA discharge interview, compared to GPRA intake.	Unable to Assess - Insufficient Data

Reduce Substance Use/Abuse

The second goal of the project was to reduce substance abuse/use. Of the 3 goals we are able to assess with available data, using urinalysis (UA) test results and phase movement data from SMART, we note that the program exceeded the stated goals. Specifically, among the 329 DTC participants referred for 1 or more services, 261 had both UA and phase data and could be assessed on this goal. Of those 261, 88% (231 of 261) had negative drug test results (did not test positive) for 90 consecutive days or more by the end of Phase I of the DTC. Further, of the 127 treatment individuals with UA and phase movement data, 87 (68%) did not test positive for 90 consecutive for 90 days or more at the time of discharge from DTC.

Table 13: Outcomes - Goal 2: Reduce Substance Use/Abuse

Go	oal 2: Reduce Substance Use/Abuse of DTC Participants	Met Goal?
a)	The number of self-reported days of illegal drug use will be reduced for at least 50% of program participants in the 6 month GPRA follow-up, when compared to GPRA intake.	Unable to Assess - Insufficient Variation in the Data
b)	The number of self-reported days of illegal drug use will be reduced for at least 40% of program participants in the GPRA discharge interview, when compared to GPRA intake.	Unable to Assess - Insufficient Data
c)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported days of illegal drug use will be reduced for at least 30% of program participants in the GPRA discharge interview when compared to the 6 month GPRA follow-up.	Unable to Assess - Insufficient Data

Go	oal 2: Reduce Substance Use/Abuse of DTC Participants	Met Goal?
d)	The number of self-reported days of alcohol use to intoxication (5+ drinks in one sitting) will be reduced for at least 25% of program participants in the 6 month GPRA follow-up, when compared to GPRA intake.	Unable to Assess - Insufficient Variation in the Data
e)	The number of self-reported days of alcohol use to intoxication (5+ drinks in one sitting) will be reduced for at least 10% of program participants in the GPRA discharge interview, when compared to GPRA intake.	Unable to Assess - Insufficient Data
f)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported days of alcohol use to intoxication (5+ drinks in one sitting) will be reduced for at least 10% of program participants in the GPRA discharge interview when compared to the 6 month GPRA follow-up.	Unable to Assess - Insufficient Data
g)	25% of program participants will have negative drug test results (will not test positive) for 90 consecutive days or more by the end of Phase I of the DTC.	Yes – 88% (231 of 261)
h)	35% of program participants will have negative drug test results (will not test positive) 90 consecutive days or more by the end of Phase 2 of the DTC.	Yes –68% (87 of 127)
i)	50% of program participants will have negative drug test results (will not test positive) for 90 consecutive days or more at the time of discharge from the DTC.	Yes – 92% (254 of 276)
j)	4 months after completing participation in Community Mediation, 60% of DTC participants will report they have been less stressed in the past 3 months compared to when referred to mediation.	N/A Only 1 Mediation Case

In addition to these two long term goals, the project set out a series of short term objectives that are closely tied to the expected direct impact of the interventions. The results of these efforts follow.

Increase Engagement and Sustainment in Substance Abuse Treatment

One of the key objectives was to increase engagement and sustainment in substance abuse treatment. Of the 11 objectives that could be assessed, the program met 4. The remaining objectives that were not met could be a consequence result of missing data – particularly with respect to the phase movement data. Nonetheless, the program did achieve the objective of increasing engagement into substance abuse treatment, as follows.

The first objective (objective 1a) was to increase engagement of clients into IOP/OP Buprenorphine¹¹ for 90 days or more. Looking at the 49 individuals referred for this service, the program did not meet the goal with only 29% (14 of 49) remaining in IOP/OP for 90 days or more. However, when narrowing the metric to the 29 individuals who showed up for the service and were admitted, 48% (14 of 29) remained engaged in service – thus meeting the goal.

The next (objective 1b) to be met was 84% of those engaged in treatment *and* received any enhanced service remain in treatment for 90 days or more. This goal is based on the Maryland Alcohol and Drug Administration's treatment records and *excluded* individuals that received only received either IOP/OP Buprenorphine or halfway house treatment (because the goal is treatment PLUS another service). Thus of the pool of 123 who fit this criteria, 103 (84%) remained in treatment for 90 days or more.

The next objectives met were objectives 1i and 1j. Excluding clients on Buprenorphine maintenance who will test positive for Buprenorphine, 40% of DTC clients participating at a halfway house will have clean urinalysis results during the first 90 days of treatment following intake. While there were no UA test data for 39 individuals, of the remaining 47 admitted to a halfway house, 62% (29 of 47) had a clean UA for the first 90 days in treatment. In addition, 57% of these halfway house treatment clients remained clean throughout the duration of treatment.

Finally, objective 1-k stated that 70% of halfway house treatment participants would attend 3 group treatment sessions per week during the first 120 days of treatment. While we are missing group treatment data for 35 of the 86 halfway house participants, of the remaining, 72% (37 of 51) met this standard. However, among the halfway house clients, only 41% (35 of 86) were successfully discharged from treatment within 180 days of intake, missing the benchmark by 9%.

Among the other objectives not met, for the objective of 60% of DTC treatment client would complete the program within 3 years of intake, we see that of the 161 who have been discharged, 81 (50%) completed the program in 3 years. Four other objectives related to the time to completion of phases were also not met. Again, this may be a consequence of missing phase data thus these results should be viewed carefully. For example, phase data was missing for 152 people needed to assess objective 1e, 217 individuals were missing from objective 1f, and 304 were missing from assessment of objective 1g.

¹¹ Note that referrals to IOP/OP Buprenorphine providers, in most instances, did not result in the individually participating in Medication Assisted Therapy. Most often, those referred for this service, while not placed on buprenorphine, were engaged into Intensive Outpatient/Outpatient substance abuse treatment.

	ojective Statement 1: Increase Engagement and Sustainment in bstance Abuse Treatment	Met Objective?
a)	40% of DTC clients referred to Buprenorphine IOP/OP slots will remain in substance abuse treatment for 90 days or more.	Of those Referred: No -29% (14 of 49) Of those Admitted: Yes -48% (14 of 29)
b)	65% of DTC clients who receive drug treatment and any enhanced services will remain in substance abuse treatment for 90 days or more.	Yes – 84% (103 of 123)
c)	60% of DTC clients who receive enhanced services will successfully complete the DTC program within 3 years of intake.	No – 50% (81 of 161)
d)	80% of DTC clients who receive enhanced services will complete Phase 1 of the DTC program within 120 days of intake. <i>Missing phase</i> <i>data 28 people</i>	No – 12% (36 of 301)
e)	60% of DTC clients who receive enhanced services will complete Phase 2 of the DTC program within 12 weeks of transition from Phase 1. <i>Missing phase data for 152</i>	No – 35% (61 of 177)
f)	45% of DTC clients who receive enhanced services will complete Phase 3 of the DTC program within 12 weeks of transition from Phase 2. <i>Missing phase data for 217</i>	No – 39% (44 of 112)
g)	40% of DTC clients who receive enhanced services will complete Phase 4 of the DTC program within 8 weeks of transition from Phase 3. <i>Missing phase data for 304</i>	No – 16% (4 of 25)
h)	25% of DTC clients who receive enhanced services and completed Phase 3 of the DTC program will follow the aftercare plan (Phase 4) for 4 weeks.	Unable to Assess - Insufficient Data
i)	Excluding clients on Buprenorphine maintenance who will test positive for Buprenorphine, 40% of DTC clients participating at a halfway house will have clean urinalysis results during the first 90 days of treatment following intake.	Yes – 62% (29 of 47)
j)	Excluding clients on Buprenorphine maintenance who will test positive for Buprenorphine, 30% of DTC clients enrolled in treatment at Halfway House have clean urinalysis results throughout duration of treatment.	Yes – 57% (27 of 47)
k)	70% of DTC clients participating at a halfway house will attend 3 group treatment sessions per week during the first 120 days of treatment.	Yes - 72% (37 of 51)
1)	50% of DTC clients participating at a halfway house will be successfully discharged from treatment (defined as completing 75% of goals in accordance with the treatment plan) within 180 days of intake.	No – 41% (35 of 86)

Table 14: Outcomes - Objective 1: Increase Engagement and Sustainment in SA Treatment

Increase Housing Stability

There were 4 objectives related to increasing housing stabilities through referral to transitional housing. Unfortunately, only 2 could be assessed, and neither goal was met. However, of the first objective, 2a, the goal was missed by only 1% -- of the individuals engaged in transitional housing, 49% (35 of 72), successfully completed 90 days. Overall, on average, those in transitional housing remained 77 days – ranging from 1 day to 277 days.

