

# An Evaluation of the Behavioral Health/Juvenile Justice (BHJJ) Initiative: 2013-2015 Wayne County Results

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EXECUTIVE SUMMARY: AN EVALUATION OF THE BEHAVIORAL HEALTH/JUVENILE JUSTICE (BHJJ) INITIATIVE: 2013–2015 WAYNE COUNTY RESULTS

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Juvenile justice-involved youth with serious behavioral health issues often have inadequate and limited access to care to address their complex and multiple needs. Ohio's Behavioral Health/Juvenile Justice (BHJJ) initiative was intended to transform and expand the local systems' options to better serve these youth. Recent emphasis was placed on decreasing the population of ODYS facilities while providing alternatives to incarceration. Twelve counties participated in BHJJ in the newest biennium: Cuyahoga, Franklin, Cuyahoga, Hamilton, Lucas, Summit, Wayne, Holmes, Trumbull, Mahoning, Lorain, and Wood. BHJJ was funded by a partnership between the Ohio Departments of Youth Services (ODYS) and Mental Health and Addiction Services (OhioMHAS). The Begun Center for Violence Prevention Research and Education at Case Western Reserve University provided research and evaluation services for the program.

The BHJJ program diverts youth from local and state detention centers into more comprehensive, community-based mental and behavioral health treatment. The BHJJ program enrolled juvenile justice-involved youth between 10-18 years of age who met several of the following criteria: a DSM IV Axis I diagnosis, substantial mental status impairment, a co-occurring substance use/abuse problem, a pattern of violent or criminal behavior, and a history of multi-system involvement.

### **Demographics and Youth Characteristics**

- ❖ 20 youth have been enrolled in BHJJ (65.0% males, 89.5% Caucasian). The average age at intake is about 15.5 years.
- ❖ Youth averaged 2.1 Axis I diagnoses. About 43% of females and 22% of males were diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) and about 86% of females and 89% of males were diagnosed with Oppositional Defiant Disorder.
- ❖ Over 44% of males and 14% of females were diagnosed with both a mental health and substance use diagnosis.
- ❖ Caregivers reported that 71.4% of the females had a history of sexual abuse, over 85.7% talked about suicide, and over 57% had attempted suicide. Over 33% of males and 66% of females had family members who were diagnosed with or showed signs of depression.
- ❖ According to the OYAS, 78.9% of the youth served in Wayne County were either moderate or high risk.
- ❖ Of the youth enrolled in Wayne County, 16% had a felony charge in the 12 months prior to enrollment.

### **Educational Information**

- ❖ Nearly 63% of the youth were suspended or expelled from school in the year prior to their enrollment. At termination, 85.7% of youth were attending school.
- ❖ At termination, workers reported that 100% of youth were attending school more or about the same amount as they were before starting treatment.

### **Mental/Behavioral Health Outcomes**

- ❖ BHJJ youth reported a decrease in Anger trauma symptoms from intake to termination.
- ❖ Results from the Ohio Scales indicated the caregiver, worker, and youth all reported increased youth functioning and decreased problem severity while in BHJJ treatment.
- ❖ Youth reported a decrease in six month alcohol and marijuana use from intake to termination.
- ❖ At intake, 42.9% of youth were at risk for out of home placement. Upon termination, 10% were at risk for out of home placement.
- ❖ 100% of caregivers agreed that they were satisfied with the services their child received through BHJJ and agreed that the services received were culturally and ethnically sensitive.

### **Termination and Recidivism Information**

- ❖ Of the 13 youth who have terminated from the program, 76% were successful. The average length of stay in the program was approximately 5 months.
- ❖ Youth demonstrated decreased juvenile court involvement after termination from BHJJ compared to before enrollment.
- ❖ One year after termination, 9% of completers had a new felony charge.
- ❖ None of the 19 youth enrolled in BHJJ for whom we had recidivism data were sent to an ODYS facility at any time following their enrollment in BHJJ.

## AN EVALUATION OF THE BEHAVIORAL HEALTH/JUVENILE JUSTICE (BHJJ) INITIATIVE: 2013-2015 WAYNE COUNTY RESULTS

### JUVENILE JUSTICE AND MENTAL HEALTH

Youth involved in the juvenile justice system report significant behavioral health impairment. While estimates vary, most studies report that between 65-75% of juvenile justice-involved (JJI) youth have at least one mental health or substance abuse disorder and 20% to 30% report suffering from a serious mental disorder (Cocozza & Skowyra, 2000; Shufelt & Cocozza, 2006; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). Rates of similar mental health/substance use disorders among the general adolescent population are far lower (Cuellar, McReynolds, & Wasserman, 2006; Friedman, Katz-Levy, Manderscheid, & Sondheimer, 1996; Merikangas, et al., 2010; Otto, Greenstein, Johnson, & Friedman, 1992; U.S. Department of Health and Human Services, 1999).

Studies have found that JJI females are often more likely to suffer from mental health disorders than JJI males (Teplin et al., 2002; Nordess et al., 2002; Shufelt & Cocozza, 2006; Wasserman, McReynolds, Ko, Katz, & Carpenter, 2005). Driving this difference is the fact that Anxiety and Mood Disorders are far more common in JJI girls than JJI boys (Shufelt & Cocozza, 2006; Teplin et al., 2002; Wasserman et al., 2005). Not only are JJI girls more likely to report mental health disorders, they are also more likely to report co-occurring mental health and substance use disorders than JJI males (Abram, Teplin, McClelland, & Dulcan, 2003; Wasserman et al., 2005; Wasserman, McReynolds, Schwalbe, Keating, & Jones, 2010).

While it is clear that a significant percentage of JJI youth have mental health problems, many have not received help or treatment for these issues prior to entering the system. One study found that only 34% of juvenile detainees with Anxiety, Mood, or Disruptive Behavior Disorders had ever received prior mental health treatment (Novins, Duclos, Martin, Jewett, & Manson, 1999). In another study, only 17% of juvenile detainees reported previous mental health treatment by a psychiatrist or therapist (Feinstein et al., 1998). A SAMHSA-funded study reported that while 94% of juvenile justice facilities had some type of mental health services available to youth, the quality and comprehensiveness of these services varied greatly based on the facility (Goldstrom, Jaiquan, Henderson, Male, & Manderscheid, 1998). Goldstrom et al. (1998) reported that 71% of juvenile detention centers offer mental health screening while only 56% conduct full evaluations. In facilities where full evaluations are offered, screenings and assessments are often not standardized (Hoge, 2002; Soler, 2002).

### JUVENILE JUSTICE/MENTAL HEALTH DIVERSION PROGRAMS

The prevalence of juvenile justice youth with mental health issues is cause for alarm. While the juvenile justice system is often the first time a youth is screened for mental health problems, the system is often ill-prepared to properly treat these youth (Cocozza & Skowyra, 2000; Skowyra & Powell, 2006; Teplin et al., 2002; U.S. Department of Justice, 2005). In response to the growing number of youth entering the juvenile justice system with mental health issues and the lack of proper care in these facilities, many communities have developed diversion programs or mental health courts as an alternative to detention or incarceration. These programs allow for more in-depth assessment and

evaluation and more comprehensive and evidence-based treatment and supervision services than are available in typical juvenile justice facilities.

## OHIO'S BEHAVIORAL HEALTH/JUVENILE JUSTICE (BHJJ) INITIATIVE

Over 15 years ago, Ohio's juvenile court judges met with representatives from the Ohio Department of Mental Health (ODMH) and the Ohio Department of Youth Services (ODYS) to address a growing and serious concern. Many of the youth who appeared in court demonstrated serious mental health and/or substance use problems. Not only did these judges lack the resources and expertise to identify, assess, and serve these youth, but there were few alternative programs into which these youth could be placed in lieu of a detention facility.

The state recommended funding local pilot projects in an attempt to divert youth who demonstrated a need for behavioral health service from incarceration and into community-based treatment settings. The pilot program operated in three counties in Ohio. While small in scope, the pilot project was successful in reducing the number of youth with behavioral health issues committed to the ODYS.

In 2005, the state allocated new resources to the Behavioral Health/Juvenile Justice (BHJJ) project and funded several counties throughout Ohio to expand upon the work accomplished in the pilot phase. The intent of the BHJJ project was to transform the local systems' ability to identify, assess, evaluate, and treat multi-need, multi-system youth and their families and to identify effective programs, practices, and policies. As in the pilot, the initiative was designed to divert JJI youth with mental health or substance use issues from detention and into community and evidence-based treatment. The state identified criteria to be used by participating counties to determine if a youth was appropriate for inclusion in the BHJJ project, including: a DSM-IV diagnosis, aged 10 to 18, substantial mental status impairment, co-occurring substance abuse, a pattern of criminal behavior, charged and/or adjudicated delinquent, a threat to public safety, exposed to trauma or domestic violence, and a history of multi-system involvement. Each county was able to determine which and how many criteria the youth had to meet to be eligible for participation.

Since 2006, 17 counties have been selected to participate in the BHJJ program. Urban, suburban, and rural counties have been included in the project. These counties were required to use evidence-based or evidence-informed treatment models; however, the state allowed each county to select the model that best fit the needs of their youth and families. Examples of the types of treatment models provided through BHJJ include Multi-systemic Therapy (MST), Functional Family Therapy (FFT), Integrated Co-Occurring Treatment (ICT), Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), and Multidimensional Family Therapy (MDFT).

While each county employs slightly different protocols and procedures in the implementation of BHJJ, the juvenile court is the typical entry point into the program. Youth who have been charged with a crime are given a psychological assessment to determine if they meet criteria for inclusion in BHJJ. If the youth meets criteria and the youth and family agrees to participate, the youth is recommended for BHJJ participation. If the judge or magistrate accepts the recommendation, the youth is enrolled in the BHJJ program and referred or linked to the treatment agency responsible for providing the treatment services. In most cases the youth remains on probation supervision during their time in the BHJJ program. While residential placement is an option in some of the participating counties, a mission of

BHJJ is to provide treatment in the least restrictive setting possible and therefore the majority of the treatment is provided in-home or in outpatient settings.

