Michigan's Juvenile Drug Courts Baseline and Process Evaluation

Summary of Findings and Recommendations

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The points of view expressed are those of the authors and do not necessarily represent the official position or policies of the Michigan State Court Administrative Office of the Michigan Supreme Court.

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Executive Summary

This report summarizes evaluation findings for Michigan Juvenile Drug Courts (JDC).

In 2016, the Michigan State Court Administrative Office contracted with the National Center for State Courts (NCSC) to complete a baseline process evaluation of Michigan's juvenile drug courts to understand how the courts currently operate. To be included in the study, a juvenile drug court had to be operational between FY12 and FY16, have at least ten program completers, and contribute data to Michigan's Drug Court Case Management Information System (DCCMIS), which resulted in a 12-court study sample. This report focuses on:

- assessing juvenile drug courts' structure and practices;
- describing characteristics of the JDC participant sample;
- analyzing team member, participant, and family perceptions of program practices;
- measuring program completion rates; and
- calculating two-year and four-year recidivism rates for JDC participants alone and compared to a matched business-as-usual (BAU) comparison group.

Key findings are summarized below:

- JDC Program Structure and Practices
    - Structure
        - Michigan's juvenile drug court programs vary greatly in years of operation (3 years to 16+ years) and program capacity (10 or fewer to 30+ participants).
        - Team member attendance at staffing and court varies, although all (or nearly all) judges, prosecutors, defense attorneys, probation officers, and substance abuse treatment providers attend both staffing and court regularly.
        - Team training is lacking in several areas, to the extent that over 40 percent of team members have never received training in six areas assessed.
    - Team Members' Perceptions of Team Collaboration
        - Statewide, JDC team members generally report positive perceptions of team collaboration, including decision-making, role definition, communication, conflict resolution, trust and common understanding.
        - Team members were less likely to agree with two statements in the assessment of team collaboration. Specifically, team members feel that there are informal alliances that impact how decisions are made and team members' different professional philosophies make it difficult for team members to work together.
    - Targeting, Eligibility, Screening and Assessment, and Program Entry
        - Most JDC programs use a clinical assessment tool, assess the youth's history of abuse/traumatic experience, and assess needs and strengths in the screening and assessment process. A little over half the programs report using a formal

risk assessment tool. Very few programs conduct a mental health assessment or family assessment during the screening and assessment process.
        - All programs require the youth to have a substance use disorder; over two-thirds of programs require the youth to be moderate- to high-risk of reoffending; and over half of the programs require the youth to be at least 14 years old to be eligible for the program.
    - Services Offered
        - All JDC programs offer individual counseling and substance abuse treatment and nearly all programs offer a wide variety of other program services.
        - Programs have a wide variety of available mental health services, including psychiatric evaluations and services (100 percent of programs) to inpatient mental health treatment (33 percent of programs).
        - Similarly, most programs offer various ancillary services, including services such as anger management, education services, family counseling, and life skills (83 percent of programs, each) as well as family services.
        - Statewide, JDC programs are strong in educational engagement and drug testing practices.
    - Supervision, Incentives, and Sanctions
        - Although most JDC supervision practices are fairly consistent across the state regarding home and school visits, drug testing, and monitoring curfews, programs vary in their use of electronic monitoring.
        - Nearly all programs have a written incentive schedule that is given to participants but only half of programs have a written sanction schedule that is given to participants.
        - All programs use acknowledgement of clean time, applause, praise, and phase promotion as incentives.
        - In order to successfully complete the program, all programs require a completion of treatment requirements, and over half of JDC programs require a period of continuous sobriety, school enrollment or employment, an aftercare plan, positive school performance, and a period of sanction-free time.
- Participant Characteristics, Perceptions, Treatment, and Exit
    - Demographics and Placement
        - The majority of Michigan JDC participants were white males, 15 or 16 years old at entry, who had completed 9th or 10th grade. Most participants were not in the labor force at entry.
        - The most common drug of choice among JDC participants was marijuana (89.7 percent) and many participants reported a preference for more than one drug.
        - Seventy-four percent of participants had a substance abuse diagnosis at entry and 19 percent had a co-occurring diagnosis at entry; the most common diagnosis was cannabis abuse/cannabis dependence.

        - Drug offenses are the most common placement offense, accounting for 36 percent of participants. Property (14 percent of participants) and alcohol (12 percent of participants) offenses are also common. Most placement offenses are misdemeanors (63 percent) and new criminal offenses (46 percent). One-third of participants had at least one prior conviction.
        - Participants had favorable perceptions of procedural justice, although they were neutral to the extent that they believe the team treats them and other groups fairly and that the judge allows them to tell their side of the story. Parents had favorable perceptions of procedural justice across the board and both participants and parents had favorable perceptions of the strength-based approach.
    - Treatment and Diagnosis
        - Two-thirds of participants received outpatient treatment services and over one-third received intensive outpatient treatment, with graduates receiving more of each type compared to non-graduates. Fewer participants (18 percent) received residential treatment.
    - Perceptions of Judicial Supervision
        - Participants have generally favorable perceptions of judicial supervision – specifically, participants report that the judge makes them feel they can say how they really feel about things, and that court appearances help them follow program rules/requirements. Parents and caregivers report feeling involved in court hearings but do not think court is held at convenient times.
    - Drug and Alcohol Testing
        - Graduates received significantly more drug tests throughout their time in their JDC program compared to non-graduates and the difference in number of tests is not explained by length of stay in the program.
        - Participants generally agreed that drug testing helps them stay clean in the program.
    - Sanctions and Incentives
        - Nearly 44 percent of participants received detention as a sanction at least once during their participation in the program.
        - Participants tend to agree that sanctions help motivate compliance in the program but they are less likely to agree that sanctions are used equally and fairly. They also agree that sanctions are used too frequently. Parents agree that sanctions are used equally and fairly.
        - Nearly two-thirds (64.3 percent) of participants received at least one incentive during their program participation.
- Outcomes
    - Short-Term Outcomes
        - A significantly smaller percentage of graduates tested positive at least once in the program (77.2 percent) compared to non-graduates (92.1 percent).

Graduates had significantly more days from entry to their first positive screen (68.5 days) compared to non-graduates (34.8 days) and had longer periods of sobriety on average (192.1 days) compared to non-graduates (94.6 days).
    - Significantly more graduates experienced gains in education (97.0 percent) and employment (46.3 percent) during their participation compared to non-graduates (83.1 percent and 16.6 percent, respectively).
    - Nearly half of all JDC participants successfully completed the program (49.1 percent); 44 percent were terminated and 7 percent exited through other means.
    - The most common reason for termination was non-compliance (84.1 percent), followed by a new offense (10.9 percent) and absconding (5.0 percent).
    - Graduates spent nearly one year in the program on average while non-graduates spent nearly ten months in the program on average.
  - Recidivism: JDC Participants
    - A significantly smaller percentage of graduates reoffended at least once within one, two, and three years of program entry compared to non-graduates. Although fewer graduates reoffended than non-graduates within four years of entry, the difference was not significant.
    - There were no significant differences in the rates of graduate versus non-graduate recidivism for drug or alcohol offenses for one, two, three, or four years' post-program entry.
  - Recidivism: JDC Participants v. BAU Comparisons
    - Significantly fewer JDC participants reoffended at least once within one and three years of entry compared to BAU comparisons. Fewer JDC participants reoffended compared to BAU comparisons within two years of entry at a level approaching significance. Although fewer JDC participants reoffended compared to BAU comparisons within four years of entry, the difference was not significant.
    - Significantly fewer JDC participants reoffended with a drug or alcohol conviction within one year of entry compared to BAU comparisons; similarly, fewer JDC participants reoffended with a drug or alcohol conviction within two years of entry compared to BAU comparisons at a level approaching statistical significance.

The NCSC evaluation team conducted hierarchical binary logistic regressions to examine which program-level and participant-level variables predict successful program completion, two-year recidivism, and four-year recidivism.

- Completion Status
  - One program-level variable (strong educational engagement practices) and five participant-level variables significantly predicted successful program completion:

gender, race, length of stay, type of treatment received, and average number of drug tests per week.

- Two-Year Recidivism
  - Zero program-level variables and six individual-level variables predicted two-year recidivism in the model: age at entry (16 and 17 years old), race, charge type, prior substance abuse treatment, and discharge status.
- Four-Year Recidivism
  - One program-level variable (strong drug testing practices) and one participant-level variable significantly predicted four-year recidivism (prior substance abuse treatment).

Based on the findings, the NCSC evaluation team makes the following recommendations:

Recommendation 1: In accordance with the national juvenile drug court guidelines, encourage all programs to adopt eligibility criteria that include youth with a substance use disorder; youth who are 14 years old or older; and youth who have a moderate to high risk of reoffending.

Recommendation 2: Identify and train staff on a set of validated risk and needs screening and assessment tools. These screening and assessment tools should be used to ensure that low-risk youth are not admitted to drug court and determine the level and types of services provided.

Recommendation 3: Design a training program to address gaps in staff training and orient new team members to the juvenile drug court.

Recommendation 4: Provide training and technical assistance to change team practice in key areas.

Recommendation 5: Review and modify, as needed, data collection in key areas.

Introduction

Juvenile drug treatment courts are a specialized docket within the juvenile or family court system to which selected delinquency cases, and in some instances status offenders, are referred for handling by a designated judge. The juvenile drug treatment court judge maintains close oversight of each case through regular status hearings with the parties and their guardians. The judge both leads and works as a member of a team comprised of representatives from treatment, juvenile justice, social and mental health services, school and vocational training programs, law enforcement, probation, the prosecution, and the defense. Over the course of a year or more, the team meets frequently (often weekly), determining how best to address the substance abuse and related problems of the youth and his or her family that have brought the youth into contact with the justice system (National Drug Court Institute & National Council of Juvenile and Family Court Judges, 2003). As of December 2014, there were approximately 420 juvenile drug courts nationwide (Marlowe, Hardin, & Fox, 2016).

In 2003, the Bureau of Justice Assistance (BJA), the National Council of Juvenile and Family Court Judges (NCJFCJ), and the National Association of Drug Court Professionals (NADCP) drafted the monograph *Juvenile Drug Courts Strategies in Practice* which contains 16 strategies to guide juvenile drug court planning and implementation. *Table 1* outlines the 16 strategies.

Table 1: The 16 Strategies to Improve Juvenile Drug Courts

Strategy	Description
Strategy 1	*Collaborative Planning:* Engage all stakeholders in creating an interdisciplinary, coordinated, and systemic approach to working with youth and their families.
Strategy 2	*Teamwork:* Develop and maintain an interdisciplinary, non-adversarial work team.
Strategy 3	*Clearly Defined Target Population and Eligibility Criteria:* Define a target population and eligibility criteria that are aligned with the program's goals and objectives.
Strategy 4	*Judicial Involvement and Supervision:* Schedule frequent judicial reviews and be sensitive to the effect that court proceedings can have on youth and their families.
Strategy 5	*Monitoring and Evaluation:* Establish a system for program monitoring and evaluation to maintain quality of service, assess program impact, and contribute to knowledge in the field
Strategy 6	*Community Partnerships:* Build partnerships with community organizations to expand the range of opportunities available to youth and their families.
Strategy 7	*Comprehensive Treatment Planning:* Tailor interventions to the complex and varied needs of youth and their families.
Strategy 8	*Developmentally Appropriate Services:* Tailor treatment to the developmental needs of adolescents.
Strategy 9	*Gender-Appropriate Services:* Design treatment to address the unique needs of each gender.
Strategy 10	*Cultural Competence:* Create policies and procedures that are responsive to cultural differences and train personnel to be culturally competent.
Strategy 11	*Focus on Strengths:* Maintain a focus on the strengths of youth and their families during program planning and in every interaction between the court and those it serves.

Strategy	Description
Strategy 12	*Family Engagement:* Recognize and engage the family as a valued partner in all components of the program.
Strategy 13	*Educational Linkages:* Coordinate with the school system to ensure that each participant enrolls in and attends an educational program that is appropriate to his or her needs.
Strategy 14	*Drug Testing:* Design drug testing to be frequent, random, and observed. Document testing policies and procedures in writing.
Strategy 15	*Goal-Oriented Incentives and Sanctions:* Respond to compliance and noncompliance with incentives and sanctions that are designed to reinforce or modify the behavior of youth and their families.
Strategy 16	*Confidentiality:* Establish a confidentiality policy and procedures that guard the privacy of the youth while allowing the drug court team to access key information.

In December 2016, the Office of Juvenile Justice and Delinquency Prevention released *the Juvenile Drug Treatment Court Guidelines*.[1] The guidelines synthesize the evidence from juvenile drug courts to determine the implementation components associated with the best outcomes and to supplement this understanding with research from related fields and interventions serving the same target population.

Project Approach

In 2016, the Michigan State Court Administrative Office contracted with the National Center for State Courts (NCSC) to complete a baseline process evaluation of the Michigan Juvenile Drug Courts. The primary purpose of the process evaluation was to understand how the juvenile courts operate in Michigan. Specifically, the evaluation sought to answer the following questions:

- Who is being served by Michigan's juvenile drug courts during the study period?
- What is the operational structure of the Michigan juvenile courts during the study period?
- What combination and types of services are delivered in Michigan's juvenile courts during the study period?
- Do juvenile drug court participants reduce their substance use and make other positive changes while enrolled in Michigan's juvenile drug courts?
- How do participants exit Michigan's juvenile drug courts and what participant and program characteristics are associated with successful completion/graduation?
- How does the recidivism rate of Michigan's juvenile drug courts compare to the recidivism rates of a matched sample?
- What participant and program characteristics are associated with lower recidivism rates?

Courts Included in the Study.

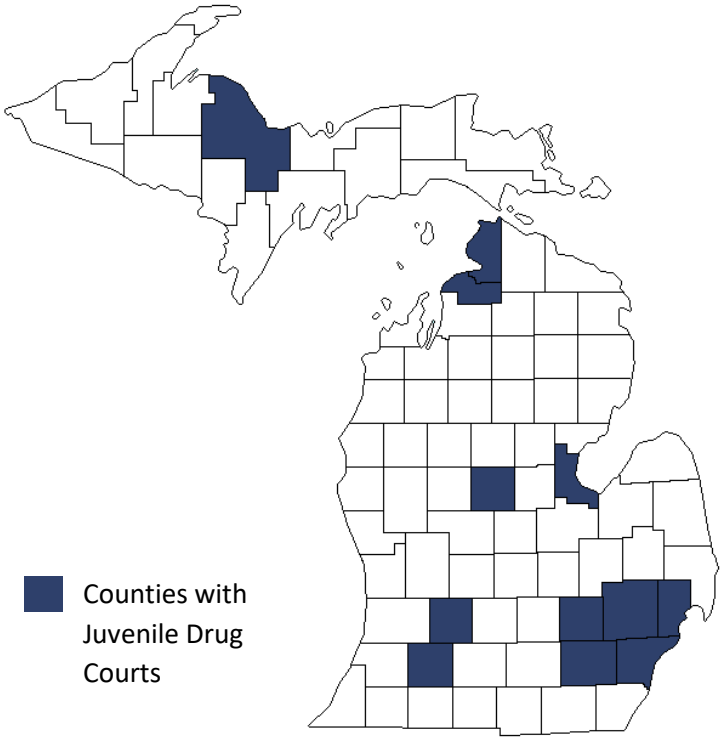
To be included in the study, a juvenile drug court had to be operational between FY12 and FY16, have at least ten program completers, and contribute data to

[1] https://www.ojjdp.gov/pubs/250368.pdf

Michigan's Drug Court Case Management Information System (DCCMIS) and the Judicial Data Warehouse. The twelve juvenile drug courts meeting these criteria and included in this study were:

- 3rd Circuit, Wayne
- 5th Circuit, Barry
- 6th Circuit, Oakland
- 9th Circuit, Kalamazoo
- 16th Circuit, Macomb
- 18th Circuit, Bay
- 21st Circuit, Isabella
- 22nd Circuit, Washtenaw
- 25th Circuit, Marquette
- 33rd Circuit, Charlevoix
- 44th Circuit, Livingston
- 57th Circuit, Emmet

Figure 1: Michigan Juvenile Drug Courts Included in the Study



Sources of Data. NCSC utilizes a multi-method approach whenever possible. For this evaluation, the team employed qualitative methods such as semi-structured interviews, staffing and court observation, and surveys. Whenever available, quantitative data was collected and summarized to use in conjunction with qualitative data. Participant-level data were collected for the cohort actively participating in one of the juvenile drug courts being studied between FY12 and FY16.

Supreme Court of Michigan Drug Court Case Management Information System (DCCMIS) and Judicial Data Warehouse. The Michigan Supreme Court State Court Administrative Office (SCAO) administers a web-based case management system known as the Drug Court Case Management Information System (DCCMIS). Administrative data, including demographics, service delivery data (e.g. treatment services, drug tests, sanctions and incentives), and program completion rates were gathered from DCCMIS for the analysis of participant outcomes and to help assess program practices. The data contained in DCCMIS were extracted by the SCAO and used to identify a comparison group in the Judicial Data Warehouse. The NCSC received a complete data extraction of all participants who entered a Michigan juvenile drug court between FY12 and FY16 as well as their matched comparison person. Courts that do not submit data to the Judicial Data Warehouse were excluded from the study, since a comparison group could not be pulled for this group.

Team Surveys. The National Center for State Courts created a web-based survey for drug court coordinators to complete. The survey was designed to collect more detailed information about target population, structure, services, and basic operation that were not already captured in grant applications. The survey was distributed in the fall of 2016 and 100 percent of the study sites completed the survey. The NCSC evaluation team also collected information from all juvenile drug court team members during site visits using a *Scantron* data collection form. Team surveys focused on measuring team collaboration and training the staff have received.

Participant and Family Surveys. In addition to collecting information from the juvenile drug court team members, youth and their families were surveyed using *Scantron* data collection forms so their program experiences could be incorporated into the process evaluation. The participant and family surveys were structured around assessing the court's compliance with the *National Juvenile Drug Court Guidelines* and the *Juvenile Drug Courts: Strategies in Practice (16 Strategies)*.

Court and Staffing Observation and Interviews. Finally, the evaluation team conducted observation of staffing and court sessions at each of the juvenile drug courts to assess team dynamics, quality of interaction with program participants, and to verify the accuracy of interview responses. When needed, the evaluation team utilized program materials, such as policy and procedures manuals and participant handbooks, to obtain additional information.

Ratings of Program Practices. An important component of the report is examining different program practices associated with positive outcomes in past research. In the *Program-Level Variables Scoring Appendix*, additional information is provided about how program factors were examined and how these factors were rated.

Statistical Significance. Throughout this report, the term "statistically significant" is used. In any analysis, there is a possibility that a result is simply due to random chance or error, even if it looks convincing. A statistically significant result suggests there is strong evidence that a relationship is not due simply to random chance. The smaller the p-value, the more likely the results are reliable. The conventional, accepted p-value of a statistically significant result is .05, although p-values between .10 and .051 are described in the report as approaching significance. *Table 2* provides an explanation for the p-values found throughout this report.

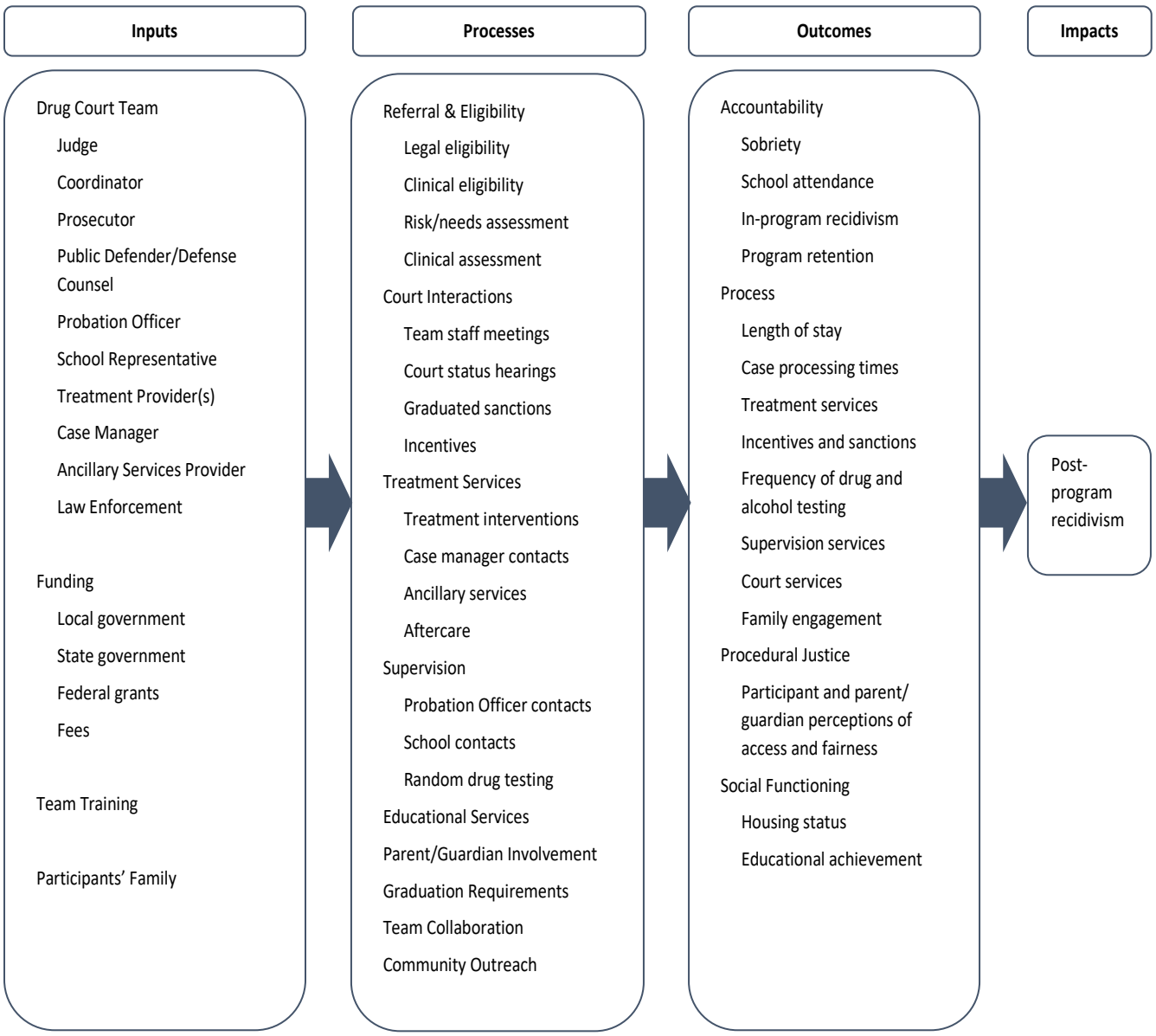
Table 2: Explanation of Statistical Significance

***p*-value**	**Possibility Finding is a Result of Chance/Error**	**Possibility Finding is the Result of Factors Studied**
.05	5%	95%
.01	1%	99%
.001	0.1%	99.9%

Program Structure of Michigan's Juvenile Drug Courts

Figure 2 provides a logic model relating program activities and resources to the desired (proximal) outcomes and (distal) impact. This section examines the structure and design of Michigan's Juvenile Drug Courts. A brief overview regarding program capacity and number of active participants is provided, followed by a discussion of eligibility, assessment, staffing, treatment, incentives and sanctions, drug testing and supervision practices.

Figure 2: Michigan Juvenile Drug Court Logic Model



Program Overview

Years of Operation. *Table 3* shows the number of years each of the juvenile drug courts has been operational in Michigan. Most juvenile drug courts in Michigan have been operating for longer than 6 years with three programs operating for more than 16 years.

Table 3: Number of Years the Program has been Operational

	Number of Courts	% of Courts
Less than 3 years	1	8%
3-5 years	1	8%
6-10 years	3	25%
11-15 years	4	33%
16+ years	3	25%

Program Capacity. Juvenile drug courts in Michigan are dynamic organizations developed to meet the needs of local constituents. The number of active participants ranged from fewer than 10 participants during the study period to more than 30 (see *Table 4)*.

Table 4: Program Capacity of Michigan's Juvenile Drug Courts

	Number of Courts	% of Courts
10 or fewer participants	3	25%
11-15 participants	2	17%
16-20 participants	4	33%
21-30 participants	2	17%
More than 30 participants	1	8%

Number of Youth Served. Admissions to the juvenile drug court declined from FY15 and FY16 as shown in *Table 5*. During this time, admissions declined from 175 to 143 youth. As a result, the number of active participants also declined. To examine caseloads, the NCSC evaluation team examined the number of active participants on July 1st of each year *(Table 6)*.

Table 5: Numbers Served as of FY15 and FY16

	FY15 July 1, 2014 - June 30, 2015	FY16 July 1, 2015 - June 30, 2016
Admissions into juvenile drug court	175	143
Juvenile drug court program discharges	197	181

Table 6: Numbers Served on July 1, 2015 and July 1, 2016

	Number of active participants on July 1, 2015	Number of active participants on July 1, 2016
Number of active participants	157	124

Team Composition and Training

Juvenile drug court research indicates that programs that develop a multidisciplinary team of stakeholders from the multiple involved systems, identify common goals, agree to share resources, and coordinate effectively have better outcomes (Belenko et al., 2009; Campie & Sokolsky, 2016; Carpenter et al., 2013; Green et al., 2009). To maximize effectiveness, staff roles should be defined in writing and signed by the team member (Dickerson, Collins-Camargo, &Martin- Galijatovic, 2011; Gatowski et al., 2016; Shaffer & Latessa, 2002; Wilson, Olaghere & Kimbrell, 2016). The adult drug court research has produced additional findings about specific roles being represented on the drug court team that have not been explored in the juvenile research. Specifically, the presence of dedicated prosecutors and public defenders on the drug court team has also been associated with reduced recidivism in the adult drug court research (Cissner et al., 2013).

Team Composition.

Michigan's juvenile drug courts have an average of six staff. *Table 7* shows that 100 percent of juvenile drug courts reported that a prosecutor regularly attended staffing and 75 percent reported that a prosecutor regularly attended court. One hundred (100) percent of juvenile drug courts reported that a defense representative regularly attended staffing and 83 percent of courts reported that a defense representative regularly attended court. Finally, 33 percent of courts reported that a law enforcement representative regularly attended staffing.

Table 7: Team Composition

	% who attend staffing	% who attend court
Judge/magistrate/referee	100%	100%
Prosecutor	100%	75%
Defense attorney/public defender	100%	83%
Coordinator	100%	100%
Probation officer	92%	100%
Case manager	8%	17%
Substance abuse treatment provider	100%	100%
Mental health treatment provider	58%	42%
Ancillary service provider	17%	8%
School representative	50%	33%
Law enforcement representative	33%	25%
Guardian Ad Litem	17%	17%
Other*	33%	33%

*Several courts have other positions represented on the team that are specific to each court.

There was little variation among the juvenile drug courts in terms of judicial, treatment and supervision attendance in staffing and court. Therefore, the NCSC evaluation team primarily examined the involvement of prosecutors and defense attorneys in the juvenile drug court to rate programs as "strong" or "not strong" in team composition. Additional detail about scoring can be found in the

Appendix. *Table 8* shows that nine of the twelve juvenile drug courts in Michigan (75.0 percent) were rated as "strong" in team composition.

Table 8: Team Composition Site Scores

	Team Composition Score
Court L	3 = Strong
Court C	1= Not Strong
Court K	3 = Strong
Court I	2 = Not Strong
Court J	1 = Not Strong
Court G	3 = Strong
Court E	3 = Strong
Court H	3 = Strong
Court B	3 = Strong
Court D	3 = Strong
Court M	3 = Strong
Court A	3 = Strong

Team Training. Juvenile drug court research notes that staff should receive regular training including cross-training on screening and assessment, cultural competence, family dynamics, motivational interviewing, and developmental psychology (Beach, Price, & Gary, 2005; Dickerson et al., 2011; Gatowski et al., 2016; Salvatore et al., 2011; and Wilson, Olaghere, & Kimbrell, 2016). *Table 9* summarizes the training received by Michigan juvenile drug court practitioners within the last year and the last three years in key areas associated with effective practices.

Table 9: Training Received by Michigan Juvenile Drug Court Practitioners

	Within the Last Year	Within the Last 1-3 Years	Never	No Answer
Screening and assessment	28.6%	26.0%	44.2%	1.3%
Strength-based approaches to juvenile case management	28.6%	20.8%	48.1%	2.6%
Adolescent development and developmental perspective	20.8%	35.1%	41.6%	2.6%
Gender differences in risk and protective factors	40.3%	33.8%	22.1%	3.9%
Cultural competency	36.4%	22.1%	39.0%	2.6%
Family engagement and working with caregivers	27.3%	18.2%	54.5%	0.0%
Motivational interviewing	26.0%	41.6%	31.2%	1.3%
Evidence based application of sanctions and incentives	29.9%	23.4%	45.5%	1.3%
Adolescent use of drugs and alcohol	9.1%	23.4%	66.2%	1.3%
Common tactics youth use to avoid testing or avoid testing positive	37.7%	31.2%	28.6%	2.6%
Interpretation of drug and alcohol tests	33.8%	31.2%	32.5%	2.6%

Federal and state confidentiality regulations	42.9%	22.1%	29.9%	5.2%

Institutionalization of Practices. *Table 10* shows the extent to which the Michigan juvenile drug courts have been institutionalized by formally documenting policies and procedures.

Table 10: Institutionalization of Practices

	Number of Courts	% of Courts
The team has a written policy and procedures manual that addresses how the program operates.	11	91%
A Memorandum of Understanding/Memorandum of Agreement defines the relationship between team members/agencies.	12	100%

Team Collaboration

The goal of any collaboration is to access and share resources to create a better outcome than could otherwise be achieved. This is achieved through,

> *"a process in which autonomous or semi-autonomous actors interact through formal and information negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together; it is a process involving shared norms and mutually beneficial interactions (Thomson et al., 2007)."*

Effective collaborative relationships require rules and procedures for both the functioning of the team and program, creation of a group identity, development of shared goals and trust, and maintenance of organizational autonomy or individual identity (Huxham & Vangen, 2005; Thomson et al., 2007, Wood & Gray, 1991). To achieve the most successful type of collaboration, teams should strive to perform well on five dimensions that capture the above requirements. To assess the current functioning of the collaboration among members and agencies involved in the Michigan juvenile drug courts, team members were asked to complete a survey. The questions asked in the survey were designed to measure collaboration on the five dimensions outlined above: governance, administration, organizational autonomy, mutuality, and norms and were based on a five-point *Likert* scale. A total of 102 surveys were received. *Table 11* shows the possible response options for each question in the survey.

