Statewide Mental Health Court Outcome Evaluation
Aggregate Report
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EXECUTIVE SUMMARY

Nationally, the number of people with serious mental illness (SMI) in jails ranges from 6 to 36 percent. Some refer to jails as the last mental health hospital as individuals with SMI revolve in and out of jails. As one solution to this social problem, jurisdictions are finding ways to divert such individuals from prosecution or sentencing by engaging them in treatment services. The mental health court (MHC) offers an alternative to traditional criminal court processing; it is post-booking diversion program that utilizes treatment and services available in a given community to stem the frequency of mentally ill offenders' contact with the criminal justice system. Studies of MHCs have consistently found that they can be successful in reducing re-offending and increasing treatment utilization.

In 2008, the Michigan Department of Community Health (MDCH) and the State Court Administrative Office (SCAO) developed the Michigan Mental Health Court Grant Program as a mechanism to jointly fund a statewide MHC pilot program during fiscal year 2009. In 2011, MDCH contracted an external evaluation of the pilot program encompassing eight MHCs: Berrien (Unified Trial Court); Genesee (25th Probate Court); Grand Traverse (86th District Court); Jackson (4th Circuit and 12th District Courts); Livingston (53rd District Court); Oakland (6th Circuit Court); St. Clair (72nd District Court); and Wayne (3rd Circuit Court).

The evaluation encompasses the three-year pilot period of January 2009 to December 2011 and relies on multiple sources of data to assess the processes and outcomes of each court. Questions related to court processes were: How are courts similar to and different from each other? What are mechanisms for referral and admission? How strong is the collaboration or integration between the court and mental health staff? Did participants successfully complete? Data used to assess these process-related questions included surveys, site visits, interviews, and court observation. Based on site visit and interview data, the research team created a process map illustrating each court's screening, admission, and decision-making processes. The process map and a report based on the data collection was submitted to each MHC for verification. Questions related to outcomes included: Did MHC reduce recidivism (i.e. time in jail, new arrests)? Did MHC increase participation in mental health treatment? Did high-intensity treatment such as hospitalization decrease as a result of MHC? Did specific individual or system level factors affect outcomes? Data collected to assess these outcomes came from five primary sources: MDCH-CMH Encounter/Service Data; SCAO – MHC database; jail data from each county; MDCH – Bureau of Substance Abuse and Addiction Services treatment data; and Michigan State Police – arrest and conviction data. To assess long-term outcomes, a comparison of three time periods was considered: 1) one year prior to MHC admission; 2) the period of involvement in MHC; and 3) one year following MHC discharge.

Using the Council of State Governments Justice Center list of ten essential elements of MHC as a guide, MHCs across Michigan were found to vary widely in terms of organization, policies, and practices. Differences between courts should not be construed as a 'right' or 'wrong' way of operating. Rather, each court is responsive to the needs of the particular county and uses the resources available to the best of its abilities. Because each MHC is unique, it is not possible to draw direct comparisons between courts. The intent of this evaluation is to illuminate the variety of MHC structures and processes across the state and utilize individual- and system-level factors, other than county of origin, to assess variations in outcomes.

There were 678 individuals admitted into the eight MHCs prior to December 31, 2011. The average age at admission was 35 years (range 18 to 64). Nearly two thirds of participants (63%) were males and 67% identified as Caucasian. The overwhelming majority of participants were unemployed (91%) at admission, and nearly 20% were homeless. Nearly 40% were admitted into MHC with a primary diagnosis of bipolar disorder, followed by depression (29%), schizophrenic/psychotic or delusional

disorders (21%), and 12% representing other diagnoses such as developmental or personality disorders. Although 60% were identified as having a 'current substance abuse', other evidence shows that as many as 79% were substance involved. Participants were most likely to enter MHC on a felony offense (48%), while 43% were admitted on a misdemeanor, and 8% on civil cases.

The average length of stay in MHC was 276 days; among all 678 participants who were admitted, there were 187,043 MHC program days since 2009. Of the 450 participants discharged, 43% successfully completed all requirements of the MHC – a proportion within range of national averages. Age and offense type were the strongest predictors of success: Successful completers were more likely to be older than average (39 years) and have a misdemeanor/civil offense.