A key component to the BHJJ program is the ongoing outcome evaluation provided by the Begun Center for Violence Prevention Research and Education at the Mandel School for Applied Social Sciences at Case Western Reserve University (Kretschmar, Butcher, & Flannery, 2016; Kretschmar, Butcher, Canary, & Devens, 2015). The current evaluation report includes data from 2006 through June 30, 2015. For information or copies of previous evaluation reports, please contact Dr. Jeff Kretschmar at [jeff.kretschmar@case.edu](mailto:jeff.kretschmar@case.edu) or visit (<http://mha.ohio.gov/Default.aspx?tabid=136>).

## MEASURES AND INSTRUMENTATION

All of the instruments collected as part of the BHJJ evaluation were in TeleForm© format. TeleForm© is a software program that allows for data transmission via fax machine, scanner, or .pdf file. Instruments are created using this software and once completed, can be faxed or scanned directly into a database.

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### OHIO YOUTH PROBLEM, FUNCTIONING, AND SATISFACTION SCALES (OHIO SCALES)

The Ohio Scales (Ogles, Melendez, Davis, & Lunnen, 2001) were designed to assess clinical outcomes for children with severe emotional and behavioral disorders, and were developed primarily to track service effectiveness. The measure assesses four primary domains of outcomes with four subscales: Problem Severity, Functioning, Hopefulness, and Satisfaction with services. In the Ohio Scales–Caregiver version, the caregiver rates his/her child’s problem severity and functioning, and the caregiver’s satisfaction with services and hopefulness about caring for his or her child. In the Ohio Scales–Youth version, the youth rates his/her own problem severity and functioning, and his/her satisfaction with services and hopefulness about life or overall well-being. The Worker version does not include the Satisfaction or Hopefulness scales. A score is generated for each of the four subscales, with a total score for the scale generated by summing the items.

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### TRAUMA SYMPTOM CHECKLIST FOR CHILDREN (TSCC)

The Trauma Symptom Checklist for Children (TSCC) is a 54-item Likert-type questionnaire containing six subscales designed to measure anxiety, anger, depression, posttraumatic stress, dissociation, and sexual concerns (Briere, 1996). Youth respond to a series of questions regarding the frequency of certain thoughts, events, or behaviors. Responses are made on a 4-point, 0-3 scale with “0” indicating “never” and “3” indicating “almost all the time”.

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### SUBSTANCE USE SURVEY – REVISED

This measure, adapted from the SAMHSA-funded Tapestry Project (a demonstration and research project that identifies, serves and follows youth and families from Cuyahoga County, Ohio, with significant behavioral and mental health needs), collects information reported by the youth about the frequency of his or her substance use, including tobacco, alcohol, marijuana, cocaine, painkillers, and several additional substances.

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## ENROLLMENT AND DEMOGRAPHICS FORM (ENROLLMENT FORM)

This form permits program staff to record several important pieces of information including date of enrollment, reasons for BHJJ services, DSM-IV diagnoses, Global Assessment of Functioning (GAF) scores, and agencies with which the youth is involved. In addition, out-of-home placement status, risk for placement, and educational and vocational data are collected.

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## CHILD INFORMATION UPDATE FORM (TERMINATION FORM)

This form is completed by the treatment staff at termination from the BHJJ program, and is used to record DSM-IV diagnoses, GAF score, date and reasons for termination from the program, and out-of-home placement risk. Educational and vocational data, as well as information related to contacts with the police are also captured.

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## RECENT EXPOSURE TO VIOLENCE

This 26-item optional scale measures several youth-reported violent acts: threats, beatings, hitting, knife attacks, sexual abuse, and shootings (adapted from Singer, Anglin, Song, & Lunghofer, 1995). Youths respond to a 4-point scale ranging from “0” (never) to “3” (almost every day). Subjects report separately on violence they have experienced directly and violence they have witnessed. For threats, slapping/hitting, and beatings, questions are specific to the setting in which the violence has occurred: at home, at school, or in the neighborhood. The remaining items do not specify the setting in which the violence occurred. This scale, which has an acceptable internal consistency (Cronbach’s alpha = .86), served as our measure of victimization.

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## CAREGIVER INFORMATION QUESTIONNAIRE (INTAKE AND TERMINATION)

The Caregiver Information Questionnaire, adapted from SAMHSA/Center for Mental Health Services (2005), permits staff to record information including demographics, risk factors, family composition, physical custody of the child, abuse history, family history of mental health issues, the child’s mental and physical health service use history, caregiver employment status, and child’s presenting problems.

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## YOUTH SERVICES SURVEY FOR FAMILIES

The Youth Services Survey for Families (YSSF) (SAMHSA) was designed to assess caregiver satisfaction with services the youth received, and if, as a result of those services, the youth is showing improved functioning. This measure was optional.

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## RECIDIVISM

Recidivism can be defined in many ways: a new offense, a violation of probation, new adjudication, or commitment to ODYS. Recidivism is a standard measure of program success, especially as an indicator of treatment outcomes over time. For this evaluation, recidivism was defined in three ways; a new misdemeanor or felony charge, a new adjudication, and a placement in an ODYS facility any time after enrollment in the BHJJ program. These data are provided to the evaluators by the juvenile court in each participating county. Recidivism data are presented for youth prior to and after enrollment and termination from BHJJ.

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## OHIO YOUTH ASSESSMENT SYSTEM (OYAS)

The OYAS is a criminogenic risk assessment tool designed to assist juvenile court staff with placement and treatment decisions based on a youth’s risk score. The OYAS contains five distinct

versions of the tool administered at different points in the juvenile justice process: Diversion, Detention, Disposition, Residential, and Reentry. Youth receive a total score and fall into three risk levels; low, moderate, or high. Each county’s juvenile court supplied OYAS data to the evaluators.

**DATA COLLECTION SCHEDULE**

The evaluation contains both mandatory and optional questionnaires (see Table 1 and Table 2).

**Table 1. Required BHJJ Questionnaires**

<b>Measure</b>	<b>Who Completes</b>	<b>When Administered</b>
<b>Ohio Scales</b>	Youth & Worker	Intake, every 3 months, Term
<b>Trauma Symptom Checklist for Children (TSCC)</b>	Youth	Intake, Term
<b>Substance Use Survey – Revised (SUS)</b>	Youth with Program Staff	Intake, every 6 months, Term
<b>Enrollment and Demographics Information Form (EDIF)</b>	Program Staff	Intake
<b>Child Information Update Form (CIUF)</b>	Program Staff	Term
<b>Caregiver Information Questionnaire – Intake (CIQ-I)</b>	Caregiver with Program Staff	Intake

**Table 2. Optional BHJJ Questionnaires**

<b>Measure</b>	<b>Who Completes</b>	<b>When Administered</b>
<b>Ohio Scales</b>	Caregiver	Intake, every 3 months, Term
<b>Recent Exposure to Violence Scale (REVS)</b>	Youth	Intake, Term
<b>Caregiver Information Questionnaire – Term (CIQ-F)</b>	Caregiver with Program Staff	Term
<b>Youth Service Survey for Families (YSSF)</b>	Caregiver	Term

## PROJECT DESCRIPTION

The Wayne County Juvenile Court through a partnership with the Mental Health and Recovery Board of Wayne and Holmes Counties implemented Multi systemic Therapy (MST) utilizing the Behavioral Health and Juvenile Justice (BHJJ) grant. MST is a voluntary program that serves male and female youth between the ages of 10 and 17.5 who are involved with the Wayne County Juvenile Court. Participating youth have an Axis I diagnosis which is creating significant behavioral problems, which could include a co-occurring mental health and substance abuse diagnosis, and meet some if not all of the following criteria:

- At risk of an out-of-home placement or returning from an out-of-home placement
- Multiple system involvement
- Parent(s) or legal guardian(s) is/are willing and committed to participating in the MST program
- Previous failed attempts at treatment
- Significant history of involvement with the juvenile justice system

Once a youth is identified as a possible candidate for the MST program, a member of the probation department makes an initial screening contact with the family to verify eligibility, discuss the program, and gauge the family's willingness and commitment to participate. If the family is determined to be appropriate, a referral is submitted to the Crisis Intervention and Recovery Center (CIRC) MST supervisor, who will then conduct a thorough screening call with the family.

Upon completion of the referral process, the case is given to the MST therapist to conduct a comprehensive clinical assessment prior to beginning work with the family. The MST therapist meets with the family approximately three times per week, or whatever is deemed clinically appropriate, for approximately three to five months depending on the family's needs. These meetings occur in the families natural environment (home, school, community), and include the families' support system (relatives, friends, neighbors, etc.). Families have access to an MST therapist 24 hours a day, 7 days a week for crisis situations. The therapist's low case load of four to six families at a time allows for increased availability.

The goal of MST is to empower the caregivers with the skills to manage the youth's current behaviors, as well as to be able to generalize the skills to other youth in the home, and any new behaviors that might arise. This "multisystemic" approach views individuals as being surrounded by a network of interconnected systems that encompass individual, family, and extra familial (peer, school) factors, and recognizes that interventions may be necessary in any one or combination of these systems to bring about a desired behavior change. Therapists have a never ending focus on engagement and alignment with the primary caregiver and key stakeholders. The therapist utilizes the nine MST Treatment Principles and the MST Analytic Process to guide their treatment. There is an ongoing process of finding the fit between identified problems, and their broader systemic context. Then, this leads to individualized interventions for each family. Examples of interventions often used are the following: home behavior contracts, safety plans, supervision and monitoring plans, prevention and retrieval plans for leaving without permission/runaway behaviors, daily report cards for school behaviors – including improving home-school link, peer approval checklists, involvement in pro social activities, and home drug/alcohol screening plans.