Table 11: Scoring Scheme for Collaboration Factors

Possible Answer Selection	Numeric Value Assigned
Strongly Disagree	1
Somewhat Disagree	2
Neither Agree nor Disagree	3
Somewhat Agree	4
Strongly Agree	5

All items were coded with five (5) being the most desirable score. In other words, statements in which disagreement indicates positive collaboration, the value of the responses were re-coded in reverse order. The following sections highlight results from the survey and display results by survey item within each area of collaboration governance.

Decision-Making. *Table 12* addresses the extent to which decision-making is shared by team members, that team members can provide input, and that there is a lack of informal alliances. The average statewide scores fall in the positive score-range with most respondents indicating that they "agree" or "strongly agree" with the statements. However, one area within decision-making requires improvement. Team members indicated some concern in response to the statement, "There are informal alliances among team members that impact how decisions are made." Statewide, the mean falls within the neutral range indicating that there may be a perception that there is some informal influence on decision-making.

Table 12: Average Decision-Making Scores

	Average State Score	Range of Scores
The team decision-making process is transparent (you understand how decisions are made).	4.5	4.1-5.0
The professional opinions of all team members are considered when decisions are made in staffing.	4.6	4.0-4.9
Team members have an opportunity to provide input into decision made in staffing.	4.6	3.8-5.0
There are informal alliances among team members that impact how decisions are made.*	3.3	2.6-4.4

*This item has been reverse coded for comparison purposes so that the most desirable score is a 5 for all items.

Role Definition. Effective management or administration of a program requires a great deal of coordination among team members, clear role definition, and processes for conflict resolution. These three areas of administration are imperative to overcoming issues of collective action (Freitag & Winkler, 2001; Thomson et al., 2007). Statewide, team members generally agree that roles and responsibilities are clearly defined, that they understand their own role on the team, and that no one team member dominates team decision-making. It is important to note that some courts' scores fall in the neutral range on some of these elements suggesting that some courts struggle with some of these issues. *Table 13* below displays the results from survey items focusing on role definition.

Table 13: Role Definition Scores

	Average State Score	Range of Scores
I understand my role on the team.	4.6	4.4-4.8
The roles and responsibilities of all team members are clearly defined.	4.3	3.7-4.6
No single team member dominates team decision-making.	4.1	3.1-4.6
The different professional philosophies of team members make it difficult for team members to work together.*	3.9	3.3-4.4

*This item has been reverse coded for comparison purposes so that the most desirable score is a 5 for all items.

Communication. Communication is an area of strength statewide, but the range of scores suggests some individual courts struggle in these areas. Most staff agreed or strongly agreed that team members have a means of communication between team meetings, that team members have all the information needed to make decisions in team meetings, and that team members share all relevant information regarding participants in the program. *Table 14* below displays the state average scores for survey items involving team communication.

Table 14: Communication Scores

	Average State Score	Range of Scores
All relevant information about participants is shared among team members.	4.5	3.6-5.0
The team has a means of communicating with one another in between staffing.	4.5	3.7-4.8
I have the information I need to make decisions in staffing.	4.4	3.8-4.8

Conflict Resolution. Conflict is inevitable on a multidisciplinary team which makes effective resolution of conflict a critical component of team functioning. *Table 15* displays the average state scores for survey items involving conflict resolution.

Table 15: Conflict Resolution Scores

	Average State Score	Range of Scores
Team members strive to achieve mutually satisfying resolutions to differences in opinion.	4.5	3.9-4.8
Team members are comfortable respectfully challenging opinions expressed by team members, including the judge.	4.3	3.4-4.8

Trust and Common Understanding. Trust is particularly important in collaborative relationships (Frey, 2006). Established trust between collaborative partners can help overcome some of the inherent vulnerabilities faced by collaborations such as issues with cooperation and coordination. Trust is built over time with repeated interactions between members of a collaborative relationship (Putnam, 2000). To be successful, members of a collaborative team must have mutually shared long-term goals that motivate them to cooperate and invest their own resources to meet the larger goals. True collaborative relationships are not formed for one-time interactions to solve short-term problems, but rather to combine important and scarce resources to address more complex and enduring problems. Trust creates a sense of shared responsibility to address long-term goals (Putnam, 2000). The statewide average scores on trust and common understanding are reasonably high as shown in *Table 16* with notable variation on the question of whether team members work hard to understand each other's perspective.

Table 16: Trust and Common Understanding Scores

	Average State Score	Range of Scores
The team shares a common understanding of the goals of the program.	4.3	3.9-4.8
Team members take their commitment to the program seriously.	4.6	4.2-5.0
I trust the professional judgment of other team members.	4.6	4.2-5.0
Team members trust my professional judgment.	4.3	4.1-4.8
Team members work hard to understand each other's perspective.	4.3	3.5-4.8

Table 17 shows that eleven of the twelve juvenile drug courts in Michigan (91.6 percent) were rated as "strong" in team collaboration. Additional detail about scoring can be found in the *Appendix*.

Table 17: Team Collaboration Scores

	Team Collaboration Score
Court L	4.0 = Strong
Court C	4.5 = Strong
Court K	4.7 = Strong
Court I	4.2 = Strong
Court J	4.3 = Strong
Court G	4.6 = Strong
Court E	4.5 = Strong
Court H	4.4 = Strong
Court B	4.3 = Strong
Court D	4.3 = Strong
Court M	3.9 = Not Strong
Court A	4.6 = Strong

Targeting, Eligibility, Screening and Assessment, and Program Entry

Several key principles are established in the *Juvenile Drug Treatment Court Guidelines* related to screening and assessment (OJJDP, 2016). Specifically:

- Before providing treatment, the most effective juvenile justice programs use validated risk assessment instruments to assess risk for each participant (Howell & Lipsey, 2012).
- All potential program participants should be screened and assessed for substance abuse using validated instruments (Guideline 2.2 and 2.3).
- Potential program participants who do not have a substance use disorder and are not assessed as moderate to high risk of reoffending should be diverted from the JDTC process (Guideline 2.4).
- Screening and assessment should also examine how parental substance use affects bonds with children and how parental role modeling influences youth behavior, and should also seek to identify more positive coping skills for both youth and parents (Hills, Shufelt, & Cocozza, 2009).

Screening and Assessment.

As shown in *Table 18*, 58 percent of Michigan's juvenile drug courts report using a risk/needs assessment, 83 percent use a clinical assessment tool, 33 percent conduct a

mental health assessment, and eight percent conduct a family assessment at entry. Of those programs that report using a clinical assessment, 80 percent conduct the assessment prior to entry and 20 percent report conducting the assessment both prior to entry and following entry into the program.

Of the programs that use a risk and/or needs assessment tool, the majority use the Michigan Juvenile Justice Assessment System (MJJAS); the Youth Assessment and Screening Instrument (YASI); or the Youth Level of Service/Case Management Inventory (YLS/CMI). For clinical assessments, programs are using the Child and Adolescent Functional Assessment Scale (CAFAS), the Juvenile Automated Substance Abuse Evaluation (JASAE), the Adolescent Chemical Dependency Inventory (ACDI CV II), and others.

Table 18: Program Screening and Assessment Process

	Number of Courts	% of Courts
Use a formal risk/needs assessment	7	58%
Use a clinical assessment tool	10	83%
Timing of clinical assessment		
Prior to entry	8	80%
Both prior to and following entry	2	20%
Assess the youth's history of abuse or other traumatic experience	11	92%
Assess needs and strengths	9	75%
Assess cognitive skills	8	67%
Assess parental drug use, mental health needs, and parenting skills	7	58%
Conduct a mental health assessment	4	33%
Conduct a family assessment	1	8%

Targeting. A large body of research suggests that higher risk youth are more likely to experience reductions in recidivism than low-risk youth (Howell & Lipsey, 2012; Lowenkamp, Latessa, & Holsinger, 2006) and that older youth have higher success rates than younger youth perhaps due to increased motivation and maturity (Wilson, Olaghere, & Kimbrell, 2016; Eardley et al., 2004; Nestlerode, O'Connell, & Miller, 1999). Research on juvenile drug courts indicates that youth who have a substance use disorder have higher completion rates than those who merely use drugs or alcohol (Boghosian, 2006; Wilson, Olaghere, & Kimbrell, 2016). It then follows that targeting high-risk youth with substance use disorders greatly reduces recidivism (Howell & Lipsey, 2012; Lowenkamp, Latessa, & Holsinger, 2006; Lowenkamp & Latessa, 2004; Prendergast et al., 2013; University of Arizona, Southwest Institute for Research on Women, 2015). Fifty-eight (58) percent of Michigan's juvenile drug courts target moderate- to high-risk and moderate- to high-need youth for participation and/or youth who are 14 years or older.

Table 19: Program Eligibility

	Number of Programs	% of Courts
Youth must be 14 years old or older?	7	58%
Youth must have a moderate to high risk of reoffending?	8	67%

Youth must have a substance use disorder to be eligible?	12	100%

Diagnosis at Entry and Treatment History Prior to Entry. *Table 20* shows that most of the participants had a substance use disorder at juvenile drug court screening (74 percent). Nearly one quarter (23 percent) of Michigan juvenile drug court participants received substance abuse treatment prior to juvenile drug court entry. Nearly one-fifth of juvenile drug court participants had a co-occurring disorder at program entry (19 percent) and one-fifth of juvenile drug court participants had a history of mental illness (20 percent).

Table 20: Treatment History and Diagnosis Prior to Program Entry

	Number of Participants	% of Participants
Diagnosis at Entry		
Substance Use Disorder Diagnosis	509	74%
Co-Occurring Disorder Diagnosis	127	19%
Prior Treatment History		
Prior substance abuse treatment	161	23%
Mental health history	136	20%

Table 21 shows the distribution of juvenile drug court participants' DSM-IV diagnoses at entry. The majority of participants (83 percent) were diagnosed with a cannabis abuse or cannabis dependence disorder at or prior to entry; the second most common diagnosis was alcohol abuse, alcohol dependence, or alcohol intoxication diagnoses (7 percent of participants). The remaining participants were diagnosed with a variety of disorders including a variety of substance abuse or dependence disorders, Attention Deficit Hyperactivity Disorders (ADHD), some mood disorders (such as Major Depressive Disorder (MDD)), and other types of disorders not otherwise specified (NOS).

Table 21: Primary Diagnosis at Entry

	Number of Participants	% of Participants
Cannabis Abuse/ Dependence	571	83%
Alcohol Abuse/Dependence Intoxication	47	7%
Polysubstance Dependence	12	2%
Other/Unknown Substance Abuse or Substance Dependence	9	1%
Oppositional Defiant Disorder	8	1%
ADHD (includes ADHD NOS/Inattentive Type/ Hyperactive-Impulse Type)	7	1%
Opioid Abuse/Dependence	6	0.9%
Depressive Disorders (MDD Single/ Recurrent)/Depressive Disorder NOS/Mood Disorder NOS	6	0.9%
Cocaine Dependence	3	0.4%
Adjustment Disorder with Mixed	3	0.4%

	Number of Participants	% of Participants
Disturbance of Emotions and Conduct		
Conduct Disorder	3	0.4%
Amphetamine Abuse/Dependence	3	0.4%
Sedative, Hypnotic, or Anxiolytic Dependence	2	0.3%
Hallucinogen Abuse/Dependence	2	0.3%
Diagnosis Deferred/No Axis I or Axis II Diagnosis	2	0.3%
Anxiety Disorder NOS	1	0.1%
Posttraumatic Stress Disorder	1	0.1%
Impulse Control Disorder NOS	1	0.1%
Total	**687**	**100.0%**

As shown in *Table 22*, the reasons for clinical exclusion vary by site. Two of the twelve sites have exclusion criteria including substance abuse too severe (17 percent), presence of a severe mental health history (67 percent), lack of motivation or readiness (33 percent), and presence of a severe medical condition (17 percent).

Table 22: Clinical Exclusion Criteria

	Number of Participant	% of Participants
Presence of a severe mental health history	8	67%
Refusal to participate	6	50%
Lack of motivation or readiness for treatment	4	33%
Substance abuse disorder too severe for available services to address	2	17%
Presence of a severe medical condition	2	17%

Table 23 shows that eight of the twelve juvenile drug courts in Michigan (66.7 percent) were rated as "strong" in targeting practices. Additional detail about scoring can be found in the *Appendix*.

Table 23: Targeting Practices Scores

	Targeting Practices Score (out of 4)
Court L	1 = Not Strong
Court C	3 = Strong
Court K	4 = Strong
Court I	4 = Strong
Court J	1 = Not Strong
Court G	4 = Strong
Court E	4 = Strong
Court H	4 = Strong
Court B	3 = Strong
Court D	4 = Not Strong

	Targeting Practices Score (out of 4)
Court M	2 = Not Strong
Court A	4 = Strong

Placement Offense. *Table 24* shows the number and percentage of juvenile drug court participants' placement offenses. The most common placement offenses for juvenile drug court participants were drug offenses (36 percent), followed by property (21 percent) and alcohol (13 percent) offenses.

Table 24: Placement Offense Type in Michigan's Juvenile Drug Courts

	Number of Participants	% of Participants
Drug offense	247	36%
Property offense	144	21%
Alcohol offense	86	13%
Juvenile – incorrigible	56	8%
Domestic violence	34	4%
Assault – Non-Domestic	27	4%
Juvenile – truancy	25	4%
Traffic offense	25	5%
Juvenile – runaway	3	0.4%
Non-violent sex offense	2	0.3%
Other (unspecified)	38	6%

Placement Offense Severity. The majority of Michigan juvenile drug court participants entered the program as a result of a misdemeanor-level offense (63 percent). The proportion of juvenile drug court participants who entered with a new criminal offense (46 percent) and a new petition (40 percent) were fairly evenly split (see *Table 25*).

Table 25: Placement Offense Severity and Legal Status

	Number of Participants	% of Participants
Placement Offense Level		
Misdemeanor	432	63%
Felony	149	22%
Status Offense	67	10%
Civil/Petition	29	4%
Other	10	2%
Legal Status at Placement		
New Criminal Offense	315	46%
New Petition	277	40%
Probation Violation – Technical Offense	52	8%
Status Offense	32	5%

	Number of Participants	% of Participants
Probation Violation – New Criminal Offense	11	2%

Approximately thirty-three percent (33%) of juvenile drug court participants had at least one prior conviction, with approximately 3 percent of participants having at least one prior felony conviction and 27 percent having at least one prior misdemeanor conviction (see *Table 26*).

Table 26: Participants' Prior Felony and Misdemeanor Convictions

	Number of Participants	% of Participants
Any Prior Conviction	226	33%
Prior Convictions by Offense Level		
Prior misdemeanor convictions	184	27%
Prior felony convictions	23	3%

Considering only Michigan juvenile drug court participants who had at least one prior conviction, *Table 27* shows Michigan's juvenile drug court participants averaged 2.1 misdemeanor convictions and 1.4 felony convictions prior to entering juvenile drug court.

Table 27: Average Number of Prior Felony and Misdemeanor Convictions

	Average number of prior convictions
Average number of prior misdemeanor convictions	2.1
Average number of prior felony convictions	1.4

Eighty-three (83) percent of Michigan's juvenile drug courts exclude youth who are charged with a violent offense or have a charge involving a firearm (see *Table 28*).

Table 28: Legal Exclusion Criteria

	Number of Participants	% of participants
Current charge is violent	10	83%
Current charge involves a firearm	10	83%
Youth is a sex offender	9	75%
Youth has prior violent convictions	6	50%
Prosecutor discretion due to suspected major drug trafficking	4	33%
Youth has pending criminal charges elsewhere	2	17%
Youth is a known gang member	1	8%

Program Entry

Juvenile drug court participants spend, on average, 18.5 days from program entry to treatment entry (see *Table 29*).

Table 29: Average Time to Placement

Average number of days from...	Average Number of Days	Median Number of Days
Program Entry to Treatment		
All participants (N=529)	18.5	0.00
Graduates (n=257)	17.1	0.00
Non-Graduates (n=243)	20.0	0.00

Treatment Services

Evaluations of juvenile drug courts show that programs are most effective when they provide complementary services to address protective and risk factors including trauma services, family services. Effective courts realize that, in addition to varying degrees of trauma, mental health, family issues, educational challenges, and criminal thinking services, as well as prosocial activities and mentoring (Bryan, Hiller, & Leukefeld, 2006; Carey, 2004; Hiller et al., 2010; Linden, 2008; Linden et al., 2010; Mericle et al., 2014; Mhlanga & Allen, 2009; Shaffer & Latessa, 2002; Schaeffer et al., 2010; and Wilson, Olaghere, & Kimbrell, 2016). In order to be effective, these services must be evidence-based and implemented with fidelity to the model (Gurnell, Holmberg, & Yeres, 2014).

Substance Abuse Treatment Services.

Substance abuse treatment is an effective intervention for individuals with substance use disorders (National Institute of Drug Abuse [NIDA], 2014). Drug court treatment produces its strongest effect on participant behavior and subsequent outcomes when it reflects the following characteristics:

- A full continuum of treatment should include home-based outpatient and intensive outpatient treatment; day treatment; individual, group, and family treatment; inpatient treatment; and residential treatment (Gurnell, Holmberg & Yeres, 2014);
- One or two treatment agencies have primary responsibility for delivering treatment services, and clinically trained representatives from these agencies are core members of the Drug Court Team;
- Treatment providers administer treatments that are manualized and demonstrated to improve outcomes for addicted offenders (e.g. Moral Reconation Therapy (MRT), the MATRIX model, and Multi-Systemic Therapy (MST));
- Participants are assigned to a level of care based on a standardized assessment of their treatment needs such as the ASAM criteria, as opposed to relying on professional judgment; and
- Participants have access to prescribed psychotropic or addiction medications (Medically-Assisted Treatment or MAT) when warranted.

Substance Abuse Services.

Table 30 lists the variety of substance abuse treatment services the juvenile drug courts report that they can access. All of the programs surveyed provide individual counseling and substance abuse treatment, although the juvenile drug courts report less access to other services like residential treatment (75 percent). Fifty (50) percent of juvenile drug court programs report they have access to at least one treatment group that is gender-specific. Only 25 percent of

juvenile drug court programs have treatment groups that include non-drug court participants, while 75 percent have treatment groups that only include juvenile drug court participants.

Table 30: Program Services Offered

	Number of Courts	% of Courts
Individual counseling	12	100%
Substance abuse treatment	12	100%
Intensive outpatient substance abuse groups	10	83%
Residential treatment	9	75%
Substance abuse case management	9	75%
Aftercare support services	7	58%
Outpatient substance abuse treatment >90 days	6	50%
Gender-specific group counseling	6	50%
Relapse prevention groups	6	50%
Outpatient substance abuse treatment - fewer than 90 days	5	42%

Table 31 shows that five of the twelve juvenile drug courts in Michigan (41.7 percent) were rated as "strong" in treatment practices. Additional detail about scoring can be found in the *Appendix*.

Table 31: Treatment Practices Scores

Court Programs	Treatment Practices Score (out of 4)
Court L	1 - Not Strong
Court C	3 - Strong
Court K	2 - Not Strong
Court I	3 - Strong
Court J	2 - Not Strong
Court G	2 - Not Strong
Court E	2 - Not Strong
Court H	2 - Not Strong
Court B	4 - Strong
Court D	3 - Strong
Court M	2 - Not Strong
Court A	3 - Strong

Table 32 shows most participants received outpatient treatment (66 percent) and/or intensive outpatient treatment (37 percent). Fewer participants received residential treatment (18 percent) or outpatient detox (0.3 percent).

Table 32: Substance Abuse Treatment Services

	# of Participants	% of Participants
Outpatient	452	66%
Intensive outpatient	254	37%
Residential	124	18%

	# of Participants	% of Participants
Outpatient Detox	2	0.3%

Table 33 shows a summary of the mean and median number of days of substance abuse treatment delivered to juvenile drug court participants (both graduates and non-graduates) for the juvenile drug courts participating in the study. Michigan juvenile drug court participants who received residential treatment (1,747.5 hours on average) and intensive outpatient treatment (191.5 hours on average) spent the most hours in treatment. Graduates, however, spent significantly more time in outpatient treatment (36.7 hours) compared to non-graduates (21.8 hours). Graduates also spent more time in intensive outpatient (207.0 hours) compared to non-graduates (177.2 hours) at a level approaching significance.

Table 33: Substance Abuse Treatment Hours Per Participant by Treatment Type

	Mean Hours	Median Hours
Residential (n=118)	1,747.5	612.0
Graduates	1,922.5	519.0
Non-Graduates	1,499.3	672.0
Intensive Outpatient (n=254)	191.5	178.5
Graduates	207.0†	195.0
Non-Graduates	177.2†	171.0
Outpatient (n=429)	30.6	20.0
Graduates	36.7***	25.0
Non-Graduates	21.8***	12.0
Sub-Acute Detox (n=0)	N/A	N/A
Graduates	-	-
Non-Graduates	-	-
Outpatient Detox (n=2)	44.5	44.5
Graduates	6.0	6.0
Non-Graduates	44.5	44.5

*** $p < .01$ † $p < .10$

Participants must receive a sufficient dosage and duration of substance abuse treatment to enjoy long-term sobriety and recovery from addiction. Considering only participants who had some recorded data regarding treatment in the Michigan juvenile drug court sample, graduates received fewer treatment contact hours overall (381.6 hours) compared to non-graduates (484.7 hours) although the difference is not statistically significant and is the result of the fact that non-graduates received more residential treatment than non-graduates. Graduates and non-graduates did not significantly differ in the number of residential treatment hours received, although graduates received more on average (1,922.5 hours) compared to non-graduates (1,499.3 hours) when only those participants who received some residential treatment were considered. When only non-residential treatment hours are considered for participants who received at least one hour of non-residential treatment, graduates received significantly more treatment contact hours on average (117.2 hours) compared to non-graduates (85.0 hours). When all participants who received any treatment were considered, regardless of whether they received either

residential or non-residential treatment, non-graduates received significantly more treatment contact hours overall, more residential treatment hours on average (but not significantly more), and significantly fewer non-residential treatment hours. A table showing treatment hours by type including all participants is in the *Treatment Appendix*. Length of stay did not completely explain any of these findings.

Table 34: Substance Abuse Treatment Hours by Completion Type

	Mean Hours	Median Hours
All Treatment Contact Hours		
All participants (N=631)	442.5	59.0
Graduates (n=334)	381.6	67.0
Non-Graduates (n=269)	484.7	57.0
Residential Treatment Contact Hours		
All participants (N=124)	1,747.5	612.0
Graduates (n=46)	1,922.5	519.0
Non-Graduates (n=72)	1,499.3	672.0
All Non-Residential Treatment Contact Hours		
All participants (N=625)	100.01	39.0
Graduates (n=333)	117.2**	54.0
Non-Graduates (n=264)	85.0**	28.0

** $p < .01$

Table 35 further details the number of participants identified by ASAM level at program entry as well as the type of treatment participants in each level received during their tenure in the program. Nearly two-thirds of participants (61.4 percent) were identified as ASAM Level I Outpatient at entry and most of the remaining participants were identified as requiring Level II Intensive Outpatient/Partial Hospitalization (29.7 percent). Fewer participants were identified as ASAM Level 0.5 Early Intervention (2.2 percent), Level III Residential/Inpatient (6.6 percent), or Level IV Medically Managed Intensive Inpatient (0.1 percent). The proportion of participants who received the appropriate level of treatment varied by ASAM level, with the number and percentage of participants who received each treatment type display in *Table 35* below. It is important to note that participants often receive treatment of more than one modality within ASAM levels (Level 0.5, for example) so the proportion levels do not necessarily equal 100 percent.

Table 35: Assessed ASAM Level of Need Compared to Substance Abuse Treatment Services Received by JDC Participants

	Number of Participants	%
Assessed ASAM Criteria Level		
Level 0.5 Early Intervention	15	0.0%
Level I Outpatient	422	61.4%
Level II Intensive Outpatient/Partial Hospitalization	204	29.7%
Level III Residential/Inpatient	45	6.6%
Level IV Medically Managed Intensive Inpatient	1	0.1%
Treatment Received by ASAM Criteria Level		

	Number of Participants	%
Level 0.5 Early Intervention (n=15)		
Received SA Outpatient Detox Treatment	1	6.7%
Received SA Outpatient Treatment	13	86.7%
Received Intensive Outpatient Treatment	5	33.3%
Received SA Residential Treatment	3	20.0%
Received SA Sub-Acute Detox Treatment	0	0.0%
Level I Outpatient (n=422)		
Received SA Outpatient Detox Treatment	1	0.2%
Received SA Outpatient Treatment	326	77.3%
Received Intensive Outpatient Treatment	111	26.3%
Received SA Residential Treatment	50	11.8%
Received SA Sub-Acute Detox Treatment	0	0.0%
Level II Intensive Outpatient/Partial Hospitalization (n=204)		
Received SA Outpatient Detox Treatment	0	0.0%
Received SA Outpatient Treatment	97	47.5%
Received Intensive Outpatient Treatment	115	56.4%
Received SA Residential Treatment	43	21.1%
Received SA Sub-Acute Detox Treatment	0	0.0%
Level III Residential/Inpatient (n=45)		
Received SA Outpatient Detox Treatment	0	0.0%
Received SA Outpatient Treatment	16	35.6%
Received Intensive Outpatient Treatment	22	48.9%
Received SA Residential Treatment	28	62.2%
Received SA Sub-Acute Detox Treatment	0	0.0%
Level IV Medically Managed Intensive Inpatient (n=1)		
Received SA Outpatient Detox Treatment	0	0.0%
Received SA Outpatient Treatment	0	0.0%
Received Intensive Outpatient Treatment	1	100.0%
Received SA Residential Treatment	0	0.0%
Received SA Sub-Acute Detox Treatment	0	0.0%

Recovery Support Services. *Table 36* shows a summary of the mean and median number of recovery support groups (e.g. NA/AA) participants attended. On average, considering only participants who had data regarding the number of recovery support meetings attended (which was 4.5 percent of the total sample), graduates completed more hours (41.8) of recovery support meetings compared to non-graduates (27.1), although the difference is not statistically significant.

Table 36: Recovery Support Services

Participants Completing at Least One Meeting (4.5% of sample)	Mean Hours	Median Hours

All participants	31	33.0	29.0
Graduates	13	41.8	35.0
Non-Graduates	17	27.1	22.0

Evidence-Based Curriculum. All of the juvenile drug courts report having access to at least one evidence-based treatment curriculum. The most commonly used curricula include: Moral Reconation Therapy (MRT), Dialectical Behavior Therapy (DBT), and Motivational Enhancement Therapy (MET). In addition to the programs listed in *Table 37,* one juvenile drug court uses the Living in Balance curriculum, one uses The Seven Challenges curriculum, one uses Aggression Replacement Therapy, and one uses Cannabis Youth Therapy.

Table 37: Use of Evidence-Based Manualized Treatment Curriculum

	Number of Courts	% of Courts
Moral Reconation Therapy (MRT)	6	50%
Dialectical Behavior Therapy (DBT)	5	42%
Motivational Enhancement Therapy (MET)	5	42%
Multi-systemic Therapy (MST)	3	25%
Functional Family Therapy (FFT)	2	17%
Matrix Model	1	8%
Multi-Dimensional Family Therapy (MDFT)	1	8%

Mental Health Services. Most of the juvenile drug courts report a range of access to mental health services (see *Table 38*). Access to psychiatric services is available in 100 percent of the programs, while access to psychotropic medications is limited to 11 of the 12 program, as is outpatient mental health treatment (67 percent). Juvenile drug courts recorded very little data on the number and type of mental health treatment participants received; services for only two participants were recorded.

Table 38: Available Mental Health Services

	Number of Courts	% of Courts
Psychiatric services	12	100%
Outpatient mental health treatment	12	100%
Co-occurring substance abuse and mental health treatment	12	100%
Psychiatric evaluations	11	100%
Access to psychotropic medications	11	92%
Integrated substance abuse and mental health treatment	11	92%
Mental health case management	10	83%
Mental health evaluation	9	75%
Emergency psychiatric services (crisis stabilization)	9	75%
Inpatient mental health treatment	8	67%

Ancillary Services. In addition to the substance abuse and mental health treatment services, the juvenile drug courts report having access to a range of ancillary services as shown in *Table 39*.

Table 39: Available Ancillary Services

	Number of Courts	% of Courts
Anger management	12	100%
Education services (e.g. GED-related class, tutoring)	10	83%
Family counseling	10	83%
Life skills (e.g. decision-making, risk reduction, health, education)	10	83%
Health education	9	75%
Transportation (e.g. providing bus passes or providing actual transportation to services)	8	67%
Mentoring or peer support	7	58%
Vocational training	7	58%
Employment services (e.g. job readiness program)	6	50%
GED-prep related classes	6	50%
Yoga/Acupuncture/Tai Chi	1	8%

Family Engagement. Research in juvenile drug courts suggests that family and parental support and involvement results in youth who perform better in juvenile drug courts (Thompson, 2006). The *Juvenile Drug Treatment Court Guidelines* recommend that:

- Families receive information (written, audio, and verbal, in their spoken language) that allows them to make informed decisions;
- Family members have the opportunity to obtain answers to questions at any point during the course of the program;
- Courts address barriers that keep the family from participating, including the timing of hearings, physical settings where meetings and hearings take place, and the family's level of comprehension; and
- The juvenile drug court engages families through activities, events, and services to demonstrate that they value the youth and families as partners.

One hundred (100) percent of the juvenile drug courts report including parents and/or guardians in all intake procedures and the initial treatment planning, and 100 percent involve the participant's parent(s) or guardian(s) in drug court hearings (see *Table 40*). Fifty-eight (58) percent of courts indicated that they provide court-certified or licensed onsite interpreters for parents or guardians with limited English proficiency and for those with hearing deficiencies. Ninety-two (92) percent of courts offer transportation incentives to family/caregivers if transportation is an identified barrier. Additionally, 92 percent of juvenile drug courts report that they always contact the parents/guardians of juvenile drug court participants prior to status hearings to request feedback regarding the participant's progress or issues. Only one program reported using a family assessment.