The other measure (Objective 2-b) was provided by the GPRA 6 month follow-up data. This measure looked only at those who participated in transitional housing and another service.¹² At intake, 27 of 43 participants (63%) advised they were housed. In the 6 month follow-up GPRA, 28 of 33 (85%) reported they were "housed" in the past 30 days – a percent change of 35%. Although not meeting the stated goal of 50%, there was a 35% increase in housing stability compared to 30 days prior to participation in the project.

Observations during the focus groups indicate that there may be issues with the transitional housing programs, in terms of both location and services provided by the programs. For example, one person observed that

"The [housing] programs are in areas where they sell drugs. To send someone where they sell drugs is an easy failure. If you are not strong enough and see someone selling drugs, then you go and get drugs. I believe the Judges need to go up and see the program and see how the clients are really living. If drug court sent me to a program in the city, I never would have survived. They need to send people to programs outside of drug areas."

Another focus group participant, talking about her experience in a transitional housing program:

"I did not like the way the program handle things and when people in the program who had needs and I felt that she wasn't given services she needed. ... They were only interested in the money. We had to complete a lot of paperwork and tell where we were all of the time."

It is important to note that these are the voices of only 2 people; 72 people were served in transitional houses and may have had a very different experience. Nonetheless, the fact that many of these programs are in the same neighborhoods from whence these individuals actively engaged in their addiction is a consideration in setting goals for these types of programs.

¹² As transitional housing was funded by Bureau of Justice Assistance, there was no GPRA requirement. Thus only those who received transitional house and another service would have completed the GPRA.

Ob	jective Statement 2: Increase Housing Stability	Met Objective?
a)	50% of DTC clients referred to Transitional House will successfully complete the transitional housing program. (90 days)	No – 49% (35 of 72)
b)	The number of DTC clients referred to transitional housing and received one or more enhanced services who report in the 6 month follow-up that in the past 30 days, they are "housed" (defined by GPRA Q C-1) most of the time, will increase by 50% compared to GPRA baseline.	No - 35%
c)	The number of DTC clients referred to transitional housing and who received one or more enhanced services who report in discharge GPRA that in the past 30 days, they are "housed" (defined by GPRA Q C-1) most of the time, will increase by 40% compared to GPRA baseline.	Unable to Assess - Insufficient Data
a)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of DTC clients referred to transitional housing and who received one or more enhanced services who report in the discharge GPRA that in the past 30 days, they are "housed" (defined by GPRA Q C-1) most of the time, will increase by 30% compared to the GPRA 6 month follow-up.	Unable to Assess - Insufficient Data

Table 15: Outcomes - Objective 2: Increase Housing Stability

Increase Access to Health Insurance

There were 2 objectives to assess for the impact of HCAM. The first – objective 3a – states that 85% of DTC/HCAM clients would select and enroll in a medical home within 21 days of insurance approval was met. Of the individuals who were eligible for services and insurance was approved, 89% (48 of 54) were enrolled in a medical home within the stated timeframe.

The second objective – objective 3b – was not met. Here GPRA data was utilized to compare how HCAM clients felt about their overall health at intake to the follow-up GPRA interview. Of the 85 HCAM clients with both an intake and follow-up interview, 33% (28 of 85) stated their health improved, 35% (30 of 85) reported the same health status (35%) and 32% (27 of 85) stated their health was worse. While we do not have any data to assess to delve further into this question, it is possible that by have an increased access to health care, and finding a medical home, leads one to discover – or acknowledge/confront – preexisting health issues. It may also be possible that in recovery, these issues also take precedence over engaging in addictions, thus the overall health of an individual may decline. Nonetheless, 33% of those who received health insurance advised their health had improved. One of the focus group participants also raised a limitation to having Primary Adult Care (PAC) health insurance. He observed that PAC:

"Will not pay for specialist ... PAC is very good at the beginning when you don't have anything. If you have a serious illness, then PAC is not good." On a positive note, another focus group participant stated "having access to PAC was beneficial. [She previously] applied several times and was not given. When HCAM applied for her – she was given."

Table 16: Outcomes -	Objective 3: Increase	Access to Health Insurance

Objective Statement 3: Increase Access to Health Insurance		Met Objective?
a)	85% of DTC/HCAM clients who are eligible for services will work with a HCAM case manager to select and enroll in a medical home within 21 days of insurance approval.	Yes – 89% (48 of 54)
b)	Of DTC participants who received HCAM case management services within 6 months of DTC intake, 50% of DTC clients will report in the 6 month GPRA follow-up that their overall health is improved, compared to GPRA Intake.	No – 33% (28 of 85)
c)	Of DTC participants who received HCAM case management services, 40% of HCAM clients will report during GPRA discharge that their overall health is improved, compared to GPRA intake.	Unable to Assess - Insufficient Data
d)	Excluding DTC participants discharged within the first 6 months of DTC intake, of DTC participants who received HCAM case management services, 30% of HCAM clients will report during GPRA discharge that their overall health is improved, compared to GPRA 6 month follow-up.	Unable to Assess - Insufficient Data

Strengthen Relationships

As evidenced in Table 17 below, all of the objectives for strengthen relationships through CMM conflict resolution training were met. All report objectives are based on evaluations provided by participants after the conclusion of the second training session. Sixty-Seven DTC participants completed Part 1 of the CMM Conflict Resolution Training from May 2012 to March 2014; 37 DTC participants completed the second session and submitted an evaluation form. For the 33 individuals who participated and completed evaluation form for *both* Part 1 and Part 2 of the training, the time between trainings averaged 33.5 days (within a range between 19 and 43 days) (standard deviation of 5.5 days).

Of particular note is Objective 4b – the extent to which the participants report they used these skills. After a month, of the 36 who reported on this question, 100% advise they use these skills at least once a month. In fact, the majority (67%) report they use these skills once a week.

While these results are promising, it remains this is a small sample and as the time period from first to second session was less than originally anticipated (e.g., 4 to 6 weeks versus 2 to 4 months) these results should be viewed cautiously.

Objective Statement 4: Strengthen Relationships	Met Objective?
 a) Between 2 and 4 months after completing Part I of the CMM Conflict Management Training, 70% of the DTC participants participating in Part II of the training agree or strongly agree to following statements: The Skills I learned in training have 	N=37
1) helped me feel more comfortable with my ability to handle conflict.	Yes - 97%
2) helped improve communication with my family	Yes - 94%
3) helped improve communication with my friends	Yes - 92%
4) helped improve communication with people I deal with in my daily life	Yes - 100%
5) have helped me deal with conflict situations with less stress.	Yes - 94%
6) have helped me keep a stronger support system	Yes - 100%
7) helped me be more effective in understanding other people better	Yes - 89%
8) helped me ask questions in a way that opens dialogue.	Yes - 100%
9) helped me be better able to effectively speak for my own needs during conflict.	Yes - 94%
 b) Between 2 and 4 months after completing Part I of the CMM Conflict Management Training, 60% of the DTC clients participating in Part II of the CMM Conflict Management Training will report they use the skills they learned in training at least once a month. 	Yes – 100% 8% Once a Month 25% Twice a Month 67% Once a Week (36 of 37)

Table 17: Outcomes - Objective 4: Strengthen Relationships

Recidivism Research Design

The impact of one or more enhanced services on three measures of recidivism -- re-arrest, reconviction, and re-incarceration was explored by comparing the treatment and control group using Logistic and Cox Regression. The analysis included measures to control for relevant factors which could otherwise explain the results, including the age and gender of the DTC participant, the length of criminal career (in days) and summated measures from the CJIS data.

The enhanced services provided to the treatment group was assessed in four ways: 1) as a discrete event (referred for one or more services vs. not referred); 2) whether they received a service or not; 3) by the number of services received; and 4) by whether or not the individual received a particular service (e.g., admitted to halfway house or participated in conflict resolution training).¹³

Logistic regression assesses outcomes based on whether an event (arrest/no arrest; conviction/no conviction; or incarceration/no incarceration) occurs. However, the analysis exploring those who received a referral (1) was not significant, nor was number of services received (3). Thus only the significant results of those who received a service (2) and by specific service (4) are provided. The results of the overall findings for those who received a service are detailed in Table 18 below. Table 19 looks at Transitional Housing and Table 20 provides the outcomes for Conflict Resolution Training. Note that these tables report the Logistic Odds Ratios where if the value is more than 1, the relationship is positive (increasing the probability of recidivism). Likewise, if the Odds Ratio is below 1, the relationship is negative – thereby reducing probability of the recidivism outcome.