Throughout the duration of participation in the MST program, the MST therapist stays in close constant communication with the youth's probation officer, and/or other key participants, through

regular phone calls and in person meetings. In addition, numerous quality assurance methods are used to guarantee the families are receiving the best treatment possible in adherence with the MST model as outlined below:

- Through the license by MST Services, the MST provider (CIRC) utilizes a standardized and comprehensive system including weekly team supervision, consultation and quarterly training. In addition, the Therapist Adherence Measure (TAM), Supervisor Adherence Measure (SAM) and Consultant Adherence Measure (CAM) are also completed
- The project's community partners/stakeholders meet on a quarterly basis to discuss the program
- Program staff complete numerous screening tools and questionnaires with the participants throughout the program to aid in program evaluation by Case Western Reserve University, including: Ohio Youth Assessment System (OYAS), Caregiver Information Questionnaire (CIQ-I), Enrollment and Demographics Information Form (EDIF), Ohio Scales, Recent Exposure to Violence (REVS), Substance Use Survey (SUS) and Trauma Symptoms Checklist for Children (TSCC)

Determining when the youth has successfully completed the MST program is a collaborative decision between the MST provider, MST consultant, probation officer, youth, parents and other support systems that may be involved with the youth. In making the decision the team determines if the treatment goals (i.e., referral behaviors) have been achieved for at least three to four weeks, and if the family is able to effectively manage any future problems with success. The ultimate outcomes are to ensure the youth remains in the home, in school, and have no new legal charges at discharge from the program.

## DESCRIPTION OF THE ANALYSES USED IN THE REPORT

Several types of inferential statistics are used throughout the report. Three types of bivariate analyses are discussed throughout both the overall report and the county specific reports. The chi-square analysis refers to a bivariate technique where a relationship between two variables is tested to determine if there are any significant differences. For example, if we are interested in whether males and females differ on whether they have ever used alcohol, a chi-square test is used. If there is a statistically significant result, this indicates that the difference between females and males is unlikely to have occurred by chance. Thus, we would describe the difference for the gender groups as a *real difference* rather than one that could have occurred by chance.

In instances where the bivariate relationship of interest is a measure that is both a yes/no measure and one that is repeated, a McNemar's test is used. For example, if we are interested in whether there is a statistically significant decrease in the proportion of youth using alcohol in the past six months from intake to termination, we would use a McNemar's test. A statistically significant result would indicate that the observed difference in six month use from intake to termination is a real difference and one that likely did not occur by chance.

The third type of bivariate analysis used throughout the report is the t-test. T-tests are similar to chi-square tests in that they test two variables to determine whether there are significant differences. For example, if we are interested in whether females and males differ on their levels of posttraumatic stress symptoms, a t-test is used. Since the variable posttraumatic stress lies on a continuous scale, we examine whether the corresponding means for the two gender groups significantly differ. Independent samples t-tests are used when there are two distinct groups (e.g. female and male) while paired samples t-tests are used when we are interested in whether means for the same group from different time points differ significantly (e.g. pre/post differences).

While statistical significance is an indication of how likely differences between groups or time points could occur by chance, effect sizes measure the magnitude of these observed differences. In other words, while statistical significance tells us whether a difference exists, effect sizes tell us how much of a difference exists. Effect sizes as represented by Cohen's *d* are also presented using the recommended criteria for its interpretation in Cohen's (1988) seminal work. Interpretation of Cohen's *d* is based on the criteria where 0.2 indicates a small effect size, 0.5 indicates a medium effect, and 0.8 indicates a large effect<sup>1</sup>.

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<sup>1</sup> For a more thorough review see Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: Lawrence Erlbaum.

## WAYNE COUNTY

### DEMOGRAPHICS

Wayne County has enrolled 20 youth in the BHJJ program since 2013. Of the 20 youth enrolled, 35.0% (n = 7) were female and 65.0% (n = 13) were male (Table 3). The majority of the overall sample of youth were Caucasian (87.5%, n = 14). The average age of the youth at intake into BHJJ was 15.49 years old (SD = 1.25).

**Table 3. Demographic Information for BHJJ Youth in Wayne County**

	<b>All Youth Enrolled (2013 - 2015)</b>
<b>Gender</b>	Female = 35.0% (n = 7) Male = 65.0% (n = 13)
<b>Race</b>	African American = 10.5% (n = 2) Caucasian = 89.5% (n = 17) Other = 0.0% (n = 0)
<b>Age at Intake</b>	15.49 years (SD = 1.25)

### CUSTODY ARRANGEMENT AND HOUSEHOLD INFORMATION

At intake, the majority of youth lived with at least one biological parent (68.8%, n = 11) (see Table 4).

Over 85% of the BHJJ caregivers (87.5%, n = 14) had at least a high school diploma or GED, and 18.8% (n = 3) had a bachelor's degree or higher (see Table 5). Two caregivers (12.5%) reported that they did not graduate from high school.

Caregivers reported their annual household income. The median household income for BHJJ families was between \$20,000 - \$24,999 (see Table 6). Three out of five caregivers (60.1%, n = 9) reported annual household incomes below \$35,000 and 40.1% (n = 6) reported an annual household income below \$20,000. One BHJJ family (6.7%) reported an annual household income below \$10,000.

**Table 4. Custody Arrangement for BHJJ Youth in Wayne County**

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	12.5% (n=2)
<b>Biological Mother Only</b>	37.5% (n=6)
<b>Biological Father Only</b>	18.8% (n=3)
<b>Adoptive Parent(s)</b>	12.5% (n=2)
<b>Sibling</b>	0.0% (n=0)
<b>Aunt/Uncle</b>	6.3% (n=1)
<b>Grandparents</b>	0.0% (n=0)
<b>Friend</b>	0.0% (n=0)
<b>Ward of the State</b>	6.3% (n=1)
<b>Other</b>	6.3% (n=1)

**Table 5. Educational Outcomes for Caregivers of BHJJ Youth in Wayne County**

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	12.5% (n=2)
<b>High School Graduate or G.E.D.</b>	43.8% (n=7)
<b>Some College or Associate Degree</b>	25.0% (n=4)
<b>Bachelor's Degree</b>	12.5% (n=2)
<b>More than a Bachelor's Degree</b>	6.3% (n=1)

**Table 6. Annual Household Income for BHJJ Families in Wayne County**

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	0.0% (n=0)
<b>\$5,000 - \$9,999</b>	6.7% (n=1)
<b>\$10,000 - \$14,999</b>	6.7% (n=1)
<b>\$15,000 - \$19,999</b>	26.7% (n=4)
<b>\$20,000 - \$24,999</b>	13.3% (n=2)
<b>\$25,000 - \$34,999</b>	6.7% (n=1)
<b>\$35,000 - \$49,999</b>	26.7% (n=4)
<b>\$50,000 - \$74,999</b>	13.3% (n=2)
<b>\$75,000 - \$99,999</b>	0.0% (n=0)
<b>\$100,000 and over</b>	0.0% (n=0)

## YOUTH AND FAMILY HISTORY

Caregivers were asked to respond to a series of questions designed to obtain data related to the youth's family history (see Table 7). Due to sample size restrictions, we did not conduct tests for statistical significance.

**Table 7. Youth and Family History in Wayne County**

Question	Females	Males
Has the child ever been physically abused?	28.6% (n=2)	22.2% (n=2)
Has the child ever been sexually abused?	71.4% (n=5)	11.1% (n=1)
Has the child ever run away?	85.7% (n=6)	55.6% (n=5)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	71.4% (n=5)	88.9% (n=8)
Has the child ever talked about committing suicide?	85.7% (n=6)	12.5% (n=1)
Has the child ever attempted suicide?	57.1% (n=4)	0.0% (n=0)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	71.4% (n=5)	66.7% (n=6)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	85.7% (n=6)	100.0% (n=9)
Has anyone in the child's biological family had a mental illness, other than depression?	66.7% (n=4)	33.3% (n=3)
Has the child ever lived in a household in which someone was convicted of a crime?	71.4% (n=5)	55.6% (n=5)
Has anyone in the child's biological family had a drinking or drug problem?	100.0% (n=7)	77.8% (n=7)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	50.0% (n=3)	25.0% (n=2)

At intake, caregivers were asked if the youth had ever been pregnant (or if male, had ever impregnated a female) and if they were currently expecting a child. None of the caregivers of BHJJ youth reported that they had ever been pregnant or ever impregnated a female.

## OHIO YOUTH ASSESSMENT SYSTEM

The OYAS is a criminogenic risk assessment tool designed to assist juvenile court staff with placement and treatment decisions based on a youth's risk score. Distribution of Wayne County youth based on the OYAS risk categories by gender and race are presented in Table 8. Chi-square analyses could not be conducted for this county due to small cell sizes.

**Table 8. OYAS Categories by Race and Gender for Wayne County**

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	28.6% (n = 2)	42.9% (n = 3)	28.6% (n = 2)
<b>Male</b>	16.7% (n = 2)	50.0% (n = 6)	33.3% (n = 4)
<b>White</b>	17.6% (n = 3)	52.9% (n = 9)	29.4% (n = 5)
<b>Nonwhite</b>	50.0% (n = 1)	0.0% (n = 0)	50.0% (n = 1)

**DSM-IV DIAGNOSES**

Workers were asked to report any DSM-IV Axis I diagnoses at intake into the BHJJ program. These diagnoses were either identified through a psychological assessment given as part of the enrollment process or in some cases, from psychological assessments given in close proximity to a youth’s enrollment in BHJJ. The most common Axis I diagnosis for both females (85.7%, n = 6) and males (88.9%, n = 8) was Oppositional Defiant Disorder (see Table 9). Statistical tests could not be conducted for this county due to small sample sizes.