Table 40: Family Engagement Services

	Number of Courts	% of Courts
Include parents/guardians in all intake procedures and initial treatment planning.	12	100%
Involve parents/guardians in drug court hearings.	12	100%
Always contact parents/guardians prior to status hearings.	11	92%
Offer transportation incentives to family caregivers.	11	92%
Require parents/guardians to participate in treatment.	10	83%
Offer family counseling.	10	83%
Offer prosocial activities that include family/caregiver participation.	9	75%
Offer a parent/family support group.	8	67%
Provide interpreters for parents/guardians.	7	58%
Provide direct services to siblings of participants.	1	8%

Table 41 shows that eight of the twelve juvenile drug courts in Michigan (66.7 percent) were rated as "strong" in family engagement. Additional detail about scoring can be found in the *Appendix*.

Table 41: Family Engagement Practices Scores

	Family Engagement Practices Score (out of 3)
Court L	3 = Strong
Court C	2 = Not Strong
Court K	2 = Not Strong
Court I	2 = Not Strong
Court J	3 = Strong
Court G	3 = Strong
Court E	3 = Strong
Court H	3 = Strong
Court B	2 = Not Strong
Court D	3 = Strong
Court M	3 = Strong
Court A	3 = Strong

Table 42 shows that ten of the eleven juvenile drug courts in Michigan (90.9 percent) were rated as "strong" in parents'/caregivers' perceptions of family engagement. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 42: Parent/Caregiver Perceptions of Family Engagement Practices Scores

	Parents'/Caregivers' Perceptions of Family Engagement Practices Score (out of 5.0)
Court L	4.1 = Strong
Court C	4.5 = Strong
Court K	4.5 = Strong

	Parents'/Caregivers' Perceptions of Family Engagement Practices Score (out of 5.0)
Court I	4.6 = Strong
Court J	4.1 = Strong
Court G	4.3 = Strong
Court E	4.8 = Strong
Court H	3.4 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.1 = Strong
Court A	4.2 = Strong

Participant and Parental Perceptions of Treatment. *Table 43* reflects the participant's perspective on treatment while *Table 44* reflects parents' and caregivers' perceptions of treatment services. All items were coded with five (5) being the most desirable score.

Table 43: Participant Perceptions of Treatment

	Statewide Average Score
I have a treatment plan in place that I understand.	4.1
The treatment staff creates an environment that helps me feel comfortable in participating in discussions.	4.1
There are enough services available to me to meet my needs.	4.1
Statewide Total	**4.1**

Table 44: Parent/Caregiver Perceptions of Treatment

	Statewide Average Score
Treatment	
My child has a treatment plan in place that I understand.	4.2
The team adequately addresses my child's needs.	4.1
The treatment staff creates an environment that helps me feel comfortable in participating in discussions.	4.2
Statewide Treatment Total	**4.2**
Family Engagement	
I was involved in the development of my child's treatment plan.	4.1
I was involved in the program intake process.	4.3
I was provided a written handbook that includes program rules and requirements that is easy to understand.	4.4
The team keeps me engaged and informed between court appearances and appointments.	4.1
Statewide Family Engagement Total	**4.2**

Table 45 shows that eight of the eleven juvenile drug courts in Michigan (72.7 percent) were rated as "strong" in the participant and parent/caregiver's perceptions of treatment engagement. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 45: Participant and Parent/Caregiver Perceptions of Treatment Practices Scores

Court Programs	Participant and Parent/Caregiver Perceptions of Treatment Practices Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.1 = Strong
Court K	4.2 = Strong
Court I	4.0 = Strong
Court J	3.7 = Not Strong
Court G	3.8 = Not Strong
Court E	4.6 = Strong
Court H	3.6 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.2 = Strong
Court A	4.3 = Strong

Community Supervision

All juvenile drug court participants are supervised by probation. *Table 46* outlines the various approaches to supervision among the juvenile drug court programs.

Table 46: Supervision Approaches

	Number of Courts	% of Courts
Home Visits		
Do not conduct	1	8%
Conduct in all phases	9	75%
Conduct as needed	2	17%
Drug Testing		
Conduct in all phases	12	100%
School Visits		
Conduct in all phases	12	100%
Curfews		
Monitor in all phases	10	83%
Monitor when given as a sanction	1	8%
Electronic Monitoring		
Monitor in all phases	3	25%
Monitor as a sanction	2	17%
Monitor as needed	7	58%

Educational Engagement

According to research cited in the *Juvenile Drug Treatment Court Guidelines*, programs are more successful when they include schools in their partnerships and make educational goals (i.e., attendance, assignment completion, behavior, and academic performance) priority for participants (Holmberg, 2013). All of the programs report tracking participant's progress in school by grades and attendance. Eleven of the twelve programs report tracking school suspensions and detentions. Although the programs report obtaining key pieces of education information, *Table 47* shows that active school representation on the JDC program is less common.

Table 47: Educational Engagement

	Number of Courts	% of Courts
An educational representative attends staffing.	6	50%
An educational representative attends court.	4	33%
The JDC has a court school program.	2	17%

Table 48 shows that four of the twelve juvenile drug courts in Michigan (33.3 percent) were rated as "strong" in educational engagement practices. Additional details about scoring can be found in the *Appendix*.

Table 48: Educational Engagement Practices Scores

	Educational Engagement Practices Score (out of 3)
Court L	0 = Not Strong
Court C	1 = Not Strong
Court K	3 = Strong
Court I	3 = Strong
Court J	0 = Not Strong
Court G	0 = Not Strong
Court E	2 = Strong
Court H	0 = Not Strong
Court B	0 = Not Strong
Court D	0 = Not Strong
Court M	0 = Not Strong
Court A	2 = Strong

Drug Testing

To be effective, drug testing should be:

- Random, observed, frequent, and sensitive to any potential trauma the youth has experienced (Gatowski et al., 2016); and

- Conducted twice a week initially and then weekly during the juvenile drug court's latter stages (National Association of Drug Court Professionals, 2015; Robinson & Jones, 2000).

Table 49 summarizes the drug testing practices of Michigan's juvenile drug courts. While all of the courts test at least twice weekly and observe specimen collection, only 75 percent randomize testing or test on weekends and only 50 percent test on holidays.

Table 49: Drug Testing Program Practices

	Number of Courts	% of Courts
Test at least twice weekly in Phase 1	12	100%
Observe specimen collection	12	100%
Employ randomized testing	10	83%
Test on weekends	9	75%
Test on holidays	6	50%

Table 50 shows that nine of the twelve juvenile drug courts in Michigan (75 percent) were rated as "strong" in drug testing practices. Additional details about scoring can be found in the *Appendix*.

Table 50: Drug Testing Practices Scores

Court Programs	Drug Testing Practices Score (out of 4)
Court L	2 = Not Strong
Court C	4 = Strong
Court K	4 = Strong
Court I	4 = Strong
Court J	2 = Not Strong
Court G	3 = Not Strong
Court E	4 = Strong
Court H	4 = Strong
Court B	4 = Strong
Court D	4 = Strong
Court M	4 = Strong
Court A	4 = Strong

Drug testing in Michigan's juvenile drug courts is primarily conducted by the probation staff (42 percent), private labs (25 percent), the coordinator (8 percent), community corrections (8 percent), testers contracted by the court (8 percent) or by treatment staff (8 percent). All of the juvenile drug courts report observing specimen collection all of the time. The most frequently used testing technologies are dipsticks/instant cups and independent labs (42 percent each), followed by onsite machine/analyzers (16 percent). Ten of the 12 courts report conducting random screens.

Most courts (75 percent) sanction participants who do not show up for a random screen while three courts report that their policy varies for no shows. Any drug or alcohol use that is determined to be new use is sanctioned in eight courts (67 percent). *Table 51* below outlines the types of drugs that are tested for within Michigan's juvenile drug courts included in this study. Eleven of the 12 programs test for

benzodiazepines, marijuana, and opiates. All of the juvenile drug courts test for marijuana, 11 of the courts test for benzodiazepines, opiates, and amphetamines. Ten of the courts test for alcohol by urine (EtG) and 9 courts test for cocaine. Eight programs test for methamphetamines. Half of the programs (6) test for alcohol by breath, Oxycodone, and non-opiate prescription drugs. Five programs test for synthetic marijuana and only one juvenile drug court tests for alcohol transdermally (e.g. SCRAM), tricyclic anti-depressants and THC.

Table 51: Drugs Routinely Tested for in Juvenile Drug Court

	Number of Programs that Routinely Test for Drugs	% of Programs that Routinely Test for Drugs
Marijuana	12	100%
Benzodiazepines	11	92%
Opiates	11	92%
Amphetamine	11	92%
Alcohol by Urine (EtG)	10	83%
Cocaine	9	75%
Methamphetamines	8	67%
Alcohol by breath	6	50%
Oxycodone	6	50%
Prescription drugs (non-opiates)	6	50%
Methadone	5	42%
Phencyclidine (PCP)	5	42%
Spice/Synthetic Marijuana	5	42%
Alcohol by urine (non-EtG)	4	33%
MDMA	4	33%
Buprenorphine	3	25%
Alcohol transdermally (e.g. SCRAM)	1	8%
Bath salts	1	8%

One court reported drug testing eight times a week, four courts reported drug testing three to four times a week, and seven courts reported testing twice a week in Phase 1 (see *Table 52*). Seventy-five (75) percent of juvenile drug courts indicated that they randomize drug testing using a call-in system or something similar. Seventy-five (75) percent reported drug testing on weekends, and 50 percent reported testing on holidays. Fifty-eight (58) percent reported receiving drug test results instantly, eight percent receive results within 24 hours, 25 percent report receiving results within two to three days, and eight percent receive results in four to six days. One hundred percent (100 percent) of juvenile drug courts reported that the collection of drug testing samples is directly observed by an authorized, same sex member of the juvenile drug court team or other approved official.

Table 52: Drug Testing Schedule

	Phase 1	Phase 2	Phase 3	Phase 4
1x a week	0 (0%)	0 (0%)	3 (25%)	4 (33%)
2x a week	7 (58%)	8 (67%)	5 (42%)	3 (25%)
3x a week	3 (25%)	2 (17%)	2 (17%)	1 (8%)

	Phase 1	Phase 2	Phase 3	Phase 4
4x a week	1 (8%)	1 (8%)	1 (8%)	2 (17%)
6+x a week	1 (8%)	1 (8%)	1 (8%)	0 (0%)
Not applicable	0 (0%)	0 (0%)	0 (0%)	2 (17%)

The juvenile drug court programs conducted over 57,679 drug or alcohol tests during the evaluation period, with an average of 84.0 drug or alcohol screens per participant (see *Table 53*). Graduates had, on average, 105.2 drug screens in the program while non-graduates had an average of 68.1 drug screens while in the program. The difference is statistically significant and not explained by length of stay.

Table 53: Average Number of Drug/Alcohol Tests Administered by Participant Completion Status

Program Completion Type	Average Number of Tests	Median
All participants	84.0	68.0
Graduates	105.2***	52.0
Non-Graduates	68.1***	12.0

***p < .001

Participant Perceptions of Drug Testing. *Table 54* reflects the participants' perspectives on drug testing. This item was coded with five (5) being the most desirable score.

Table 54: Participant Perceptions of Drug Testing

	Statewide Average Score
Drug testing helps me stay clean in this program.	4.1

Judicial Supervision

Court Appearances. Nine courts have a single judicial officer who presides over the juvenile drug court program, while the remaining three courts have two judicial officers who preside over the program (see *Table 55*). The required court reporting schedule is consistent in Phase 1 across programs but varies after that by phase.

Table 55: Frequency of Court Appearances per Month

	Phase 1	Phase 2	Phase 3	Phase 4
1 court appearance monthly	0 (0%)	0 (0%)	0 (0%)	2 (20%)
2 court appearances monthly	0 (0%)	0 (0%)	2 (17%)	0 (0%)
3 court appearances monthly	0 (0%)	1 (8%)	1 (8%)	0 (0%)
4 court appearances monthly	12 (100%)	11 (92%)	9 (75%)	8 (80%)

Table 56 shows a summary of the mean and median number of court appearances made by juvenile drug court participants (both graduates and non-graduates) for the juvenile drug courts included in the study. During the judicial review hearings, the judge discusses the participant's progress in treatment and supervision directly with the participant. On average, juvenile drug court participants appeared before the court 22.5 times over the course of their participation in juvenile drug court. The range,

among all participants in the study was from 0 to 147 court appearances. There was no significant difference in the average number of scheduled court reviews for graduates (24.1) compared to non-graduates (22.3), although graduates did spend significantly more time in the program (362.4) compared to non-graduates (293.0) ($p < .001$). However, once the number of days spent in court was controlled, the difference between graduates and non-graduates in the number of scheduled court reviews became significant ($p = .011$), meaning that graduates had more scheduled court reviews when the length of stay was controlled.

Table 56: Scheduled Court Appearances by Participant Completion Status

	Mean Number of Scheduled Court Appearances	Median Number of Scheduled Court Appearances
All participants	22.5	18.0
Graduates	24.1	20.0
Non-Graduates	22.3	16.5

Participant and Parental Perceptions of Judicial Supervision. *Table 57* reflects the participants' perspectives of judicial supervision while *Table 58* reflects parents'/caregivers' perceptions of court. All items were coded with five (5) being the most desirable score.

Table 57: Participant Perceptions of Judicial Supervision

	Statewide Average Score
Court sessions are held at times that are convenient.	3.7
The judge makes me feel that I can say how I really feel about things.	3.9
The judge is knowledgeable about my case.	4.1
Appearances before the judge help me follow program rules and requirements.	3.9
Statewide Total	**3.9**

Table 58: Parent/Caregiver Perceptions of Judicial Supervision

	Statewide Average Score
Court sessions are held at times that are convenient.	3.8
The judge involves me in court hearings.	4.5
Statewide Total	**4.1**

Table 59 shows that eight of the eleven juvenile drug courts in Michigan (72.7 percent) were rated as "strong" in participants' and parents'/caregivers' perceptions of judicial supervision. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 59: Participant and Parent/Caregiver Perceptions of Judicial Supervision Scores

	Participant and Parent/Caregiver's Perceptions of Judicial Supervision Score (out of 5.0)
Court L	4.1 = Strong
Court C	4.1 = Strong
Court K	4.2 = Strong
Court I	3.9 = Not Strong
Court J	3.6 = Not Strong
Court G	3.8 = Not Strong
Court E	4.4 = Strong
Court H	3.5 = Not Strong
Court B	-
Court D	4.3 = Strong
Court M	4.2 = Strong
Court A	4.1 = Strong

Sanctions, Incentives and Treatment Adjustments

The use of sanctions and incentives is firmly grounded in scientific literature and is a key component of drug courts throughout the United States. Within drug court programs, reinforcement (incentives) and punishment (sanctions) are used to increase desired behavior. Key sanction and incentive practices from the research are:

- Sanctions and incentives should be individually tailored to each youth's needs (Gatowski et al., 2016);
- Incentives and sanctions should be immediate, certain, consistent, fair, of appropriate intensity, goal oriented, graduated, and therapeutically sound (Gurnell, Holmberg, & Yeres, 2014);
- Detention should be used sparingly and only as a last resort (Borg et al., 2014);
- Programs should strive to deliver four incentives for every sanction (Gendreau, Cullen, & Bonta, 1994); and
- Data should be used to monitor the implementation of incentives and sanctions (Borg et al., 2014).

Table 60 displays Michigan Juvenile Drug Courts' practices surrounding sanctions and incentives.

Table 60: Sanction and Incentive Practices

	Number of Courts	% of Courts
Program has written incentive schedule	11	92%
Participants receive copy of written incentive schedule	11	92%
Program has written sanction schedule	6	50%
Participants receive copy of written sanction schedule	5	42%

Sanctions. The most commonly used sanctions, as self-reported by the juvenile drug court programs, include curfew restrictions, electronic monitoring and essays. A sample of the sanctions that are utilized by the juvenile drug courts is displayed in *Table 61* below.

Table 61: Sanctions Used by Michigan Juvenile Drug Courts

	Number of Courts	% of Courts
Curfew restrictions	12	100%
Electronic monitoring	12	100%
Essays/Homework assignments (read a book, watch a movie, etc.)	12	100%
Community service	11	92%
Detention	11	92%
Home confinement	11	92%
Increased drug testing	11	92%
Increased probation officer contact	11	92%
Verbal reprimand	11	92%
Bench warrant	9	75%
Increased monitoring/contacts with the juvenile drug court team	7	58%
Phase demotion/setback in time	7	58%
Increased court appearances	7	58%
Continuous alcohol monitoring (e.g. SCRAM)	4	33%
Court observation (sit in traditional court to watch proceedings)	3	25%
License suspension	3	25%
Fines	1	8%
No applause	1	8%

Table 62 shows a summary of the number of incentives and sanctions given to juvenile drug court participants. Nearly two-thirds of juvenile drug court participants received at least one incentive and over two-thirds received at least one sanction during their participation in the program. Nearly half of participants (43.7 percent) received detention as a sanction at least once during their time in the program. Michigan juvenile drug courts could also more sparingly use detention as a sanction, since the total number of detention days served as a sanction (for participants who received any) was nearly 31 days on average.

Table 62: Number of Sanctions Given to Drug Court Participants

Behavioral Response	N = 687
Sanctions – General	
% of participants who received at least one sanction	68.1%
Average # of sanctions per participant*	4.5
Sanctions – Detention/Jail	
% of participants who received at least one detention/jail sanction	43.7%
Average # of detention/jail days (sanctions) per participant*	30.7

*Among those participants who received an incentive or sanction.

Table 63 shows the use of detention/jail by program.

Table 63: Use of Detention/Jail Days by Program

	Number of Detention/Jail Days as Sanction				
Program	**Average number of sanctions (detention and non-detention)**	**% of youth with at least one jail/detention sanction**	**Average # of days in detention/jail**	**Median # of days in detention/ jail**	**Range # of days in detention /jail**
Court L	5.0	50.0%	31.2	21.0	1 – 128
Court C	6.0	69.7%	30.6	21.0	1 – 107
Court K	3.9	64.3%	13.7	5.0	2 – 53
Court I	3.3	78.3%	16.6	13.5	1 – 61
Court J	4.5	51.2%	21.6	15.0	1 – 90
Court G	1.5	39.0%	30.7	28.5	3 – 87
Court E	1.9	18.6%	6.9	4.5	2 – 18
Court H	4.0	80.2%	56.8	51.0	5 – 163
Court B	2.5	0.0%	-	-	-
Court D	6.8	71.4%	23.6	15.0	1 – 68
Court M	1.9	24.3%	4.3	3.0	2 – 15
Court A	1.2	21.9%	19.4	7.0	1 – 199
Statewide Total (N=687)	**3.1**	**43.7%**	**30.7**	**19.0**	**1 – 199**

Table 64 shows that five of the twelve juvenile drug courts in Michigan (42 percent) were rated as "strong" in sanction practices. Additional details about scoring can be found in the *Appendix*.

Table 64: Sanction Practices Scores

Court Programs	**Sanction Practices Score (out of 2)**
Court L	0 = Not Strong
Court C	0 = Not Strong
Court K	2 = Strong
Court I	1 = Not Strong
Court J	2 = Strong
Court G	2 = Strong
Court E	2 = Strong
Court H	0 = Not Strong
Court B	0 = Not Strong
Court D	0 = Not Strong
Court M	0 = Not Strong
Court A	2 = Strong

Participant and Parental Perceptions of Sanctions. *Table 65* reflects participants' perceptions of sanctions while *Table 66* reflects parents' and caregivers' perceptions of sanctions. All items were coded with five (5) being the most desirable score from the viewpoint of the program. For example, the most

desirable response to the participant question "Sanctions are used too frequently in this program" from the program's perspective is strongly disagree. Because programs would like participants to disagree with the statement, it is reverse scored.

Table 65: Participant Perceptions of Sanctions

	Statewide Average Score
Sanctions are imposed equally and fairly.	3.9
The possibility of being sanctioned motivates me to comply with program rules and policies.	4.0
Sanctions are used too frequently in this program.*	2.4
Total Perceptions of Sanctions Only	**3.5**

*Reverse-scored item.

Table 66: Parent/Caregiver Perceptions of Sanctions Only

	Statewide Average Score
Sanctions are imposed equally and fairly.	4.1

Table 67 shows that one of the eleven juvenile drug courts in Michigan (9 percent) were rated as "strong" in the participants' perceptions of sanction practices. Additional details about scoring can be found in the *Appendix*.

Table 67: Participant Perceptions of Sanctions Scores

Court Programs	Participant Perceptions of Sanction Practices Score (out of 5.0)
Court L	3.4 = Not Strong
Court C	3.4 = Not Strong
Court K	4.3 = Strong
Court I	2.7 = Not Strong
Court J	3.0 = Not Strong
Court G	3.5 = Not Strong
Court E	3.9 = Not Strong
Court H	3.0 = Not Strong
Court B	-
Court D	3.5 = Not Strong
Court M	3.3 = Not Strong
Court A	3.7 = Not Strong

Table 68 shows that seven of the eleven juvenile drug courts in Michigan (63.6 percent) were rated as "strong" in parents'/caregivers' perceptions of sanction practices. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 68: Parent/Caregiver Perceptions of Sanction Practices Scores

	Parents'/Caregivers' Perceptions of Sanction Practices Score (out of 5.0)
Court L	3.5 = Not Strong
Court C	4.7 = Strong
Court K	5.0 = Strong
Court I	4.7 = Strong
Court J	3.9 = Not Strong
Court G	3.7 = Not Strong
Court E	4.9 = Strong
Court H	3.0 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.1 = Strong
Court A	4.2 = Strong

Incentives. Incentives are used in drug court and in other treatment settings to motivate participant behavior toward pro-social behavior. Incentives are used to shape behavior gradually by rewarding the participant's positive behavior or achievement of a specific target behavior to reinforce this positive behavior. Two findings from empirical research on adolescent development are particularly pertinent to understanding the limitations of sanctioning and the power of incentives with adolescents. (National research Council, 2013). Recent studies of adolescent development show a change in sensitivity to reward cues, suggesting that they have a unique influence on cognition during the adolescent years. These findings reveal an increase insensitivity to rewards that peaks between 13 and 17 and then declines. They also suggest that the immediacy of an incentive in response to a desired behavior is critical to determining the incentive's effectiveness.

Research on adolescent development has also shown a reduced sensitivity to the threat of punishment, especially its long-term consequences. These findings suggest that an immediate sanction combined with a high probability of a short period of detention is more likely to influence the adolescent's behavior than sanctions involving long-periods of detention or the threat thereof.

Long-term gains are more likely to be realized if juvenile drug courts use reinforcement to increase productive behaviors that compete against alcohol abuse and crime after participants are no longer under the authority of the juvenile drug court. Incentives can be as simple as praise from a staff member or the juvenile drug court Judge; a certificate for completion of a specific milestone of the program; or medallions that reward and acknowledge specific lengths of sobriety. *Table 69* reflects the common incentives used by Michigan juvenile drug courts.

Table 69: Incentives Used by Michigan Juvenile Drug Courts

	Number of Courts	% of Courts
Acknowledgment of clean time	12	100%
Applause/verbal praise	12	100%

	Number of Courts	% of Courts
Phase promotion	12	100%
Praise from the judge	12	100%
Certificates	11	92%
Gift cards	11	92%
Extended curfew	11	92%
Candy bars	10	83%
Movie tickets/passes to events	10	83%
Medallions, tokens and plaques	8	67%
Reduction in supervision requirements	8	67%
Reduction in court appearances	7	58%
"Fast Pass" (called first on docket)	6	50%
Group events (e.g. pizza parties, picnics)	6	50%
Bus passes	6	50%
Reduction in community service	5	42%
Lunch with a juvenile drug court staff member	4	32%
Reduction in fees	4	32%
Fish bowl drawing	3	25%
Tokens and/or medallions	3	25%
Job shadowing	1	8%

Table 70 shows a summary of the number of incentives and sanctions given to juvenile drug court participants. Nearly two-thirds of juvenile drug court participants received at least one incentive and over two-thirds received at least one sanction during their participation in the program.

Table 70: Number of Incentives Given to Juvenile Drug Court Participants

Behavioral Response	N = 687
Incentives	
% of participants who received at least one incentive	64.3%
Average # of incentives per participant*	10.1***

*Among those participants who received an incentive
*** $p < .001$ -- Graduates received significantly more incentives (M = 12.5) compared to non-graduates (M = 6.9) ($F(1,420) = 46.737$, $p < .001$)

Table 71 shows that eleven of the twelve juvenile drug courts in Michigan (91.6 percent) were rated as "strong" in incentive practices. Additional details about scoring can be found in the *Appendix*.

Table 71: Incentive Practices Scores

	Incentive Practices Score (out of 2)
Court L	2 = Strong
Court C	0 = Not Strong
Court K	2 = Strong
Court I	2 = Strong
Court J	2 = Strong

	Incentive Practices Score (out of 2)
Court G	2 = Strong
Court E	2 = Strong
Court H	2 = Strong
Court B	2 = Strong
Court D	2 = Strong
Court M	2 = Strong
Court A	2 = Strong

Participant and Parental Perceptions of Incentives. *Table 72* reflects the participants' perspectives of incentives while *Table 73* reflects parents' and caregivers' perceptions of sanctions. All items were coded with five (5) being the most desirable score.

Table 72: Participant Perceptions of Incentives Only

	Statewide Average
Rewards and incentives used in this program motivate me to comply with program	3.9
Rewards and incentives are used equally and fairly.	3.9
Total Perceptions of Sanctions and Incentives	4.0

Table 73: Parent/Caregiver Perceptions of Incentives Only

	Statewide Average
Rewards and incentives are used equally and fairly.	4.1

Table 74 shows that seven of the 11 juvenile drug courts in Michigan (63.6 percent) were rated as "strong" in participants' perceptions of incentives. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 74: Participant Perceptions of Incentives Scores

	Participant Perceptions of Incentive Practices Score (out of 5.0)
Court L	4.3 = Strong
Court C	4.0 = Strong
Court K	5.0 = Strong
Court I	3.0 = Not Strong
Court J	3.4 = Not Strong
Court G	3.6 = Not Strong
Court E	4.8 = Strong
Court H	3.3 = Not Strong
Court B	-
Court D	4.0 = Strong
Court M	4.0 = Strong

	Participant Perceptions of Incentive Practices Score (out of 5.0)
Court A	4.2 = Strong

Table 75 shows that nine of the eleven juvenile drug courts in Michigan (81.8 percent) were rated as "strong" in parents'/caregivers' perceptions of incentives. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 75: Parent/Caregiver Perceptions of Incentives Scores

	Parents'/Caregivers' Perceptions of Incentive Practices Score (out of 5.0)
Court L	4.0 = Strong
Court C	4.7 = Strong
Court K	5.0 = Strong
Court I	4.7 = Strong
Court J	4.2 = Strong
Court G	3.7 = Not Strong
Court E	4.7 = Strong
Court H	2.9 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.4 = Strong
Court A	4.0 = Strong

Ratio of Incentives to Sanctions: Some adult drug court studies (e.g. Gendreau, 1996) have found that a 4:1 ratio of incentives to sanctions was associated with significantly better outcomes among offenders. Michigan juvenile drug courts have a ratio of 10.1 incentives to 4.5 sanctions, applying the research-based ratio this is approximately 2.24 incentives to 1 sanction. Michigan juvenile drug courts could improve on the number of incentives given relative to the number of sanctions.

Treatment Adjustments. Treatment adjustments are not sanctions, but are therapeutic responses to treatment related issues. All twelve programs utilized treatment adjustments (see *Table 76*). All the courts utilized increased individual treatment as a treatment adjustment, 92 percent utilized residential treatment, 83 percent utilized family counseling, and 67 percent utilized increased group treatment sessions.

Table 76: Treatment Adjustments Used by Michigan Juvenile Drug Courts

	Number of Courts	% of Courts
Increased individual treatment sessions	12	100%
Residential treatment	11	92%
Family counseling	10	83%
Increased group treatment sessions	8	67%

Other*	3	25%

*Other includes anger management treatment, individual and group counseling, essays, increased ancillary services, and community service hours.

Conclusion. This section illustrates the diverse nature of Michigan's Juvenile Drug Courts. The length of operation, program capacity and number of active participants varies from site-to-site. Team composition is fairly consistent among JDC programs, although the rate of attendance varies by site for some team members, specifically law enforcement representatives. Training received by JDC practitioners is lacking in several areas, including: screening and assessment; strength-based approaches to juvenile case management; adolescent development and developmental perspective; family engagement and working with caregivers; evidence based application of sanctions and incentives; and adolescent use of drugs and alcohol.

Juvenile drug court teams across the state generally scored high on the five dimensions of team collaboration: governance, administration, organizational autonomy, mutuality, and norms. For decision-making, one area needs slight improvement; team members had some concern that there are informal alliances among team members that impact decision-making. Statewide, JDC teams report favorable scores for role definition, communication, conflict resolution, and trust.

Screening and assessment practices also vary site-to-site. Fewer than half of JDC programs report using a risk/needs assessment (42 percent) or mental health assessment (33 percent) during screening and assessment and only eight percent of programs conduct a family assessment. Slightly over half of JDC programs (58 percent) target moderate- to high-risk/need youth and/or youth who are at least 14 years old. Furthermore, clinical exclusion criteria vary by site, although the most common clinical exclusion criterion is the presence of severe mental health history (67 percent of programs) and refusal to participate (50 percent of programs). Nearly all courts use similar legal exclusion criteria.

Regarding treatment services, all programs offer individual counseling and substance abuse treatment and at least three-quarters of programs offer intensive outpatient substance abuse groups, residential treatment, and substance abuse case management. At entry, most participants were assessed at the Level I Outpatient (61.4 percent) or the Level II Intensive Outpatient/Partial Hospitalization (29.7 percent) ASAM level. Although few participants were assessed as ASAM Level III Residential/Inpatient (6.6 percent), 18 percent of participants received some residential treatment. The majority of programs offer psychiatric and/or mental health evaluations and services, co-occurring treatment, outpatient treatment, case management, access to medications, and integrated substance abuse and mental health treatment. Most programs also offer a wide range of ancillary services and family engagement services.

Across the state, juvenile drug courts take varied approaches to supervision. Most programs conduct home visits and monitor curfews in all phases and use electronic monitoring as needed. Some programs do not conduct home visits or only do so as needed; some programs use electronic monitoring in all phases; and some programs only monitor curfews and use electronic monitoring as a sanction.