The second analytic method -- Cox Regression (also referred to as survival analysis or hazard modeling) allows one to explore the timing of events, including the time for an individual to "fail" (in this case being arrested, convicted, or incarcerated). This analysis is useful because it allows one to account for different starting points (e.g., you don't have to artificially eliminate subjects because they started the drug court either before or after a period you want to observe). For this analysis, the treatment group was compared to control group to ascertain whether the provision of one or more services helped DTC participants remain in the community without reengaging into the justice system for a longer period of time than those who did not receive a service. While the survival analysis looks at the control group from the date of admittance to DTC, the time period for those in the treatment group started from the date of the first service they received. Table 21 and Table 22 detail the Cox Regression Survival analysis results.

Note that the probability of arrest -- derived from the logistic regression analysis -- is not the same as the hazard or risk of arrest. The *probability* of arrest is based on the cumulative, or the overall likelihood of a situation occurring. The *risk* of arrest, obtained in the survival analysis, considers the timing of the arrest, or the relative rate of this person failing given how long they have survived.

¹³Thus the first analysis (1) looks at "intent to treatment" cases -- everyone referred – even those who did not receive a service. For the remaining types of analysis, (e.g., whether or not they actually received one or more services (2), total number of services received (3), and by a specific service (4)) only include those who were referred, showed up, were eligible, were admitted or assessed, and received at least 1 day of service.

Recidivism Analysis and Results

Results: Logistic Regression

Services Received Overall

As indicated in Table 18, participation in one or more enhanced services significantly reduces the probability that that an individual will be arrested, convicted, and sentenced to incarceration, compared those who did not receive one or more services.

Arrest

As indicated in the first column of Table 18 (Model 1), after controlling for key factors¹⁴, the probability of arrest for those who participate in one or more service is 25% compared to the probability of arrest of 54% for those who do not participate.¹⁵ For those who participate in a service, the length of time between the date of service or admittance to Drug Court through July 2014 was a significant factor. This is likely because those who were participants in the DTC when the project began had a longer period of time where they were at risk for an arrest. As a result, it was important to include this variable in the model to account for that issue.

In addition, age (older people are less likely to be re-engaged into the justice system), gender (male participants were more likely to be arrested), the number of prior drug charges (those with more drug charges were more likely to be arrested), and the minimum seriousness category of all prior convictions were significant influences. For this measure, those with a *higher* minimum conviction seriousness category were *less* likely to be arrested either during or following participation in DTC. However, it must be noted that the vast majority (e.g., 91%) of the DTC participants had the lowest level category (Level VII) and most of the remaining had category V offenses as their minimum category were less frequent offenders overall. They had significantly fewer arrests over their careers (e.g., on average 7.16 arrests vs. 19.12 of the Level VII group), fewer drug charges (8.31 vs. 18.81), as well as fewer property and person charges. Thus this variable – minimum seriousness conviction category -- is likely a proxy which represents offenders who may be less frequent, yet somewhat more serious offenders in terms of the type of crime in which they engage.

¹⁴ A number of variables were considered in these models including prior arrest conviction rate, charge conviction rate, career number of days sentenced to incarceration, number of person, violation of probation/parole (VOP) charges, as well as number of property and VOP convictions and level of education and employment status at admittance to DTC. While a few of these variables were significant in one or two models, on the whole, the additional of these data did not change or improve the overall findings. Thus, the final model was pared down to only include variables that were theoretically and empirically relevant.

¹⁵ Probabilities for the treatment and control groups were calculated based on output values, and the calculation worksheets are provided in Appendix E.

Conviction

The second column of Table 18 (Model 2) provides the results for participation in one or more enhanced services on post-admittance/post-service conviction. Similar to arrest, days since admittance/service, age and gender of the participant, number of prior drug charges, and minimum seriousness category are all significant factors in conviction. After controlling for these key factors, the probability¹⁵ of a conviction for those who participate in one or more services is 44% compared to the probability of conviction of 56% for those who do not participate, an overall reduction of 12%.

Incarceration

Model 3 in Table 18 details the results for the impact of services on the probability¹⁵ of being sentenced to incarceration (for an arrest) by the court for 1 or more days post DTC admittance/post-service.¹⁶ DTC participants who received 1 or more services have a significant reduction in probability of incarceration compared to those in DTC who did not receive a service, with an overall reduction of 9%. The probability of being sentenced to a period of incarceration of 1 day or more post-DTC admittance/post service provision is 14% compared to 23% of those who do not participate. All of the factors that significantly influenced conviction also play a role in incarceration.

The next step explores the impact of specific types of services provided to participants. Of the services provided under this project, only 2 were statistically significant predictors of recidivism. The first was transitional housing and the second was conflict resolution training. These results follow.

¹⁶ This analysis does not explicitly include or exclude sanctions by the Drug Court which may involve brief returns to jail. However, incarcerations captured here are based on arrests that resulted in a conviction, with a subsequent sentence of 1 or more days. In some cases, the individual was likely detained, and the sentence was time served. However, the CJIS data do not provide sufficient detail to distinguish those incarcerated post-conviction from those detained pre-trial.

	Logistic Odds Ratios [#] and z Statistic		
	(1) Arrest	(2) Conviction	(3) Incarceration – Sentence 1 or More Days
Received 1 or More Services	0.608	0.606	0.548
	(2.45)*	(2.34)*	(2.33)*
Days Since Admittance to DTC	1.001	1.001	1.001
	(7.78)**	(7.00)**	(5.04)**
Participant Age at DTC Admittance	0.926	0.950	0.947
	(5.76)**	(3.88)**	(3.56)**
Gender (1=Male; 0=Female)	2.117	1.850	2.397
	(3.84)**	(3.13)**	(3.75)**
Criminal Career (in Days)	1.000	1.000	1.000
	(1.18)	(0.53)	(0.32)
Least Serious Conviction Category ^L	0.703	0.664	0.632
	(2.24)*	(2.52)*	(2.25)*
Number of Drug Charges ^L	1.019	1.015	1.016
	(2.46)*	(1.90)	(1.80)
Observations	755	755	755
Pseudo R-Square	.1525	.1339	.1184
Log Likelihood	-443.22	-439.01	-361.45

Table 18: Regression: Services on Recidivism – Treatment vs. Control Group

^L Lifetime measure based on criminal history

* Significant at p<.05 ** Significant at p<.01

[#]Odds Ratios with values above 1 indicate a positive association (or higher odds of the outcome occurring), values below 1 indicate a negative association (or lower odds of the outcome occurring).

Services Received - Transitional Housing

As indicated in Table 19, participation in transitional housing does not impact either the probability of arrest nor conviction. However, it does reduce the chances that at DTC participant will be sentenced to 1 or more days of incarceration. Similar to the overall results, the factors which significantly influence this outcome were age and gender of the participant, the number of days from admittance or from service provision, the minimum seriousness conviction category and number of prior drug charges. Once these factors were controlled for, the probability that those in Transitional Housing will be sentenced to 1 or more days is reduced overall by 12%. Those participating in transitional housing have a 9% likelihood of post-service incarceration,

whereas those who are not in a transitional house have a 21% chance. Given that homelessness is both a predictor and consequence of criminal offending¹⁷, for those who were arrested and convicted, perhaps the access to stable housing resulted in fewer individuals detained or incarcerated.

	Logistic Odds Ratios [#] and z Statistic		
	(1) Arrest	(2) Conviction	(3) Incarceration – Sentence 1 or More Days
Transitional Housing 1 or More Days	0.943	0.804	0.384
	(0.21)	(0.70)	(2.09)*
Days Since Admittance to DTC	1.002	1.001	1.001
	(9.41)**	(8.61)**	(6.31)**
Participant Age at DTC Admittance	0.928	0.952	0.948
	(5.60)**	(3.77)**	(3.50)**
Gender (1=Male; 0=Female)	2.056	1.815	2.380
	(3.71)**	(3.04)**	(3.71)**
Criminal Career (in Days)	1.000	1.000	1.000
	(1.07)	(0.63)	(0.44)
Least Serious Conviction Category ^L	0.682	0.646	0.616
	(2.45)*	(2.70)**	(2.40)*
Number of Drug Charges ^L	1.017	1.013	1.015
	(2.22)*	(1.74)	(1.73)
Observations	755	755	755
Pseudo R-Square	.1468	.1290	.1180
Log Likelihood	-446.20	-441.50	-361.58

Table 19: Regression	: Transitional Housi	ng on Recidivism	– Housing vs. No Housing
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^L Lifetime measure based on criminal history

* Significant at p<.05 ** Significant at p<.01

[#]Odds Ratios with values above 1 indicate a positive association (or higher odds of the outcome occurring), values below 1 indicate a negative association (or lower odds of the outcome occurring).