A total of 34 Axis I diagnoses were identified for 16 youth with diagnostic information (2.12 diagnoses per youth). Females reported 16 Axis I diagnoses (2.28 diagnoses per female) and males reported 18 Axis I diagnoses (2.00 diagnoses per male). Of the youth who had available diagnostic information, 14.3% (n = 1) of females and 44.4% (n = 4) of males had a co-occurring substance use and mental health diagnosis.

**Table 9. Most Common DSM-IV Axis I Diagnoses in Wayne County**

DSM-IV Axis I Diagnosis	Females	Males
<b>Alcohol-related Disorders</b>	0.0% (n=0)	11.1% (n=1)
<b>Attention Deficit Hyperactivity Disorder</b>	42.9% (n=3)	22.2% (n=2)
<b>Bipolar Disorder</b>	0.0% (n=0)	0.0% (n=0)
<b>Cannabis-related Disorders</b>	0.0% (n=0)	33.3% (n=3)
<b>Conduct Disorder</b>	14.3% (n=1)	11.1% (n=1)
<b>Depressive Disorders</b>	0.0% (n=0)	11.1% (n=1)
<b>Mood Disorder</b>	14.3% (n=1)	0.0% (n=0)
<b>Oppositional Defiant Disorder</b>	85.7% (n=6)	88.9% (n=8)
<b>Post-traumatic Stress Disorder</b>	14.3% (n=1)	0.0% (n=0)

## EDUCATIONAL AND VOCATIONAL INFORMATION

### EDUCATIONAL DATA

Several items that focused on educational and vocational information were included in the evaluation packet at both intake and termination from the BHJJ program. The items were completed by the worker with help from the youth and caregiver. In the 12 months prior to intake, 62.5% (n = 10) were either suspended or expelled from school. While in treatment with BHJJ, 33.3% (n = 3) of BHJJ youth were either suspended or expelled from school.

Educational data were analyzed for youth who were eligible for inclusion (youth on summer break or who had graduated at the time of the survey were not included in the analyses). At intake, 100.0% (n = 15) of youth were currently attending school excluding those on summer break. At termination, 85.7% (n = 6) of youth were attending school. Again, this does not include youth out of school due to summer break. If the youth was attending school, the worker was asked to identify the types of grades the youth typically received (see Table 10).

**Table 10. Academic Performance in Wayne County**

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	13.3% (n=2)	0.0% (n=0)
Mostly B's and C's	40.0% (n=6)	50.0% (n=4)
Mostly C's and D's	26.7% (n=4)	37.5% (n=3)
Mostly D's and F's	20.0% (n=3)	12.5% (n=1)

At termination, workers reported that 77.8% (n = 7) of youth were attending school more than before starting treatment and 22.2% (n = 2) of youth were attending school 'about the same' amount compared to before starting treatment.

## OHIO SCALES

One of the main measures in the data collection packet was the Ohio Scales. The Ohio Scales were completed by the youth, caregiver, and worker at intake and then every three months following intake until termination from services. Because termination can occur at any point in time along the continuum of service, separate charts are included that display the means from intake to termination. Decreases in Problem Severity and increases in Functioning correspond to positive change.

All Problem Severity and Functioning analyses were conducted on assessment periods with enough valid cases to produce meaningful results. Paired samples t-tests were used to compare Problem Severity scores at intake to Problem Severity scores at the other assessment periods. A paired samples t-test compares the means of two variables by computing the difference between the two variables for each case and testing to see if the average difference is significantly different from zero. In order for a case to be included in the analyses, the rater must have scores for both assessment periods. For example, a caregiver must supply scores for both the intake and three month assessment period to be included in the paired samples t-test for that time point. If the caregiver only has an intake score, his or her data is not included in the analysis.

## PROBLEM SEVERITY

Overall means for the Problem Severity scale by rater and assessment period for Wayne County youth are represented in Figure 1. Means from intake to termination are presented in Figure 2.

**Figure 1. Problem Severity Scores across Time - Wayne County**

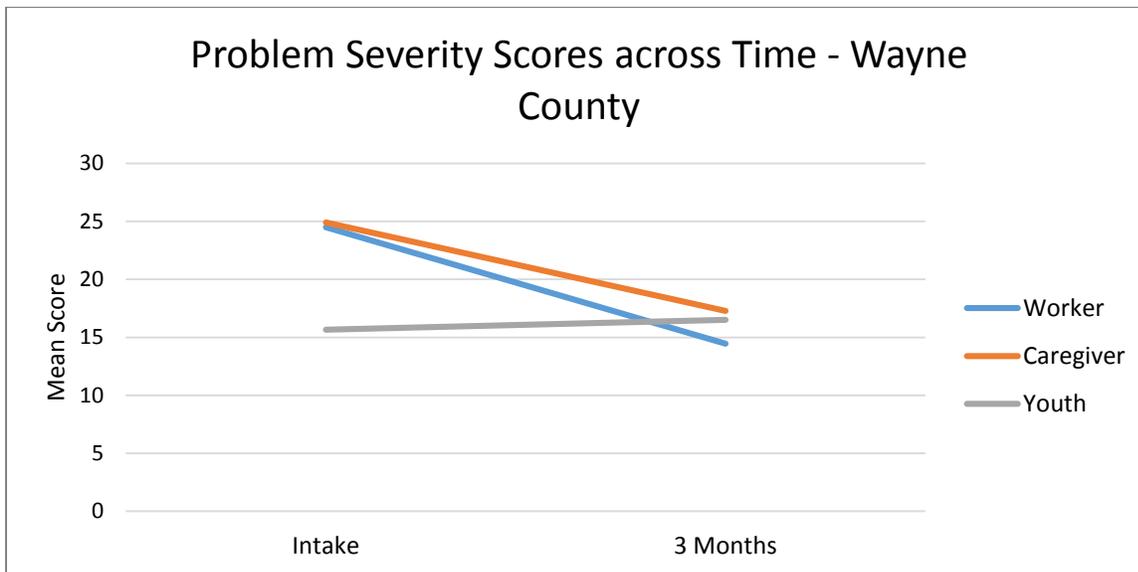
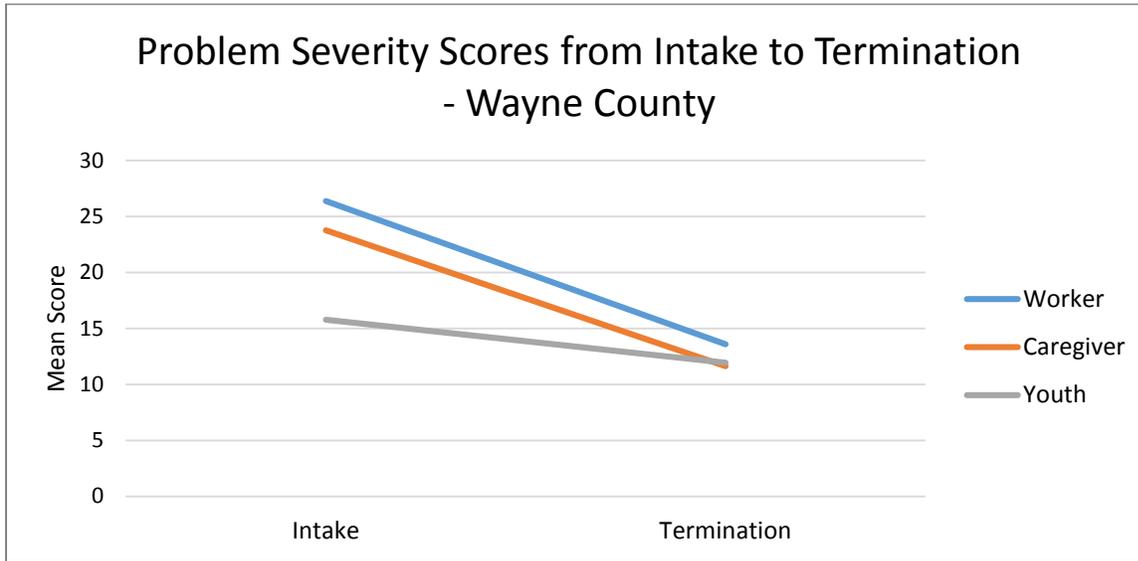


Figure 2. Problem Severity Scores from Intake to Termination - Wayne County



#### CAREGIVER RATING

While Problem Severity decreased from intake to each measurement interval, the data did not indicate a statistically significant change (see Table 11). Large effect sizes were found for each of these measurement intervals.

Table 11. Paired Samples T-Tests for Caregiver Report Problem Severity Scores for Wayne County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	28.50 (SD=14.31; n=6)	16.15 (SD=9.30; n=6)	1.48	1.02
Intake to Termination	23.78 (SD=14.67; n=9)	11.63 (SD=5.44; n=9)	2.28	0.91

#### WORKER RATING

For workers, paired samples t-tests indicated significant improvement in Problem Severity at both data collection points (see Table 12). Significant improvements were noted at three months  $t(9) = 2.75, p < .05$  and at termination:  $t(9) = 2.64, p < .05$ . A large effect size was noted between intake and three months while a small effect size were observed between intake and termination.

Table 12. Paired Samples T-Tests for Worker Report Problem Severity Scores for Wayne County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	26.15 (SD=12.12; n=10)	14.45 (SD=5.27; n=10)	2.75*	1.25
Intake to Termination	16.40 (SD=11.76; n=10)	13.60 (SD=7.79; n=10)	2.64*	.28

\* $p < .05$

## YOUTH RATING

While Problem Severity decreased from intake to both measurement intervals, the data did not indicate a statistically significant change (see Table 13). A small effect size was noted for intake to three months. A moderate effect size was noted for intake to termination.