Most programs have a written incentive schedule and give participants a copy of the incentive schedule (92 percent of programs) but fewer programs (50 percent of programs) have a written sanction schedule and give participants a copy of the schedule. Programs also use a wide variety of sanctions, with all programs using curfew restrictions, electronic monitoring, and essays or homework assignments. The most common behaviors that result in the use of detention as a sanction are tampering with a drug screen and missing three supervision meetings. Nearly two-thirds (64.3 percent) of participants across the state received at least one incentive during their time in the program and over two-thirds (68.1 percent) of participants received at least one sanction during their participation. Moreover, nearly half of participants (43.7 percent) received at least one jail day as a sanction. Finally, participants agree that sanctions motivate them to comply with program rules and tend to agree that sanctions are used too frequently. Both participants and parents agree sanctions are used fairly and equally. Like sanctions, most JDC programs use common incentives; all programs use acknowledgement of clean time, applause/verbal praise, phase promotion, and praise from the judge.

Although some qualities and practices of Michigan juvenile drug courts are consistent across the state, many practices vary quite extensively from site-to-site. Across sites, team composition is consistent, practitioners are lacking in the training they receive, and most programs offer similar treatment, mental health, and ancillary services. Education involvement is strong across the state. Other areas, however, show the diversity of Michigan's JDCs. Programs take varied approaches to screening and assessment, clinical and legal exclusion criteria, and supervision and sanction practices.

Participant Profile

In the following section, we examine characteristics of Michigan Juvenile Drug Court participants, including demographics (gender, race, age), education and employment at entry, placement offense information, and treatment history. Prior involvement with the criminal justice system was also examined, focusing on prior arrests and convictions for both misdemeanors and felonies. The data use the full sample of juvenile drug court participants as opposed to the matched sample.

Demographics. Michigan juvenile drug court participants were 79.9 percent male and 19.8 percent female. The majority of juvenile drug court participants were 15 (35.1 percent) or 16 (43.5 percent) years old at entry. *Table 77* shows that 63.8 percent of participants were Caucasian and 25.3 percent were African American. Fewer participants were multi-racial, Hispanic or Latino, or belonged to a racial group labeled "other."

Table 77: Demographics of Juvenile Drug Court Participants

Demographics	Number of Participants	% of Participants
Gender		
Male	549	79.9%
Female	136	19.8%
Unknown	2	0.3%
Age at Entry		
12	1	0.1%
13	15	2.2%
14	81	11.8%
15	241	35.1%
16	299	43.5%
17	50	7.3%
Race		
Caucasian	438	63.8%
African American	174	25.3%
Multi-racial	34	4.9%
Hispanic/Latino	22	3.2%
Other*	19	2.7%

*Other includes Asian American/Pacific Islander, Native American, and Other.

Education Level. *Table 78* illustrates the highest educational level achieved at the time the participant entered juvenile drug court. At program entry, 27.7 percent of participants had completed eighth grade or less, 42.8 percent had completed ninth grade, 25.0 percent had completed tenth grade, and 4.5 percent had completed eleventh grade or higher.

Table 78: Educational Attainment of Participants at Entry

Last Grade Completed	Number of Participants	% of Participants
6th Grade or Less	11	1.6%
7th Grade	35	5.1%
8th Grade	144	21.0%
9th Grade	294	42.8%
10th Grade	172	25.0%
11th Grade	30	4.4%
12th Grade/GED	1	0.1%

Employment Status at Entry. *Table 79* illustrates the employment status of Michigan juvenile drug court participants at the time of program entry. Most participants were not in the labor force at the time of program entry (77.7 percent), while 17.3 percent were seeking employment but unemployed. Juvenile drug court participants who worked less than 35 hours per week (part-time workers) comprised approximately 4.9 percent of total participants.

Table 79: Employment at Juvenile Drug Court Entry

	Number of Participants	% of Participants
Not in labor force	534	77.7%
Not employed	119	17.3%
Employed part-time	34	4.9%

Drug of Choice. Upon admission into the juvenile drug court program, participants are asked to disclose their preferred drugs of choice. Information is based on self-report but may be interpreted by staff considering other available information, such as the drug involved in the offense at referral and the results of baseline drug tests at intake. It is important to note that not all participants are forthcoming about the nature and extent of their drug use at intake or assessment and this may become clearer once the participant is involved in the program. In addition, preference for multiple drugs is common among participants. Most juvenile drug court participants reported marijuana as the drug of choice (89.7 percent) (see *Table 80)*. Participants reported use of alcohol and heroin/opiates but to a much lesser extent. Eighty-five participants (12.4 percent) reported a secondary drug of choice, the most common being alcohol (69.4 percent). For participants who reported, the average age of first drug use was 13.1 years old and the average age of first alcohol use was 11.8 years old. Nearly 5 percent (4.5 percent) of Michigan juvenile drug court participants reported a history of IV drug use.

Table 80: Drug of Choice Among Juvenile Drug Court Participants

Drug of Choice	Number of Participants	% of Participants
Marijuana	616	89.7%
Alcohol	40	5.8%
Heroin/Opiates	8	1.2%
Poly Drug	6	0.9%
Methamphetamines/Amphetamines	4	0.6%

Drug of Choice	Number of Participants	% of Participants
Cocaine/Crack Cocaine	3	0.4%
Other*	10	1.5%

* "Other" includes barbiturates, benzodiazepines, hallucinogens and inhalants

Conclusion. This section examined a variety of characteristics of those being served in the juvenile drug courts in Michigan. Demographics suggest the typical juvenile drug court participant is a 15- or 16-year-old Caucasian male. Over half of juvenile drug court participants have completed ninth or tenth grade at entry and were not in the labor force at entry. Juvenile drug court participants reported marijuana as the most common drug of choice, although preference for multiple drugs is common among participants. The reported average age of participants' first drug use was 13.1 years old and their reported average age of first alcohol use was 11.8 years old.

Short-Term Outcomes

Short-term outcomes are an important measure of court program effectiveness and, as shown earlier in the logic model, favorable short-term outcomes are essential to favorable long-term impacts. The following section describes sobriety during the juvenile drug court program, education at program entry and program completion, and employment at program entry and program completion. The section concludes with an analysis of program completion rates and type.

Sobriety. Sobriety, both during and after juvenile drug court participation, is a goal of all juvenile drug courts because it fosters rehabilitation, public safety, and accountability. As shown in *Table 81*, the majority of participants (84.3 percent) tested positive for drugs and/or alcohol at some point in the program. Significantly fewer participants who went on to graduate (77.2 percent) tested positive for drugs and/or alcohol at some point in the program compared to participants who were eventually terminated from the program (92.1 percent). Overall, 16.8 percent of all drug or alcohol tests were positive, although the difference between the rate of positive screens for graduates (7.7 percent) was significantly lower than the rate of positive drug screens for non-graduates (25.8 percent).

Table 81: In-Program Positive Drug Tests

	Percent of participants who tested positive at least once while in drug court	Percent of all drug/alcohol tests that were positive
All participants (N=687)	84.3%	16.8%
Graduates (n=337)	77.2%***	7.7%***
Non-Graduates (n=302)	92.1%***	25.8%***

*** p < .001

Table 82 shows the average number of days to the first positive drug or alcohol screen for the 579 participants who tested positive at least once during their time in the program. For all participants who tested positive at least once, the average number of days from entry to their first positive screen was 49.9 days. Graduates had significantly fewer positive tests overall (9.2) compared to non-graduates (12.9).

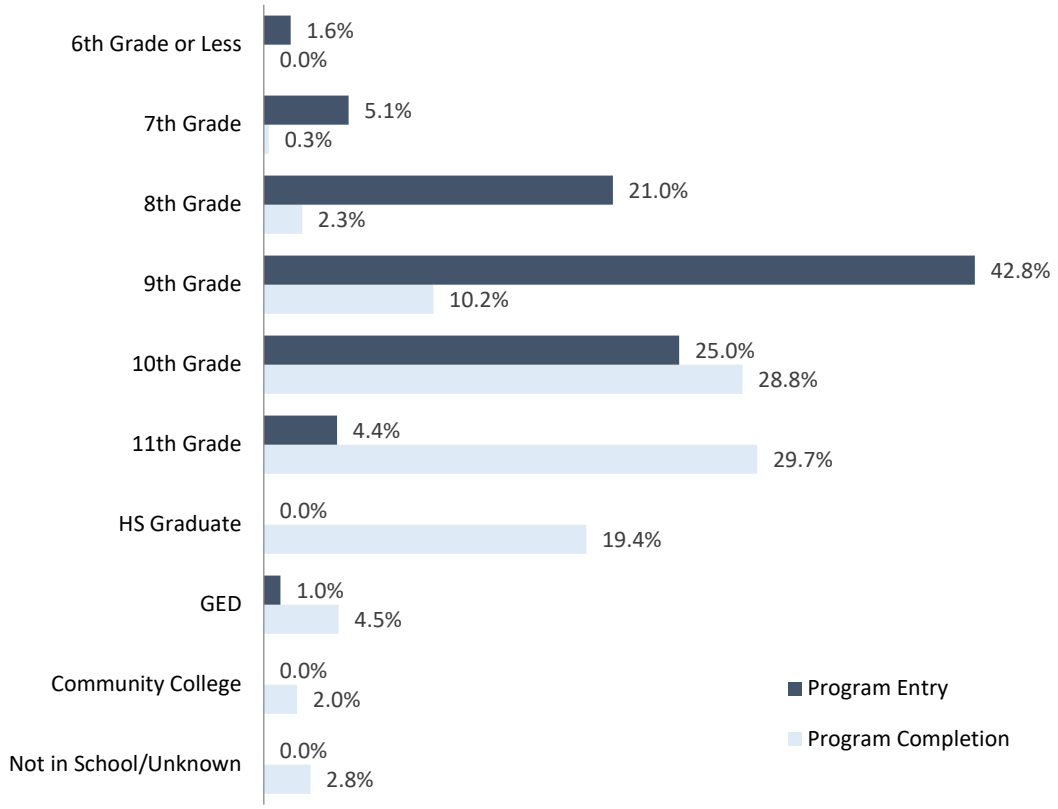
Table 82: In-Program Sobriety by Participant Closure Type

Type of Program Completion	Average number of days to first positive screen N=579	Average # of positive drug/alcohol tests per participant N=579
All participants	49.9	11.0
Graduates	68.5***	9.2***
Non-Graduates	34.8***	12.9***

*** p < .001

Education. *Figure 3* illustrates the highest educational level achieved at the time the participant entered and completed the juvenile drug court. At program entry, 27.7 percent of participants had completed eighth grade or less, 42.8 percent had completed ninth grade, 25.0 percent had completed tenth grade, and 4.5 percent had completed eleventh grade or higher. At program completion, the majority of participants had completed tenth grade or higher, with 28.8 percent completing tenth grade, 29.7 percent completing eleventh grade, 19.4 percent graduating from high school and 4.5 obtaining a GED. Two percent of juvenile drug court participants completed community college by the time they completed the program.

Figure 3: Participants' Educational Attainment at Program Entry and Program Completion



Most juvenile drug court participants experienced improvements in educational attainment during their participation in juvenile drug court. As shown in *Table 83*, the majority of participants (89.4 percent) experienced an improvement in their educational attainment from program entry to program completion, with smaller proportions experiencing no change in educational attainment (10 percent). Moreover, significantly more graduates experienced improvements in their educational attainment between program entry and program completion compared to non-graduates.

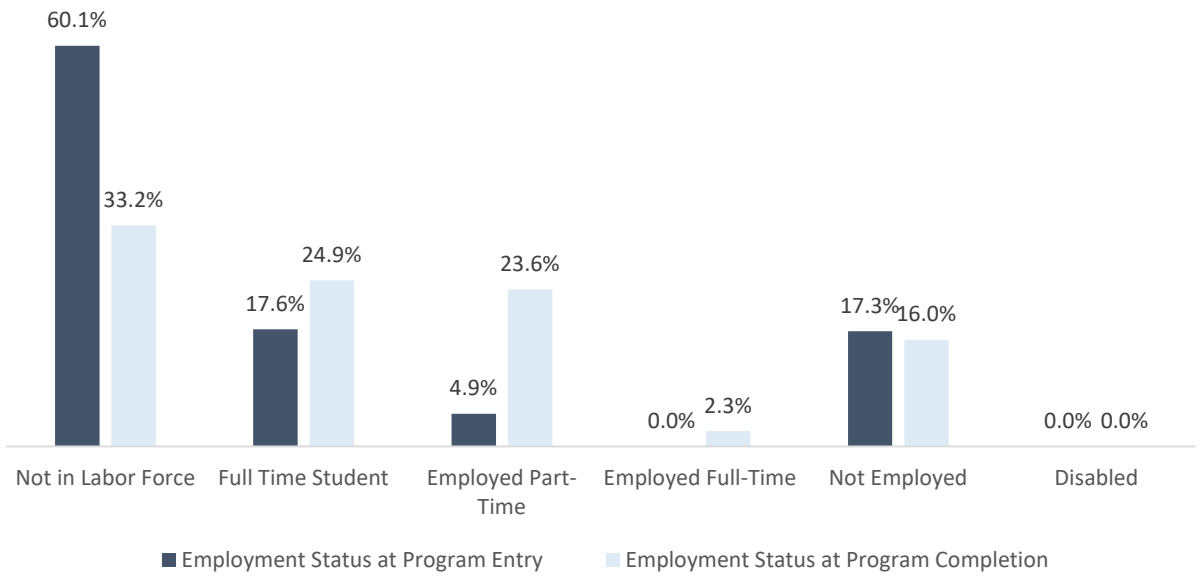
Table 83: Changes in Education from Program Entry to Program Completion

			Completion Status			
	All Participants N=687	**%**	**Graduates** n=337	**%**	**Non-Graduates** n=302	**%**
No Change	69	10.0%	10	3.0%	47	15.6%
Improvement	614	89.4%	327	97.0%***	251	83.1%***
Unknown	4	0.6%	0	0.0%	4	1.3%

*** p < .001

Employment. *Figure 4* examines gains in employment, another key interim outcome area for participants in juvenile drug courts. Approximately 60 percent of all participants (graduates and non-graduates) were not in the labor force when they entered the juvenile drug court program, while 33.2 percent of all participants left the juvenile drug court not in the labor force.

Figure 4: Employment Status of Juvenile Drug Court Participants at Program Entry and Program Completion



Half of juvenile drug court participants did not experience any change in their employment status between entry into and completion of juvenile drug court. As shown in *Table 84*, half (50.9 percent) of participants experienced no change in their employment status from program entry to completion, nearly one-fifth of participants (17.6 percent) experienced a decline in their employment status during participation, and nearly one-third of participants (30.9 percent) experienced a gain in employment status. Moreover, significantly more graduates experienced improvements in their employment status between program entry and program completion compared to non-graduates, while the majority of non-graduates experienced no change.

Table 84: Changes in Employment from Program Entry to Program Completion

	All Participants N=687	%	Completion Status: Graduates n=337	%	Non-Graduates n=302	%
Worsen	121	17.6%	61	18.1%	51	16.9%
No Change	350	50.9%	120	35.6%***	197	65.2%***
Improvement	212	30.9%	156	46.3%***	50	16.6%***
Unknown	4	0.6%	0	0.0%	4	1.3%

*** p < .001

Among juvenile drug court graduates, the impact is more pronounced. Only 8.3 percent of participants who graduated from the juvenile drug court program were employed at entry and 45.0 percent were employed at program completion (see *Figure 5*). Furthermore, as displayed in *Figure 6*, significantly more graduates (45.0 percent) were employed at program completion compared to non-graduates (7.6 percent).

Figure 5: Employment Status of Juvenile Drug Court Graduates at Program Entry and Program Completion

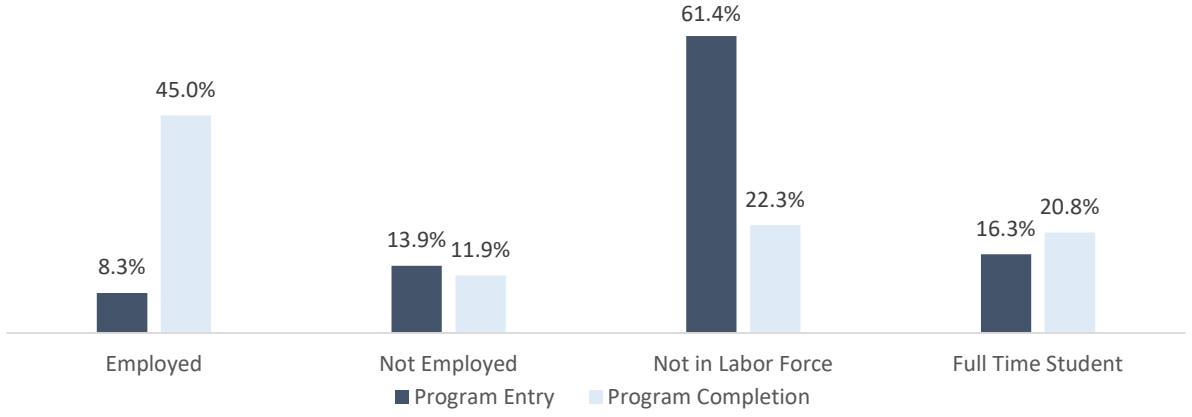
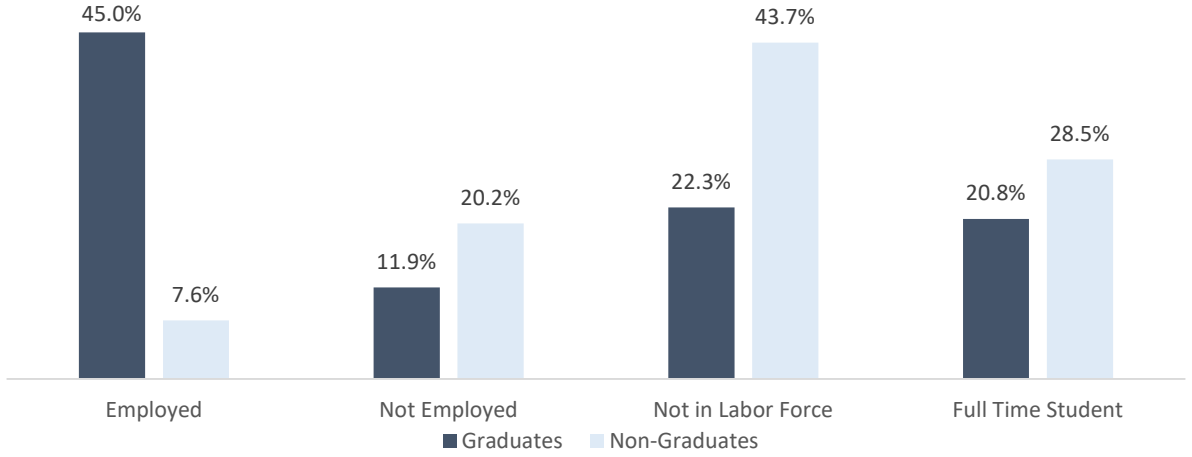


Figure 6: Employment Status of Drug Court Graduates and Non-Graduates at Program Completion



*** p < .001 Significantly fewer non-graduates were employed at exit compared to graduates.

Program Exit by Type. Approximately 49.1 percent of juvenile drug court participants exited successfully from their juvenile drug court program and 44.0 percent were terminated (see *Figure 7)*. While graduates and terminations account for 93.0 percent of participants who exited, another 7.0 percent exited by means of voluntary withdrawal, medical discharge, death, or other reasons.

Figure 7: Type of Program Exit

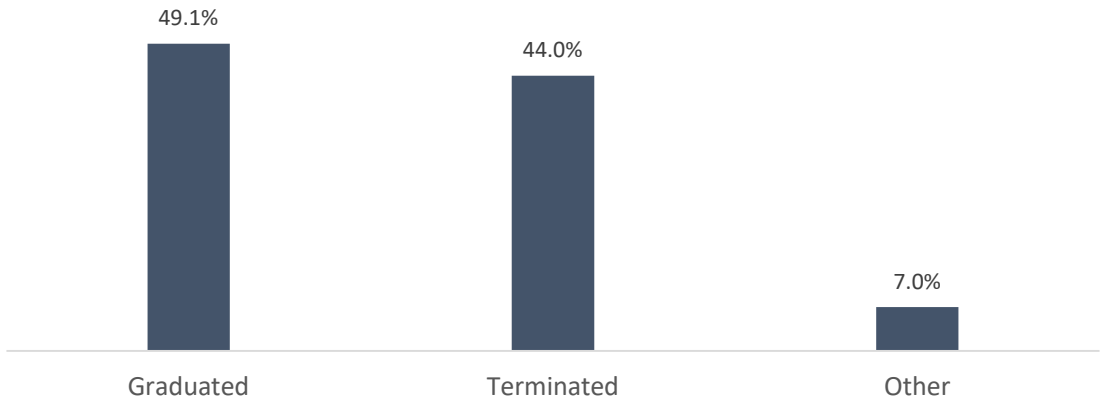


Table 85 shows the successful completion rates by court.

Table 85: Successful Completion Rates by Court

	Completion Rates		
Court Program	**N**	**Number of Graduates**	**%**
Court L	26	19	73.1%
Court C	33	14	42.4%
Court K	14	10	71.4%
Court I	23	15	65.2%
Court J	41	27	65.9%
Court G	41	21	51.2%
Court E	43	19	44.2%
Court H	101	64	63.4%
Court B	25	10	40.0%
Court D	70	30	42.9%
Court M	74	37	50.0%
Court A	196	71	36.2%
Statewide Total	**687**	**337**	**49.1%**

Graduation. *Table 86* shows that most programs require participants to complete treatment (100 percent), have a period of continuous sobriety (92 percent), be employed or enrolled in school (67 percent), have an aftercare plan (67 percent), and have positive performance in school (67 percent). For programs that require a specific period of sobriety to graduate, the most common period was 30 days (6

programs). For programs that require youth to be sanction-free for a specific period, the most common length of time was between 7 and 30 days.

Table 86: Graduation Requirements

	Number of Programs	% of Programs
Complete requirements of treatment program	12	100%
Have a period of continuous sobriety	11	92%
Employed or be enrolled in school	8	67%
Have an aftercare plan	8	67%
Positive performance in school	8	67%
Be sanction-free for a specified period of time	7	58%
Complete exit status interview	3	25%
Complete graduation application	3	25%
Have stable housing	3	25%
Payment of restitution fees per payment plan	3	25%
Employment training/vocational requirement	2	17%
Pay court costs per payment plan	2	17%
Perform community service	2	17%
Other*	2	17%

*Other includes that the participant must be sanction-free for 84 days, accomplish self-created goals, develop an approved aftercare plan, or complete "Senior Phase."

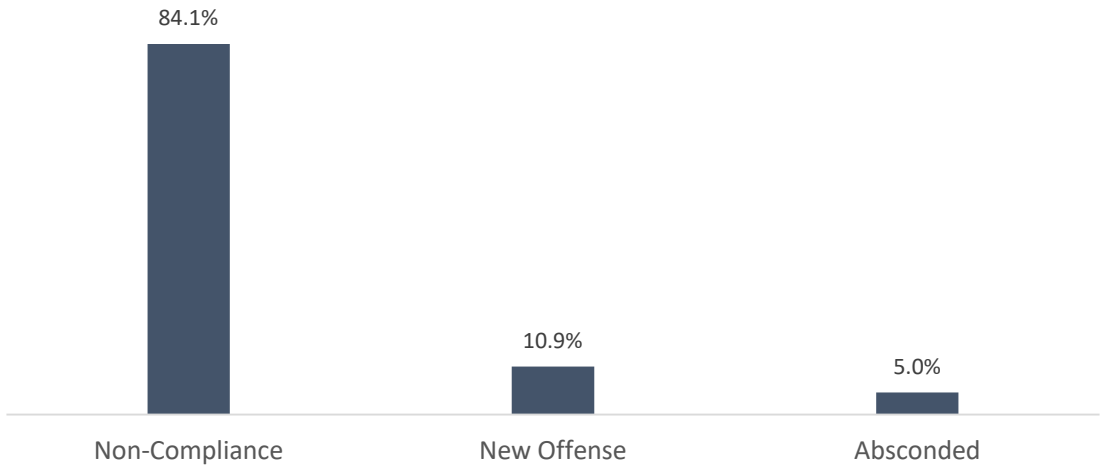
For the majority of juvenile drug courts, the legal benefit of participating in juvenile drug court is that the youth is discharged from regular probation (92 percent). For just over half the programs, the youth may also have his or her petition dismissed (58 percent) or he or she will avoid detention (50 percent) (see *Table 87*).

Table 87: Legal Benefits of Graduation

	Number of Programs	% of Programs
Youth is discharged from regular probation	11	92%
Petition is dismissed	7	58%
Avoid detention	6	50%
Charges are reduced	5	42%
Fees/Costs waived	4	33%
Reduced/suspended disposition	3	25%
Charges and conviction are expunged	2	17%
Expedited settlement or placement	1	8%
Waiving community service hours	1	8%

Termination. Non-compliance accounted for 84.1 percent of unsuccessful program terminations (see *Figure 8*). New offenses accounted for 10.9 percent of terminations and absconding accounted for 5.0 percent of terminations.

Figure 8: General Reasons for Program Termination



Participants terminated from the juvenile drug court generally served a detention sentence in 25 percent of courts. Other courts indicated that the participant may be placed in a treatment or residential placement or moved back to regular probation or discharged if it's past their seventeenth birthday. Participants may be terminated from juvenile drug court for a variety of reasons that range from new arrests to excess truancy. *Table 88* below outlines the common reasons a participant may be terminated from the juvenile drug court program.

Table 88: Behaviors that Result in Program Termination

	Number of Programs	% of Programs
Lack of progress in the program	11	92%
New arrest for violent offense	8	67%
Failure to appear in court with no excuse/multiple failures to appear	8	67%
Lack of progress in treatment	7	58%
Repeatedly missing treatment sessions	6	50%
New arrest for drug distribution/trafficking	5	42%
Repeatedly testing positive for drug or alcohol	5	42%
Excessive truancy	3	25%
Any new arrest	2	17%
Dropping out of school	2	17%
New arrest for drug possession	1	8%
New arrest for DUI	1	8%
Suspension from school	1	8%
Other*	3	25%

*Other includes when a participant lacks parental support, ages out of the juvenile court system, or when a participant is jailed in adult court.

Time in Program. The minimum length of time it takes to successfully complete a juvenile drug treatment court ranges from 3 months to 13 months with seven programs requiring a minimum of 3 to 7 months in the program. On average, all program participants (graduates and non-graduates) remained in the program an average of 319.8 days (see *Table 89*). Graduates spent nearly 12 months (362.4 days) in the program on average, with a range of 84 to 1,073 days (2.9 years). Non-graduates (terminated participants) spent close to ten months (293.0 days) in the program, with a range of 12 to 1,128 days (3.1 years) in the program. Graduates spent significantly more time in their respective programs compared to non-graduates. Nearly half of all non-graduates spent more than 8 months (240 days) in the program.

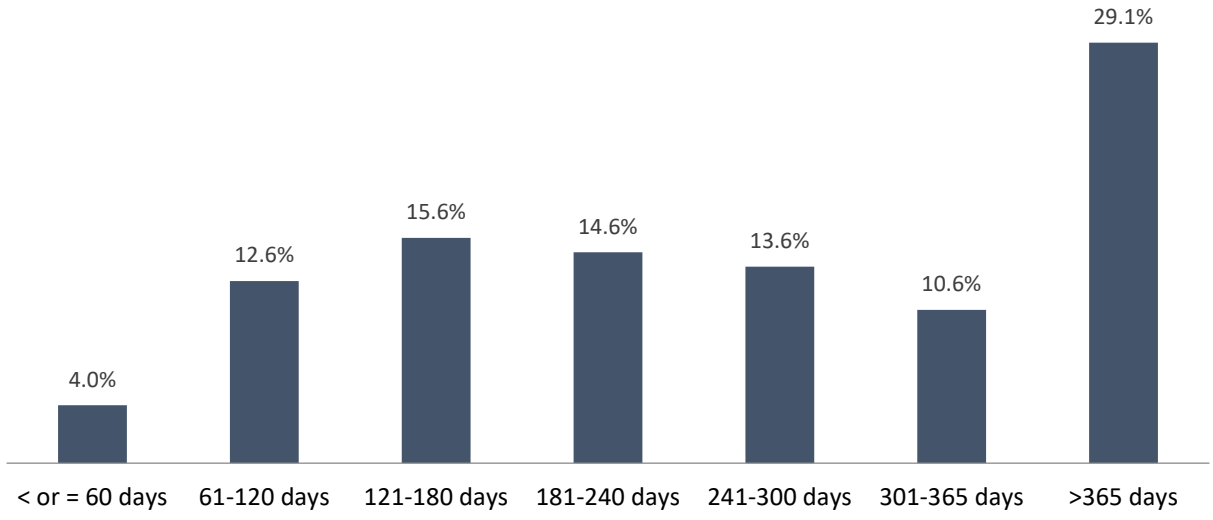
Table 89: Time in Program

	Average Length of Stay	Range
All Participants (N=687)	319.8	2 – 1,128
Graduates (N=337)	362.4***	84 – 1,073
Terminated Participants (N = 302)	293.0***	12 – 1,128

*This chart does not include the length of stay for the 48 juvenile drug court participants who were closed as "Other." "Other" includes 27 participants with unknown closure data, 19 voluntary withdrawals, and 2 medical discharges.
*** $p < .001$

A sub-analysis of the amount of time between program acceptance and termination was conducted, as shown in *Figure 9* for the 302 juvenile drug court terminations. Approximately 17 percent were terminated from the program within the first 120 days (four months) after acceptance, while over 54 percent were terminated between four months and one year after acceptance. The remaining 29.1 percent were terminated more than one year after acceptance.

Figure 9: Number of Days from Program Entry to Termination



The data reflect that participants are not routinely terminated without first having been given ample time to succeed in juvenile drug court. They also reflect that juvenile drug courts are investing resources

in participants that are for the most part terminated late in their juvenile drug court programs. Given this investment, juvenile drug courts should avoid termination, if possible. It is recommended that individual programs examine the point in time that terminations occur in their programs (similar to the analysis above) and seek to strengthen their programs at the points where most terminations occur.