Treatment outcomes. Participants received the greatest number of services during MHC, and these were primarily low-intensity services (e.g., med reviews, case management). The proportion of participants requiring a high intensity service (e.g., hospitalization) declined from 31% pre-MHC to 15% post-MHC. Time to first mental health treatment after MHC admission averaged 16 days; upon discharge into the community the average was 41 days. While 95% of participants received mental health treatment during MHC, 72% of those discharged greater than one year received such services. Substance abuse treatment within the CMH system increased during MHC as compared to pre-MHC (45% compared to 53%) but declined post-MHC (28% of those discharged).

Recidivism outcomes. A primary indicator of MHC is recidivism, measured nationally by new arrests. Since admission into MHC, only 14% of participants were arrested and charged with a new offense – a much lower rate than national averages - particularly, since time between admission to MHC and one year post-MHC may have been as long as 2-years. Prior to MHC, 81% of participants spent time in jail, averaging 39 days. During MHC, 54% of participants spent time in jail, averaging 24 days. This represents a statewide saving of 10,074 jail bed days. To date, a reduction of 15,991 jail bed days is seen when comparing the pre-MHC to post-MHC periods for the 450 participants discharged. Among participants discharged one-year (n=236), long-term outcomes indicate 43% spent time in jail post-MHC and 4% were incarcerated in state prisons. Successful program completion strongly predicts the absence of recidivism.

Individual Factors Influencing Outcomes. Mental health diagnosis was found to have no effect on completion, treatment attainment or recidivism. However, the presence of COD predicted less favorable completion, more time in jail during MHC and higher proportion of new arrests/convictions. Similarly, those with felony offenses were less likely to complete, and when they did, they spent more time in MHC. Interestingly, those with felony offenses had significant reductions in jail days when comparing pre- and post-MHC periods regardless of completion status. Importantly, there was no difference in new arrest/convictions between those who entered with a felony versus a misdemeanor.

System-level Factors Influencing Outcomes. Outcome variations related to court type (felony, misdemeanor/civil, or mixed) were similar to those above, with courts focused on felony cases having the greatest reduction in jail days. Examining the level of integration between the courts and treatment staff (high vs. low), high integration courts had lower lengths of stay and less time to treatment. Although those in low integration courts were more likely to complete MHC, those in high integration courts were more likely to experience greater reductions in jail days and higher treatment participation.

Implementation and piloting of MHCs across Michigan has been successful, and many quantitative indicators as well as personal stories demonstrate positive outcomes. Based upon the body of knowledge amassed in this report, the following are areas for future consideration that may expand positive outcomes: 1) Enhance the level of integration between courts and treatment; 2) Consider matching risk level with length or intensity of court supervision; 3) Extend use of rewards to encourage longer length of stays and positive completion; 4) Increase attention to COD, integration of mental health and substance abuse treatment, and continuity of care post-MHC to support ongoing recovery.

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List of Acronyms

ACT	Assertive Community Treatment
BSAAS	Bureau of Substance Abuse and Addiction Services
CA	Coordinating Agency
CJ	Criminal Justice
CMH	Community Mental Health
CMH ID	Community Mental Health Identification
CMHSP	Community Mental Health Service Program
COD	Co-occurring Disorders
CSC	Criminal Sexual Conduct
DO	Disorder
IDDT	Integrated Dual Disorders Treatment
LOS	Length of Stay
MDCH	Michigan Department of Community Health
MDOC	Michigan Department of Corrections
MH	Mental Health
MHC	Mental Health Court
MMHCGP	Michigan Mental Health Court Grant Program
MSP	Michigan State Police
OTIS	Offender Tracking Information System
SA	Substance Abuse
SCAO	State Court Administrative Office
SCCM	Specialty Court Case Management
SD	Standard Deviation
SMI	Serious Mental Illness
SPMI	Serious and Persistent Mental Illness
SSN	Social Security Number
SUD	Substance Use Disorder
TX	Treatment

I.   Introduction

The number of people with serious mental illness (SMI) in jails ranges from 6 to 36 percent,[1][2][3][4][5][6] which is approximately three to six times greater than the proportion of persons with a mental illness in the general population[7]. There are now more individuals with SMI being treated in jails and prisons than in public psychiatric hospitals, leading some to refer to jail/prison as the last mental hospital[8][9][10][11]. The criminal justice system has become a revolving door as persons with mental illness go from arrest, to court, to cell and back to the community, often without receiving services and treatment[12][13].