¹⁷ Greenberg, G.A., & R.A. Rosenheck (2008). Jail Incarceration, Homelessness, and Mental Health: A National Study. <u>Psychiatric Services, 59, (2)</u>, 170-177 and Greenberg, G.A., & R.A. Rosenheck (2008). Homelessness in the State and Federal Prison Population. <u>Criminal Behavior and Mental Health, 18,</u> 88-103.

Services Received - Conflict Resolution Training

Table 20 highlights the impact of conflict resolution training on participants. Across all recidivism measures, conflict resolution training reduces the probability of engagement in the criminal justice system.

It is important to note several key issues concerning these results. First, of the 268 DTC participants who received 1 or more services, 67 participated in at least 1 conflict resolution training session, a relatively small sample. In addition, the 3 day conflict resolution training was offered as an option to fulfill DTC community service hours, thus it is possible that those who participated in conflict resolution training were somehow different than other DTC participants who engaged in one or more services in this project. To explore this possibility, demographics and criminal history data of the conflict resolution training participants were compared to the non-conflict resolution training participants. Differences include that while those in training had significantly less time since admittance to DTC, conflict resolution training participants were demographically similar to all other DTC participants. Although the conflict resolution training group had a few differences in their criminal histories, these differences were in the direction of indicating somewhat more serious offenders with a higher average of felony convictions (e.g., 26% vs. 18% for non-conflict resolution training participants). Thus, while they are more similar, overall, than dissimilar, it may be that there are unmeasured factors (motivation, family stability, and/or recovery support) that could influence these results.

Arrest

Model 1 in Table 20 shows that conflict resolution training reduces the likelihood of a postservice arrest. The probability¹⁵ that those who participated in conflict resolution training will be arrested is reduced by 29%, compared to those who do not participate in conflict resolution training. Again, all of the factors that significantly influenced the overall results play a role in these findings. Younger males are more at risk for arrest, as are those with a higher number of drug charges.

Conviction

Model 2 in Table 20 provides the results for participation in conflict resolution training on postadmittance/post-service conviction. Again, days since admittance/service, age and gender of the participant, number of prior drug charges, and minimum seriousness category are all significant factors in conviction. After controlling for key factors, the probability¹⁵ of a conviction for those who participate in conflict resolution training is 16% compared to the probability of conviction of 39% for those who do not participate, an overall reduction of 23%.

Incarceration

Finally, Model 3 in Table 20 details the results for the impact of conflict resolution training on the probability¹⁵ of being sentenced to incarceration for 1 or more days post DTC admittance/post-service. DTC participants who receive conflict resolution training have a significant overall reduction of 14% in the probability of incarceration compared to those in DTC

who did not participate in conflict resolution training. The probability of being sentenced to a period of incarceration of 1 day or more post-DTC admittance/post service provision is 7% compared to 21% of those who do not participate. With the exception of the number of drug charges, all of the factors that significantly influenced conviction also play a role in incarceration.

Upon reviewing these results and noting the similarity to the overall results (coupled with the fact that most of the other services were not statistically significant predictors of recidivism), the individuals who participated in conflict resolution training were omitted from the sample, and the data was re-analyzed. We discovered that after dropping those 67 participants, participation in services overall was no longer significant. Conflict resolution training, and/or some unmeasured aspect of those who participated in conflict resolution training, is driving the overall results.

	Logistic Odds Ratios [#] and z Statistic		
	(1) Arrest	(2) Conviction	(3) Incarceration – Sentence 1 or More Days
Participated Conflict Resolution	0.280	0.296	0.292
Training	(3.70)**	(3.01)**	(2.28)*
Days Since Admittance to DTC	1.002	1.001	1.001
	(8.99)**	(8.34)**	(6.42)**
Participant Age at DTC Admittance	0.928	0.952	0.949
	(5.61)**	(3.72)**	(3.43)**
Gender (1=Male; 0=Female)	2.043	1.796	2.337
	(3.63)**	(2.97)**	(3.64)**
Criminal Career (in Days)	1.000	1.000	1.000
	(1.11)	(0.59)	(0.35)
Least Serious Conviction Category ^L	0.692	0.653	0.623
	(2.35)*	(2.63)**	(2.35)*
Number of Drug Charges ^L	1.020	1.015	1.015
	(2.50)*	(1.90)	(1.75)
Observations	755	755	755
Pseudo R-Square	.1618	.1396	.12
Log Likelihood	-438.33	-436.14	-360.76

Table 20: Regression: Conflict Resolution Training on Recidivism vs. No Training

^L Lifetime measure based on criminal history

* Significant at p<.05 ** Significant at p<.01

[#]Odds Ratios with values above 1 indicate a positive association (or higher odds of the outcome occurring), values below 1 indicate a negative association (or lower odds of the outcome occurring).

Results: Cox Regression

The purpose of this analysis was to observe if there were differences between the treatment group and control group on the amount of time to arrest. CJIS data provides the offender's history including all dates of arrest, the outcome of that arrest, and sentencing data. The period between the date of admittance to the court or the date of the first service provision, and the date of the first arrest was calculated to create a "days to event" measure, which was the outcome explored. The same process was used to identify the date of first arrest leading to a conviction post admittance to DTC/post-service provision, and the number of days to the first arrest leading to a sentence of incarceration of 1 or more days.

Services Received Overall

As indicated in Table 21 below, participating in one or more enhanced services reduces the risk of both conviction and being sentenced to incarceration for 1 or more days. The hazard (or risk)¹⁸ of post-admittance/post-service conviction and incarceration for those in the treatment group is less than the risk for those in the control group who did not participate in enhanced services.

As indicated by the direction of the coefficients (a negative value indicating a relationship that is in the opposite direction; a positive value indicating the relationship between the variable and the outcome moves in the same direction) -- male DTC participants had a greater risk of recidivism, while older participants, and those with a history of convictions with a lower minimum seriousness category had a higher risk of an arrest leading to incarceration.

However, again noting the similarities with the conflict resolution training survival results (see Table 22 below), the conflict resolution training participants were omitted from the overall analysis and the survival analysis was re-run. The overall results provided in Table 21 were no longer significant. Consequently, the discussion now turns to the conflict resolution training survival analysis findings.

¹⁸ See Appendix F for calculation worksheet for conversation of hazard rate into relative risk.

	Cox Coefficients and Standard Errors		
	(1) Time to First Arrest	(2) Time to First Arrest Leading to Conviction	(3) Time to First Arrest Leading to Sentence of Incarceration
Participated in 1 or more Services	-0.234	-0.331	-0.423
	(1.84)	(2.16)*	(2.04)*
Participant Age at DTC Admittance	-0.042	-0.023	-0.033
	(4.88)**	(2.57)*	(2.69)**
Gender	0.446	0.400	0.741
(1=Male; 0=Female)	(3.53)**	(2.82)**	(3.77)**
Career Days - First date of arrest to DTC admittance (in Days) ^L	0.000	-0.000	-0.000
	(0.51)	(1.43)	(1.02)
Career Minimum Seriousness	-0.198	-0.251	-0.327
Category Prior Convictions ^L	(1.84)	(2.02)*	(1.84)
Number of Drug Charges ^L	0.010	0.010	0.012
	(2.15)*	(1.92)	(1.75)
Length of Stay in Drug Court	0.000	-0.000	-0.000
(in Days)	(0.84)	(0.39)	(2.23)*
Observations	755	755	755
Log Likelihood	2324.97	-1805.92	-1054.98

Table 21: Cox Regression: Participated in Services vs. No Services

^L Lifetime measure based on criminal history

* Significant at p<.05 ** Significant at p<.00

Services Received - Conflict Resolution Training

Models 1 and 2 of Table 22 indicate that conflict resolution training reduces the risk of two of three measures of recidivism – time to the first arrest and time to arrest leading to a conviction (both at (p<.01). Specifically, the risk of arrest for those who participate in conflict resolution training is decreased by $58\%^{18}$ and the risk of an arrest leading to a conviction is reduced by 61% for those who participate in conflict resolution training compared to the control group, with all other values held constant. One additional variable added to this model was the length of time the participant had been in the DTC (in days) from the date of admission to the date of discharge (or if still active, the default date of March 31, 2014 as the last possible date of

services). This was added to account for the large difference in length of stay¹⁹ between those in the treatment and control groups.