Table 13. Paired Samples T-Tests for Youth Report Problem Severity Scores for Wayne County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	15.89 (SD=9.09; n=9)	16.51 (SD=12.32; n=9)	6.75	.06
Intake to Termination	15.78 (SD=8.41; n=9)	11.95 (SD=6.16; n=9)	12.58	.52

## FUNCTIONING

Overall means for the Functioning scale by rater and assessment period for Wayne County youth are represented graphically in Figure 3. Means from intake to termination are presented in Figure 4.

Figure 3. Functioning Scores across Time - Wayne County

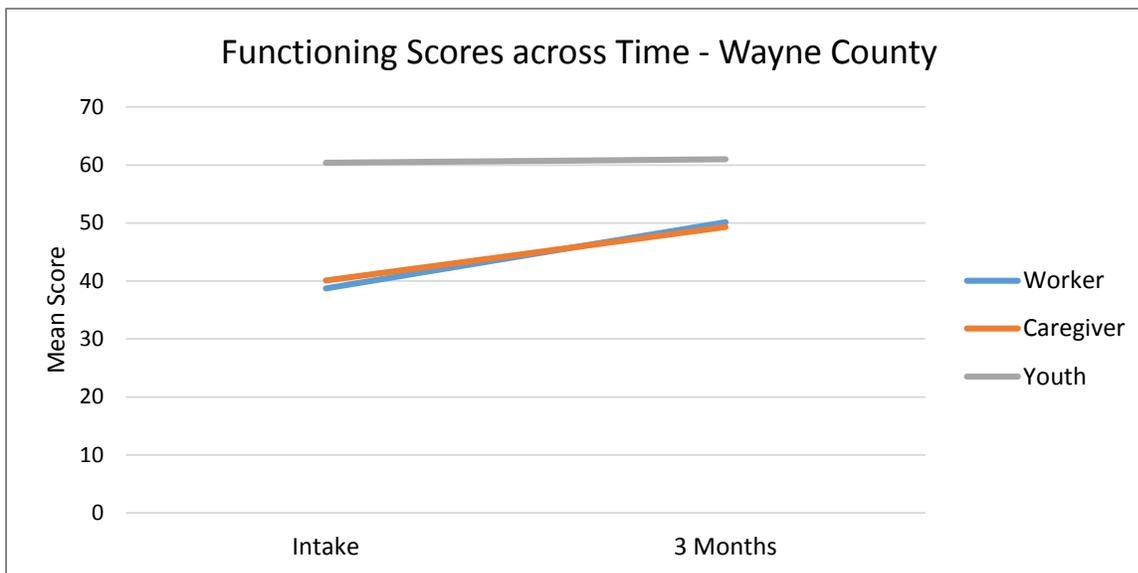
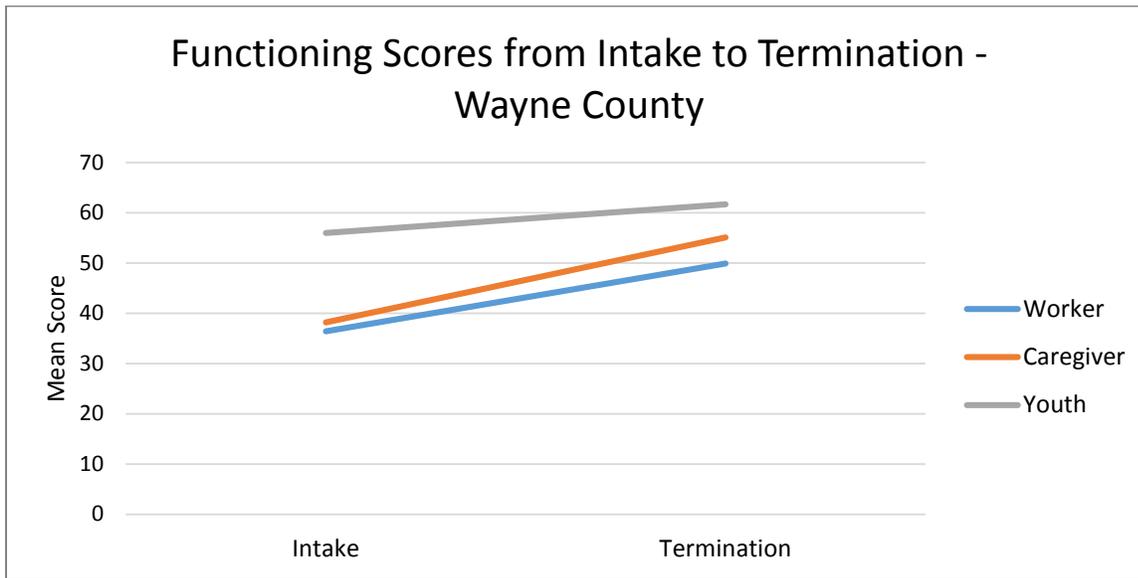


Figure 4. Functioning Scores from Intake to Termination - Wayne County



#### CAREGIVER RATING

Paired samples t-tests revealed significant improvements in Functioning at termination (see Table 14) compared to intake. Significant improvements were noted at termination:  $t(8) = -2.58$ ,  $p < .05$ . Large effect sizes were observed for both measurement intervals.

Table 14. Paired Samples T-Tests for Caregiver Report Functioning Scores for Wayne County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	32.5 (SD=13.84; n=6)	50.17 (SD=11.30; n=6)	-2.33	1.25
Intake to Termination	38.22 (SD=14.56; n=9)	55.11 (SD=14.38; n=9)	-2.58*	1.70

\* $p < .05$

#### WORKER RATING

For workers, paired samples t-tests indicated significant improvement in the Functioning scale for each of the measurement intervals (see Table 15). Significant improvements were noted at three months:  $t(9) = -4.09$ ,  $p < .01$  and termination:  $t(9) = -2.60$ ,  $p < .05$ . Large effect sizes were noted for both measurement intervals.

Table 15. Paired Samples T-Tests for Worker Report Functioning Scores for Wayne County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	37.10 (SD=11.32; n=10)	50.10 (SD=9.05; n=10)	-4.09**	1.27
Intake to Termination	36.40 (SD=11.06; n=10)	49.90 (SD=9.18; n=10)	-2.60*	1.33

\* $p < .05$ , \*\* $p < .01$

---

## YOUTH RATING

**While Functioning increased from intake to both measurement points, these differences are not statistically significant (see Table 16).** Small effect sizes were noted for both of the measurement intervals.

**Table 16. Paired Samples T-Tests for Youth Report Functioning Scores for Wayne County**

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	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
<b>Intake to Three Months</b>	57.22 (SD=10.65; n=9)	61.00 (SD=11.62; n=9)	-1.82	.06
<b>Intake to Termination</b>	56.00 (SD=9.55; n=9)	61.67 (SD=13.93; n=9)	-1.84	.48

---

## TSCC

The Trauma Symptom Checklist for Children (TSCC) was administered to youth in the BHJJ program in Wayne County at both intake and termination. The TSCC is made up of six subscales: Anxiety, Depression, Anger, Posttraumatic Stress, Dissociation, and Sexual Concerns. Higher scores on each of the subscales indicate higher levels of trauma symptoms. Table 17 shows the mean TSCC scores at intake and at termination.

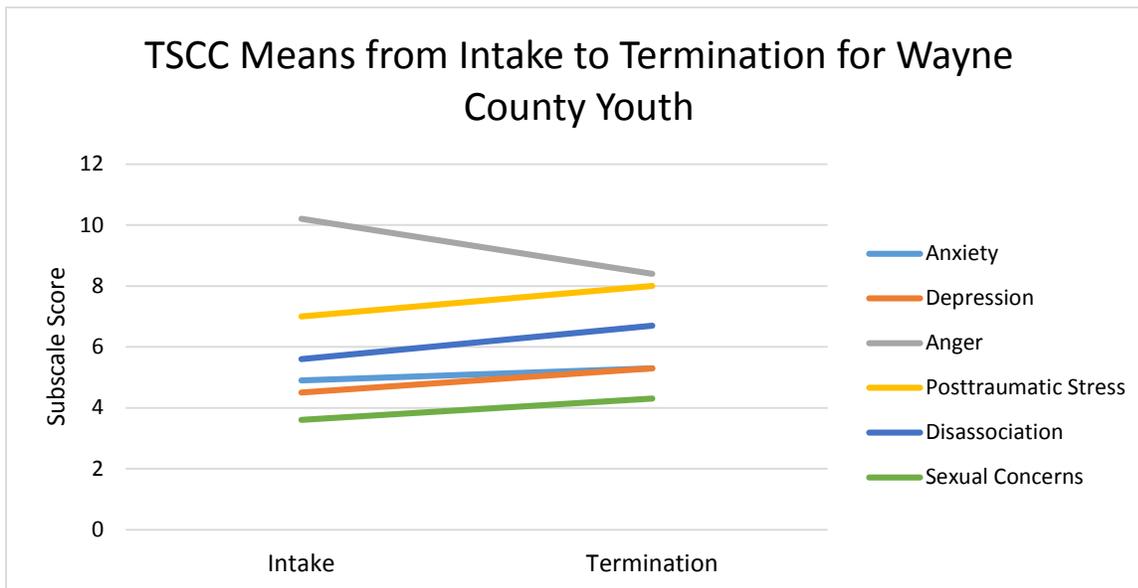
Paired samples t-tests were conducted on the six subscales for Wayne County BHJJ youth who have subscale scores both at intake and at termination (see Table 17). Data were available for youth aged 8-17 who had completed the TSCC at both intake and termination.

While statistically significant improvements were not noted for any of the subscales, Anger decreased from Intake to Termination. Means reported in Table 17 are represented graphically in Figure 5. While TSCC scores increased from intake to termination, it is important to note that these increases are slight and not statistically significant. More data are needed to understand the real effect of the program on trauma on BHJJ youth in Wayne County.