As one solution to this social problem, local jurisdictions have implemented various diversionary programs in which offenders with mental illness are given an opportunity to avoid prosecution or serving a sentence by engaging in treatment services. The mental health court is an example of a post-booking diversion program that utilizes treatment and services available in a given community to stem the frequency of mentally ill offenders' contact with the criminal justice system. Mental health courts are a type of problem-solving court (also called specialty courts or therapeutic courts), which are an alternative to traditional criminal court processing. The proliferation of these courts is commonly associated with the first drug court in Dade County, Florida in 1989[14][15]. The court was established to treat addiction among defendants who had been arrested on drug related charges and who had a history of substance abuse. Observers lauded the drug court for its innovation and success and the model was quickly emulated in other jurisdictions and used as a framework in developing other types of problem-solving courts. In 1997 Broward County, Florida started the nation's first official mental health court after a judge observed the county's number of misdemeanor cases involving mental illness growing and leading to overburdened court dockets and overcrowded jails[16]. The Broward County mental health court modified the key components of the drug court model to fit mentally ill offenders[17]. Similar experiences in other jurisdictions led to the creation of mental health courts, and today there are more than 300 mental health courts in operation across the United States[18].

Although mental health courts vary across jurisdictions, they have a similar underlying goal, which is to divert offenders from the criminal justice system by linking them with treatment, services or other community alternatives designed to alter the causes of their criminal behavior. Unlike traditional criminal courts, mental health courts use a non-adversarial team approach in which a judge, prosecution and defense attorneys, mental health practitioners, probation officers and other experts collaborate to link defendants to treatment and services[19]. Participation in mental health court is voluntary, and individuals can opt-out at any time and have their case sent back to traditional criminal court for processing if pre-adjudicated enrollment, or serve their sentences if post-adjudicated enrollment. Once enrolled the court team regularly evaluates compliance with treatment, services and court mandates for behavioral change. If a participant is continually non-compliant, the team ejects him/her from the mental health court process and returns him/her to traditional court or to serve the sentence. If an offender remains compliant for the allotted time, charges are dismissed (in pre-adjudication cases) or the sentence is reduced (in post-adjudication cases).

Since the first mental health court in the late 1990s a number of aspects of these courts have been examined. Several studies have examined the court proceedings, describing the court process [16][20][21], the ways in which interactions with the judge in mental health court differs from traditional court [22][17], and the ways in which these proceedings are perceived by the participants[23][24]. Other research has also focused on the inner-workings of the process, outlining how individuals are selected for the mental health court[25], the decision-making process of the mental health court team[26], and factors that predict mental health court completion[27][28]. Some research has examined diagnostic characteristics of individuals enrolled in mental health court, finding that most participants have been diagnosed with a serious mental illness—many with co-occurring substance abuse problems[29] — and that schizophrenia, schizoaffective disorder, bipolar disorder, and depressive disorders were the most common diagnoses[30].

The majority of mental health court research has focused on the key criminal justice goal of the court, that is, reductions in criminal recidivism. These studies have consistently found that mental health courts can be successful in reducing re-offending[31][32][33][34][35][36][37][38][39][40][41][42][43]. Arrest, time to re-arrest, and jail time are the most common outcome indicators employed, though some studies evaluated severity of reoffending[33][38][39], and one looked at cost effectiveness[41]. With the exception of Steadman et al.[42], who found reductions in criminal recidivism among four mental health courts across the U.S., all of these recidivism studies have focused on a single court.

Current Study
The data presented in this report come from eight mental court pilot programs in Michigan. In 2008, the Michigan Department of Community Health (MDCH) and the State Court Administrative Office (SCAO), developed a collaboration called the Michigan Mental Health Court Grant Program (MMHCGP) as a mechanism to jointly fund a mental health court (MHC) pilot program in Michigan during fiscal year (FY) 2009. The MMHCGP, funded with appropriations from the MDCH and SCAO 2009 budgets, invited trial courts statewide that were partnered with a local Community Mental Health Service Program (CMHSP) to apply for a grant to implement a post-arraignment MHC within their communities targeting adults with an Axis I thought or mood disorder or Axis II developmental disability. Nine programs applied for and were awarded funding in November 2008 including Berrien (Unified Trial Court); Genesee (25th Probate Court); Grand Traverse (86th District Court); Jackson (4th Circuit and 12th District Courts); Livingston (53rd District Court); Oakland (6th Circuit Court); Otsego (24th Circuit and 87A District Courts); St. Clair (72nd District Court); and Wayne (3rd Circuit Court).