	Cox Coefficients and Standard Errors		
	(1) Time to First Arrest	(2) Time to First Arrest Leading to Conviction	(3) Time to First Arrest Leading to Sentence of Incarceration
Participated in Conflict Resolution	-0.856	-0.940	-0.963
Training	(3.01)**	(2.60)**	(1.89)
Participant Age at DTC Admittance	-0.041	-0.021	-0.031
	(4.79)**	(2.38)*	(2.52)*
Gender	0.438	0.389	0.732
(1=Male; 0=Female)	(3.47)**	(2.75)**	(3.73)**
Career Days - First date of arrest to DTC admittance (in Days) ^L	0.000	-0.000	-0.000
	(0.49)	(1.55)	(1.13)
Career Minimum Seriousness	-0.207	-0.265	-0.350
Category Prior Convictions ^L	(1.94)	(2.14)*	(1.98)*
Number of Drug Charges ^L	0.010	0.010	0.011
	(2.22)*	(1.91)	(1.63)
Length of Stay in Drug Court	0.000	-0.000	-0.000
(in Days)	(1.21)	(0.02)	(1.89)
Observations	755	755	755
Log Likelihood	2320.81	-1803.79	-1054.75

Table 22: Cox Regression: DTC Participants – Conflict Resolution Training vs. No Training

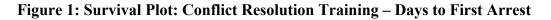
^L Lifetime measure based on criminal history

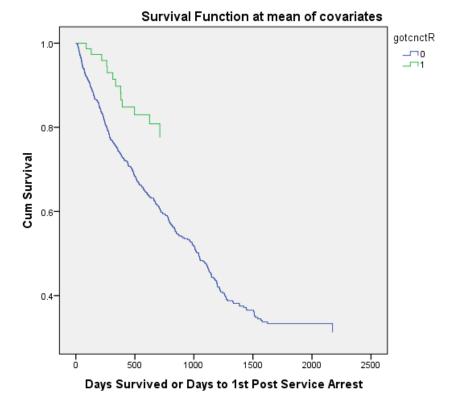
* Significant at p<.05 ** Significant at p<.00

The difference between those who participate in conflict resolution training and those who do not on these two recidivism outcomes are illustrated in the survival plots provided in Figure 1 and Figure 2. On the vertical axis is the cumulative survival rate, or the overall rate of those who have survived – or not re-arrested or reconvicted. These graphs were calculated including the variables contained in the Cox regression models.

¹⁹ For the logistic regression model, length of stay was included in the length of time from the date of admission or from the date of first service to July 2014 – the last date of CJIS activity. As the length of stay variable, calculated from admission date to discharge date (or March 31, 2014) was highly correlated to the length of time to July 2014, only one of these variables could be included in the logistic regression model.

In terms of those who participate in conflict resolution training and the length of time they survive to first arrest, at 365 days post service provision, 90% of the conflict resolution training participants survived without an arrest compared to 74% of the comparison group (see Table 23). Looking at Figure 1, the gap between the treatment and control group begins to widen around 300 days (10 months), and the treatment group continues to survive at higher rates than those in the comparison group. Within two years of release, 77% of the conflict resolution training group survived, compared to 60% of those comparison group.





Again, as noted in Table 23, the same pattern exhibited for arrest is evident with respect to arrest leading to conviction. Of the treatment group, 91% survived without an arrest leading to a conviction compared to 82% of the non-conflict resolution training group at 365 days. At two years 86% of the treatment group survived versus 71% of the comparison group. Looking at Figure 2, the gap between the treatment and control group appears to widen almost immediately, and the treatment group continues to survive at higher rates than those in the comparison group.

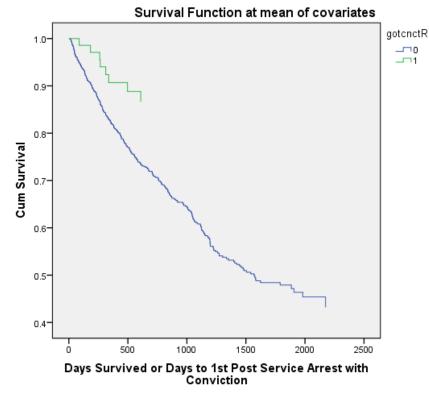


Figure 2: Survival Plot: Conflict Resolution Training to First Arrest Leading to Conviction

Table 23: Survival Differences Year 1 & 2 – Conflict Resolution Training vs. No Training

Significant Outcome	1 Year		At 2 Years	
Significant Outcome	ТХ	CTRL	ТХ	CTRL
Conflict Resolution Training - Arrest	90%	74%	77%	60%
Conflict Resolution Training – Conviction	91%	82%	86%	71%

One possible explanation for the strength of these conflict resolution training results may be that one of the most effective treatment models is cognitive behavioral therapies which seek to change "drug abuse offenders' dysfunctional beliefs, perceptions and attribution errors that contribute to and sustain drug abuse and criminal lifestyles".²⁰ Conflict resolution training is in large part a skill-building intervention and some of the focus group comments about the training support the idea that the training had an impact. One focus group participant said:

"I took the conflict training and thought it worked well. I learned that anger is not an emotion but a reaction."

²⁰ Kinlock, T.W., K.E. O'Grady, & T.E. Hanlon (2003). The Effects of Drug Treatment on Institutional Behavior. <u>The Prison Journal, 83, (3),</u> 257-276. Page 262

While another participant stated

"I just had so much fun and even though it was about conflict, [the CMM trainer] taught us so much ... showed me many ways to handle conflict."

A third observed that although his Probation Officer pushed him into the training, he thought

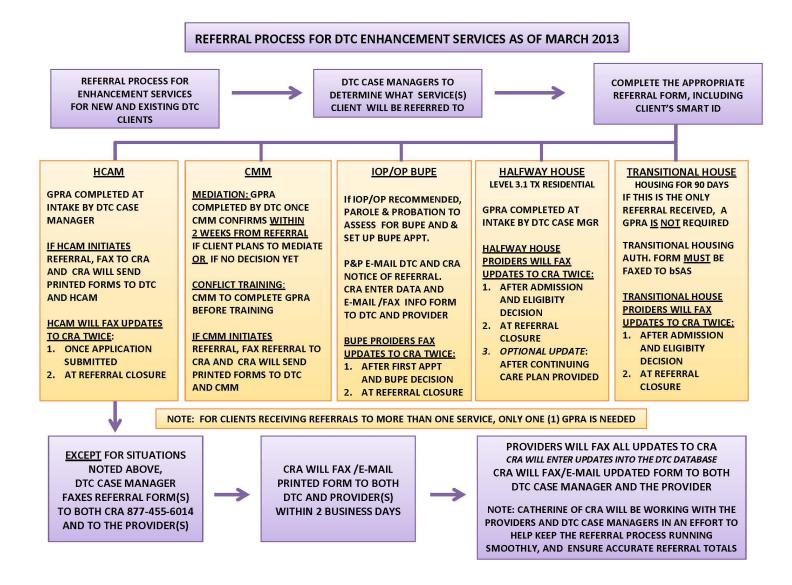
"it was very good ... the trainer was excellent and [participant] found it useful [and] has used training in real-life experience".

Limitations and Conclusion

As previously noted, there are some data limitations to these findings. Of particular note is the lack of discharge GPRA interviews, as well as possibly incomplete DTC phase, urinalysis, and treatment encounter data in SMART. Nonetheless, participants appear to have benefited from the additional services provided, although it must be noted that it is unknown what services were provided to DTC participants separate and outside from of this project so replication would be helpful to confirm these results.

While in some ways this project has been challenging – particularly with respect to coordination among the many project partners – we have accomplished much. Through this process, a detailed evaluation plan was constructed (the PDE), two databases to capture referral and tracking activity were developed, and a clear referral procedure was established and tested. Future implementation or replication of this project would benefit from this experience and these tools – undoubtedly shortening the time from startup to full implementation, as well ensuring fidelity to the model through ongoing monitoring of implementation metrics.