Conclusion. The vast majority of Michigan juvenile drug court participants (84.3 percent) tested positive for alcohol or drugs on at least one occasion during their participation in the program. Participants who went on to successfully complete their juvenile drug court program (1) tested positive at least once during the program significantly less often than non-graduates; (2) had significantly lower percentages of positive drug tests during the program than non-graduates; (3) had a significantly longer periods of time before their first positive screen compared to non-graduates; (4) had significantly fewer positive tests during their participation compared to non-graduates; and (5) had a significantly longer periods of sobriety compared to non-graduates. Similarly, non-graduates had significantly more positive tests overall compared to graduates. Furthermore, JDC participants in general experienced improvements in educational attainment between entry and exit with more successful participants experiencing gains in education and employment between entry and exit than non-graduates. Nearly half (49.1 percent) of youth who entered a juvenile drug court program exited successfully; 44 percent of youth were terminated and seven percent exited through other means (voluntary withdraw, medical discharge, or unknown). Non-compliance was the most common reason for termination, explaining 84.1 percent of terminations, with new offenses (10.9 percent) and absconding (5.0 percent) accounting for the remaining terminations. The most common non-compliant behavior resulting in termination is lack of program progress. Regarding amount of time spent in the program, graduates spent significantly more days in the program (approximately one year) compared to non-graduates (almost ten months). In general, graduates of Michigan's juvenile drug court programs had significantly fewer positive drug tests during program participation, experienced greater improvements in education and employment, and spent more time in their program compared to non-graduates.

Procedural Justice and Strengths–Based Approaches

The NCSC evaluation team used a survey to assess components of procedural justice and the extent to which the Michigan juvenile drug courts employ a strengths-based approach. Surveys were administered to participants and parents/caregivers by the NCSC evaluation team during each site visit. This written survey was completed anonymously by participants and their parents/caregivers. A total of 76 participants and 85 family members elected to complete the survey. The surveys asked the respondent to rate their experiences. Participants and their family members were asked about their experiences with the team in areas typically associated with procedural justice such as being treated with respect, being treated fairly, and being given an opportunity to voice his or her opinion. Surveys were scored on a 5-point scale. Response options ranged from "Strongly Agree" (reflecting a score of 5) to "Strongly Disagree" (reflecting a score of 1). A copy of the participant and parent/caregiver survey can be found in the *Appendix: Data Collection Instruments*.

Procedural Justice

Researchers have identified the key elements of procedural justice to be *voice* (defendants are given the opportunity to tell their story); *respect* (litigants perceive they are treated with respect and dignity); *neutrality* (defendants believe the decision-making process is fair); *understanding* (defendants understand the decisions that are made); and *helpfulness* (defendants believe the judge and staff are interested in their personal situation) (Tyler, 1990).

In a study of legal socialization of adolescents, Fagan &Tyler (2005) found that judgments about their personal interactions with legal actors predicted their attitudes toward the legitimacy of law, which in turn, predicted self-reported delinquency. Their findings showed that adolescent's perceptions of procedural fairness are based on the degree to which they were given the opportunity to express their feelings or concerns, the neutrality and fact-based quality of the decision-making process, whether the youth was treated with respect and politeness, and whether authorities appeared to be acting out of benevolent and caring motives.

Table 90 reflects the participants' perspectives on procedural justice while *Table 91* reflects parents' and caregivers' perceptions of procedural justice. All items were coded with five (5) being the most desirable score. Items with scores in the neutral range or lower (scores below 4.0) are indicative of potential issues.

Table 90: Participant Perceptions of Procedural Justice

	Statewide Average Score	Range of Scores
The team gives me enough of a chance to say what I want to say.	4.0	3.2 – 5.0
I am given an opportunity to give feedback about the program through surveys or interviews.	4.0	3.0 – 5.0
The team treats me fairly.	3.9	2.7 – 5.0
I feel comfortable being open and honest with the team.	4.0	3.6 – 4.5

	Statewide Average Score	Range of Scores
The team treats all people and groups equally.	3.9	3.2 – 5.0
The judge's expectations of me are reasonable.	4.1	3.5 – 5.0
The judge applies rules equally and fairly to everyone.	4.0	3.0 – 5.0
The judge gives me a chance to tell my side of the story.	3.8	3.0 – 5.0
The judge treats me politely.	4.1	3.3 – 5.0
Statewide Total	**4.0**	**3.3 – 4.9**

Table 91: Parent/Caregiver Perceptions of Procedural Justice

	Statewide Average Score	Range of Scores
The team's expectations of my child are clear.	4.3	3.0 – 4.9
I feel supported by the team even when my child has setbacks.	4.1	2.9 – 4.7
The team treats my child fairly.	4.3	3.0 – 4.9
The judge's expectations of my child are reasonable.	4.4	3.0 – 5.0
The judge applies rules equally and fairly to everyone.	4.3	3.2 – 5.0
I am given an opportunity to give feedback about the program through surveys or interviews.	4.1	3.0 – 4.7
Statewide Total	**4.2**	**3.3 – 4.8**

Table 92 shows that five of the eleven juvenile drug courts in Michigan (45.4 percent) were rated as "strong" in participants' perceptions of procedural fairness. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 92: Participant Perceptions of Procedural Fairness Scores

	Participants' Perceptions of Procedural Fairness Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.2 = Strong
Court K	4.9 = Strong
Court I	3.4 = Not Strong
Court J	3.3 = Not Strong
Court G	3.8 = Not Strong
Court E	4.4 = Strong
Court H	3.5 = Not Strong
Court B	-
Court D	3.9 = Not Strong
Court M	3.7 = Not Strong
Court A	4.2 = Strong

Table 93 shows that eight of the eleven juvenile drug courts in Michigan (72.7 percent) were rated as "strong" in parents'/caregivers' perceptions of procedural fairness. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 93: Parent/Caregiver Perceptions of Procedural Fairness Scores

	Parents'/Caregivers' Perceptions of Procedural Fairness Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.7 = Strong
Court K	3.3 = Not Strong
Court I	4.5 = Strong
Court J	3.9 = Not Strong
Court G	4.3 = Strong
Court E	4.8 = Strong
Court H	3.3 = Not Strong
Court B	-
Court D	4.5 = Strong
Court M	4.3 = Strong
Court A	4.4 = Strong

Strength-Based Approach

Juvenile drug courts that use a strength-based approach identify and build on the youth and family's existing skills, competencies, and characteristics. *Table 94* reflects the participants' perspectives on the extent to which the juvenile drug court programs employ a strength-based approach while *Table 95* reflects parents' and caregivers' perceptions in this area. All items were coded with five (5) being the most desirable score. Items with scores in the neutral range or lower (scores below 4.0) are indicative of potential issues.

Table 94: Participant Perceptions of the JDC's Strength-Based Approach

	Statewide Average Score	Range of Scores
The team is respectful of me, even when I disagree with them.	4.0	3.0 – 5.0
The team is sensitive to my spiritual, community, and family values.	4.0	3.3 – 5.0
The team has allowed me to identify in ways that make me comfortable regarding race, ethnicity, sexual orientation, etc.	4.1	3.4 – 5.0
The team addresses and respects my cultural and language needs.	4.1	3.5 – 5.0
The team truly wants to help me.	4.2	3.4 – 5.0
The team recognizes my positive attributes and achievements.	4.2	3.5 – 5.0
I feel supported by the team even when I have setbacks.	4.0	3.3 – 5.0
The judge acknowledges my strengths and positive behavior at court hearings.	4.0	3.2 – 4.5
Statewide Total	**4.1**	**3.5 – 4.9**

Table 95: Parent/Caregiver Perceptions of the JDC's Strength-Based Approach

	Statewide Average Score	Range of Scores
The team is respectful of me, even when I disagree with them.	4.3	3.0 – 4.8
The team is sensitive to my spiritual, community, and family values.	4.2	3.3 – 5.0
The team addresses and respects my cultural and language needs.	4.3	3.6 – 5.0
The judge acknowledges my child's strengths and positive behavior at court hearings.	4.4	3.8 – 4.8
Statewide Total	**4.3**	**3.4 – 4.8**

Table 96 shows that nine of the eleven juvenile drug courts in Michigan (81.7 percent) were rated as "strong" in participants' and parents'/caregivers' perceptions of strength-based approaches. One court did not participate in the surveys. Additional details about scoring can be found in the *Appendix*.

Table 96: Participant and Parent/Caregiver Perceptions of Strength-Based Approach Scores

	Participants' and Parents'/Caregivers' Perceptions of Strength-Based Approach Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.4 = Strong
Court K	4.3 = Strong
Court I	4.2 = Strong
Court J	3.8 = Not Strong
Court G	4.3 = Strong
Court E	4.6 = Strong
Court H	3.5 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.1 = Strong
Court A	4.2 = Strong

Conclusion. In general, participants have favorable perceptions of procedural justice in their juvenile drug court program. Participants generally agree they have a chance to voice what they want to say; the team treats them fairly; they are comfortable being honest with the team; and the judge has reasonable expectations and treats everyone fairly and politely. Participants are less likely to agree, however, that the team treats them and all people and groups fairly and that the judge gives them an opportunity to voice their side of the story. Alternatively, parents and caregivers have consistently favorable perceptions of procedural justice, scoring above 4.0 on each item in the survey. Parents believe there are clear expectations, the rules are applied fairly to everyone, and they have opportunities to provide feedback. Moreover, both participants and parents generally agree that the JDC team uses a strength-based approach, focusing on respect, recognition, support, and identity.

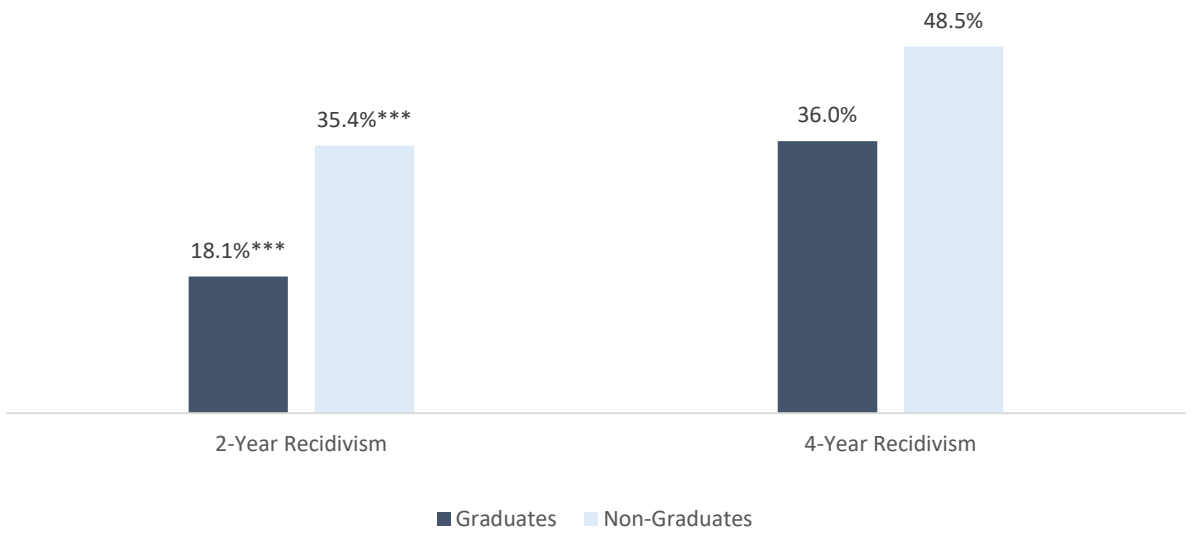
Recidivism Rates of the Juvenile Drug Court Participants by Program Completion Type

One of the most important and interesting outcomes of a drug court program is the rate of participants reoffending during and after the program. The Michigan State Court Administrative Office (SCAO) defines recidivism with two definitions and in two timeframes. First, recidivism is broadly defined as *any new conviction* falling within the following offense categories: violent offenses; controlled substance use or possession; controlled substance manufacturing or distribution; other drug offenses; driving under the influence of drugs or alcohol first offense; driving under the influence of drugs or alcohol second offense; driving under the influence of drugs or alcohol third offense; other alcohol offenses; property offenses; breaking and entering or home invasion; nonviolent sex offenses; juvenile status offenses of incorrigible, runaway, truancy, or curfew violations; neglect and abuse civil; and neglect and abuse criminal.

Second, recidivism is narrowly defined as a *new drug or alcohol conviction* falling within the following categories: controlled substance use or possession; controlled substance manufacturing or distribution; other drug offenses; driving under the influence of drugs or alcohol first offense; driving under the influence of drugs or alcohol second offense; driving under the influence of drugs or alcohol third offense; and other alcohol offenses. Both the broad (all convictions) and narrow (drug and alcohol convictions) recidivism rates are calculated within two years and four years of entry into the juvenile drug court program. The following analysis reports recidivism rates under both definitions from both two and four years from entry. Because of the time from entry requirement, all recidivism analyses included only those juvenile drug court participants (and later their business-as-usual (BAU) comparisons) who had sufficient time from entry to recidivate.

Figure 10 displays the two-year and four-year recidivism rates for both juvenile drug court graduates and non-graduates. Within two years of entry, a significantly lower percentage of graduates (18.1 percent) reoffended at least once compared to non-graduates (35.4 percent). The pattern remained the same within four years of admission, such that a lower percentage of graduates (36.0 percent) reoffended compared to non-graduates (48.5 percent), although the difference for four-year recidivism was not significant.

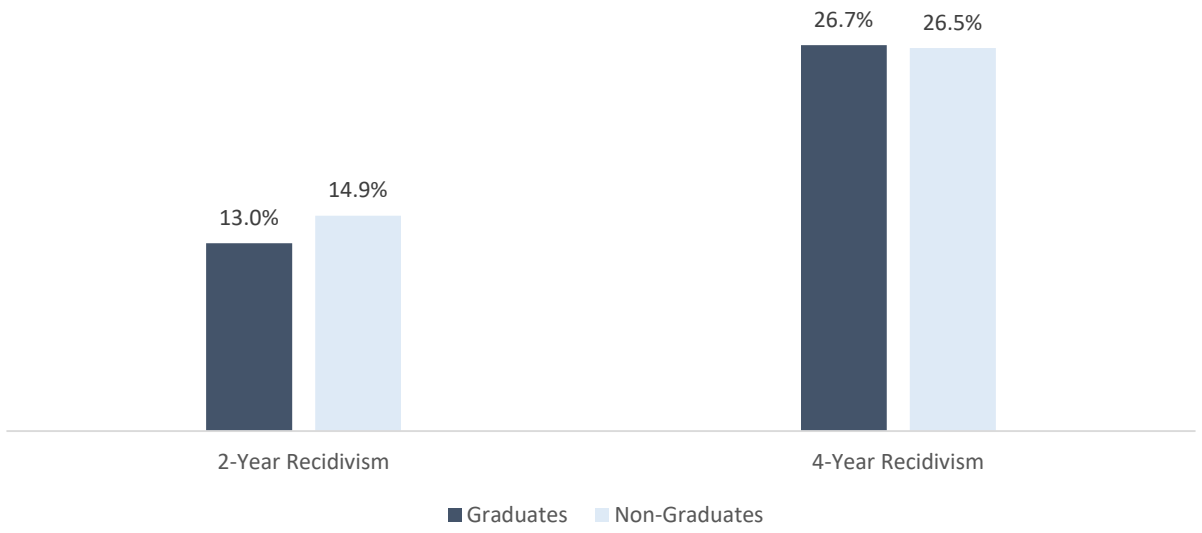
Figure 10: General Recidivism Rates for Juvenile Drug Court Graduates and Non-Graduates



*** p < .001

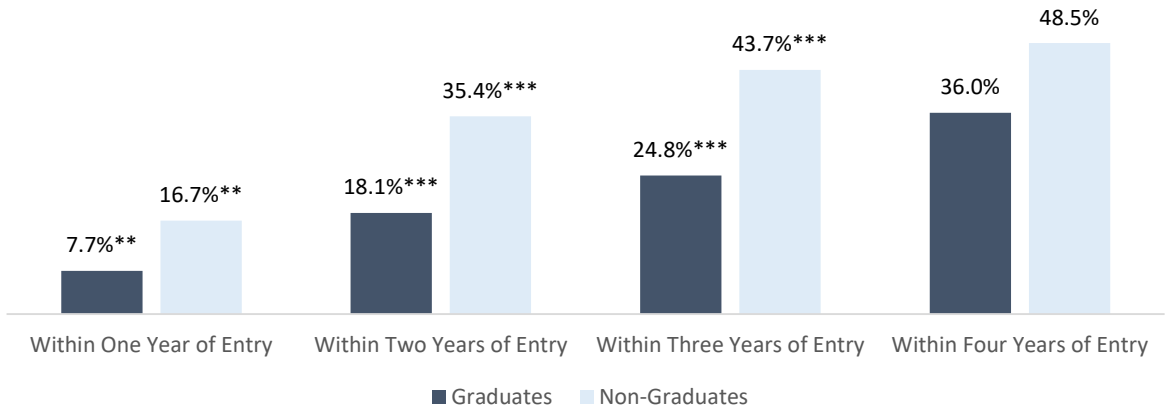
Figure 11 shows the two-year and four-year recidivism rates for juvenile drug court graduates and non-graduates for drug and alcohol convictions. Within two years of entry, fewer graduates (13.0 percent) reoffended compared to non-graduates (14.9 percent). At four years of entry, graduates (26.7 percent) reoffended with a drug or alcohol offense at equal rates to non-graduates (26.5 percent). The difference between graduates and non-graduates was not significant for either two-year or four-year recidivism.

Figure 11: Alcohol and Drug Offense Recidivism Rates for Juvenile Drug Court Graduates and Non-Graduates



Time to New Conviction Among Graduates and Non-Graduates. *Figure 12* shows that significantly more participants who went on to be non-graduates were reconvicted within one year of entry (16.7 percent) compared to graduates (7.7 percent). The pattern continues for convictions within two and three years of entry such that significantly more non-graduates were reconvicted compared to graduates. More non-graduates were reconvicted within four years compared to graduates although the difference is not significant.

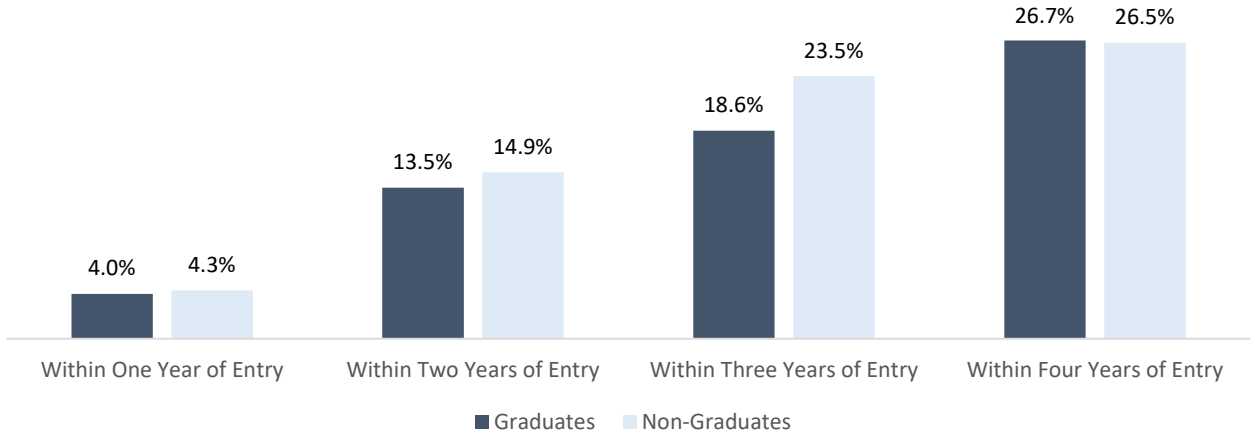
Figure 12: Recidivism Within One, Two, Three, and Four Years from Entry for Graduates versus Non-Graduates (All Convictions)



*** p < .001 ** p < .01

Figure 13 shows the drug and alcohol reconviction rates of graduates and non-graduates at one, two, three, and four years from program entry. Like all reconvictions generally, more non-graduates are reconvicted of a drug or alcohol offense at one, two, and three years' post-entry, although none of the differences are significantly different. Practically the same proportion of graduates and non-graduates were reconvicted of a drug or alcohol offense within four years of entry.

Figure 13: Recidivism Within One, Two, Three, and Four Years from Entry for Graduates versus Non-Graduates (Drug and Alcohol Convictions)



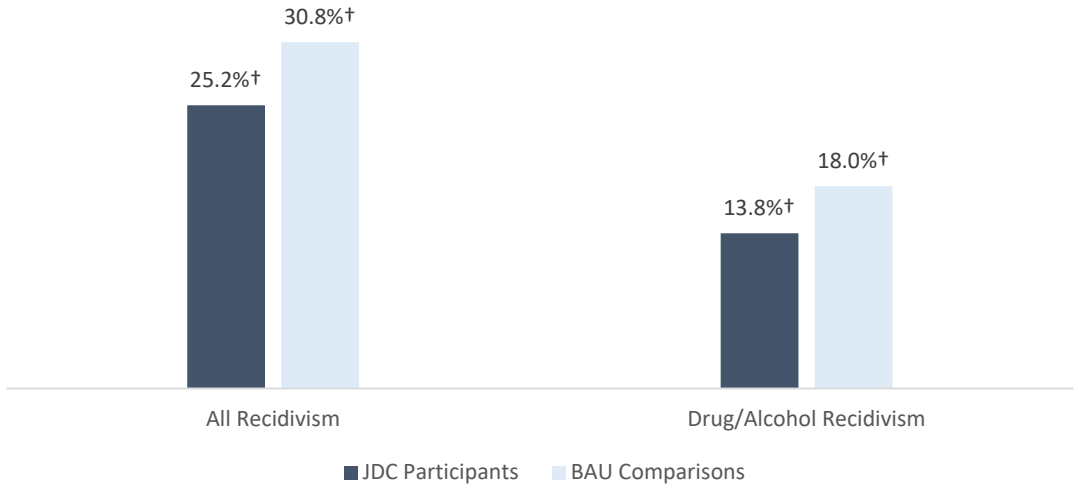
Conclusion. In general, significantly fewer juvenile drug court graduates reoffended within one, two, and three years of entry compared to non-graduates. Fewer graduates reoffended within four years' post-entry but not at a statistically significant level. Graduates and non-graduates did not reoffend at significantly different rates, however, for drug and alcohol offenses within one, two, three, or four years of entry.

Recidivism Rates of the Juvenile Drug Court Participants Compared to Business-As-Usual

To accurately and practically examine recidivism rates among juvenile drug court participants, a matched comparison group was used. The Michigan SCAO uses the Judicial Data Warehouse to match each juvenile drug court participant to a comparison person. To be considered an accurate match, the comparison person must have a matching offense in the same court as the juvenile drug court participant; the comparison person must be the same gender, fall within the same age group, year of offense group, same offense category, and number of cases in the previous two years must fall within the same range as the juvenile drug court participant. To be matched to a juvenile drug court participant, the comparison group person must not have previously participated in any juvenile drug court program or had a violent offense on his or her record.

Only juvenile drug court participants who had a matched comparison person were included in the following analyses. *Figure 14* displays the two-year recidivism rates for juvenile drug court participants and their business as usual (BAU) comparisons. For all recidivism, more BAU comparison people were reconvicted of an offense within two years of entry (30.8 percent) compared to juvenile drug court participants (25.2 percent) at a level approaching significance. Similarly, for drug and alcohol recidivism, more BAU comparison people were reconvicted of a drug or alcohol offense within two years of entry (18.0 percent) compared to juvenile drug court participants (13.8 percent) at a level approaching significance.

Figure 14: Two-Year Recidivism Rate for Juvenile Drug Court Participants and Comparison Group



† p < .10

Table 97 shows a break-down of recidivism rates at two years by court.

Table 97: Two-Year Recidivism Rates by Court

	Two-Year Recidivism Rates		
Court Program	**N**	**JDC**	**BAU**
Court L	18	50.0%	44.4%
Court C	23	47.8%	52.2%
Court K	12	25.0%*	66.7%*
Court I	12	25.0%	25.0%
Court J	25	24.0%	16.0%
Court G	27	11.1%	25.9%
Court E	33	27.3%	45.5%
Court H	88	20.5%†	31.8%†
Court B	15	46.7%	46.7%
Court D	52	25.0%	34.6%
Court M	-	-	-
Court A	123	21.1%	17.9%
Statewide Total	**428**	**25.2%†**	**30.8%†**

* $p < .05$ † $p < .10$

For four-year recidivism rates**,** more BAU comparison people were reconvicted of an offense within four years of entry (48.0 percent) compared to juvenile drug court participants (41.3 percent) for all recidivism (see *Figure 15*)**.** Regarding drug and alcohol recidivism specifically, more BAU comparison people (30.7 percent) were reconvicted of a drug/alcohol offense within four years of entry compared to juvenile drug court participants (25.3 percent). Neither comparison was a significant difference.

Figure 15: Four-Year Recidivism Rate for Drug Court Participants and Comparison Group

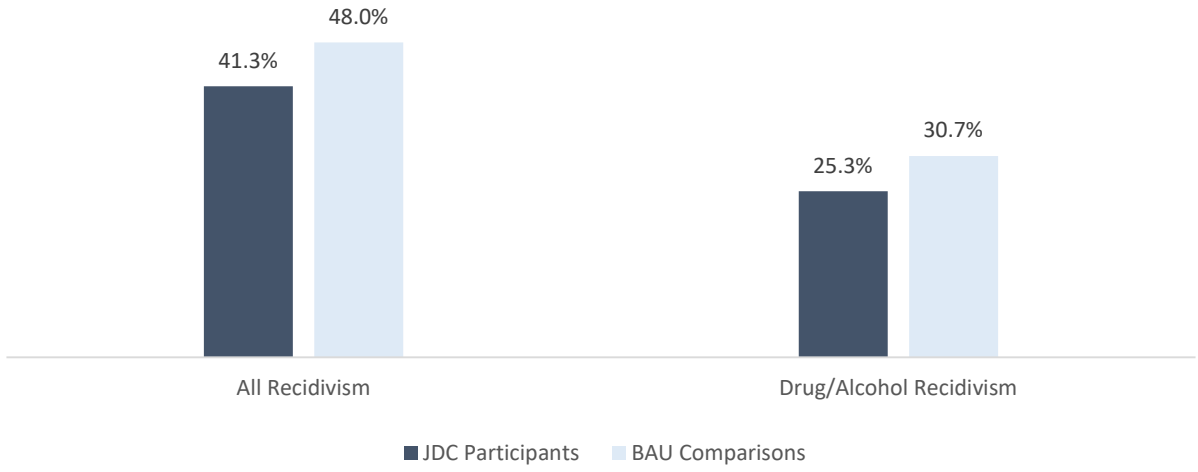


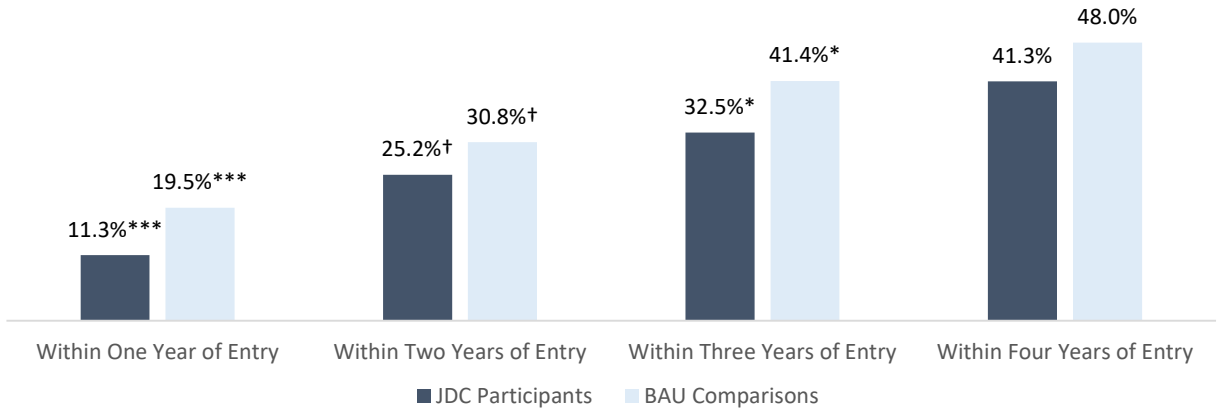
Table 98 shows a break-down of recidivism rates at four years by court.

Table 98: Four-Year Recidivism Rates by Court

	Four-Year Recidivism Rates		
Court Program	**N**	**JDC**	**BAU**
Court L	9	77.8%	55.6%
Court C	9	55.6%	66.7%
Court K	5	40.0%	80.0%
Court I	4	50.0%	75.0%
Court J	7	42.9%	28.6%
Court G	11	54.5%	54.5%
Court E	11	45.5%	45.5%
Court H	33	27.3%	45.5%
Court B	-	-	-
Court D	13	38.5%	53.8%
Court M	-	-	-
Court A	48	37.5%	39.6%
Statewide Total	**150**	**41.3%**	**48.0%**

Time to New Conviction Among Participants and Comparisons. *Figure 16* shows more BAU comparison people were reconvicted within one year of entry (19.5 percent) compared to juvenile drug court participants (11.3 percent). The pattern continues for reconvictions within two and three years of entry such that more BAU comparison people were consistently reconvicted compared to juvenile drug court participants. The difference between juvenile drug court participants and BAU comparisons was significant for recidivism rates within one and three years of entry and approached significance within two years from entry. Although more BAU comparisons reoffended within four years of entry compared to juvenile drug court participants, the difference was not significant.

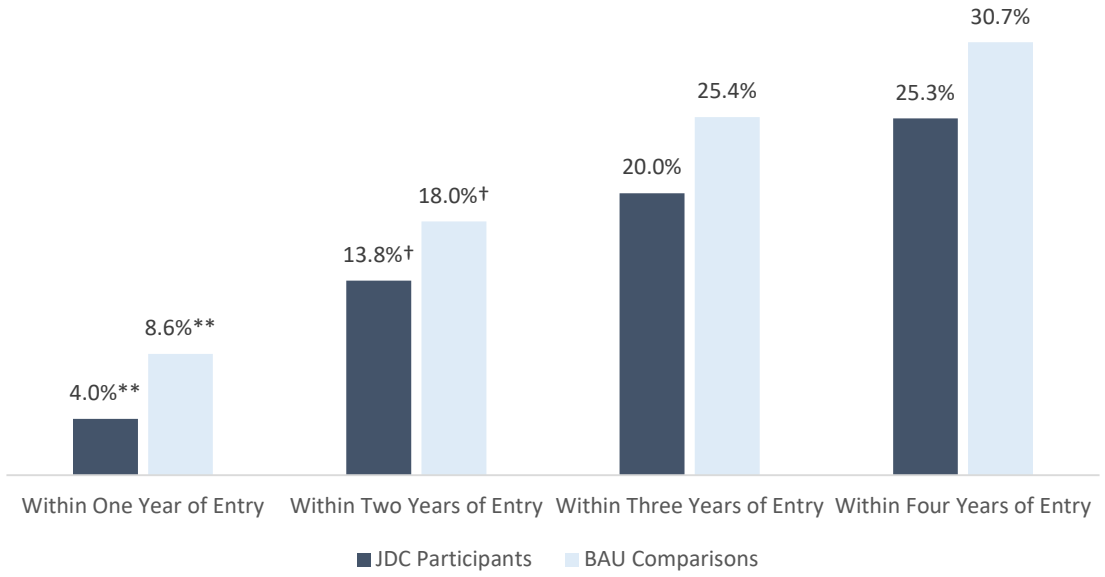
Figure 16: Recidivism Within One, Two, Three, and Four Years from Entry for Juvenile Drug Court Participants versus BAU Comparisons (All Convictions)



*** $p < .001$ * $p < .05$ † $p < .10$

Figure 17 shows that significantly more BAU comparisons were reconvicted within one year of entry (8.6 percent) compared to juvenile drug court participants (4.0 percent). The pattern continues for alcohol or drug reconvictions within two, three, and four years of entry such that more BAU comparisons were reconvicted compared to juvenile drug court participants. The difference, however, approached significance within two years of entry and is not significantly different within three or four years of entry.