In August 2011, MDCH partnered with Dr. Sheryl Kubiak and her team from Michigan State University (MSU) to conduct an outcome evaluation of the remaining eight funded mental health court pilot programs. The outcome evaluation encompasses the three-year pilot project period of January 2009 – December 2011. The purpose of the evaluation is to determine if the courts have been successful in reducing recidivism and increasing participation in mental health treatment. Questions to be considered during the outcome evaluation include: Did individuals change their behaviors when compared to the year before MHC? Did participants enter and

remain in mental health treatment? Did participants experience new arrests or incarcerations? Did individual- or system-level factors affect outcomes?

II.   Methodology

The evaluation relies on multiple sources of data to assess both the processes and outcomes of each court.

Process Methods
Process methods employed during the evaluation included stakeholder surveys, site visits, observations, onsite interviews, and process mapping. Each of these methods is described in greater detail below.

Stakeholder Surveys
In September 2011, surveys were electronically administered to all individuals directly involved with the development, implementation, administration, and/or daily operations of all eight courts as identified by the MHC coordinator. Stakeholder surveys were included as part of the evaluation to assess the perceptions of individual members and to determine areas of shared understanding (or conversely, shared disagreement) and individual views on the strengths and challenges of the implementation and ongoing operations of the MHC. The results of the stakeholder survey were compiled into a report, *Mental Health Courts Statewide: Report of Stakeholder Survey,* and submitted to MDCH.

Site Visits, Interviews, and Court Observation
Site visits and stakeholder interviews were conducted at all eight courts between October 2011 and June 2012 to assess participant eligibility, the flow of the court activities from referral to admission, and to determine areas of shared understanding (or conversely, shared disagreement) and individual views on the strengths and challenges during the implementation and ongoing operation of the MHC. Interviewees who were most involved with management of the court and knowledgeable about daily operations and administration of the court were purposefully selected to represent both the mental health (MH) and criminal justice (CJ) systems.

In addition to the interviews, an observation of a typical team meeting and MHC court hearings was also conducted. The observation was conducted by an evaluation team member in conjunction with the interviews to assess factors that may influence the outcomes associated with each program including decision-making and dynamics among the treatment team members; the use of sanctions and incentives; the role and level of involvement of MHC team members during court proceedings; the relationship between the judge and MHC participants; and unique characteristics of the program.

Process Mapping

Process mapping was conducted in conjunction with the onsite interviews as described below. A process map illustrates the flow of participants into the MHC and through the various systems and services associated with the court. The process map was used to assess the flow of the court at both individual and systems level to answer the following questions: Where did referrals come from? Do eligibility criteria match the client population? How are individuals screened for the MHC? Is there a gatekeeper? In addition, the process maps illustrate similarities and differences across the eight pilot programs. Process maps for all eight courts are presented in Appendix C.

Outcome Methods

Outcome methods employed included the merging and analyses of multiple secondary administrative datasets. To determine both short- and long-term outcomes, several sources of secondary data were used (see Table 1 below). For short-term outcomes related to progress in and completion of the MHC, data from the State Court Administrative Office's (SCAO) Specialty Court Case Management (SCCM) database were used. To track long-term outcomes associated with treatment utilization during and post-MHC, Community Mental Health (CMH) statewide encounter data and Bureau of Substance Abuse and Addiction Services (BSAAS) statewide admissions data were used. To assess outcomes associated with recidivism, Michigan State Police (MSP) arrest and conviction data and jail admission and discharge data from each of the eight counties were used.

Table 1: Short-Term and Long-Term Outcome Data Sources

Data Source	Data Type
MDCH-CMH	CMH Encounter/Service Data
County Jails (n=8)	Local Incarcerations; bed days
MDCH-BSAAS	Substance Abuse Treatment
SCAO-SCCM	Mental Health Court Database
Michigan State Police	Statewide arrest, conviction data

Obtaining and Merging Secondary Data from Administrative Sources

Prior to data analyses, each of the administrative data sets had to be officially requested. Once permission for access was obtained, each administrative entity required a data file for matching the target participants. Once this data file was configured to the agency's standards, it was sent and the requested data file sent back to the research team. The process for verifying, cleaning and merging each of the data sets is detailed in Appendix A.