**Table 17. Paired Samples T Tests for TSCC Subscales for Wayne County Youth**

	Intake	Termination	t	d
Anxiety	4.90 (SD=4.40; n=10)	5.30 (SD=4.00; n=10)	-0.38	.09
Depression	4.50 (SD=2.27; n=10)	5.30 (SD=3.68; n=10)	-0.76	.26
Anger	10.20 (SD=7.28; n=10)	8.40 (SD=6.96; n=10)	0.91	.25
PTS	7.00 (SD=5.70; n=10)	8.00 (SD=6.44; n=10)	-0.59	.16
Dissociation	5.60 (SD=3.59; n=10)	6.70 (SD=4.00; n=10)	-0.80	.29
Sexual Concerns	3.60 (SD=4.27; n=10)	4.30 (SD=4.37; n=10)	-1.17	.16

**Figure 5. TSCC Means from Intake to Termination for Wayne County Youth**



## SUBSTANCE USE

Every six months the youth completed a self-report measure of substance use. The survey was designed to measure any lifetime use of each drug as well as patterns of current use. Table 18 presents the percentages of BHJJ youth who reported ever using alcohol or drugs and the average age of first use. Alcohol, cigarettes, and marijuana were the three most commonly used substances for both males and females. Due to small sample sizes, chi-square analyses detecting gender differences for substance use were not possible.

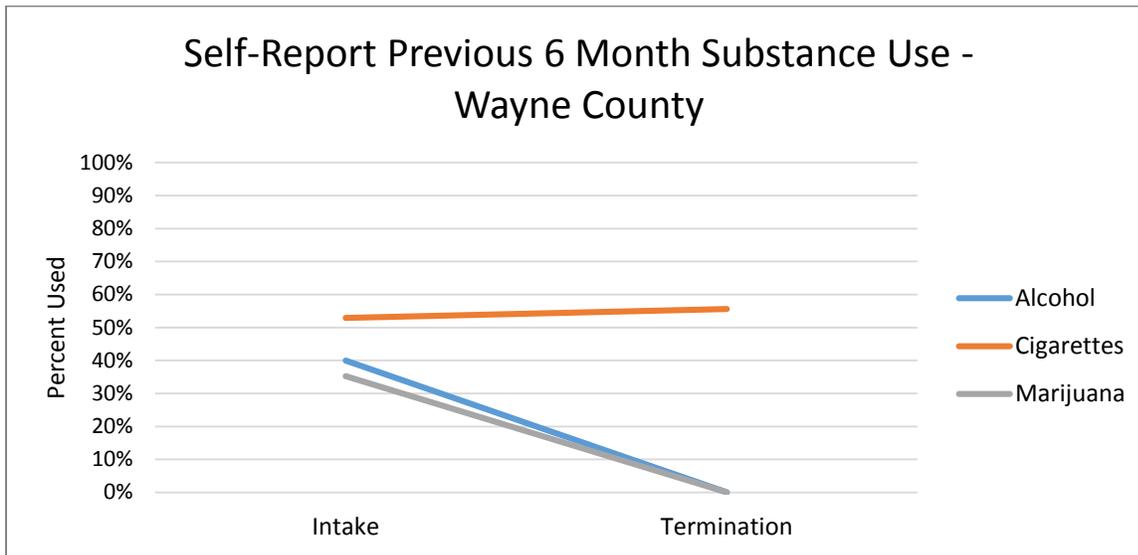
Youth were also asked to report whether they had used each substance in the past six months. Figure 6 presents past six month use for the most commonly reported substances among those who reported lifetime use. With the exception of cigarette use, the percentage of those using substances decreased among the most commonly reported substances. Six month alcohol use decreased from 40.0% (n = 6) at intake to zero at termination. Six month marijuana use decreased from 35.3% (n = 6) at intake and 0% at termination.

**Table 18. Self-Report Substance Use at Intake for Wayne County BHJJ Youth**

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	88.9% (n = 8)	12.38 (SD = 1.60)	71.4% (n = 5)	13.00 (SD = 2.00)
<b>Cigarettes</b>	88.9% (n = 8)	11.63 (SD = 1.85)	100% (n = 7)	12.43 (SD = 1.40)
<b>Chewing Tobacco</b>	33.3% (n = 3)	12.67 (SD = 1.53)	0.0% (n = 0)	N/A
<b>Marijuana</b>	100% (n = 9)	12.67 (SD = 1.23)	85.7% (n = 6)	13.33 (SD = 0.82)
<b>Cocaine</b>	0.0% (n = 0)	N/A	14.3% (n = 1)	16.00
<b>Pain Killers (use inconsistent with prescription)</b>	22.2% (n = 2)	15.00 (SD = 0.00)	42.9% (n = 3)	14.33 (SD = 0.58)
<b>GHB</b>	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
<b>Inhalants</b>	0.0% (n = 0)	N/A	14.3% (n = 1)	15.00
<b>Heroin</b>	0.0% (n = 0)	N/A	14.3% (n = 1)	15.00
<b>Amphetamines</b>	11.1% (n = 1)	15.00	0.0% (n = 0)	N/A
<b>Ritalin (use inconsistent with prescription)</b>	33.3% (n = 3)	14.00 (SD = 1.41)	0.0% (n = 0)	N/A
<b>Barbiturates</b>	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
<b>Non-prescription Drugs</b>	11.1% (n = 1)	15.00	28.6% (n = 2)	15.00
<b>Hallucinogens</b>	11.1% (n = 1)	14.00	28.6% (n = 2)	13.50 (SD = 0.71)
<b>PCP</b>	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
<b>Ketamine</b>	11.1% (n = 1)	15.00	0.0% (n = 0)	N/A
<b>Ecstasy</b>	11.1% (n = 1)	15.00	14.3% (n = 1)	15.00
<b>Tranquilizers</b>	11.1% (n = 1)	15.00	14.3% (n = 1)	13.00

<sup>a</sup>Standard Deviations are not calculated when only one respondent reported using a substance.

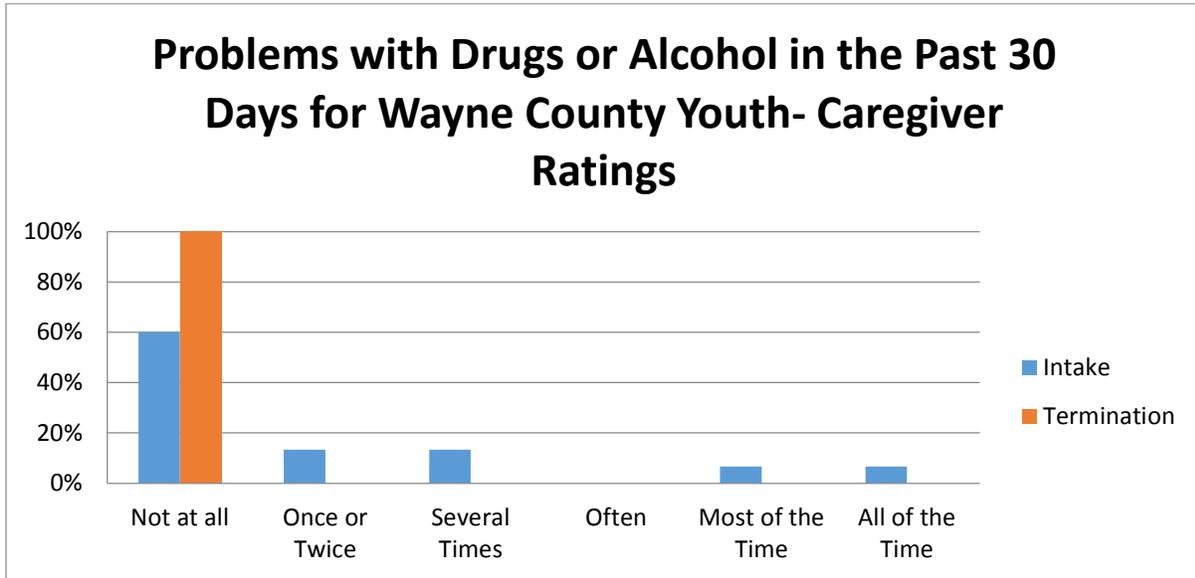
Figure 6. Self-Report Previous 6 Month Substance Use from Intake to Termination - Wayne County



#### OHIO SCALES AND SUBSTANCE USE

The Ohio Scales contain one Likert-scale item about the youth's problems with alcohol and drugs during the past 30 days. This question appears on all three versions of the Ohio Scales (Caregiver, Worker, and Youth). The responses range from zero to five, with zero indicating no problems at all with drugs or alcohol in the past 30 days and five indicating problems with drugs or alcohol all of the time. Scores on this item were examined at intake and termination for the three raters. All raters reported fewer problems with drugs or alcohol at termination from BHJJ (see Figure 7, Figure 8, and Figure 9). At intake 60% (n = 9) of caregivers and 70.6% (n = 12) of workers reported no problems with drugs or alcohol in the past 30 days while 100% (n = 9) of caregivers and 100% (n = 10) of workers reported no problems at termination. Similarly, 81.3% (n = 13) of youth reported no problems in the past 30 days with drugs or alcohol at intake while 100% (n = 8) of youth reported no problems at termination.