Figure 17: Recidivism Within One, Two, Three, and Four Years from Entry for Juvenile Drug Court Participants versus BAU Comparisons (Drug and Alcohol Convictions)



** $p < .01$ † $p < .10$

Conclusion. Significantly fewer juvenile drug court participants reoffended within one year of program entry compared to the matched BAU comparison group. Fewer JDC participants reoffended within two years of entry compared to the matched BAU comparison group at a level approaching significance. The pattern holds true for drug and alcohol convictions, specifically, such that significantly fewer JDC participants were convicted of a new drug or alcohol offense within one year of entry compared to BAU comparisons; fewer JDC participants were convicted of a drug or alcohol offense within two years of entry at a level approaching significance.

Predicting Successful Program Completion

Both the attributes of a program and the individual characteristics of the participant may influence outcomes, such as successful program completion. To assess which program-level and individual-level variables predict successful program completion, the NCSC evaluation team conducted a hierarchical binary logistic regression, which first took into account qualities of the program and then considered characteristics of the participants. First, programs were given a dichotomous (yes or no) score on each program-level variable; the scoring scheme for program-level variables is in the *Program-Level Variables Scoring Appendix.* Next, chi-square analyses, which assess the goodness-of-fit between expected and observed values, determined which program-level variables were related to program completion; program-level variables that were significantly related (or were approaching significance) to program completion were included in the full model. The full chi-square analyses are in the *Technical Appendix: Detailed Analysis.* The program-level variables identified in the chi-square analyses and all individual-level variables were then included in the hierarchical binary logistic regression. Some program-level variables were fairly consistent across programs and, therefore, were not good predictors of program completion. Not all program-level variables appear in the full models because when program-level variables were very similar across programs, they were excluded.

One program-level variable and five participant-level variables significantly predicted successful program completion (see *Table 99)*. Controlling for all other factors entered into the model, participants who were (1) female (compared to male); (2) white (compared to black); (3) spent 288 days or more in the program; (4) received non-residential treatment only; and (5) were drug tested at least twice per week were more likely to successfully complete the program.

Table 99: Participant Variables Significantly Predicting Successful Program Completion

Participant Variables	Impact	Significance Level *p*
Gender	Female participants are 2.0 times more likely to successfully complete the JDC program compared to otherwise similar male participants.	< .05
Race – Black	Black JDC participants are 0.2 times less likely to successfully complete the JDC program compared to otherwise similar white participants.	< .001
Number of Days in Court	Participants who spend 288 days or more in the JDC are 3.2 times more likely successfully complete the JDC program compared to those who spend fewer than 288 days in the program.	< .001
Type of Treatment Received	Participants who receive non-residential treatment only are 7.2 times more likely to successfully complete the JDC program compared to those who receive any residential treatment.	< .001
Drug Tested Twice Per Week on Average	Participants who are drug tested at least twice per week on average during their time in the program are 2.1 times more likely to successfully complete the	< .01

Participant Variables	Impact	Significance Level *p*
	JDC program compared to those who are not drug tested at least twice weekly.	

Conclusion. Program educational practices and participant gender, race, length of stay, type of treatment received, and number of drug tests received predict successful completion. Specifically, youth who were (1) female; (2) white; (3) spent 288 days or more in the program; (4) did not receive residential treatment; and (5) were drug tested at least twice per week were more likely to be graduates.

Predicting Recidivism

As with predicting successful program completion, the NCSC evaluation team conducted two hierarchical binary logistic regressions to assess which program-level and individual-level variables predict recidivism among the sample of Juvenile Drug Court participants. After scoring each program on the program-level variables (as shown in the *Program-Level Variables Scoring Appendix)*, chi-square analyses determined which program-level variables were related to two-year and four-year recidivism. Program-level variables that were significantly related to recidivism were included in the full models. The full chi-square analyses are in the *Technical Appendix: Detailed Analysis.* The program-level variables identified in the chi-square analyses and all individual-level variables were then included in two hierarchical binary logistic regressions – one predicting two-year recidivism and one predicting four-year recidivism. Because some program-level variables were extremely consistent across programs and therefore not good predictors, it was not uncommon for program-level variables to drop out of the models due to collinearity. Moreover, while the sample size of participants used in the recidivism models was large enough to conduct the evaluation analysis, a larger sample size may result in more robust findings.

Two-Year Recidivism

Unlike the completion model, no program-level variables significantly predicted two-year recidivism. Six participant level variables, however, did predict two-year recidivism, as shown in *Table 100* below. Specifically, participants who (1) were 16 years old at entry or (2) 17 years old at entry compared to those who were 14 years old or younger at entry; and (3) were non-white (compared to white) were less likely to reoffend within two years. Moreover, participants who (4) entered the program with a felony offense versus a status offense; (5) had received prior substance abuse treatment; and (6) did not successfully complete the JDC program were more likely to recidivate within two years of entry.

Table 100: Participant Variables Significantly Predicting Two-Year Recidivism

Participant Variables	Impact	Significance Level *p*
Age – 16 Years Old at Entry	Participants who are 16 years old at entry are 0.4 times less likely to recidivate within two years compared to those who are 14 years old or younger at entry.	< .05
Age – 17 Years Old at Entry	Participants who are 17 years old at entry are 0.1 times less likely to recidivate within two years compared to those who are 14 years old or younger at entry.	< .05
Race	Participants who are non-white are 0.5 times less likely to recidivate within two years compared to those who are white.	< .05
Charge Type – Felony	Participants who entered the JDC on a felony charge are 6.6 times more likely to recidivate within two years compared to those who entered on a status offense.	< .05

Participant Variables	Impact	Significance Level *p*
Received Prior Substance Abuse Treatment	Participants who received prior substance abuse treatment are 5.4 times more likely to recidivate within two years compared to those who did not receive prior substance abuse treatment.	< .001
Discharge Status	Participants who did not successfully complete the JDC program are 3.5 times more likely to recidivate within two years compared to successful program completers.	< .001

Four-Year Recidivism

One program-level variable and two participant-level variables significantly predicted four-year recidivism, as shown in *Tables 101* and *102* below. Specifically, participants enrolled in programs with strong drug testing practices are less likely to reoffend within four years compared to participants in programs with weak drug testing practices and participants who had received prior substance abuse treatment were more likely to recidivate within four years of entry. The full regression models for completion, two-year recidivism, and four-year recidivism are in the *Technical Appendix: Detailed Analysis.*

Table 101: Program Variables Significantly Predicting Four-Year Recidivism

Program Variables	Impact	Significance Level *p*
Strong Drug Testing Practices	Participants enrolled in a program with strong drug testing practices are 0.1 times less likely to reoffend within four years compared to otherwise similar participants in a JDC program with weak drug testing practices.	< .05

Table 102: Participant Variables Significantly Predicting Four-Year Recidivism

Participant Variables	Impact	Significance Level *p*
Received Prior Substance Abuse Treatment	Participants who received prior substance abuse treatment are 5.9 times more likely to recidivate within four years compared to those who did not receive prior substance abuse treatment.	< .05

Conclusion. Participants who older at entry (16 or 17 years old) and non-white were less likely to reoffend within two years of entry compared to their otherwise similar counterparts. Alternatively, program drug testing practices predict recidivism within four years of entry, such that participants enrolled in programs that report having strong drug testing practices are less likely to recidivate within that time period. Participants who had received substance abuse treatment prior to program entry and were drug tested more often were more likely to reoffend within four years.

Predicting Recidivism: Comparing JDC Participants and BAU Comparisons

As with predicting successful program completion, the NCSC evaluation team conducted two hierarchical binary logistic regressions to assess the extent to which participation in the juvenile drug court (versus regular probation) affects two-year and four-year recidivism.

Two-Year Recidivism: General and Drug and Alcohol Recidivism

With only participant type (JDC participant versus BAU comparison) entered into the model, participant type approaches significance (p = .068), such that BAU comparisons were more likely to reoffend within two years compared to JDC participants. However, when other individual characteristics were entered into the model, including age at screening, charge type severity, and gender, participant type no longer approaches significance. The comparison of these two models suggests that the variance is better explained by other individual characteristics rather than participant type. The model pattern is consistent for both general two-year recidivism and drug and alcohol specific two-year recidivism and all four models are displayed in the *Technical Appendix: Detailed Analysis.*

Four-Year Recidivism: General and Drug and Alcohol Recidivism

Participant type did not significantly predict four-year recidivism when only participant type (JDC participant versus BAU comparison) was entered into the model. Moreover, when other individual characteristics were entered into the model, including age at screening, charge type severity, and gender, participant type still does not predict four-year recidivism (although gender predicts both general and drug/alcohol recidivism within four years, with females being less likely to reoffend). The comparison of these two models suggests that the variance is better explained by other individual characteristics rather than participant type. The model pattern is consistent for both general two-year recidivism and drug and alcohol specific two-year recidivism, all of which are displayed in the *Technical Appendix: Detailed Analysis*.

Conclusion. Although considering participant type alone predicts recidivism with two years, such that BAU comparisons are more likely to reoffend within two years of entry compared to JDC participants, the effect disappears when other individual characteristics enter the model. This suggests JDC participation influences recidivism generally but that variance may be better explained by individual qualities of JDC participants. Larger sample sizes and the inclusion of more individual-level variables may allow for more robust findings.

Recommendations

Based on the findings, the NCSC evaluation team offers the following recommendations:

Recommendation 1: In accordance with the national juvenile drug court guidelines, encourage all programs to adopt eligibility criteria that include the following criteria:

- **Youth with a substance use disorder, as required by Michigan law;**
- **Youth who are 14 years old or older; and**
- **Youth who have a moderate to high risk of reoffending.**

As noted previously, research findings support working with higher risk youth who are more likely to experience reductions in recidivism compared to low-risk youth. In addition, research on juvenile drug courts indicates that youth who have a substance use disorder and/or youth who are older have higher completion rates than those who merely use drugs or alcohol or are younger. Adopting Guideline 2.1 of the *Juvenile Drug Treatment Court Guidelines* (OJJDP, 2016), as listed above, will ensure that all programs are targeting a population that can benefit from the juvenile drug court program.

Recommendation 2: Identify and train staff on a set of validated risk and needs screening and assessment tools. These screening and assessment tools should be used to ensure that low-risk youth are not admitted to drug court and determine the level and types of services provided.

To ensure court programs identify and serve the high-risk/high-need population, NCSC recommends the adoption of a validated, statewide risk-needs assessment instrument for both drug court participants and probationers in general. Not only would the use of a validated assessment instrument ensure the appropriate selection of juvenile drug court participants, it would also allow staff to create case management, treatment, and supervision plans, that incorporate participants' individual needs and risk levels. The recommendation aligns with Guideline 6.4. of the *Juvenile Drug Treatment Court Guidelines* (OJJDP, 2016). Ideally the juvenile drug treatment courts will elect to use the same instrument statewide so that participant demographics and program outcomes can be measured across programs consistently.

Common risk tools include the Youth Level of Service/Case Management Inventory (YLS/CMI), the Positive Achievement Change Tool Assessment (PACT), or the youth version of the COMPAS. The YLS/CMI measures family, education, peers, substance abuse, attitudes/orientation, prior and current offenses, personality/behavior, leisure/recreation. The PACT assessment includes 12 domains including criminal history, gender, school, use of free time, employment, relationships, family/current living arrangements, alcohol and drugs, mental health, attitudes/behaviors, aggression, and skills. To assess treatment needs, a tool such as the Global Appraisal of Individual Needs (GAIN) could be considered. There are screening and full versions available. The available versions include: (1) GAIN-SS (short screener): (2) GAIN-Q; and (3) GAIN-Initial. All of the above tools are propriety and require training.

Recommendation 3: Design a training program to address gaps in staff training and orient new team members to the juvenile drug court.

The process evaluation identified that a number of staff have not received training on key juvenile drug court practices. This may be in part due to turnover in staff or lack of resources. The NCSC evaluation team recommends that the Michigan State Court Administrative Office work to develop brief trainings that can be delivered online, remotely. Some content may already exist and could be used. For example, the Center for Court Innovation maintains a virtual training system for treatment court practitioners at https://treatmentcourts.org/. This online resources for juvenile drug treatment courts is a good starting point for establishing a training program to orient new treatment court professionals. The SCAO could also produce additional webinars as needed. This work could be done in collaboration with the Michigan Association of Treatment Court Professionals, as appropriate.

Training content that can be taught effectively in a distance learning format include:

- Introduction to the *Juvenile Drug Treatment Court Guidelines*
- Strength-based approaches to juvenile case management
- Adolescent development
- Substance use and abuse among youth
- Gender differences in risk and protective factors
- Cultural competency
- Family engagement and working with caregivers
- Motivational interviewing
- Tactics youth use to avoid testing or avoid testing positive
- Interpretation of drug and alcohol tests
- Federal and state confidentiality regulations

Recommendation 4: Provide training and technical assistance to change team practice in key areas.

While virtual training is appropriate for some concepts as noted above, intensive team-based training and technical assistance is needed to change team practices. Key areas that are challenges for the Michigan juvenile drug courts, such as sanctions and incentives, are complex concepts that will require ongoing technical assistance to effectively address and implement. Two areas that are best addressed in a two day statewide or regional training designed for drug court professionals to attend as a team are:

- The effective use of sanctions, incentives and treatment adjustments.
- Effective program design (e.g. length of phases, length of program, effective drug and alcohol testing, program requirements that align with proximal and distal goals, etc.)
- Team roles and responsibilities

The NCSC evaluation team can assist with designing and delivering training in these areas if this recommendation is adopted. Additionally, courts with program-specific issues should receive training and technical assistance tailored to their specific program. This will be provided through a combination of NCSC and SCAO resources.

Recommendation 5: Review and modify, as needed, data collection in key areas.

The NCSC evaluation team identified a few areas where data collection could be refined to improve each team's ability to monitor participant outcomes. For example, ensuring that changes in assessed level of treatment needs are tracked in the database is important when assessing whether a youth receives the level of treatment that matches their assessed treatment needs. The NCSC evaluation team will review these areas in the next two months and recommend modifications, as needed.

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Appendix: Data Collection Instruments

Participant Experiences Survey

For each statement, please select the response option that best represents your opinion by filling in the box completely.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
The team is respectful of me, even when I disagree with them.						
The team is sensitive to my spiritual, community, and family values.						
The team has allowed me to identify in ways that make me comfortable regarding race, ethnicity, sexual orientation, etc.						
The team addresses and respects my cultural and language needs.						
The team truly wants to help me.						
The team recognizes my positive attributes and achievements.						
The team gives me enough of a chance to say what I want to say.						
I am given an opportunity to give feedback about the program through surveys or interviews.						
The team treats me fairly.						
I feel comfortable being open and honest with the team.						
The team treats all people and groups equally.						
I feel supported by the team even when I have setbacks.						
I have a treatment plan in place that I understand.						
The treatment staff create an environment that helps me feel comfortable in participating in discussions.						
There are enough services available to me to meet my needs (such as substance abuse services, mental health services, etc.)						
I was provided a written handbook that includes program rules and requirements that is easy to understand.						
I was provided written lists of possible behaviors that could result in incentives and sanctions.						

For each statement, please select the response option that best represents your opinion by filling in the box completely.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
Rewards and incentives used in this program motivate me to comply with program requirements.						
Rewards and incentives are used equally and fairly.						
Sanctions are imposed equally and fairly.						
The possibility of being sanctioned motivates me to comply with program rules and policies.						
Sanctions are used too frequently in this program.						
I know what the possible responses to a positive drug test may be.						
Drug testing helps me stay clean in this program.						
Court sessions are held at times that are convenient.						
The judge's expectations of me are reasonable.						
The judge acknowledges my strengths and positive behavior at court hearings.						
The judge applies rules equally and fairly to everyone.						
The judge makes me feel that I can say how I really feel about things.						
The judge gives me a chance to tell my side of the story.						
The judge treats me politely.						
The judge is knowledgeable about my case.						
Appearances before the judge help me follow program rules and requirements.						
The presence of the defense attorney in court helps to make sure my rights are represented fairly.						

I have been in the program for:	Less than one month	1 to 3 months	4 to 6 months	More than 6 months

Parent/Guardian Experiences Survey

For each statement, please select the response option that best represents your opinion by filling in the box completely.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
The team is respectful of me, even when I disagree with them.						
The program has been sensitive to my child's spiritual, community, and family values.						
The team addresses and respects my cultural and language needs.						
My child has a treatment plan in place that I understand.						
I was involved in the development of my child's treatment plan.						
The team adequately addresses my child's needs (such as substance abuse services, mental health services, etc.).						
The treatment staff create an environment that helps me feel comfortable in participating in discussions.						
I was involved in the program intake process.						
I was provided a written handbook that includes program rules and requirements that is easy to understand.						
The team's expectations of my child are clear.						
I feel supported by the team even when my child has setbacks.						
The team treats my child fairly.						
The team engages me in the sanction and incentive process.						
Rewards and incentives are used equally and fairly.						
Sanctions are imposed equally and fairly.						
The team keeps me engaged and informed between court appearances and appointments.						
Court sessions are held at times that are convenient.						
The judge's expectations of my child are reasonable.						
The judge acknowledges my child's strengths and positive behavior at court hearings.						
The judge involves me in court hearings.						
The judge applies rules equally and fairly to everyone.						
The presence of the defense attorney in court helps to make sure my child's rights are represented fairly.						
I am given an opportunity to give feedback about the program through surveys or interviews.						

Juvenile Drug Court Team Survey

What is your role on the team?

Judge
Defense Attorney
Prosecutor
Coordinator
Treatment
Probation Officer
Case Manager
School Liaison
Law Enforcement
Other (Please specify)

Please indicate your degree of agreement with each of the following statements regarding the collaboration of your JDC team.	**[Use scale: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree]**
The team decision-making process is transparent (you understand how decisions are made).	
The professional opinions of all team members are considered when decisions are made in staffing.	
Team members have the opportunity to provide input into decisions made in staffing.	
There are informal alliances among team members that impact how decisions are made.	
I understand my role on the team.	
Roles and responsibilities of team members are clearly defined.	
No single team member (or agency) dominates team decision-making.	
All relevant information about participants is shared among team members.	
The team has a means of communicating with one another in between staffing.	
I have the information I need to make decisions in staffings.	
Team members strive to achieve mutually satisfying resolutions to differences of opinion.	
Team members are comfortable respectfully challenging opinions expressed by team members, including the judge.	
The different professional philosophies of team members make it difficult for team members to work together.	
The team shares a common understanding of the goals of the program.	
Team members take their commitment to the program seriously.	
I trust the professional judgment of other team members.	
Team members trust my professional judgment.	
Team members work hard to understand each other's perspectives.	

Have you attended training as it relates to your membership on the Juvenile Drug Court Team on…	Within the last year	Within the last 1-3 years	Never
Screening and assessment, particularly relating to the development of treatment plans?			
Strength-based approaches to juvenile case management?			
Adolescent development and the developmental perspective for juvenile justice programming?			
Gender differences in risk and protective factors for juveniles?			
Cultural competence in working with youth and families?			
Family engagement and working with caregivers through a trauma-informed lens?			
Motivational interviewing?			
Evidence-based application of sanctions and incentives?			
Adolescent use of drugs and alcohol?			
Common tactics youth use to avoid testing or avoid testing positive?			
How to interpret drug and alcohol testing results?			
Federal and state law and regulations on substance abuse treatment records?			

Program-Level Variables Scoring Appendix

Table 103: Scoring Scheme for Program-Level Variables

	Scoring
Team Composition	0/3 = Not Strong 1/3 = Not Strong 2/3 = Not Strong 3/3 = Strong
Team Collaboration	< 4.0 = Not Strong ≥ 4.0 = Strong
Sanction Practices	0/2 = Not Strong 1/2 = Not Strong 2/2 = Strong
Incentive Practices	0/2 = Not Strong 1/2 = Not Strong 2/2 = Strong
Participant and Parent/Caregiver Perceptions of Sanctions and Incentives	< 4.0 = Not Strong ≥ 4.0 = Strong
Participant Perceptions of Sanction Practices	< 4.0 = Not Strong ≥ 4.0 = Strong
Participant Perceptions of Incentive Practices	< 4.0 = Not Strong ≥ 4.0 = Strong
Parent/Caregiver Perceptions of Sanction Practices	< 4.0 = Not Strong ≥ 4.0 = Strong
Parent/Caregiver Perceptions of Incentive Practices	< 4.0 = Not Strong ≥ 4.0 = Strong
Participant and Parent/Caregiver Perceptions of Strength-Based Approach	< 4.0 = Not Strong ≥ 4.0 = Strong
Educational Engagement Practices	0/3 = Not Strong 1/3 = Not Strong 2/3 = Strong 3/3 = Strong
Participant and Parent/Caregiver Perceptions of Judicial Supervision	< 4.0 = Not Strong ≥ 4.0 = Strong
Drug Testing Practices	0/4 = Not Strong 1/4 = Not Strong 2/4 = Not Strong 3/4 = Not Strong 4/4 = Strong
Family Engagement Practices	0/3 = Not Strong 1/3 = Not Strong 2/3 = Not Strong 3/3 = Strong
Parent/Caregiver Perceptions Family Engagement	< 4.0 = Not Strong ≥ 4.0 = Strong
Targeting	0/4 = Not Strong 1/4 = Not Strong

	Scoring
	2/4 = Not Strong 3/4 = Strong 4/4 = Strong
Treatment Practices	0/5 = Not Strong 1/5 = Not Strong 2/5 = Not Strong 3/5 = Not Strong 4/5 = Strong 5/5 = Strong
Participant and Parent/Caregiver Perceptions of Treatment	< 4.0 = Not Strong ≥ 4.0 = Strong
Participant Perceptions of Procedural Justice	< 4.0 = Not Strong ≥ 4.0 = Strong
Parent/Caregiver Perceptions of Procedural Justice	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 104: Percentage of Programs with Strong Program Factor Scores

	Percent of Programs
Strong Incentive Practices	91.7%
Strong Team Collaboration	91.7%
Strong Parent/Caregiver Perceptions Family Engagement	90.9%
Strong Parent/Caregiver Perceptions of Incentive Practices	81.8%
Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach	81.8%
Strong Drug Testing Practices	75.0%
Strong Team Composition	75.0%
Strong Participant and Parent/Caregiver Perceptions of Treatment Practices	72.7%
Strong Parent/Caregiver Perceptions of Procedural Justice	72.7%
Strong Targeting Practices	66.7%
Strong Family Engagement Practices	66.7%
Strong Participant Perceptions of Incentive Practices	63.6%
Strong Parent/Caregiver Perceptions of Sanction Practices	63.6%
Strong Participant and Parent/Caregiver Perceptions of Judicial Supervision	63.6%
Strong Participant Perceptions of Procedural Justice	45.5%
Strong Treatment Practices	41.7%
Strong Sanction Practices	41.7%
Strong Participant and Parent/Caregiver Perceptions of Sanctions and Incentives	36.4%
Strong Educational Engagement Practices	33.3%
Strong Participant Perceptions of Sanction Practices	9.1%

Team Composition

Table 105: Team Composition Elements

	Scores
Prosecutor attends staffing	Yes/No
Prosecutor attends court	Yes/No
Defense attends staffing/court	Yes/No

Table 106: Team Composition Scoring Scheme

	Scoring Scheme
Team Structure	0/3 = Not Strong 1/3 = Not Strong 2/3 = Not Strong 3/3 = Strong

Table 107: Team Composition Scores

	Team Composition Score (out of 3)
Court L	3 = Strong
Court C	1 = Not Strong
Court K	3 = Strong
Court I	2 = Not Strong
Court J	1 = Not Strong
Court G	3 = Strong
Court E	3 = Strong
Court H	3 = Strong
Court B	3 = Strong
Court D	3 = Strong
Court M	3 = Strong
Court A	3 = Strong

Team Collaboration

Table 108: Team Collaboration Elements

	Scores
Team decision-making process is transparent.	1 - 5
Professional opinions of all team members are considered when decisions are made in staffing.	1 - 5
Team members have opportunity to provide input into decisions made in staffing.	1 - 5
There are informal alliances among team members that impact how decisions are made.*	1 - 5
I understand my role on the team.	1 - 5
Roles and responsibilities of team members are clearly defined.	1 - 5
No single team member dominates team decision-making.	1 - 5
The different professional philosophies of team members make it difficult for team members to work together.*	1 - 5
All relevant information about participants is shared among team members.	1 - 5
The team has means of communicating with one another in between staffing.	1 - 5
I have the information I need to make decisions in staffings.	1 - 5
Team members strive to achieve mutually satisfying resolution to difference of opinion.	1 - 5
Team members are comfortable respectfully challenging opinions expressed by team members, including the judge.	1 - 5
The team shares a common understanding of the goals of the program.	1 - 5
Team members take their commitment to the program seriously.	1 - 5
I trust the professional judgment of other team members.	1 - 5
Team members trust my professional judgment.	1 - 5
Team members work hard to understand each other's perspectives.	1 - 5

*Reverse-scored item.

Table 109: Team Collaboration Scoring Scheme

	Scoring Scheme
Team Collaboration Total Score (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 110: Team Collaboration Scores

	Team Collaboration Score (out of 5.0)
Court L	4.0 = Strong
Court C	4.5 = Strong
Court K	4.7 = Strong
Court I	4.2 = Strong
Court J	4.3 = Strong
Court G	4.6 = Strong
Court E	4.5 = Strong
Court H	4.4 = Strong

	Team Collaboration Score (out of 5.0)
Court B	4.3 = Strong
Court D	4.3 = Strong
Court M	3.9 = Not Strong
Court A	4.6 = Strong

Table 111: Team Collaboration Subscores and Total by Court Program

Team Collaboration	Decision-Making	Role Definition	Communication	Conflict Resolution	Trust and Common Understanding	Total Team Collaboration Score
Court L (n=6)	4.1	4.1	3.9	4.2	4.1	4.0
Court C (n=5)	4.5	4.4	4.4	4.6	4.6	4.5
Court K (n=5)	4.7	4.6	4.7	4.8	4.8	4.7
Court I (n=7)	4.2	4.1	4.5	3.8	4.1	4.2
Court J (n=7)	4.2	4.1	4.4	4.6	4.5	4.3
Court G (n=4)	4.6	4.2	4.8	4.8	4.8	4.6
Court E (n=6)	4.4	4.2	4.7	4.6	4.5	4.5
Court H (n=5)	4.2	4.3	4.4	4.4	4.6	4.4
Court B (n=6)	4.4	4.2	4.3	4.2	4.3	4.3
Court D (n=7)	4.2	4.2	4.4	4.4	4.3	4.3
Court M (n=11)	3.7	3.8	4.2	4.0	4.0	3.9
Court A (n=13)	4.3	4.5	4.7	4.6	4.7	4.6
Total (N=82)	**4.2**	**4.2**	**4.4**	**4.4**	**4.4**	**4.3**

Sanction Practices

Table 112: Sanction Practices Elements

	Scores
Does your program have a written schedule defining which sanctions accompany given infractions?	Yes/No/Don't Know
Do participants receive a copy of the schedule so she/he is informed about which sanctions accompany given infractions?	Yes/No/Don't Know

Table 113: Sanction Practices Scoring Scheme

	Scoring Scheme
Sanction Practices	0/2 = Not Strong 1/2 = Not Strong 2/2 = Strong

Table 114: Sanction Practices Scores

	Sanction Practices Score (out of 2)
Court L	0 = Not Strong
Court C	0 = Not Strong
Court K	2 = Strong
Court I	1 = Not Strong
Court J	2 = Strong
Court G	2 = Strong
Court E	2 = Strong
Court H	1 = Not Strong
Court B	1 = Not Strong
Court D	1 = Not Strong
Court M	0 = Not Strong
Court A	2 = Strong

Incentive Practices

Table 115: Incentive Practices Elements

	Scores
Does your program have a written schedule defining which incentives are given based on positive participant behavior?	Yes/No
Do participants receive a copy of the schedule so she/he is informed about which incentives are given for positive behavior?	Yes/No

Table 116: Incentive Practices Scoring Scheme

	Scoring Scheme
Incentive Practices	0/2 = Not Strong 1/2 = Not Strong 2/2 = Strong

Table 117: Incentive Practices Scores

	Incentive Practices Score (out of 2)
Court L	2 = Strong
Court C	0 = Not Strong
Court K	2 = Strong
Court I	2 = Strong
Court J	2 = Strong
Court G	2 = Strong
Court E	2 = Strong
Court H	2 = Strong
Court B	2 = Strong
Court D	2 = Strong
Court M	2 = Strong
Court A	2 = Strong

Participant and Parent/Caregiver Perceptions of Sanctions and Incentives

Table 118: Participant and Parent/Caregiver Perceptions of Sanctions and Incentives Elements

	Scores
Participants	
I was provided a written handbook that includes program rules and requirements that is easy to understand	1 - 5
I was provided written lists of possible behaviors that could result in incentives and sanctions.	1 - 5
Rewards and incentives used in this program motivate me to comply with program requirements.	1 - 5
Rewards and incentives are used equally and fairly.	1 - 5
Sanctions are imposed equally and fairly.	1 - 5
The possibility of being sanctioned motivates me to comply with program rules and policies.	1 - 5
Sanctions are used too frequently in this program.*	1 - 5
Parents/Caregivers	
The team engages me in the sanction and incentive process.	1 - 5
Rewards and incentives are used equally and fairly.	1 - 5
Sanctions are imposed equally and fairly.	1 - 5

*Reverse-scored item.