Appendix A: Referral Process Map



		Data Source
	Standard	DRD=DTC Referral Database SM=SMART CMM=Recovery Database HCAM=IRIS CRA=Tracking Database
	Data Collection Standards	
1.	All DTC Enhancement Service Partners (HCAM, CMM, IOP/OP, Halfway House, and Transitional House) will obtain Client Contact Update Forms for 100% of DTC clients at intake	CRA
2.	All DTC Enhancement Service Partners (HCAM, CMM, IOP/OP, Halfway House, and Transitional House) will fax 100% of Client Contact Update Forms to CRA within 7 days of completion	CRA
3.	All DTC Enhancement Service Partners (HCAM, CMM, IOP/OP, Halfway House, and Transitional House) will obtain Client Contact Update Forms for 60% of DTC clients at end or near end of service provision or discharge.	CRA
4.	DTC Case Managers will submit 100% of referrals to partners within 3 business days of referral	DRD
5.	DTC Case Managers will notify CRA of all closed cases within 3 days of a case being closed.	DRD
	For Intervention #1: IOP/OP Buprenorphine Treatme	<u>ent</u>
5.	60% of those referred to IOP/OP Buprenorphine will meet the eligibility criteria.	DRD
6.	100% of those referred to IOP/OP Buprenorphine will be assessed by the IOP/OP treatment provider within 10 days	SM
7.	100% of those assessed by IOP/OP providers as appropriate for IOP/OP Buprenorphine will be admitted within 14 days of referral.	DRD
8.	The treatment provider will notify the DTC case manager and Parole & Probation agent by phone within 3 business days for all DTC participants that are discharged (after either voluntary drop out and/or termination which can occur up to 30 days after the last face to face meeting).	DRD
	For Intervention #2: Halfway House (Level 3.1 Residential T	<u>reatment)</u>
1.	100% of DTC clients who are eligible for halfway house services (Level 3.1) will be enrolled into treatment within 7 days of a DTC referral (provided space is available).	DRD
2.	90% of DTC clients admitted to the halfway House will be assessed within 3 business days of client's admission.	DRD

Appendix B: Implementation Standards and Data Source

	Standard	Data Source DRD=DTC Referral Database SM=SMART CMM=Recovery Database HCAM=IRIS CRA=Tracking Database
3.	90% of DTC clients admitted to halfway house will meet with the primary clinician within 7 days of admission for initial development of treatment plan goals and objectives.	DRD
4.	90% of DTC clients, upon completion of treatment, will receive a comprehensive continuing care plan prepared by their primary clinician.	DRD
5.	The halfway house will notify the DTC case manager and Parole & Probation agent (by phone) within 3 business days for all DTC participants that are discharged (after either voluntary drop out and/or termination).	DRD
6.	90% of DTC clients will meet at least monthly with their primary clinician to assess progress towards treatment plan goals and objectives.	SM
7. • •	90% of DTC clients will be tested for illicit substance use based on following schedule:Wells House: once a week for duration of treatmentA Step Forward: three times a week for duration of treatmentDamascus: once a month for duration of treatmentRecovery Network: three times a week for duration of treatment	SM
	For Intervention #3: Transitional Housing	
1.	100% of those referred to transitional housing will meet the eligibility criteria (assessed as needing this level of care and opiate dependent)	DRD
2.	The transitional housing provider will conduct an intake of 100% of DTC participants referred to them within 2 business days	DRD
3.	The transitional house provider will notify the DTC case manager and Parole & Probation agent within 3 business days for all DTC participants who either voluntarily leave or are terminated from the program.	DRD
	For Intervention #4: HCAM- Health Insurance Focused Case N	<u>lanagement</u>
1.	70% of DTC participants referred to HCAM will meet and conduct an assessment with the HCAM Drug Court Advocate within 14 Days.	DRD
2.	85% of DTC/HCAM clients who have gone through intake and are eligible for services will complete an application for insurance within 30 days of intake.	DRD
3.	100% of DTC/HCAM clients will have an attempted contact with the HCAM Advocate every 30 days from date of intake until case closure.	НСАМ

Standard	Data Source DRD=DTC Referral Database SM=SMART CMM=Recovery Database HCAM=IRIS CRA=Tracking Database
 50% of DTC/HCAM clients will have a completed contact with the HCAM Advocate (a completed contact is defined as a phone conversation, face-to-face conversation, or mail [unreturned]) every 30 days until case closure. 	НСАМ
5. 90% of DTC/HCAM clients who request resource information at intake will receive 100% of the requested information.	НСАМ
6. 100% of DTC/HCAM clients who request a medical appointment will have an appointment scheduled for them by the HCAM Advocate.	DRD
7. 100% of DTC/HCAM clients who request a mental health appointment will have an appointment scheduled for them by the HCAM Advocate.	DRD
<u>Intervention #5 CMM – Mediation</u> Only 1 Case Mediated, Implementation Standards Not Assessed	
Intervention #6: CMM – Conflict Resolution Trainin	<u>19</u>
CMM Conflict Resolution Training Program Standards	
80% of DTC participants will agree or strongly agree with the following statements:	
8. The skills I learned today will help me be more effective in dealing with conflicts with my family.	СММ
9. The skills I learned today will help me be more effective in dealing with conflicts with my friends.	СММ
10. The skills I learned today will help me be more effective in dealing with conflicts with people I need to engage with in the course of daily life.	СММ
11. The skills I learned today will help me more effective in understanding other people during conflict.	СММ
 The skills I learned today will help me be better able to effectively speak for my own needs during conflict. 	СММ
13. The skills I learned today will help me ask questions in a way that opens dialogue.	СММ
14. The skills I learned today will help me keep my relationships with my support system strong.	СММ

	Standard	Data Source DRD=DTC Referral Database SM=SMART CMM=Recovery Database HCAM=IRIS CRA=Tracking Database
CN	IM Conflict Resolution Training Administrative Standards	
6.	The CMM Liaison will submit a referral form to the DTC case manager not later than 4 business days prior to the training for 100% of DTC clients who agree to participate so to obtain the SMART ID# for that individual and to determine if they have previously completed a GPRA Intake Interview.	СММ
7.	100% of DTC participants who agree to participate in Conflict Resolution Training will have a completed GPRA intake interview. For 100% of participants who have not previously completed the GPRA interview, the CMM Liaison will complete the GPRA interview within 2 days prior to Part I training.	CMM & CRA
8.	100% of those who complete Part I of the Conflict Resolution Training will complete a post training evaluation form.	СММ
9.	60% of those who complete Part I of the Conflict Resolution Training will complete Part II of the Conflict resolution training	СММ
10.	100% of those who complete Part II of the Conflict Resolution Training will complete a post training evaluation form.	СММ

Appendix C: Program Outcomes and Data Source

	Appendix C: 110gram Outcomes and Data Source	
	Goals and Objectives	Primary Data Source GPRA = GPRA Interview CH = Criminal History DRD=DTC Referral Database SM=SMART ADAA= TX Records CMM=Recovery Database
Go	al 1: Reduce Criminal Justice Involvement of DTC Participants	
a)	50% of DTC program participants will not be rearrested for any criminal charge within 3 months of intake into the DTC program.	СН
b)	85% of DTC program participants who complete phase 2 will not be rearrested for drug-related offenses from completion of phase 2 through graduation of the DTC program.	СН
c)	The number of self-reported times arrested in the past 30 days will be reduced for at least 50% of program participants in the 6 month GPRA follow-up, compared to GPRA intake.	GPRA
d)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days will be reduced for at least 30% of program participants in the GPRA discharge interview, compared to the 6 month GPRA follow-up.	GPRA
e)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days will be reduced for at least 20% of program participants in the GPRA discharge interview, compared to GPRA intake.	GPRA
f)	The number of self-reported times arrested in the past 30 days for a drug- related offense will be reduced for at least 50% of program participants in the 6 month GPRA follow-up, compared to GPRA intake.	GPRA
g)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days for a drug-related offense will be reduced for at least 30% of program participants in the GPRA discharge interview, compared to the 6 month GPRA follow-up.	GPRA
h)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported times arrested in the past 30 days for a drug-related offense will be reduced for at least 20% of program participants in the GPRA discharge interview, compared to GPRA intake.	GPRA
i)	The number of self-reported nights spent in jail/prison (may be for arrests or sanctions) in the past 30 days will be reduced for at least 20% of program participants in the 6 month GPRA follow-up, compared to GPRA intake.	GPRA
j)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported nights spent in jail/prison (may be for arrests or sanctions) in the past 30 days will be reduced for at least 30% of program participants in the GPRA discharge interview, compared to the 6 month GPRA follow-up.	GPRA