**Figure 7. Problems with Drugs or Alcohol in the Past 30 Days for Wayne County Youth - Caregiver Ratings**



**Figure 8. Problems with Drugs or Alcohol in the Past 30 Days for Wayne County Youth - Worker Ratings**

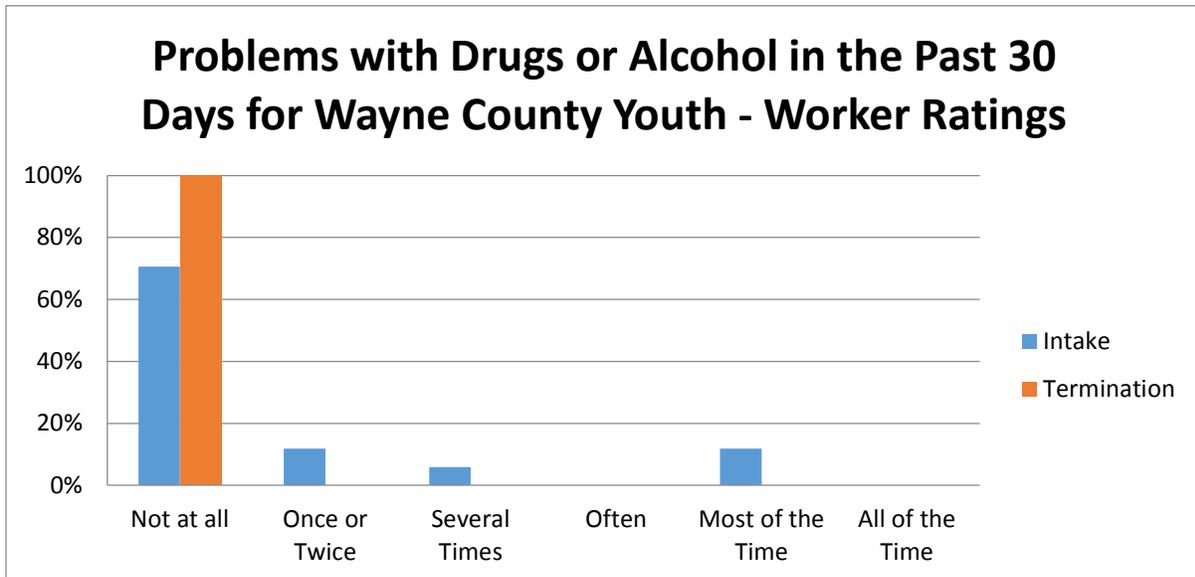
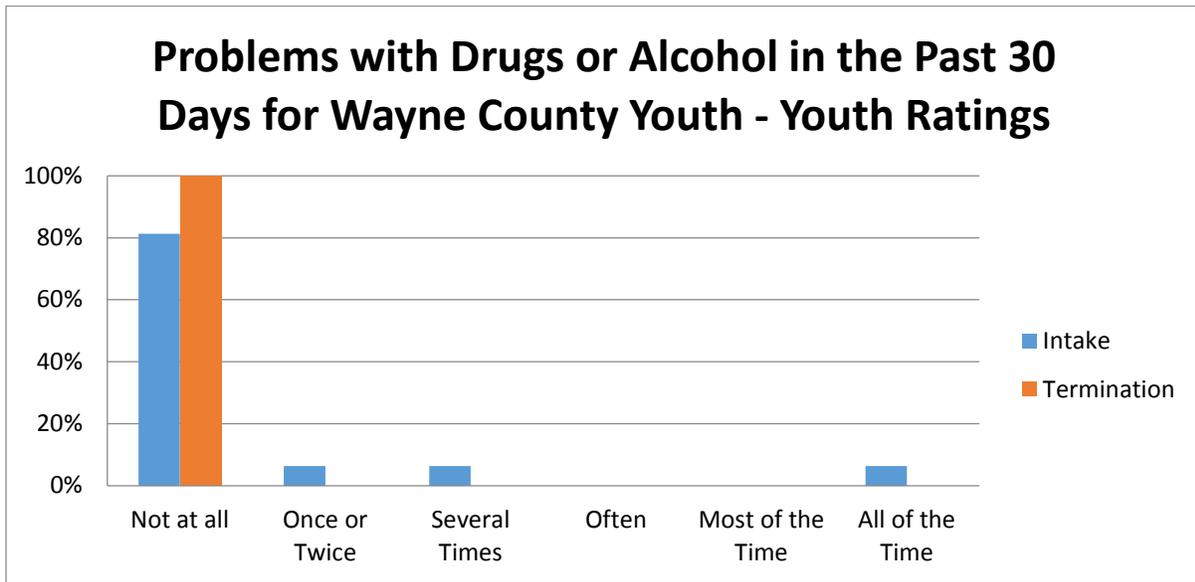


Figure 9. Problems with Drugs or Alcohol in the Past 30 Days for Wayne County Youth - Youth Ratings



## TERMINATION INFORMATION

### REASONS FOR TERMINATION

Upon termination of treatment from BHJJ, the case worker is asked to identify the reason for the youth's termination from the program. This information is typically focused on treatment outcomes and driven by local definitions of success, not necessarily whether the youth received new court charges or adjudications (recidivism), although youth may be terminated from the BHJJ program due to new involvement with the court. Typically, successful treatment completion is tied to attendance at meetings, progress in therapy, compliance with terms of the treatment plan, etc. County-specific definitions of successful termination are described in detail in the Project Descriptions section.

To date, there have been 13 youth terminated from the BHJJ program in Wayne County. **Over 76% (76.9%, n = 10) of the youth terminated from the BHJJ program were identified as successful treatment completers.** The remainder of the sample terminated either due to out of home placement (7.7%, n = 1), or "other" (15.4%, n = 2). For the two youth who were terminated due to "other" reasons, they were terminated because of family reasons.

### AVERAGE LENGTH OF STAY

The average length of stay for youth in the Wayne County BHJJ program was 142 days. For those who completed successfully, the average length of stay was 149 days. For those who did not complete successfully, the average length of stay was 119 days.

### RISK FOR OUT OF HOME PLACEMENT

At intake into and termination from the BHJJ program, workers were asked whether the youth was at risk for out of home placement. Upon entering the program, 47.1% of the youth (n = 8) in Wayne County were at risk for out of home placement. At termination, 15.4% (n = 2) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, zero were at risk for out of home placement at termination.

### POLICE CONTACTS

With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth had been receiving mental health services through BHJJ. Workers reported that police contacts has been reduced for 92.3% (n = 12) of the youth. For the remainder, police contacts stayed the same (7.7%, n = 1).

## SATISFACTION WITH SERVICES

Upon completion of the BHJJ program, the caregiver was asked about their overall satisfaction with the BHJJ program (see Table 19). At termination from the BHJJ program, 100% (n = 9) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 100% (n = 9) either strongly agreed or agreed that the services their child and/or family received were right for them. One hundred percent (n = 9) of caregivers either strongly agreed or agreed that treated them with respect and 100% (n = 9) strongly agreed or agreed that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

**Table 19. Satisfaction with Services – Wayne County**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Undecided</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<b>Overall I am satisfied with the services my child received</b>	<b>55.6%</b>	<b>44.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>The services my child and/or family received were right for us</b>	<b>66.7%</b>	<b>33.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Staff treated me with respect</b>	<b>77.8%</b>	<b>22.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Staff were sensitive to my cultural/ethnic background</b>	<b>77.8%</b>	<b>22.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

## RECIDIVISM

### METHODOLOGY

Court data were provided by the Wayne County Juvenile Court, and consisted of charges, adjudications, and commitments to ODYS (at any time after their BHJJ enrollment, including after termination from BHJJ). Data were divided into charges prior to enrollment, charges after enrollment, and charges after termination from BHJJ. We also present the data by treatment completion status (successful vs. unsuccessful). Technical or probation violations were not considered to be new charges and thus were not included in the analyses. Data specific to charges for misdemeanor and felony charges are presented in the following sections. Juvenile court history and recidivism information are presented at 3, 6, 12, and 18 month intervals for prior to intake, and 3, 6, and 12 month intervals for after intake and termination.

Several criteria for inclusion in the analysis were considered based on the time period of interest. While all youth 18 years of age and under are included in the analyses prior to enrollment, not all youth are included in each assessment period after enrollment and after termination. Any charges for youth over 18 years of age would likely be filed in adult court, and therefore would not appear in juvenile court records. A youth over 18 at the time of termination may show no future juvenile court involvement; however the individual may have charges in the adult system. Because we did not have access to adult records, youth 18 years of age or older at termination were eliminated from all analyses that examined charges after termination. Also, youth who turned 18 years old during the measurement interval in question (3, 6, 12 months after enrollment or termination) were eliminated from the analysis because we lacked a complete picture of their possible court involvement.

Enrollment and termination dates were also used to identify youth for the analyses. For example, when examining recidivism data three months after termination from BHJJ we chose to include only those youth who had been terminated from BHJJ for at least three months prior to the end of the data collection period, June 30, 2015. If the youth was terminated one month prior to the end of the data collection, that youth only had one month to recidivate. Therefore, the full extent of their recidivism is not known. For example, in order to be included in the three month after termination analyses, a youth had to have been 17.75 years old or younger at the time of termination and must have been terminated at least three months prior to the end of the data collection period. To be included in the 6 month analysis, youth had to have been 17.50 years old or younger at termination and have been terminated 6 months prior to June 30, 2015. The same criteria were applied to the intervals following enrollment in BHJJ. When examining new charges occurring within three months after intake, youth must be 17.75 years old or younger at the time of enrollment and the enrollment date must be at least three months prior to the end of the data collection period for inclusion in the analysis.

## RESULTS

### JUVENILE COURT INVOLVEMENT PRIOR TO INTAKE

In the 12 months prior to their BHJJ enrollment, 78.9% (n = 15) of the BHJJ youth had a misdemeanor charge, 15.8% (n = 3) had a felony charge, and 78.9% (n = 15) were adjudicated delinquent (see Table 20).

**Table 20. Charges Prior to BHJJ Enrollment – Wayne County**

	Misdemeanors	Felonies	Adjudicated Delinquent
<b>3 months</b>	26.3% (n = 5)	0.0% (n = 0)	26.3% (n = 5)
<b>6 months</b>	42.1% (n = 8)	5.3% (n = 1)	47.4% (n = 9)
<b>12 months</b>	78.9% (n = 15)	15.8% (n = 3)	78.9% (n = 15)

### RECIDIVISM AFTER ENROLLMENT

We defined recidivism after enrollment as receiving a new charge or adjudication at 3, 6, and 12 months after a youth's BHJJ enrollment date. Once again even if a charge was eventually dismissed, it was included in the 'Misdemeanors' and 'Felonies' columns of the associated tables but would not be included in the calculations of delinquent adjudications. Recidivism data are not yet available at 18 months for this county.