Analyses of Administrative Data

After merging all of the administrative data files, initial analysis concentrated on each of the eight courts to assess outcomes within each individual court. An aggregate analysis followed, which considered individuals across the eight courts and then examined both individual and system-level factors contributing to short- and long-term outcomes. Questions to consider in

assessing outcomes include: Did participants' involvement in criminal activity decrease? Did participants engage in mental health or substance abuse treatment during and post-MHC? Did treatment engagement increase as a result of MHC? Did the intensity of treatment services change? Did the number of days spent in the jail decrease?

To be able to assess long-term outcomes, a comparison of three time periods was considered: 1) one year prior to MHC admission (pre-); 2) the period of involvement in the MHC (during); and 3) one year following MHC discharge (post-).

Reporting
Data specific to the processes and outcomes for each of the eight individual courts were provided to MDCH separately in September 2012. **This aggregate report will focus on the statewide outcomes across the eight courts** including Berrien (Unified Trial Court); Genesee (25th Probate Court); Grand Traverse (86th District Court); Jackson (4th Circuit and 12th District Courts); Livingston (53rd District Court); Oakland (6th Circuit Court); St. Clair (72nd District Court); and Wayne (3rd Circuit Court).

III. Michigan Mental Health Courts

Michigan Mental Health Court Grant Program Requirements
The development of each of the eight funded MHCs in Michigan was based on the criteria set forth by the MMHCGP. Eligibility was limited to trial courts partnering and collaborating with the Community Mental Health Services Program (CMHSP) through a single joint application operating post-arraignment programs targeting adults with an Axis I thought or mood disorder or Axis II developmental disability.

Essential Elements of a Mental Health Court
To aid in development of mental health courts, the Council of State Governments Justice Center compiled a list of ten essential elements of a mental health court[44]. The list represents consensus among researchers, practitioners, and policymakers on adult mental health court design and implementation. Though the elements are not research-based and may not be present in every MHC, they serve as a useful guide in the review of the organization and functions of existing courts. Listed below are the ten elements and some of the questions to be considered within each element.

Table 2: Ten Essential Elements of a Mental Health Court

1	Goals	What are specific goals of the MHC?
2	Target Population	What kind of diagnostic criteria will the court establish?
		Will the court accept defendants with misdemeanors, felonies, or both?
		Will those with violent crimes or a history of violence be eligible?
3	Confidentiality	How will participants be asked to consent to the release of information?
		How will clinical information be handled in open court?
4	Terms of Participation	How long will the program last?
		Will the length of the program vary by participant?
		How often will participants report to the court for status hearings?
5	Informed and Voluntary Choice	How will the court ensure that defendants are fully informed about the program before opting into the court?
6	Participant Identification	From which agencies or individuals will the court accept referrals?
7	Integration of Treatment and Community Supports	How will the court address the treatment needs of participants with co-occurring psychiatric and substance abuse disorders?
		How will the court transition participants from court supervision to unsupervised treatment?
8	The Court Team	Who will compose the court team?
9	Monitoring Adherence to Court Conditions	What kind of incentives will be provided to encourage compliance?
		What kind of sanctions will be applied?
		When, if at all, will jail be used as a sanction?
		How will the court resolve differences of opinion about how to best respond to violations of court conditions?
10	Sustainability	From what sources will the court obtain long-term funding or resources to operate?
		Which outcome data will be collected and who will collect it?

Source: Bureau of Justice Assistance and Justice Center for The Council of State Governments

Differences and Similarities Between Courts

Though the MHCs were guided by the MMHCGP, as described above, the resulting programs vary widely in terms of organization, policies, and practices. In addition to the guidelines required by the MMHCGP, each MHC was greatly influenced by the needs of the community as defined by those stakeholders involved in the development, implementation, and ongoing administration of the MHC.

Table 3, below, compares the eight MHCs across seven domains – legal eligibility, clinical eligibility, leadership, court processes, mental health treatment, substance abuse treatment, and discharge requirements – based on information gleaned during site visits, onsite interviews and observations, and/or a review of court materials including policies and procedures, websites, and collateral materials. Considering these domains in the context of the ten essential elements of the MHC identified in Table 2, above, key differences and similarities between the eight courts emerge.