	Goals and Objectives	Primary Data Source GPRA = GPRA Interview CH = Criminal History DRD=DTC Referral Database SM=SMART ADAA= TX Records CMM=Recovery Database
k)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported nights spent in jail/prison (may be for arrests or sanctions) in the past 30 days will be reduced for at least 50% of program participants in the GPRA discharge interview, compared to GPRA intake.	GPRA
Go	al 2: Reduce Substance Use/Abuse of DTC Participants	
a)	The number of self-reported days of illegal drug use will be reduced for at least 50% of program participants in the 6 month GPRA follow-up, when compared to GPRA intake.	GPRA
b)	The number of self-reported days of illegal drug use will be reduced for at least 40% of program participants in the GPRA discharge interview, when compared to GPRA intake.	GPRA
c)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported days of illegal drug use will be reduced for at least 30% of program participants in the GPRA discharge interview when compared to the 6 month GPRA follow-up.	GPRA
d)	The number of self-reported days of alcohol use to intoxication (5+ drinks in one sitting) will be reduced for at least 25% of program participants in the 6 month GPRA follow-up, when compared to GPRA intake.	GPRA
e)	The number of self-reported days of alcohol use to intoxication (5+ drinks in one sitting) will be reduced for at least 10% of program participants in the GPRA discharge interview, when compared to GPRA intake.	GPRA
f)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of self-reported days of alcohol use to intoxication (5+ drinks in one sitting) will be reduced for at least 10% of program participants in the GPRA discharge interview when compared to the 6 month GPRA follow-up.	GPRA
g)	25% of program participants will have negative drug test results (will not test positive) for 90 consecutive days or more by the end of Phase I of the DTC.	SM
h)	35% of program participants will have negative drug test results (will not test positive) 90 consecutive days or more by the end of Phase 2 of the DTC.	SM
i)	50% of program participants will have negative drug test results (will not test positive) for 90 consecutive days or more at the time of discharge from the DTC.	SM
j)	4 months after completing participation in Community Mediation, 60% of DTC participants will report they have been less stressed in the past 3 months compared to when referred to mediation.	СММ

	Goals and Objectives	Primary Data Source GPRA = GPRA Interview CH = Criminal History DRD=DTC Referral Database SM=SMART ADAA= TX Records CMM=Recovery Database
Oł	jective Statement 1: Increase Engagement and Sustainment in Substa	nce Abuse Treatment
a)	40% of DTC clients referred to Buprenorphine IOP/OP slots will remain in substance abuse treatment for 90 days or more.	ADAA
b)	65% of DTC clients who receive drug treatment and any enhanced services will remain in substance abuse treatment for 90 days or more.	ADAA
c)	60% of DTC clients who receive enhanced services will successfully complete the DTC program within 3 years of intake.	SM
d)	80% of DTC clients who receive enhanced services will complete Phase 1 of the DTC program within 120 days of intake.	SM
e)	60% of DTC clients who receive enhanced services will complete Phase 2 of the DTC program within 12 weeks of transition from Phase 1.	SM
f)	45% of DTC clients who receive enhanced services will complete Phase 3 of the DTC program within 12 weeks of transition from Phase 2.	SM
g)	40% of DTC clients who receive enhanced services will complete Phase 4 of the DTC program within 8 weeks of transition from Phase 3.	SM
h)	25% of DTC clients who receive enhanced services and completed Phase 3 of the DTC program will follow the aftercare plan (Phase 4) for 4 weeks.	SM
i)	Excluding clients on Buprenorphine maintenance who will test positive for Buprenorphine, 40% of DTC clients participating at a halfway house will have clean urinalysis results during the first 90 days of treatment following intake.	SM
j)	Excluding clients on Buprenorphine maintenance who will test positive for Buprenorphine, 30% of DTC clients enrolled in treatment at Halfway House will have clean urinalysis results throughout the duration of treatment.	SM
k)	70% of DTC clients participating at a halfway house will attend 3 group treatment sessions per week during the first 120 days of treatment.	SM
1)	50% of DTC clients participating at a halfway house will be successfully discharged from treatment (defined as completing 75% of goals in accordance with the treatment plan) within 180 days of intake.	DRD
Oł	jective Statement 2: Increase Housing Stability	
a)	50% of DTC clients referred to Transitional House will successfully complete the transitional housing program. (90 days)	DRD
b)	The number of DTC clients referred to transitional housing and received one or more enhanced services who report in the 6 month follow-up that in the past 30 days, they are "housed" (defined by GPRA Q C-1) most of the time, will increase by 50% compared to GPRA baseline.	GPRA

	Goals and Objectives	Primary Data Source GPRA = GPRA Interview CH = Criminal History DRD=DTC Referral Database SM=SMART ADAA= TX Records CMM=Recovery Database
c)	The number of DTC clients referred to transitional housing and who received one or more enhanced services who report in discharge GPRA that in the past 30 days, they are "housed" (defined by GPRA Q C-1) most of the time, will increase by 40% compared to GPRA baseline.	GPRA
b)	Excluding DTC participants discharged within the first 6 months of DTC intake, the number of DTC clients referred to transitional housing and who received one or more enhanced services who report in the discharge GPRA that in the past 30 days, they are "housed" (defined by GPRA Q C-1) most of the time, will increase by 30% compared to the GPRA 6 month follow-up.	GPRA
Ob	jective Statement 3: Increase Access to Health Insurance	
a)	85% of DTC/HCAM clients who are eligible for services will work with a HCAM case manager to select and enroll in a medical home within 21 days of insurance approval.	DRD
b)	Of DTC participants who received HCAM case management services within 6 months of DTC intake, 50% of DTC clients will report in the 6 month GPRA follow-up that their overall health is improved, compared to GPRA Intake.	GPRA
c)	Of DTC participants who received HCAM case management services, 40% of HCAM clients will report during GPRA discharge that their overall health is improved, compared to GPRA intake.	GPRA
d)	Excluding DTC participants discharged within the first 6 months of DTC intake, of DTC participants who received HCAM case management services, 30% of HCAM clients will report during GPRA discharge that their overall health is improved, compared to GPRA 6 month follow-up.	GPRA
Ob	ojective Statement 4: Strengthen Relationships	
1)	Between 2 and 4 months after completing Part I of the CMM Conflict Resolution Training, 70% of the DTC participants participating in Part II of the training will report that they agree or strongly agree to the following statements:a) The skills I learned in the training have helped me feel more comfortable with my ability to handle conflict.	
	 b) The skills I learned in the training have helped improve communication with my family c) The skills I learned in the training have helped improve communication with my friends 	СММ
	d) The skills I learned in the training have helped improve communication with the people I deal with in my daily life	

	Go	als and Objectives	Data Source GPRA = GPRA Interview CH = Criminal History DRD=DTC Referral Database SM=SMART UP=bSAS Utilization CMM=Recovery Database
t	e) f) g)	The skills I learned in the training have helped me deal with conflict situations with less stress. The skills I learned in the training have helped me keep a stronger support system The skills I learned in the training have helped me be more effective in	
1	6) h)	understanding other people better The skills I learned in the training have helped me ask questions in a way that opens dialogue. The skills I learned in the training have helped me be better able to effectively speak for my own needs during conflict.	СММ
2)]	Bet	ween 2 and 4 months after completing Part I of the CMM Conflict Resolution Training, 60% of the DTC clients participating in Part II of the CMM Conflict Resolution Training will report they use the skills they learned in training at least once a month.	СММ

Appendix D: Dashboard Summary Report

bSAS/SAMHSA/BJA - DTC Dashboard Summary to Date Report From: 10/1/2010 To: 3/31/2014

Referral Summary By Service	Referrals
Healthcare Access MD	185
Community Mediation MD - Mediation	27
	113
Community Mediation MD - Conflict Training	77
Transitional Housing	
Halfway House Level 3.1	90
IOP/OP Buprenorphine	49
Total Referrals To Date:	541
Referral Summary By Provider	
Transitional Housing	
New Vision House of Hope	27
Passionate Hands (Female)	10
Passionate Hands (Male)	31
Talitha Cumi Save Haven (Female)	8
Bernie's Place	8 1
Total Referrals To Date:	77
Halfway House	
A Step Forward (Female)	4
A Step Forward (Male)	14
Damascus House (Male)	31
Recovery Network (Female)	4
Recovery Network (Male)	14
Wells House (Male)	23
Total Referrals To Date:	90
IOP/OP Buprenorphine	
Total Health Care	25
University of MD-ADAP	10
Family Health Centers	0
And and a second second	08
Bon Secours Next Passage	14
Total Referrals To Date:	49
Referrals Providers Report but Not in Database	0
GPRA Interview Summary	
Total GPRA Intake Interviews Received	279
Average Days to Fax to CRA	7.1
Number of GPRAs Received Without A Referral:	0
Number of Missing GPRAs:	0
	-
Number of GPRAs Dropped Permantely:	15
Total GPRA Follow-up Interviews Received	266
Average Days to Fax to CRA	5
Completed Outside Follow-up Window	0
Administrative Follow-up Interviews	76
Questions? Please contact Choice Research Associates	

Total GPRAs missing, less GPRAs Received or Dropped Dropped never obtained GPRA, not active; no services received

**Will not count toward 80% requirement **Will not count toward 80% requirement

Questions? Please contact Choice Research Associates Shawn Flower at 703-915-0916