Table 119: Participant and Parent/Caregiver Perceptions of Sanctions and Incentives Scoring Scheme

	Scoring Scheme
Participant and Parent/Caregiver Perceptions of Sanctions and Incentives (Combined Participant and Parent/Caregiver Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 120: Participant and Parent/Caregiver Perceptions of Sanctions and Incentives Scores

	Participant and Parent/Caregiver Perceptions of Sanctions and Incentives Score (out of 5.0)
Court L	3.8 = Not Strong
Court C	4.2 = Strong
Court K	4.6 = Strong
Court I	3.8 = Not Strong
Court J	3.6 = Not Strong
Court G	3.8 = Not Strong
Court E	4.6 = Strong
Court H	3.0 = Not Strong
Court B	-
Court D	4.2 = Strong
Court M	3.9 = Not Strong
Court A	3.9 = Not Strong

Participant Perceptions of Sanction Practices

Table 121: Participant Perceptions of Sanctions Elements

	Scores
Sanctions are imposed equally and fairly.	1 - 5
The possibility of being sanctioned motivates me to comply with program rules and policies.	1 - 5
Sanctions are used too frequently in this program.*	1 - 5

*Reverse-scored item.

Table 122: Participant Perceptions of Sanctions Scoring Scheme

	Scoring Scheme
Participant Perceptions of Sanction Practices (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 123: Participant Perceptions of Sanctions Scores

	Participant Perceptions of Sanction Practices Score (out of 5.0)
Court L	3.4 = Not Strong
Court C	3.4 = Not Strong
Court K	4.3 = Strong
Court I	2.7 = Not Strong
Court J	3.0 = Not Strong
Court G	3.5 = Not Strong
Court E	3.9 = Not Strong
Court H	3.0 = Not Strong
Court B	-
Court D	3.5 = Not Strong
Court M	3.3 = Not Strong
Court A	3.7 = Not Strong

Table 124: Participant Perceptions of Sanctions Only

	Sanctions are imposed equally and fairly.	The possibility of being sanctioned motivates me to comply with program rules and policies.	Sanctions are used too frequently in this program.*	**Sanctions Total**
Court L (n=4)	4.3	4.3	1.8	**3.4**
Court C (n=5)	4.0	4.3	2.0	**3.4**
Court K (n=2)	5.0	5.0	1.0	**4.3**
Court I (n=3)	2.7	3.3	2.0	**2.7**
Court J (n=8)	3.0	3.1	2.9	**3.0**
Court G (n=5)	3.6	3.8	3.0	**3.5**

*Reverse-scored item.

Participant Perceptions of Incentive Practices

Table 125: Participant Perceptions of Incentives Element

	Scores
Rewards and incentives used in this program motivate me to comply with program requirements.	1 - 5
Rewards and incentives are used equally and fairly.	1 - 5

Table 126: Participant Perceptions of Incentives Scoring Scheme

	Scoring Scheme
Participant Perceptions of Incentive Practices (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 127: Participant Perceptions of Incentives Scores

	Participant Perceptions of Incentive Practices Score (out of 5.0)
Court L	4.3 = Strong
Court C	4.0 = Strong
Court K	5.0 = Strong
Court I	3.0 = Not Strong
Court J	3.4 = Not Strong
Court G	3.6 = Not Strong
Court E	4.8 = Strong
Court H	3.3 = Not Strong
Court B	-
Court D	4.0 = Strong
Court M	4.0 = Strong
Court A	4.2 = Strong

Table 128: Participant Perceptions of Incentives Only

	Rewards and incentives used in this program motivate me to comply with program requirements.	Rewards and incentives are used equally and fairly.	**Incentives Total**
Court L (n=4)	4.3	4.3	**4.3**
Court C (n=5)	3.8	4.2	**4.0**
Court K (n=2)	5.0	5.0	**5.0**
Court I (n=3)	3.0	3.0	**3.0**
Court J (n=8)	3.6	3.5	**3.4**
Court G (n=5)	3.6	3.6	**3.6**
Court E (n=6)	4.8	4.6	**4.8**
Court H (n=6)	3.3	3.2	**3.3**
Court B (n=0)	-	-	**-**
Court D (n=9)	4.3	4.3	**4.0**
Court M (n=6)	3.8	4.2	**4.0**
Court A (n=22)	4.2	4.1	**4.2**

Parent/Caregiver Perceptions of Sanction Practices

Table 129: Parent/Caregiver Perceptions of Sanction Practices Element

	Scores
Sanctions are imposed equally and fairly.	1 - 5

Table 130: Parent/Caregiver Perceptions of Sanction Practices Scoring Scheme

	Scoring Scheme
Parent/Caregiver Perceptions of Sanction Practices (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 131: Parent/Caregiver Perceptions of Sanction Practices Scores

	Parent/Caregiver Perceptions of Sanction Practices Score (out of 5.0)
Court L	3.5 = Not Strong
Court C	4.7 = Strong
Court K	5.0 = Strong
Court I	4.7 = Strong
Court J	3.9 = Not Strong
Court G	3.7 = Not Strong
Court E	4.9 = Strong
Court H	3.0 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.1 = Strong
Court A	4.2 = Strong

Table 132: Parent/Caregiver Perceptions of Sanctions Only

	Sanctions are imposed equally and fairly.	Sanctions Total
Court L (n=4)	3.5	**3.5**
Court C (n=5)	4.7	**4.7**
Court K (n=2)	5.0	**5.0**
Court I (n=3)	4.7	**4.7**
Court J (n=8)	3.9	**3.9**
Court G (n=5)	3.7	**3.7**
Court E (n=6)	4.9	**4.9**
Court H (n=6)	3.0	**3.0**
Court B (n=0)	-	**-**
Court D (n=9)	4.4	**4.4**
Court M (n=6)	4.1	**4.1**
Court A (n=22)	4.2	**4.2**

Parent/Caregiver Perceptions of Incentive Practices

Table 133: Parent/Caregiver Perceptions of Incentives Element

	Scores
Rewards and incentives are used equally and fairly.	1 - 5

Table 134: Parent/Caregiver Perceptions of Incentives Scoring Scheme

	Scoring Scheme
Parent/Caregiver Perceptions of Incentive Practices (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 135: Parent/Caregiver Perceptions of Incentives Scores

	Parent/Caregiver Perceptions of Incentive Practices Score (out of 5.0)
Court L	4.0 = Strong
Court C	4.7 = Strong
Court K	5.0 = Strong
Court I	4.7 = Strong
Court J	4.2 = Strong
Court G	3.7 = Not Strong
Court E	4.7 = Strong
Court H	2.9 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.4 = Strong
Court A	4.0 = Strong

Table 136: Parent/Caregiver Perceptions of Incentives Only

	Rewards and incentives are used equally and fairly.	Incentives Total
Court L (n=4)	4.0	**4.0**
Court C (n=5)	4.7	**4.7**
Court K (n=2)	5.0	**5.0**
Court I (n=3)	4.7	**4.7**
Court J (n=8)	4.2	**4.2**
Court G (n=5)	3.7	**3.7**
Court E (n=6)	4.7	**4.7**
Court H (n=6)	2.9	**2.9**
Court B (n=0)	-	**-**
Court D (n=9)	4.4	**4.4**
Court M (n=6)	4.4	**4.4**
Court A (n=22)	4.0	**4.0**

Participant and Parent/Caregiver Perceptions of Strength-Based Approach

Table 137: Participant and Parent/Caregiver Perceptions of Strength-Based Approach Elements

	Scores
Participants	
The team is respectful of me, even when I disagree with them.	1 - 5
The team is sensitive to my spiritual, community, and family values.	1 - 5
The team has allowed me to identify in ways that make me comfortable regarding race, ethnicity, sexual orientation, etc.	1 - 5
The team addresses and respects my cultural and language needs.	1 - 5
The team truly wants to help me.	1 - 5
The team recognizes my positive attributes and achievements.	1 - 5
I feel supported by the team even when I have setbacks.	1 - 5
The judge acknowledges my strengths and positive behavior at court hearings.	1 - 5
Parents/Caregivers	
The team is respectful of me, even when I disagree with them.	1 - 5
The program has been sensitive to my child's spiritual, community, and family values.	1 - 5
The team addresses and respects my cultural and language needs.	1 - 5
The judge acknowledges my child's strengths and positive behavior at court hearings.	1 - 5

Table 138: Participant and Parent/Caregiver Perceptions of Strength-Based Approach Scoring Scheme

	Scoring Scheme
Participant and Parent/Caregiver Perceptions of Strength-Based Approach (Combined Participant and Parent/Caregiver Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 139: Participant and Parent/Caregiver Perceptions of Strength-Based Approach Scores

	Participant and Parent/Caregiver Perceptions of Strength-Based Approach Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.4 = Strong
Court K	4.3 = Strong
Court I	4.2 = Strong
Court J	3.8 = Not Strong
Court G	4.3 = Strong
Court E	4.6 = Strong
Court H	3.5 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.1 = Strong
Court A	4.2 = Strong

Table 140: Participant Perceptions of the JDC's Strength-Based Approach

	The team is respectful of me, even when I disagree with them.	The team is sensitive to my spiritual, community, and family values.	The team has allowed me to identify in ways that make me comfortable regarding race, ethnicity, sexual orientation, etc.	The team addresses and respects my cultural and language needs.	The team truly wants to help me.	The team recognizes my positive attributes and achievements .	I feel supported by the team even when I have setbacks.	The judge acknowledges my strengths and positive behavior at court hearings.	**Total**
Court L (n=4)	4.5	3.8	4.0	4.0	4.0	4.3	4.3	4.3	**4.1**
Court C (n=5)	4.4	3.8	4.5	4.8	4.5	4.3	3.8	4.0	**4.2**
Court K (n=2)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	**4.9**
Court I (n=3)	3.0	4.0	4.0	4.3	3.7	4.3	3.7	4.0	**3.9**
Court J (n=8)	3.4	3.3	3.4	3.5	3.4	3.6	3.5	3.5	**3.5**
Court G (n=5)	4.4	4.0	4.4	4.2	4.2	4.4	3.6	3.5	**4.1**
Court E (n=6)	4.5	4.2	4.3	4.5	4.5	4.3	4.5	4.2	**4.4**
Court H (n=6)	3.7	4.0	4.0	4.0	3.8	3.5	3.3	3.2	**3.7**
Court B (n=0)	-	-	-	-	-	-	-	-	**-**
Court D (n=9)	4.0	3.9	3.9	3.9	4.0	4.1	4.1	4.1	**4.0**
Court M (n=6)	3.7	3.8	4.3	4.2	4.2	4.3	3.7	3.8	**4.0**
Court A (n=22)	4.1	4.1	4.1	4.1	4.5	4.2	4.1	4.4	**4.2**

Table 141: Parent/Caregiver Perceptions of the JDC's Strength-Based Approach

	The team is respectful of me, even when I disagree with them.	The team is sensitive to my spiritual, community, and family values.	The team addresses and respects my cultural and language needs.	The judge acknowledges my child's strengths and positive behavior at court hearings.	**Total**
Court L (n=4)	4.3	4.3	4.3	4.3	**4.3**
Court C (n=5)	4.7	4.7	4.7	4.7	**4.7**
Court K (n=2)	3.0	3.5	4.0	4.5	**3.8**
Court I (n=3)	3.8	3.9	3.8	4.8	**4.4**
Court J (n=8)	4.3	4.2	4.2	4.3	**4.2**
Court G (n=5)	4.7	4.5	4.8	4.0	**4.4**
Court E (n=6)	4.8	5.0	5.0	4.7	**4.8**
Court H (n=6)	3.4	3.3	3.6	3.8	**3.4**
Court B (n=0)	-	-	-	-	**-**
Court D (n=9)	4.6	4.5	4.4	4.8	**4.6**
Court M (n=6)	4.4	4.3	4.5	3.9	**4.3**
Court A (n=22)	4.4	4.1	4.3	4.3	**4.3**

Educational Engagement Practices

Table 142: Educational Engagement Practices Elements

	Scores
Educational representative attends staffing	Yes/No
Educational representative attends court	Yes/No
Program has a court school	Yes/No

Table 143: Educational Engagement Practices Scoring Scheme

	Scoring Scheme
Educational Engagement Practices	0/3 = Not Strong 1/3 = Not Strong 2/3 = Strong 3/3 = Strong

Table 144: Educational Engagement Practices Scores

	Educational Engagement Practices Score (out of 3)
Court L	0 = Not Strong
Court C	1 = Not Strong
Court K	3 = Strong
Court I	3 = Strong
Court J	0 = Not Strong
Court G	0 = Not Strong
Court E	2 = Strong
Court H	0 = Not Strong
Court B	0 = Not Strong
Court D	0 = Not Strong
Court M	0 = Not Strong
Court A	2 = Strong

Participant and Parent/Caregiver Perceptions of Judicial Supervision

Table 145: Participant and Parent/Caregiver Perceptions of Judicial Supervision Elements

	Scores
Participants	
Court sessions are held at times that are convenient.	1 - 5
The judge makes me feel that I can say how I really feel about things.	1 - 5
The judge is knowledgeable about my case.	1 - 5
Appearances before the judge help me follow program rules and requirements.	1 - 5
Parents	
Court sessions are held at times that are convenient.	1 - 5
The judge involves me in court hearings.	1 - 5

Table 146: Participant and Parent/Caregiver Perceptions of Judicial Supervision Scoring Scheme

	Scoring Scheme
Participant and Parent/Caregiver Perceptions of Judicial Supervision (Combined Participant and Parent/Caregiver Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 147: Participant and Parent/Caregiver Perceptions of Judicial Supervision Scores

	Participant and Parent/Caregiver Perceptions of Judicial Supervision Score (out of 5.0)
Court L	4.1 = Strong
Court C	4.1 = Strong
Court K	4.2 = Strong
Court I	3.9 = Not Strong
Court J	3.6 = Not Strong
Court G	3.8 = Not Strong
Court E	4.4 = Strong
Court H	3.5 = Not Strong
Court B	-
Court D	4.3 = Strong
Court M	4.2 = Strong
Court A	4.1 = Strong

Table 148: Participant Perceptions of the JDC's Judicial Supervision

	Court sessions are held at times that are convenient.	The judge makes me feel that I can say how I really feel about things.	The judge is knowledgeable about my case.	Appearances before the judge help me follow program rules and requirements.	**Total**
Court L (n=4)	4.0	4.3	4.3	4.0	**4.1**
Court C (n=5)	3.8	4.3	4.2	3.8	**4.0**
Court K (n=2)	4.5	4.5	5.0	4.5	**4.6**
Court I (n=3)	3.7	4.0	3.3	2.7	**3.4**
Court J (n=8)	2.8	3.3	3.5	3.3	**3.2**
Court G (n=5)	3.4	3.4	3.8	3.8	**3.6**
Court E (n=6)	3.7	4.2	4.7	4.5	**4.3**
Court H (n=6)	3.3	3.7	3.8	4.0	**3.7**
Court B (n=0)	-	-	-	-	**-**
Court D (n=9)	4.1	3.9	3.9	4.0	**4.0**
Court M (n=6)	4.7	4.0	4.0	3.7	**4.1**
Court A (n=22)	3.7	4.0	4.3	4.2	**4.0**

Table 149: Parent/Caregiver Perceptions of the JDC's Judicial Supervision

	Court sessions are held at times that are convenient.	The judge involves me in court hearings.	**Total**
Court L (n=4)	4.0	4.3	**4.1**
Court C (n=3)	4.0	4.7	**4.3**
Court K (n=2)	3.0	4.5	**3.8**
Court I (n=3)	4.3	4.7	**4.5**
Court J (n=7)	3.8	4.3	**4.1**
Court G (n=5)	3.6	4.4	**4.0**
Court E (n=7)	4.0	4.9	**4.4**
Court H (n=11)	2.9	3.9	**3.4**
Court B (n=0)	-	-	**-**
Court D (n=18)	4.3	4.6	**4.4**
Court M (n=8)	4.3	4.6	**4.3**
Court A (n=16)	3.6	4.5	**4.1**

Drug Testing Practices

Table 150: Drug Testing Practices Elements

	Scores
Drug/alcohol test at least twice per week in Phase 1.	Yes/No
The JDC employs randomized drug/alcohol testing.	Yes/No
The JDC drug tests on weekends.	Yes/No
The JDC observes specimen collection.	Yes/No

Table 151: Drug Testing Practices Scoring Scheme

	Scoring Scheme
Drug Testing Practices	0/4 = Not Strong 1/4 = Not Strong 2/4 = Not Strong 3/4 = Not Strong 4/4 = Strong

Table 152: Drug Testing Practices Scores

	Drug Testing Practices Score (out of 4)
Court L	2 = Not Strong
Court C	4 = Strong
Court K	4 = Strong
Court I	4 = Strong
Court J	2 = Not Strong
Court G	3 = Not Strong
Court E	4 = Strong
Court H	4 = Strong
Court B	4 = Strong
Court D	4 = Strong
Court M	4 = Strong
Court A	4 = Strong

Table 153: Participant Perceptions of Drug Testing

	Drug testing helps me stay clean in this program.	Total
Court L (n=4)	4.0	**4.0**
Court C (n=5)	3.8	**3.8**
Court K (n=2)	5.0	**5.0**
Court I (n=3)	3.7	**3.7**
Court J (n=8)	3.0	**3.0**
Court G (n=5)	3.8	**3.8**

	Drug testing helps me stay clean in this program.	**Total**
Court E (n=6)	4.7	**4.7**
Court H (n=6)	4.3	**4.3**
Court B (n=0)	-	**-**
Court D (n=9)	4.0	**4.0**
Court M (n=6)	4.2	**4.2**
Court A (n=22)	4.3	**4.3**

Family Engagement Practices

Table 154: Family Engagement Elements

	Scores
Does the JDC involve the participant's parent(s) or guardian(s) in drug court hearings?	Yes/No
Are parents/guardians required to attend court status hearings?	Yes/No
Is parent support group offered?	Yes/No

Table 155: Family Engagement Scoring Scheme

	Scoring Scheme
Family Engagement Practices	0/3 = Not Strong 1/3 = Not Strong 2/3 = Not Strong 3/3 = Strong

Table 156: Family Engagement Scores

	Family Engagement Practices Score (out of 3)
Court L	3 = Strong
Court C	2 = Not Strong
Court K	2 = Not Strong
Court I	2 = Not Strong
Court J	3 = Strong
Court G	3 = Strong
Court E	3 = Strong
Court H	3 = Strong
Court B	2 = Not Strong
Court D	3 = Strong
Court M	3 = Strong
Court A	3 = Strong

Parent/Caregiver Perceptions of Family Engagement Practices

Table 157: Parent/Caregiver Perceptions of Family Engagement Practices Elements

	Scores
I was involved in the development of my child's treatment plan.	1 - 5
I was involved in the program intake process.	1 - 5
I was provided a written handbook that includes program rules and requirements that is easy to understand.	1 - 5
The team keeps me engaged and informed between court appearances and appointments.	1 - 5

Table 158: Parent/Caregiver Perceptions of Family Engagement Practices Scoring Scheme

	Scoring Scheme
Parent/Caregiver Perceptions of Family Engagement Practices (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 159: Parent/Caregiver Perceptions of Family Engagement Practices Scores

	Parent/Caregiver Perceptions of Family Engagement Practices Score (out of 5.0)
Court L	4.1 = Strong
Court C	4.5 = Strong
Court K	4.5 = Strong
Court I	4.6 = Strong
Court J	4.1 = Strong
Court G	4.3 = Strong
Court E	4.8 = Strong
Court H	3.4 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.1 = Strong
Court A	4.2 = Strong

Table 160: Parent/Caregiver Perceptions of Family Engagement

	I was involved in the development of my child's treatment plan.	I was involved in the program intake process.	I was provided a written handbook that includes program rules and requirements that is easy to understand.	The team keeps me engaged and informed between court appearances and appointments.	**Total**
Court L (n=4)	4.0	4.0	4.3	4.3	**4.1**
Court C (n=3)	4.7	4.7	4.7	4.0	**4.5**
Court K (n=2)	4.6	4.4	4.6	4.3	**4.5**
Court I (n=3)	5.0	5.0	4.7	3.7	**4.6**
Court J (n=7)	4.1	4.0	4.4	3.7	**4.1**
Court G (n=5)	4.3	4.6	4.4	4.0	**4.3**
Court E (n=7)	4.9	4.4	4.9	4.9	**4.8**
Court H (n=11)	3.0	3.5	3.8	3.5	**3.4**
Court B (n=0)	-	-	-	-	**-**
Court D (n=18)	4.3	4.5	4.4	4.3	**4.4**
Court M (n=8)	3.7	4.5	4.3	3.9	**4.1**
Court A (n=16)	4.0	4.3	4.4	4.1	**4.2**

Targeting Practices

Table 161: Targeting Practices Elements

	Scores
Participants are required to be 14 years or older to be eligible.	Yes/No
Eligibility is restricted to youth with moderate to high risk of reoffending.	Yes/No
Program uses clinical substance abuse assessments to determine eligibility.	Yes/No
Participants are required to have a SA disorder to be eligible.	Yes/No

Table 162: Targeting Practices Scoring Scheme

	Scoring Scheme
Targeting Practices	0/4 = Not Strong 1/4 = Not Strong 2/4 = Not Strong 3/4 = Strong 4/4 = Strong

Table 163: Targeting Practices Scores

	Targeting Practices Score (out of 4)
Court L	1 = Not Strong
Court C	3 = Strong
Court K	4 = Strong
Court I	4 = Strong
Court J	1 = Not Strong
Court G	4 = Strong
Court E	4 = Strong
Court H	4 = Strong
Court B	3 = Strong
Court D	4 = Not Strong
Court M	2 = Not Strong
Court A	4 = Strong

Treatment Practices

Table 164: Treatment Practices Elements

	Scores
Program uses more than two substance use treatment providers.	Yes/No
Treatment provider offers at least one group that is gender-specific.	Yes/No
Program offers family treatment for substance abuse.	Yes/No
Program has access to family treatment for mental health.	Yes/No

Table 165: Treatment Practices Scoring Scheme

	Scoring Scheme
Treatment Practices	0/4 = Not Strong 1/4 = Not Strong 2/4 = Not Strong 3/4 = Strong 4/4 = Strong

Table 166: Treatment Practices Scores

	Treatment Practices Score (out of 4)
Court L	1 - Not Strong
Court C	3 - Strong
Court K	2 - Not Strong
Court I	3 - Strong
Court J	2 - Not Strong
Court G	2 - Not Strong
Court E	2 - Not Strong
Court H	2 - Not Strong
Court B	4 - Strong
Court D	3 - Strong
Court M	2 - Not Strong
Court A	3 - Strong

Participant and Parent/Caregiver Perceptions of Treatment Practices

Table 167: Elements of Participant and Parent/Caregiver Perceptions of Treatment Practices

	Scores
Participants	
I have a treatment plan in place that I understand.	1 - 5
The treatment staff create an environment that helps me feel comfortable in participating in discussions.	1 - 5
There are enough services available to me to meet my needs (such as substance abuse services, mental health services, etc.)	1 - 5
Parents	
My child has a treatment plan in place that I understand.	1 - 5
The team adequately addresses my child's needs (such as substance abuse services, mental health services, etc.).	1 - 5
The treatment staff create an environment that helps me feel comfortable in participating in discussions.	1 - 5

Table 168: Participant and Parent/Caregiver Perceptions of Treatment Practices Scoring Scheme

	Scoring Scheme
Participant and Parent/Caregiver Perceptions of Treatment Practices (Combined Parent/Caregiver and Participant Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 169: Participant and Parent/Caregiver Perceptions of Treatment Practices Scores

	Participant and Parent/Caregiver Perceptions of Treatment Practices Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.1 = Strong
Court K	4.2 = Strong
Court I	4.0 = Strong
Court J	3.7 = Not Strong
Court G	3.8 = Not Strong
Court E	4.6 = Strong
Court H	3.6 = Not Strong
Court B	-
Court D	4.4 = Strong
Court M	4.2 = Strong
Court A	4.3 = Strong

Table 170 Participant Perceptions of Treatment

Perceptions of Treatment	I have a treatment plan in place that I understand.	The treatment staff creates an environment that helps me feel comfortable in participating in discussions.	There are enough services available to me to meet my needs.	Total
Court L (n=4)	4.3	4.0	4.3	**4.2**
Court C (n=5)	4.0	4.0	3.3	**3.8**
Court K (n=2)	5.0	5.0	5.0	**5.0**
Court I (n=3)	3.3	3.7	3.3	**3.4**
Court J (n=8)	3.5	3.4	3.6	**3.5**
Court G (n=5)	3.8	3.8	3.6	**3.7**
Court E (n=6)	4.3	4.5	4.5	**4.4**
Court H (n=6)	4.2	3.8	4.3	**4.1**
Court B (n=0)	-	-	-	**-**
Court D (n=9)	4.1	4.0	3.9	**4.0**
Court M (n=6)	4.0	3.7	4.3	**4.0**
Court A (n=22)	4.3	4.4	4.5	**4.4**

Table 171: Parent/Caregiver Perceptions of Treatment

	My child has a treatment plan in place that I understand.	The team adequately addresses my child's needs.	The treatment staff create an environment that helps me feel comfortable in participating in discussions.	Total
Court L (n=4)	4.3	4.3	4.0	**4.2**
Court C (n=5)	4.7	4.7	4.7	**4.7**
Court K (n=2)	3.0	3.0	4.0	**3.3**
Court I (n=3)	4.7	4.3	4.7	**4.6**
Court J (n=8)	3.7	4.0	3.8	**3.9**
Court G (n=5)	4.0	3.4	4.4	**3.9**
Court E (n=6)	4.9	4.8	4.7	**4.8**
Court H (n=6)	3.3	3.4	3.1	**3.2**
Court B (n=0)	-	-	-	**-**
Court D (n=9)	4.6	4.5	4.5	**4.5**
Court M (n=6)	4.1	4.3	4.5	**4.3**
Court A (n=22)	4.3	4.2	4.3	**4.3**

Participant Perceptions of Procedural Fairness

Table 172: Elements of Participant Perceptions of Procedural Fairness

	Scores
The team gives me enough of a chance to say what I want to say.	1 - 5
I am given an opportunity to give feedback about the program through surveys or interviews.	1 - 5
The team treats me fairly.	1 - 5
I feel comfortable being open and honest with the team.	1 - 5
The team treats all people and groups equally.	1 - 5
The judge's expectations of me are reasonable.	1 - 5
The judge applies rules equally and fairly to everyone.	1 - 5
The judge gives me a chance to tell my side of the story.	1 - 5
The judge treats me politely.	1 - 5

Table 173: Participant Perceptions of Procedural Fairness Scoring Scheme

	Scoring Scheme
Participant Perceptions of Procedural Fairness (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 174: Participant Perceptions of Procedural Fairness Scores

	Participant Perceptions of Procedural Fairness Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.2 = Strong
Court K	4.9 = Strong
Court I	3.4 = Not Strong
Court J	3.3 = Not Strong
Court G	3.8 = Not Strong
Court E	4.4 = Strong
Court H	3.5 = Not Strong
Court B	-
Court D	3.9 = Not Strong
Court M	3.7 = Not Strong
Court A	4.2 = Strong

Table 175: Participant Perceptions of Procedural Fairness

Perceptions of Treatment	The team gives me enough of a chance to say what I want to say.	I am given an opportunity to give feedback about the program through surveys or interviews.	The team treats me fairly.	I feel comfortable being open and honest with the team.	The team treats all people and groups equally.	The judge's expectations of me are reasonable.	The judge applies rules equally and fairly to everyone.	The judge gives me a chance to tell my side of the story.	The judge treats me politely.	**Total**
Court L (n=4)	4.0	4.3	4.0	4.3	4.0	4.3	4.3	4.3	4.5	**4.2**
Court C (n=5)	4.4	4.0	4.3	4.2	3.8	4.4	4.2	4.3	4.4	**4.2**
Court K (n=2)	5.0	5.0	5.0	4.5	5.0	5.0	5.0	5.0	5.0	**4.9**
Court I (n=3)	3.3	3.0	2.7	4.0	3.3	3.7	3.0	3.3	3.7	**3.4**
Court J (n=8)	3.5	3.1	3.4	3.4	3.4	3.5	3.1	3.3	3.3	**3.3**
Court G (n=5)	3.8	3.6	3.8	3.6	3.8	3.8	3.8	3.6	4.0	**3.8**
Court E (n=6)	4.5	4.3	4.5	4.3	4.3	4.5	4.7	4.3	4.3	**4.4**
Court H (n=6)	3.2	3.5	3.2	3.7	3.2	4.0	3.5	3.7	3.7	**3.5**
Court B (n=0)	-	-	-	-	-	-	-	-	-	**-**
Court D (n=9)	4.1	3.9	3.9	4.0	4.1	4.0	4.1	3.9	3.9	**4.0**
Court M (n=6)	3.5	4.8	3.8	3.8	3.2	3.8	3.8	3.0	4.4	**3.7**
Court A (n=22)	4.1	4.2	4.2	4.1	4.2	4.4	4.1	4.0	4.2	**4.2**

Parent/Caregiver's Perceptions of Procedural Fairness

Table 176: Elements of Parent/Caregiver's Perceptions of Procedural Fairness

	Scores
The team's expectations of my child are clear.	1 - 5
I feel supported by the team even when my child has setbacks.	1 - 5
The team treats my child fairly.	1 - 5
The judge's expectations of my child are reasonable.	1 - 5
The judge applies rules equally and fairly to everyone.	1 - 5
I am given an opportunity to give feedback about the program through surveys or interviews.	1 - 5

Table 177: Parent/Caregiver's Perceptions of Procedural Fairness Scoring Scheme

	Scoring Scheme
Parent/Caregiver Perceptions of Procedural Fairness (Program Average)	< 4.0 = Not Strong ≥ 4.0 = Strong

Table 178: Parent/Caregiver's Perceptions of Procedural Fairness Scores

	Parent/Caregiver's Perceptions of Procedural Fairness Score (out of 5.0)
Court L	4.2 = Strong
Court C	4.7 = Strong
Court K	3.3 = Not Strong
Court I	4.5 = Strong
Court J	3.9 = Not Strong
Court G	4.3 = Strong
Court E	4.8 = Strong
Court H	3.3 = Not Strong
Court B	-
Court D	4.5 = Strong
Court M	4.3 = Strong
Court A	4.4 = Strong