Table 3: Comparison of MHCs Across Seven Domains

	Berrien	Genesee	Grand Traverse	Jackson	Livingston	Oakland	St. Clair	Wayne
Legal Eligibility								
Misdemeanor/Felony/Mix	Mix	Mix	Misd	Mix	Mix	Felony	Misd	Felony
Violent Offenses? (N)o, (C)ase by case,	N	w/consent	N	C	C	No pattern	N	C
CSC Offenses? (N)o, (C)ase by case	C	N	N	N	N	N	Unknown	N
Clinical Eligibility								
MH Diagnostic Criteria	Axis I,DD	Axis I	Axis I	Axis I	Axis I,II	Axis I	Axis I,II,DD	Axis I
Qualify for CMH? Y/N	Y	Y	N	Y	N	Y	Y	Y
Use of Standard CMH MH/SA Assessment? Y/N	Y	Y	Y	Y	Y	Y	Y	N
Name of SA tool	UNCOPE	ASAM	Unknown	ASAM	Unknown	UNCOPE	ASAM	Unknown
Leadership								
Advisory Committee	Y	Y	N	N	N	N	N	Y
Gatekeeper: (P)rosecutor; (J)udicial	J	P, J	P	P	P	J	P	P
Decision Maker: (J)udge; (T)eam	T	J	J	T	T	J	J	J
Pre-Hearing Interaction w/ Judge and Team	N	Y	Y	Y	Y	Y	Y	Y
Court Processes								
Type of Sanctions:(F)ormal;(C)ase-by-Case;(B)oth	B	C	C	C	F	C	C	C
Jail As Sanction? Y/N	Y	Y	Y	Y	Y	Y	Y	Y
Use of GPS Tether? Y/N	Y	N	N	N	N	N	N	Y
Use of SCRAM Tether? Y/N	N	N	N	N	N	Y	N	N
Intended Program Length	12 mos	12 mos	12-24 mos	12 mos	24 mos	13 mos	24 mos	18 mos
Phase Structure	I-III	None	Group C-A	I-III	I-III	Stages I-IV	None	I-IV
Sanctions Consistently Recorded in SCCM? Y/N	N	Y	N	Y	N	Y	Y	Y
Separate Male/Female Dockets? Y/N	N	N	N	N	N	Y	N	Y
Added Svcs: (T)rans;(H)ousing;(Th)erapy;(O)ther	T,H	T	H,Th,O	T,O	Th,O	T,H	T	T,H,Th,O
Mental Health Treatment								
CMH Liaison on Treatment Team? Y/N	Y	Y	Y	Y	Y	Y	Y	Y
Liaison Role:(C)ase mgr;(D)irect contact;(A)dmin	C	D	C	C	D	D	C	A
CMH Liaison has SCCM Access? Y/N	Y	Y	Y	N	Y	Y	Y	N
Provider on Treatment Team? Y/N	Y	Y	N	Y	N	N	Y	Y
Provider has SCCM Access? Y/N	Y	Y	N	N	N	N	Y	Y
Provider attends hearings? Y/N	Y	Y	N	Y	N	N	Y	Y
Substance Abuse Treatment								
Residential SA Requirement? Y/N	N	N	N	N	N	Y	N	N
Integrated MH/SA Treatment? Y/N	N	Y	Y	N	N	N	Y	N
Provider on Treatment Team? Y/N	N	Y	Y	Y	N	Y	N	Y
Provider has SCCM Access? Y/N	N	N	N	N	N	Y	N	N
Discharge Requirements								
Mental Health Stability (duration)	Y	Y	Y (6 mos)	Y	Y	Y	Y	Y
12-Step Attendance (duration)	N	N	Y (6 mos)	N	N	Y	N	N
No New Offense: (C)ase by case; (Y)es (duration)	C	Y (12 mos)	C	C	C	Y	C	C
Negative Drug Screens: (Y)es (duration)	Y (6 mos)	Y	Y (3 mos)	Y	Y	Y (4 mos)	Y	Y
Allow Re-Admissions to Program? Y/N	Y	Y	N	Y	N	Y	Y	Y

Key differences include target population, participant identification, integration of treatment and community supports, the court team, and monitoring adherence to court conditions as discussed below. Some of the key similarities include program goals, terms of participation, the integration of treatment and community supports, and monitoring adherence to court as discussed below. Following is a summary of key differences and similarities according to Essential Elements #1, #2, #4, #6, #7, #8, and #9.

Essential Element #1: Goals
This element considers the goals of the program. Within the eight MHCs, there are two sets of goals to consider: 1) the primary goal of the program, which is the initial, overarching goal as identified by community stakeholders and considered to be the impetus for the development of the MHC in the community; and 2) the programmatic goals, which are the goals participants are expected to achieve during participation in the program.