- 56 -

Appendix E: Conversion Odds Ratio to Probability – Treatment vs. Control Group

	DICK			ices			
ARREST	Odds Ratio	Reduction in odds	Change in Prob 0 to 1	Change into %			
Received 1 or More Services	0.608	-39%	-0.124	-12%	Probability those	who receiv	ed
Days Since Admittance DTC	1.001	0%	0.000	0%	•	enhanced services will be arrested	
Age	0.926	-7%	-0.002	0%	reduced by 12%		
Gender	2.117	112%	0.185	19%	obs	755	
Criminal Career (In Days)	1.000	0%	0.000	0%	LL	-443.22	
Least Serious Category Conv.	0.703	-30%	-0.086	-9%	psudo r2	0.1525	15%
Number of Drug Charges	1.019	2%	0.005	0%	prvalue	0.5173	
					Prob TX Arrest	44%	TX=1
					Prob CT Arrest	56%	TX=0
							•
CONVICTION	Odds Ratio	Reduction in odds	Change in Prob 0 to 1	Change into %			
Received 1 or More Services	0.606	-39%	-0.114	-11%	Probability those	who receiv	ed
Days Since Admittance DTC	1.001	0%	0.000	0%	Probability those who received enhanced services will be convicted		
Age	0.950	-5%	-0.006	-1%	is reduced by 11%		
Gender	1.850	85%	0.138	14%	obs	755	
Criminal Career (In Days)	0.999	0%	0.000	0%	LL	-439.01	
Least Serious Category Conv.	0.663	-34%	-0.101	-10%	psudo r2	0.1339	13%
Number of Drug Charges	1.014	1%	0.003	0%	prvalue	0.37	
0 0					Prob TX Convict	30%	TX=1
					Prob CT Convict	41%	TX=0
INCARCERATION	Odds Ratio	Reduction in odds	Change in Prob 0 to 1	Change into %			
Received 1 or More Services	0.548	-45%	-0.090	-9%	Probability those	who receiv	ed
Days Since Admittance DTC	1.001	0%	0.000	0%	enhanced services		
Age	0.947	-5%	-0.010	-1%	to 1 or more days		
Gender	2.397	140%	0.124	12%	obs	755	
Criminal Career (In Days)	0.999	0%	0.000	0%	LL	- 361.452	
Least Serious Category Conv.	0.632	-37%	-0.086	-9%	psudo r2	0.1184	12%
Number of Drug Charges	1.015	-3770	0.002	0%	prvalue	0.1164	12/0
Trainoor of Drug Charges	1.015	1/0	0.002	070	Prob TX Incar.	14%	TX=1
					Prob CT Incar.	23%	TX=1 TX=0
						23/0	$1\Lambda = 0$

DTC Received Services vs. No Services

DTC Received Conflict Resolution Training vs. No Conflict Training								
ARREST	Odds Ratio	Reduction in odds	Change in Prob 0 to 1	Change into %				
Conflict Resolution Training	0.280	-72%	-0.293	-29%	Probability those w	ho received conflict		
Days Since Admittance DTC	1.001	0%	0.000	0%	resolution training			
Age	0.928	-7%	-0.002	0%	reduced by 29%			
Gender	2.042	104%	0.176	18%	obs 755			
Criminal Career (In Days)	1.000	0%	0.000	0%	LL	-438.33		
Least Serious Category Conv.	0.692	-31%	-0.090	-9%	psudo r2	0.161816%		
Number of Drug Charges	1.019	2%	0.005	0%	prvalue	0.5133		
					Prob TX Arrest	25% Training=1		
					Prob CT Arrest	54% Training=0		
CONVICTION	Odds Ratio	Reduction in odds	Change in Prob 0 to 1	Change into %				
Conflict Resolution Training	0.296	-70%	-0.233	-23%	Probability those who received confl resolution training will be convicted			
Days Since Admittance DTC	1.001	0%	0.000	0%				
Age	0.952	-5%	-0.006	-1%	reduced by 23%			
Gender	1.795	80%	0.131	13%	obs	755		
Criminal Career (In Days)	1.000	0%	0.000	0%	LL	-436.14		
Least Serious Category Conv.	0.653	-35%	-0.104	-10%	psudo r2	0.139614%		
Number of Drug Charges	1.015	1%	0.003	0%	prvalue	0.3692		
					Prob TX Convict	16% Training=1		
					Prob CT Convict	39% Training=0		
INCARCERATION	Odds Ratio	Reduction in odds	Change in Prob 0 to 1	Change into %				
Conflict Resolution Training	0.292	-71%	-0.139	-14%	Probability those w	ho received conflict		
Days Since Admittance DTC	1.001	0%	0.000	0%		will be sentenced to		
Age	0.949	-5%	-0.010	-1%	1 or more days is r	educed by 14%		
Gender	2.337	134%	0.187	19%	obs	755		
Criminal Career (In Days)	0.999	0%	0.000	0%	LL	-360.768		
Least Serious Category Conv.	0.623	-38%	-0.088	-9%	psudo r2	0.1212%		
Number of Drug Charges	1.015	1%	0.002	0%	prvalue	0.1937		
					Prob TX Incarc.	7% Training=1		
					Prob CT Incarc.	21% Training=0		

DTC Received Conflict Resolution Training vs. No Conflict Training

DTC Received Transitional Housing vs. No Transitional Housing

ARREST

Transitional Housing NOT SIGNIFICANT

CONVICTION

Transitional Housing

NOT SIGNIFICANT

INCARCERATION	Odds Ratio	Reduction in odds	Change in Prob 0 to 1	Change into %			
Transitional Housing	0.384	-62%	-0.118	-12%	Probability those	in Transiti	onal
Days Since Admittance DTC	1.001	0%	0.000	0%	Housing will be sentenced to 1 or more		
Age	0.948	-5%	-0.010	-1%	days is reduced b	y 12%	
Gender	2.380	138%	0.122	12%	obs	755	
Criminal Career (In Days)	1.000	0%	0.000	0%	LL	-361.58	
Least Serious Category Conv.	0.616	-38%	-0.092	-9%	psudo r2	0.118	12%
Number of Drug Charges	1.015	1%	0.002	0%	prvalue	0.1965	
					Prob TX Incarc.	9%	Housing=1
					Prob CT Incarc.	21%	Housing=0

Appendix F: Conversion of Hazard Rates to Relative Risk Worksheet

Participated in Services

ARREST	Exp(B) Hazard Rate	Relative Risk	
Received 1 or More Services	NOT SI	GNIFICAN	NT
CONVICT	Exp(B) Hazard Rate	Relative Risk	
Received 1 or More Services	.718	-28%	The risk of conviction for
Age	.977	-2%	those who received 1 or more
Gender	1.491	49%	services is reduced by 28%
Criminal Career (Days)	1.000	0%	compared to those who didn't
Least Serious Category Conv.	.778	-22%	receive a service, with all
Number of Drug Charges	1.010	1%	other values held constant.
Length of Stay in DTC	1.000	0%	
INCARCERATION	Exp(B) Hazard Rate	Relative Risk	
Received 1 or More Services	.655	-34%	The risk of incarceration
Age	.967	-3%	those who received 1 or more
Gender	2.099	110%	services is reduced by 34%
Criminal Career (Days)	1.000	0%	compared to those who didn't
Least Serious Category Conv.	.721	-28%	receive a service, with all
Number of Drug Charges	1.012	1%	other values held constant.
Length of Stay in DTC	1.000	0%	

Conflict Resolution Training

ARREST	Exp(B) Hazard Rate	Relative Risk	
Conflict Resolution Training	.425	-58%	The risk of arrest for those who
Age	.960	-4%	participate in conflict resolution
Gender	1.550	55%	training is decreased by 58%
Criminal Career (Days)	1.000	0%	compared to those who didn't participate in conflict training,
Least Serious Category Conv.	.813	-19%	with all other values held
Number of Drug Charges	1.011	1%	constant.
Length of Stay in DTC	1.000	0%	

CONVICT	Exp(B) Hazard Rate	Relative Risk	
Conflict Resolution Training	.391	-61%	The risk of conviction for those
Age	.979	-2%	who participate in conflict
Gender	1.475	48%	resolution training is decreased
Criminal Career (Days)	1.000	0%	by 61% compared to those who
Least Serious Category Conv.	.767	-23%	didn't participate in conflict
Number of Drug Charges	1.010	1%	training, with all other values
Length of Stay in DTC	1.000	0%	held constant.

INCARCERATION	Exp(B) Hazard Rate	Relative Risk	

Conflict Resolution Training

NOT SIGNIFICANT