Table 179: Parent/Caregiver's Perceptions of Procedural Fairness

	The team's expectations of my child are clear.	I feel supported by the team even when my child has setbacks.	The team treats my child fairly.	The judge's expectations of my child are reasonable.	The judge applies rules equally and fairly to everyone.	I am given the opportunity to give feedback about the program through surveys or interviews.	**Total**
Court L (n=4)	4.3	4.0	4.0	4.3	4.3	4.3	**4.2**
Court C (n=5)	4.7	4.7	4.7	4.7	4.7	4.7	**4.7**
Court K (n=2)	3.0	3.5	3.0	3.0	5.0	4.0	**3.3**
Court I (n=3)	4.7	3.7	4.7	4.7	4.7	4.7	**4.5**
Court J (n=8)	3.9	4.0	3.7	4.4	4.0	4.0	**4.0**
Court G (n=5)	4.4	4.0	4.4	4.2	4.3	3.7	**4.3**
Court E (n=6)	4.9	4.6	4.9	5.0	4.9	4.6	**4.8**
Court H (n=6)	3.6	2.9	3.4	3.9	3.2	3.0	**3.3**
Court B (n=0)	-	-	-	-	-	-	**-**
Court D (n=9)	4.6	4.5	4.6	4.5	4.5	4.3	**4.5**
Court M (n=6)	4.5	4.0	4.0	4.3	4.4	4.4	**4.3**
Court A (n=22)	4.5	4.4	4.5	4.3	4.3	4.3	**4.4**

Treatment Appendix

Table 180: Substance Abuse Treatment Hours by Completion Type – All Participants

	Mean Hours	Median Hours
All Treatment Contact Hours		
All participants (N=631)	442.5	59.0
Graduates (n=334)	381.6	67.0
Non-Graduates (n=269)	484.7	57.0
Residential Treatment Contact Hours		
All participants (N=631)	343.4	0.0
Graduates (n=334)	264.8	0.0
Non-Graduates (n=269)	401.3	0.0
All Non-Residential Treatment Contact Hours		
All participants (N=631)	99.1	38.0
Graduates (n=334)	116.8***	53.0
Non-Graduates (n=269)	83.4***	27.0

*** $p < .001$

Technical Appendix: Detailed Analysis

Table 181: Chi-Square Analyses Assessing Which Program-Level Variables Are Related to Program Completion Status

Program Variables	Completion					
	Non-Graduates		Graduates		Total	
	#	%	#	%	#	%
Strong Team Composition *Significant†:* X^2 (1, N=639) = 3.06, p = .080						
No	53	40.5%	78	59.5%	131	100.0%
Yes	249	49.0%	259	51.0%	508	100.0%
Strong Team Collaboration X^2 (1, N=639) = 0.06, p = .808						
No	35	48.6%	37	51.4%	72	100.0%
Yes	267	47.1%	300	52.9%	567	100.0%
Strong Sanction Practices *Significant:* X^2 (1, N=639) = 4.82, p = .028						
No	180	44.0%	229	56.0%	409	100.0%
Yes	122	53.0%	108	47.0%	230	100.0%
Strong Incentive Practices X^2 (1, N=639) = 1.09, p = .296						
No	18	56.3%	14	43.8%	32	0.0%
Yes	284	46.8%	323	53.2%	607	100.0%
Strong Participant and Parent/Caregiver Perceptions of Sanction and Incentive Practices X^2 (1, N=552) = 0.16, p = .692						
No	215	45.8%	254	54.2%	469	100.0%
Yes	40	48.2%	43	51.8%	83	100.0%
Strong Participant Perceptions of Sanction Practices X^2 (1, N=552) = 1.80, p = .180						
No	251	46.7%	287	53.3%	538	100.0%
Yes	4	28.6%	10	71.4%	14	100.0%
Strong Participant Perceptions of Incentive Practices *Significant:* X^2 (1, N=552) = 20.74, p < .001						
No	62	32.8%	127	67.2%	189	100.0%
Yes	193	53.2%	170	46.8%	363	100.0%
Strong Parent/Caregiver Perceptions of Sanction Practices *Significant:* X^2 (1, N=552) = 21.70, p < .001						
No	64	32.8%	131	67.2%	195	100.0%
Yes	191	53.5%	166	46.5%	357	100.0%

Program Variables	Completion					
	Non-Graduates		Graduates		Total	
	#	%	#	%	#	%
Strong Parent/Caregiver Perceptions of Incentive Practices *Significant:* X^2 (1, N=552) = 6.03, p = .014						
No	50	37.0%	85	63.0%	135	100.0%
Yes	205	49.2%	212	50.8%	417	100.0%
Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach *Significant:* X^2 (1, N=552) = 15.06, p < .001						
No	42	31.6%	91	68.4%	133	100.0%
Yes	213	50.8%	206	49.2%	419	100.0%
Strong Educational Engagement Practices *Significant:* X^2 (1, N=639) = 8.92, p = .003						
No	164	42.5%	222	57.5%	386	100.0%
Yes	138	54.5%	115	45.5%	253	100.0%
Strong Participant and Parent/Caregiver Perceptions of Judicial Supervision *Significant:* X^2 (1, N=552) = 20.74, p < .001						
No	62	32.8%	127	67.2%	189	100.0%
Yes	193	53.2%	170	46.8%	363	100.0%
Strong Program Structure X^2 (1, N=639) = 1.26, p = .261						
No	172	49.3%	177	50.7%	349	100.0%
Yes	130	44.8%	160	55.2%	290	100.0%
Strong Drug Testing Practices *Significant:* X^2 (1, N=639) = 13.18, p < .001						
No	29	30.2%	67	69.8%	96	100.0%
Yes	273	50.3%	270	49.7%	543	100.0%
Strong Family Engagement Practices X^2 (1, N=639) = 0.95, p = .330						
No	36	42.4%	49	57.6%	85	100.0%
Yes	266	48.0%	288	52.0%	554	100.0%
Strong Parent/Caregiver Perceptions of Family Engagement *Significant:* X^2 (1, N=552) = 5.71, p = .017						
No	35	35.4%	64	64.6%	99	100.0%
Yes	220	48.6%	233	51.4%	453	100.0%
Strong Targeting X^2 (1, N=639) = 1.65, p = .199						
No	87	43.5%	113	56.5%	200	100.0%
Yes	215	49.0%	224	51.0%	439	100.0%

Program Variables	Completion					
	Non-Graduates		Graduates		Total	
	#	%	#	%	#	%
Strong Treatment Practices *Significant:* X^2 (1, N=639) = 7.37, p = .007						
No	71	38.8%	112	61.2%	183	100.0%
Yes	231	50.7%	225	49.3%	456	100.0%
Strong Participant and Parent/Caregiver Perceptions of Treatment *Significant:* X^2 (1, N=552) = 15.23, p < .001						
No	57	33.7%	112	66.3%	169	100.0%
Yes	198	51.7%	185	48.3%	383	100.0%
Strong Participant Perceptions of Procedural Justice *Significant:* X^2 (1, N=552) = 16.25, p < .001						
No	97	37.2%	164	62.8%	261	100.0%
Yes	158	54.3%	133	45.7%	291	100.0%
Strong Parent/Caregiver Perceptions of Procedural Justice *Significant:* X^2 (1, N=552) = 17.90, p < .001						
No	46	31.3%	101	68.7%	147	100.0%
Yes	209	51.6%	196	48.4%	405	100.0%
Court Location Type: Rural X^2 (1, N=639) = 0.00, p = .992						
No	293	47.3%	327	52.7%	620	100.0%
Yes	9	47.4%	10	52.6%	19	100.0%

As a result of the above analysis, NCSC included all independent variables that had a significant chi-square into the regression model (although some were later excluded for collinearity). Program-level variables entered included:

- Strong Team Composition
- Strong Sanction Practices
- Strong Participant Perceptions of Incentive Practices
- Strong Parent/Caregiver Perceptions of Sanction Practices
- Strong Parent/Caregiver Perceptions of Incentive Practices
- Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach
- Strong Educational Engagement Practices
- Strong Participant and Parent/Caregiver Perceptions of Judicial Supervision
- Strong Drug Testing Practices
- Strong Parent/Caregiver Perceptions of Family Engagement
- Strong Treatment Practices
- Strong Participant and Parent/Caregiver Perceptions of Treatment
- Strong Participant Perceptions of Procedural Justice
- Strong Parent/Caregiver Perceptions of Procedural Justice

Individual variables in the model:

- Gender (male v. female)
- Age at Screening (≤ 14yo v. 15yo, 16yo, 17yo)
- Race (white v. black, multi-racial, Hispanic/Latino, Other)
- Drug of Choice (marijuana v. alcohol; marijuana v. others)
- Charge Type (status offense v. misdemeanor, felony, civil/petition/other)
- Prior Substance Abuse Treatment (no v. yes)
- Type of Treatment Received (any residential v. solely non-residential)
- Tested Twice Per Week on Average (no v. yes)
- Prior Felonies (no v. yes)
- Prior Misdemeanors (no v. yes)
- Education Completed at Admission

Table 182: Full Regression Model Predicting Completion (Non-Graduate v. Graduate)

Variables (N=518)	B	S.E.	Odds Ratio
Program Variables			
Strong Team Composition	1.723	1.061	-
Strong Sanction Practices	.553	.821	-
Strong Participant Perceptions of Incentives	-.853	1.127	-
Strong Parent/Caregiver Perceptions of Sanctions	-.825	1.870	-
Strong Parent/Caregiver Perceptions of Incentives	-.108	1.083	-
Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach	.959	1.956	-
Strong Educational Engagement Practices**	**-1.605**	**.547**	**.201**
Drug Testing Practices	1.997	1.636	-
Strong Treatment Practices	-.046	.806	-
Individual Variables			
Gender (male v. female)*	**.684**	**.291**	**1.982**
Age at Screening: ≤ 14 years old			
15 years old	-.329	.360	-
16 years old	.064	.395	-
17 years old	.255	.576	-
Race: White			
Black***	**-1.758**	**.297**	**.172**
Multi-Racial†	-.779	.474	-
Hispanic/Latino	.115	.620	-
Other	1.256	1.111	-
Drug of Choice: Marijuana			
Alcohol	.072	.597	-
Other	-.292	.618	-
Charge Type: Status Offense			
Misdemeanor†	.753	.408	-
Felony	.657	.495	-
Civil/Petition/Other	.915	.650	-
Received Prior Substance Abuse Treatment (no v. yes)	.083	.324	-
Prior Conviction(s) (no v. yes)	-.167	.282	-
Education Level at Admission (< 9th grade v. ≥ 9th grade)	-.136	.291	-
Number of Days in Court (< 288 days v. ≥ 288 days)***	**1.157**	**.231**	**3.181**
Type of Treatment Received (any residential v. non-residential only)***	**1.969**	**.352**	**7.162**
Drug Tested Twice Per Week on Average (no v. yes)**	**.762**	**.276**	**2.144**
Constant	-4.255	1.712	.014

***Significant $p < .001$, ** $p < .01$, * $p < .05$, † $p < .10$

Table 183: Chi-Square Analyses Assessing Which Program-Level Variables Are Related to Two-Year Recidivism

Program Variables	Two-Year Recidivism					
	Non-Recidivists		Recidivists		Total	
	#	%	#	%	#	%
Strong Team Composition X^2 (1, N=428) = 0.06, p = .801						
No	82	73.9%	29	26.1%	111	100.0%
Yes	238	75.1%	79	24.9%	317	100.0%
Strong Team Collaboration *N/A*						
No	0	0.0%	0	0.0%	0	0.0%
Yes	320	74.8%	108	25.2%	428	100.0%
Strong Sanction Practices X^2 (1, N=428) = 1.53, p = .216						
No	195	72.8%	73	27.2%	268	100.0%
Yes	125	78.1%	35	21.9%	160	100.0%
Strong Incentive Practices *Significant:* X^2 (1, N=428) = 6.58, p = .010						
No	12	52.2%	11	47.8%	23	100.0%
Yes	308	76.0%	97	24.0%	405	100.0%
Strong Participant and Parent/Caregiver Perceptions of Sanction and Incentive Practices *Significant:* X^2 (1, N=361) = 4.06, p = .044						
No	228	77.8%	65	22.2%	293	100.0%
Yes	45	66.2%	23	33.8%	68	100.0%
Strong Participant Perceptions of Sanction Practices X^2 (1, N=361) = 0.00, p = .959						
No	264	75.6%	85	24.4%	349	100.0%
Yes	9	75.0%	3	25.0%	12	100.0%
Strong Participant Perceptions of Incentive Practices *Significant†:* X^2 (1, N=361) = 3.07, p = .080						
No	122	80.3%	30	19.7%	152	100.0%
Yes	151	72.2%	58	27.8%	209	100.0%
Strong Parent/Caregiver Perceptions of Sanction Practices X^2 (1, N=361) = 0.39, p = .534						
No	122	77.2%	36	22.8%	158	100.0%
Yes	151	74.4%	52	25.6%	203	100.0%
Strong Parent/Caregiver Perceptions of Incentive Practices *Significant†:* X^2 (1, N=361) = 3.42, p = .064						
No	94	81.7%	21	18.3%	115	100.0%

Program Variables	Two-Year Recidivism					
	Non-Recidivists		Recidivists		Total	
	#	%	#	%	#	%
Yes	179	72.8%	67	27.2%	246	100.0%
Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach X^2 (1, N=361) = 0.88, p = .349						
No	89	78.8%	24	21.2%	113	100.0%
Yes	184	74.2%	64	25.8%	248	100.0%
Strong Educational Engagement Practices X^2 (1, N=428) = 0.99, p = .319						
No	181	73.0%	67	27.0%	248	100.0%
Yes	139	77.2%	41	22.8%	180	100.0%
Strong Participant and Parent/Caregiver Perceptions of Judicial Supervision *Significant†:* X^2 (1, N=361) = 3.07, p = .080						
No	122	80.3%	30	19.7%	152	100.0%
Yes	151	72.2%	58	27.8%	209	100.0%
Strong Program Structure X^2 (1, N=428) = 0.68, p = .408						
No	178	73.3%	65	26.7%	243	100.0%
Yes	142	76.8%	43	23.2%	185	100.0%
Strong Drug Testing Practices X^2 (1, N=428) = 0.01, p = .919						
No	52	74.3%	18	25.7%	70	100.0%
Yes	268	74.9%	90	25.1%	358	100.0%
Strong Family Engagement Practices *Significant:* X^2 (1, N=428) = 6.98, p = .008						
No	38	61.3%	24	38.7%	62	100.0%
Yes	282	77.0%	84	23.0%	366	100.0%
Strong Parent/Caregiver Perceptions of Family Engagement X^2 (1, N=361) = 0.97, p = .324						
No	70	79.5%	18	20.5%	88	100.0%
Yes	203	74.4%	70	25.6%	273	100.0%
Strong Targeting X^2 (1, N=428) = 1.16, p = .281						
No	67	70.5%	28	29.5%	95	100.0%
Yes	253	76.0%	80	24.0%	333	100.0%
Strong Treatment Practices X^2 (1, N=428) = 1.74, p = .187						
No	61	69.3%	27	30.7%	88	100.0%
Yes	259	76.2%	81	23.8%	340	100.0%

Program Variables	Two-Year Recidivism					
	Non-Recidivists		Recidivists		Total	
	#	%	#	%	#	%
Strong Participant and Parent/Caregiver Perceptions of Treatment *Significant†:* X^2 (1, N=361) = 3.22, p = .073						
No	113	80.7%	27	19.3%	140	100.0%
Yes	160	72.4%	61	27.6%	221	100.0%
Strong Participant Perceptions of Procedural Justice *Significant†:* X^2 (1, N=361) = 3.07, p = .080						
No	122	80.3%	30	19.7%	152	100.0%
Yes	151	72.2%	58	27.8%	209	100.0%
Strong Parent/Caregiver Perceptions of Procedural Justice X^2 (1, N=361) = 0.80, p = .371						
No	98	78.4%	27	21.6%	125	100.0%
Yes	175	74.2%	61	25.8%	236	100.0%
Court Location Type: Rural *Significant†:* X^2 (1, N=428) = 3.79, p = .052						
No	312	75.5%	101	24.5%	413	100.0%
Yes	8	53.3%	7	46.7%	15	100.0%

As a result of the above analysis, NCSC included all independent variables that had a significant chi-square into the regression model (although some were later excluded for collinearity). Program-level variables entered included:

- Strong Incentive Practices
- Strong Participant and Parent/Caregiver Perceptions of Sanction and Incentive Practices
- Strong Participant Perceptions of Incentive Practices
- Strong Parent/Caregiver Perceptions of Incentive Practices
- Strong Participant and Parent/Caregiver Perceptions of Judicial Supervision
- Strong Family Engagement Practices
- Strong Participant and Parent/Caregiver Perceptions of Treatment
- Strong Participant Perceptions of Procedural Justice
- Court Location Type: Rural

Individual variables in the model:

- Gender (male v. female)
- Age at Screening (≤ 14yo v. 15yo, 16yo, 17yo)
- Race (white v. non-white)
- Drug of Choice (marijuana v. alcohol; marijuana v. others)
- Charge Type (status offense v. misdemeanor, felony, civil/petition/other)

- Prior Substance Abuse Treatment (no v. yes)
- Type of Treatment Received (any residential v. solely non-residential)
- Tested Twice Per Week on Average (no v. yes)
- Prior Felonies (no v. yes)
- Prior Misdemeanors (no v. yes)
- Education Completed at Admission
- Discharge Status (grad v. non-grad)

Table 184: Full Regression Model Predicting Two-Year Recidivism (Non-Recidivists v. Recidivists)

Variables (N=314)	B	S.E.	Odds
Program Variables			
Strong Incentive Practices	-1.296	.945	-
Strong Participant and Parent/Caregiver Perceptions of Sanction and Incentive Practices	-.638	.688	-
Strong Participant Perceptions of Incentive Practices	-.762	1.267	-
Strong Parent/Caregiver Perceptions of Incentive Practices	.690	.801	-
Strong Family Engagement Practices	.932	.978	-
Strong Participant and Parent/Caregiver Perceptions of Treatment	.590	1.462	-
Individual Variables			
Gender (male v. female)	-.093	.413	-
Age at Screening: ≤ 14 years old			
15 years old	-.593	.458	-
16 years old*	**-1.050**	**.503**	**.350**
17 years old*	**-2.107**	**.929**	**.122**
Race (White v. Non-White)*	**-.762**	**.368**	**.467**
Drug of Choice: Marijuana			
Alcohol	.034	.628	-
Other	-1.366	.989	-
Charge Type: Status Offense			
Misdemeanor†	1.370	.802	-
Felony*	**1.885**	**.845**	**6.588**
Civil/Petition/Other	1.083	1.281	-
Received Prior Substance Abuse Treatment (no v. yes)***	**1.693**	**.502**	**5.435**
Prior Conviction(s) (no v. yes)	.302	.366	-
Education Level at Admission (< 9th grade v. ≥ 9th grade)	.100	.388	-
Number of Days in Court (< 288 days v. ≥ 288 days)†	-.606	.310	-
Type of Treatment Received (any residential v. non-residential only)	-.463	.440	-
Drug Tested Twice Per Week on Average (no v. yes)	.557	.344	-
Discharge Status (Graduate v. Non-Graduate)***	**1.262**	**.337**	**3.531**
Constant	-1.819	1.303	.162

***Significant $p < .001$, * $p < .05$, † $p < .10$

Table 185: Chi-Square Analyses Assessing Which Program-Level Variables Are Related to Four-Year Recidivism

Program Variables	Four-Year Recidivism					
	Non-Recidivists		Recidivists		Total	
	#	%	#	%	#	%
Strong Team Composition X^2 (1, N=150) = 1.54, p = .215						
No	28	66.7%	14	33.3%	42	100.0%
Yes	60	55.6%	48	44.4%	108	100.0%
Strong Team Collaboration *N/A*						
No	0	0.0%	0	0.0%	0	0.0%
Yes	88	58.7%	62	41.3%	150	100.0%
Strong Sanction Practices X^2 (1, N=150) = 0.37, p = .542						
No	51	56.7%	39	43.3%	90	100.0%
Yes	37	61.7%	23	38.3%	60	100.0%
Strong Incentive Practices X^2 (1, N=150) = 0.80, p = .371						
No	4	44.4%	5	55.6%	9	100.0%
Yes	84	59.6%	57	40.4%	141	100.0%
Strong Participant and Parent/Caregiver Perceptions of Sanction and Incentive Practices X^2 (1, N=137) = 0.52, p = .473						
No	67	59.8%	45	40.2%	112	100.0%
Yes	13	52.0%	12	48.0%	25	100.0%
Strong Participant Perceptions of Sanction Practices X^2 (1, N=137) = 0.01, p = .941						
No	77	58.3%	55	41.7%	132	100.0%
Yes	3	60.0%	2	40.0%	5	100.0%
Strong Participant Perceptions of Incentive Practices X^2 (1, N=137) = 1.04, p = .308						
No	35	63.6%	20	36.4%	55	100.0%
Yes	45	54.9%	37	45.1%	82	100.0%
Strong Parent/Caregiver Perceptions of Sanction Practices X^2 (1, N=137) = 0.00 p = .990						
No	35	58.3%	25	41.7%	60	100.0%
Yes	45	58.4%	32	41.6%	77	100.0%
Strong Parent/Caregiver Perceptions of Incentive Practices X^2 (1, N=137) = 1.51, p = .220						

Program Variables	Four-Year Recidivism					
	Non-Recidivists		Recidivists		Total	
	#	%	#	%	#	%
No	29	65.9%	15	34.1%	44	100.0%
Yes	51	54.8%	42	45.2%	93	100.0%
Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach *Significant†:* X^2 (1, N=137) = 3.13, p = .077						
No	28	70.0%	12	30.0%	40	100.0%
Yes	52	53.6%	45	46.4%	97	100.0%
Strong Educational Engagement Practices X^2 (1, N=150) = 0.14, p = .712						
No	47	57.3%	35	42.7%	82	100.0%
Yes	41	60.3%	27	39.7%	68	100.0%
Strong Participant and Parent/Caregiver Perceptions of Judicial Supervision X^2 (1, N=137) = 1.04, p = .308						
No	35	63.6%	20	36.4%	55	100.0%
Yes	45	54.9%	37	45.1%	82	100.0%
Strong Program Structure X^2 (1, N=150) = 2.43, p = .119						
No	47	53.4%	41	46.6%	88	100.0%
Yes	41	66.1%	21	33.9%	62	100.0%
Strong Drug Testing Practices *Significant:* X^2 (1, N=150) = 4.36, p = .037						
No	11	40.7%	16	59.3%	27	100.0%
Yes	77	62.6%	46	37.4%	123	100.0%
Strong Family Engagement Practices X^2 (1, N=150) = 0.63, p = .426						
No	9	50.0%	9	50.0%	18	100.0%
Yes	79	59.8%	53	40.2%	132	100.0%
Strong Parent/Caregiver Perceptions of Family Engagement *Significant†:* X^2 (1, N=137) = 3.68, p = .055						
No	24	72.7%	9	27.3%	33	100.0%
Yes	56	53.8%	48	46.2%	104	100.0%
Strong Targeting X^2 (1, N=150) = 1.60, p = .206						
No	14	48.3%	15	51.7%	29	100.0%
Yes	74	61.2%	47	38.8%	121	100.0%
Strong Treatment Practices X^2 (1, N=150) = 2.33, p = .127						
No	15	46.9%	17	53.1%	32	100.0%

Program Variables	Four-Year Recidivism					
	Non-Recidivists		Recidivists		Total	
	#	%	#	%	#	%
Yes	73	61.9%	45	38.1%	118	100.0%
Strong Participant and Parent/Caregiver Perceptions of Treatment X^2 (1, N=137) = 1.33, p = .248						
No	33	64.7%	18	35.3%	51	100.0%
Yes	47	54.7%	39	45.3%	86	100.0%
Strong Participant Perceptions of Procedural Justice X^2 (1, N=137) = 1.04, p = .308						
No	35	63.6%	20	36.4%	55	100.0%
Yes	45	54.9%	37	45.1%	82	100.0%
Strong Parent/Caregiver Perceptions of Procedural Justice *Significant†:* X^2 (1, N=137) = 3.04, p = .081						
No	31	68.9%	14	31.1%	45	100.0%
Yes	49	53.3%	43	46.7%	92	100.0%
Court Location Type: Rural *N/A*						
No	88	58.7%	62	41.3%	150	100.0%
Yes	0	0.0%	0	0.0%	0	0.0%

As a result of the above analysis, NCSC included all independent variables that had a significant chi-square into the regression model (although some were later excluded for collinearity). Program-level variables entered included:

- Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach
- Strong Drug Testing Practices
- Strong Parent/Caregiver Perceptions of Family Engagement
- Strong Parent/Caregiver Perceptions of Procedural Justice

Individual variables in the model:

- Gender (male v. female)
- Age at Screening (≤ 14yo v. 15yo, 16yo, 17yo)
- Race (white v. black, multi-racial, Hispanic/Latino, Native American, Other)
- Drug of Choice (marijuana v. alcohol; marijuana v. others)
- Charge Type (status offense v. misdemeanor, felony, civil/petition/other)
- Prior Substance Abuse Treatment (no v. yes)
- Type of Treatment Received (any residential v. solely non-residential)
- Tested Twice Per Week on Average (no v. yes)
- Prior Felonies (no v. yes)

- Prior Misdemeanors (no v. yes)
- Education Completed at Discharge
- Discharge Status (grad v. non-grad)

Table 186: Full Regression Model Predicting Four-Year Recidivism (Non-Recidivists v. Recidivists)

Variables (N=123)	B	S.E.	Odds Ratio
Program Variables			
Strong Participant and Parent/Caregiver Perceptions of Strength-Based Approach	.264	2.032	-
Strong Drug Testing Practices*	**-2.060**	**.831**	**.127**
Strong Parent/Caregiver Perceptions of Family Engagement	-2.050	1.687	-
Strong Parent/Caregiver Perceptions of Procedural Justice	2.145	1.471	-
Individual Variables			
Gender (male v. female)	-.295	.803	-
Age at Screening: ≤ 14 years old			
15 years old	.797	.765	-
16 years old	.357	.754	-
17 years old	-.516	1.271	-
Race (White v. Non-White)	-.041	.571	-
Drug of Choice: Marijuana			
Alcohol	-.757	.970	-
Other	-.704	1.499	-
Charge Type: Status Offense			
Misdemeanor	-.793	.874	-
Felony	-.057	.924	-
Civil/Petition/Other	-.680	2.103	-
Received Prior Substance Abuse Treatment (no v. yes)*	**1.770**	**.708**	**5.869**
Prior Conviction(s) (no v. yes)	.558	.537	-
Education Level at Discharge: Less than High School			
12th Grade/GED	-.030	.629	-
Higher than High School	.297	1.633	-
Number of Days in Court (< 288 days v. ≥ 288 days)	-.375	.496	-
Type of Treatment Received (any residential v. non-residential only)	-1.095	.700	-
Drug Tested Twice Per Week on Average (no v. yes)*	**1.327**	**.538**	**3.768**
Discharge Status (Graduate v. Non-Graduate)	.717	.551	-
Constant	1.249	1.462	3.486

*Significant $p < .05$

Table 187: Regression Model Predicting General Two-Year Recidivism with Participant Type (JDC Participants v. BAU Comparisons)

Variables	(N=856)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)†		.279	.153	-
Constant		-1.086	.111	.338

† *p* = .068

Table 188: Regression Model Predicting General Two-Year Recidivism with Participant Type and Other Individual Characteristics

Variables	(N=856)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)		.282	.317	-
Gender (male v. female)†		-.395	.206	-
Age at Screening (compared to less than 14 years old)				
15 years old		-.248	.332	-
16 years old		-.461	.318	-
17 years old†		-.702	.410	-
18+ years old		-.307	.413	-
Charge Type (compared to Status Offense)				
Misdemeanor		.278	.303	-
Felony		.089	.333	-
Civil/Petition/Other		-.192	.632	-
Constant		-.873	.392	.417

† *p* < .10

Table 189: Regression Model Predicting Drug/Alcohol Two-Year Recidivism with Participant Type (JDC Participants v. BAU Comparisons)

Variables	(N=856)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)†		.316	.188	-
Constant		-1.833	.140	.160

† *p* = .093

Table 190: Regression Model Predicting Drug/Alcohol Two-Year Recidivism with Participant Type and Other Individual Characteristics

Variables	(N=856)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)		-.075	.415	-
Gender (male v. female)†		-.461	.263	-
Age at Screening (compared to less than 14 years old)				
15 years old		-.138	.441	-
16 years old		-.045	.415	-
17 years old		-.065	.521	-
18+ years old		.399	.547	-
Charge Type (compared to Status Offense)				
Misdemeanor*		1.254	.528	3.504
Felony		.687	.563	-
Civil/Petition/Other		.621	.910	-
Constant		-2.739	.626	.065

* *p* < .05 † *p* < .10

Table 191: Regression Model Predicting General Four-Year Recidivism with Participant Type (JDC Participants v. BAU Comparisons)

Variables	(N=300)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)		.270	.233	-
Constant		-.350	.166	.705

Table 192: Regression Model Predicting General Four-Year Recidivism with Participant Type and Other Individual Characteristics

Variables	(N=300)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)		.634	.510	-
Gender (male v. female)**		-1.036	.381	.355
Age at Screening (compared to less than 14 years old)				
15 years old		.388	.564	-
16 years old		.026	.510	-
17 years old		-.131	.665	-
18+ years old		-.287	.679	-
Charge Type (compared to Status Offense)				
Misdemeanor		.348	.479	-
Felony		.363	.510	-
Civil/Petition/Other		1.414	1.154	-
Constant		-.655	.641	.520

** $p < .01$

Table 193: Regression Model Predicting Drug/Alcohol Four-Year Recidivism with Participant Type (JDC Participants v. BAU Comparisons)

Variables	(N=300)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)		.265	.258	-
Constant		-1.081	.188	.339

Table 194: Regression Model Predicting Drug/Alcohol Four-Year Recidivism with Participant Type and Other Individual Characteristics

Variables	(N=300)	B	S.E.	Odds Ratio
Participant Type (JDC v. BAU)		.413	.548	-
Gender (male v. female)**		-1.298	.503	.273
Age at Screening (compared to less than 14 years old)				
15 years old		.350	.681	-
16 years old		.401	.615	-
17 years old		.307	.764	-
18+ years old		.167	.774	-
Charge Type (compared to Status Offense)				
Misdemeanor		.124	.517	-
Felony		-.268	.557	-
Civil/Petition/Other†		2.115	1.210	-
Constant		-1.294	.741	.274

** $p < .01$ † $p < .10$