In the 12 months after enrollment in BHJJ, 33.3% (n = 2) of youth were charged with at least one new misdemeanor and 16.7% (n = 1) were charged with at least one new felony. Thirty three percent (33.3%, n = 2) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 21).

**Table 21. Charges after BHJJ Enrollment – Wayne County**

	Misdemeanors	Felonies	Adjudicated Delinquent
<b>3 months</b>	17.6% (n = 3)	5.9% (n = 1)	17.6% (n = 3)
<b>6 months</b>	30.8% (n = 4)	7.7% (n = 1)	30.8% (n = 4)
<b>12 months</b>	33.3% (n = 2)	16.7% (n = 1)	33.3% (n = 2)

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## RECIDIVISM AFTER TERMINATION

We defined recidivism after termination as receiving a new charge or adjudication any time after a youth's BHJJ termination date. If a charge was eventually dismissed, it was still included in the 'Misdemeanors' and 'Felonies' column of the associated tables but would not be included in the calculations of delinquent adjudications.

In the 12 months after termination from BHJJ, 9.1% (n = 1) of youth were charged with at least one new misdemeanor, 9.1% (n = 1) were charged with at least one new felony, and 9.1% (n = 1) were adjudicated delinquent (see Table 22).

**Table 22. Charges after BHJJ Termination – Wayne County**

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	<b>Misdemeanors</b>	<b>Felonies</b>	<b>Adjudicated Delinquent</b>
<b>3 months</b>	11.1% (n = 1)	11.1% (n = 1)	11.1% (n = 1)
<b>6 months</b>	14.3% (n = 1)	14.3% (n = 1)	14.3% (n = 1)
<b>12 months</b>	9.1% (n = 1)	9.1% (n = 1)	9.1% (n = 1)

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## FELONY OFFENDERS AND ODYS COMMITMENTS

We examined data for those youth who committed felony offenses in the 12 months prior to their BHJJ enrollment to determine if they had new felony charges after their BHJJ termination. One felony offender remained in the analysis after the data were restricted to youth 17 years old or younger, who had one full year to recidivate and for whom we had both recidivism and termination data. This one case had a new felony charge one year after BHJJ termination.

**None of the 19 BHJJ youth from Wayne County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.**

## SUCCESS STORY

The probation department had been working with a sibling set for some time. The brother and sister had what was becoming an extensive juvenile court history which included numerous admissions to the detention center. The siblings' charges included unruly, domestic violence, assault and unauthorized use of a motor vehicle. Both siblings were exhibiting serious verbal and physical behaviors at home and in the community and would leave the home on a daily basis without permission. Due to their behaviors, the family had to bounce between homes as the siblings would quickly overstay their welcome due to their behaviors. Although the Judge did not specifically deal with these siblings, she saw their names come across her desk enough that she returned the file with a note stating that she wanted them considered for MST.

The father and his fiancé were willing to work with MST and acknowledged that the siblings' behavior created an unsafe environment for not only the siblings but everyone around them. The siblings' on the other hand were not interested in the program or the therapist, as this would threaten their way of life. The MST therapist worked with the adults on communication and putting up a united front. This included a great deal of time role playing scenarios so they felt comfortable in their united front. This new approach by the adults put a kink in the siblings' efforts to play the caregivers against each other and allowed for the adults to work with the therapist on the youths' specific behaviors. Initially the larger behaviors were addressed and as those became under control the focus shifted to the smaller ones. The adults were in contact with the therapist either by phone or in person on almost a daily basis and this along with the interventions allowed the father and his fiancé to gain control of their home.

After four months in the program every behavior that caused the referral to the program had decreased significantly or was eliminated completely. The father and his fiancé expressed that they felt in control of their household, which they hadn't been in some time. On the day of the last session the sister reported to the MST therapist that she was angry and left the home without permission the previous day and by the time she reached the end of the street she turned around and went back because the consequences were not worth the action. The siblings earned their way off of probation and no new charges have been filed with the Court since they completed the program. The father and his fiancé remain in regular contact with the MST therapist and report that almost a year later the siblings are doing well and they still use the techniques they learned in MST.

## REFERENCES

- Abram, K. M., Teplin, L. A., McClelland, G. M., & Dulcan, M. K. (2003). Comorbid psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry, 60*(11), 1097-1108.
- Briere, J. (1996). *Trauma Symptom Checklist for Children (TSCC) Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Cocozza, J. & Skowrya, K. (2000). Youth with mental health disorders: Issues and emerging responses. *Office of Juvenile Justice and Delinquency Prevention Journal, 7*(1), 3-13.
- Cuellar, A.E., McReynolds, L., & Wasserman, G. (2006). A cure for crime: Can mental health treatment diversion reduce crime among youth? *Journal of Policy Analysis and Management, 25*(1), 197-214.
- Feinstein, R. A., Lampkin, A., Lorish, C. D., Klerman, L. V., Maisiak, R., & Oh, M. K. (1998). Medical status of adolescents at time of admission to a juvenile detention center. *Journal of Adolescent Health, 22*(3), 190-196.
- Friedman, R., Katz-Levy, J., Manderscheid, R., & Sondheimer, D. (1996). Prevalence of serious emotional disturbance in children and adolescents. In R. Manderscheid & M. A. Sonnenschein (Eds.), *Mental health in the United States* (pp. 71-89). Rockville, MD: U.S. Department of Health and Human Services.
- Goldstrom, I., Jaiquan, F., Henderson, M., Male, A., & Manderscheid, R.W. (2000). The availability of mental health services to young people in juvenile justice facilities: A national survey. In R.W. Manderscheid and M.J. Henderson (Eds.) *Mental Health, United States, 2000* (DHHS Publication No. SMA-01-3537, pp.248-268). Washington, DC: U.S. Government Printing Office.
- Hoge, R. D. (2002). Standardized instruments for assessing risk and need in youthful offenders. *Criminal Justice and Behavior, 29*, 380-396.
- Kretschmar, J.M., Butcher, F., Flannery, D.J., & Singer, M.I. (2016). Diverting juvenile justice-involved youth with behavioral health issues from detention: Preliminary findings from Ohio's Behavioral Health Juvenile Justice (BHJJ) Initiative. *Criminal Justice Policy Review, 27*(3), 302-325.
- Kretschmar, J.M., Butcher, F., Canary, P.K., & Devens, R. (2015). Responding to the mental health and substance abuse needs of youth in the juvenile justice system: Ohio's Behavioral Health/Juvenile Justice Initiative. *American Journal of Orthopsychiatry, 85*, 515-521.
- Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., & Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(10), 980-989.
- Nordess, P., Grummert, M., Banks, D., Schindler, M., Moss, M., Gallagher, K., & Epstein, M. (2002).

- Screening the mental health needs of youths in juvenile detention. *Juvenile & Family Court Journal*, 53(2), 43-50.
- Novins, D. K., Duclos, C. W., Martin, C., Jewett, C. S., & Manson, S. M. (1999). Utilization of alcohol, drug, and mental health treatment services among American Indian adolescent detainees. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38, 1102-1108.
- Ogles, B. M., Melendez, G., Davis, D. C., & Lunnen, K. M. (2001). The Ohio Scales: Practical outcome assessment. *Journal of Child and Family Studies*, 10(2), 199-212.
- Otto, R.K., Greenstein, J.J., Johnson, M.K., & Friedman, R.M. (1992). Prevalence of mental disorders among youth in the juvenile justice system. In J.J. Cocozza (Ed.), *Responding to the mental health needs of youth in the juvenile justice system*. Seattle, WA: The National Coalition for the Mentally Ill in the Criminal Justice System.
- Schwalbe, C. S., Gearing, R. E., McKenzie, M. J., Brewer, K. B., Ibrahim, R. (2012). A meta-analysis of experimental studies of diversion programs for juvenile offenders. *Clinical Psychology Review*, 32, 26-33.
- Shufelt, J. L. & Cocozza, J. J. (2006). *Youth with mental health disorders in the juvenile justice system: Results from a multi-state prevalence study*. Delmar, NY: National Center for Mental Health and Juvenile Justice.
- Singer, M. I., Anglin, T. M., Song, L. y. & Lunghofer, L. (1995). Adolescents' exposure to violence and associated symptoms of psychological trauma. *Journal of the American Medical Association*, 273(6), 477-482.
- Skowrya, K. & Powell, S. (2006). *Juvenile diversion: Programs for justice-involved youth with mental health disorders*. Delmar, NY: National Center for Mental Health and Juvenile Justice.
- Soler, M. (2002). Health issues for adolescents in the justice system. *Journal of Adolescent Health*, 31, 321-333.
- Teplin, L. A., Abram, K. M., McClelland, G. M., Dulcan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry*, 59(12), 1133-1143.
- U.S. Department of Health and Human Services. (2005). *National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program*. Rockville, MD: Author.
- U.S. Department of Justice. (2005). *Department of Justice activities under Civil Rights of Institutionalized Persons Act: Fiscal year 2004*. Washington, DC: Author.
- Wasserman, G. A., McReynolds, L. S., Ko, S. J., Katz, L. M., & Carpenter, J. R. (2005). Gender differences in psychiatric disorders at juvenile probation intake. *American Journal of Public Health*, 95(1), 131-137.
- Wasserman, G. A., McReynolds, L., Lucas, C., Fisher, P., & Santos, L. (2002). The Voice DISC-IV with

incarcerated male youths: Prevalence of disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(3), 314-321.

Wasserman, G. A., McReynolds, L. S., Schwalbe, C. S., Keating, J. M., & Jones, S. A. (2010). Psychiatric disorder, comorbidity, and suicidal behavior in juvenile justice youth. *Criminal Justice and Behavior*, 37(12), 1361-1376.