In most cases, the primary goal of each MHC was identified by a small group of stakeholders in an attempt to resolve an issue within the community. These stakeholders most often included sheriffs, judges, and CMH liaisons. The primary goal of each of the eight programs falls into one of three categories: 1) to save money by reducing jail bed days or jail mental health costs; 2) to complement existing treatment courts or diversion programs; or 3) to expand or complement services offered for mentally ill offenders within the community. Among the eight courts, three were initially established to save money by reducing jail bed days and mental health costs in the jails; three were established to complement existing treatment court or diversion programs; and two were established to expand or complement services offered for mentally ill offenders.

All of the MHCs also employ programmatic goals. These are goals that must be met by participants to successfully advance through and complete the program. In most cases, the goals of the program have been modified since the implementation of the program to better meet participant needs based on new information and/or experience gained by the treatment team. The goals vary from court to court but most often include compliance with program requirements, the mental health treatment plan, medication, and terms of probation; clean drug screens; no sanctions; payment of restitution or community service, and obtaining housing and employment.

Most often, the goals of the MHCs are organized into program phases or stages. The phases add a structural component to the MHC as participants are promoted (or demoted) from phase to phase as goals are met (or not met) or according to a prescribed number of days or months per phase. It is expected that participants will progress through the phases and ultimately qualify to successfully complete the program. Among the eight courts, six employ a phase or phase-like structure – including four structured with phases, one with stages, and one with groups – and two do not employ any phase, stage, or group structure. Of the six courts employing a phase or phase-like structure, three tied successful completion to specific objectives in some or all of the phases, and three tied it to broad objectives for each phase that were flexible and individualized according to the needs, abilities, and progress of the

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participant. Of the two MHCs operating without a phase structure, successful completion was driven by the calendar (12-month intended length of stay) in one, and the other had a longer length of stay (12 to 24 months) with successful completion being highly individualized. Two MHCs – one with a phase structure and one without – further tied successful completion to the achievement of three overall goals including 1) active employment, school, or volunteer activity, 2) housing, and 3) stabilization of mental health symptoms.

Essential Element #2: Target Population
This element considers the court's clinical and legal eligibility. The legal guidelines set forth by the MMHCGP required only that the MHC target adults within the criminal justice system post-arraignment. Working within these requirements, stakeholders were able to tailor the legal eligibility criteria of their court to meet the needs of the community and/or to suit the expertise or special interests of the judge and treatment team. The resulting eight courts employ a variety of legal eligibility criteria ranging from civil petition or misdemeanor offenses to felony offenses with a history of previous diversion or probation failure. In order to examine the outcomes of similar courts, the courts have been categorized into three groups – misdemeanor/civil, felony, or mix – according to the type of offense(s) eligible for the program as follows:

> **Misdemeanor/Civil Courts** – Grand Traverse and St. Clair
> **Felony Courts** – Oakland and Wayne
> **Mixed Courts** – Berrien, Genesee, Jackson, and Livingston

Within each of the above three categories, variation exists regarding the types of offenses and criminal histories of the participants. Violent offenses and criminal sexual conduct offenses and/or histories of either require special consideration in most of the courts. Of the eight courts, three exclude violent offenders, three consider violent offenders on a case-by-case basis, one permits violent offenders with the consent of the victim, and one permits violent offenders as long as a history of violence does not exist. In addition, only one of the eight courts considers criminal sexual conduct offenses on a case-by-case basis while six of the seven remaining courts exclude these cases. **The wide variation in the legal eligibility of the eight courts prohibits comparison of outcomes between courts.**

Similarly, another primary difference between the eight courts is the clinical criteria employed by each. The MMHCGP grant targeted Axis I thought or mood disorders or Axis II developmental disabilities. The resulting mental health diagnostic eligibility utilized within the eight courts attempts to address prevalent issues within the jurisdiction. Of the eight courts, six fall within the clinical eligibility targeted by MMHCGP: one court includes eligibility to Axis I disorders and Axis II developmental disabilities and five include Axis I thought or mood disorders, but does not include developmental disabilities. The remaining two courts expanded upon the MMHCGP by including other Axis II disorders: One includes any Axis I or II disorders with the exception of developmental disabilities; and one includes Axis I and II disorders including developmental disabilities.

The MMHCGP required that the MHC be a partnership and collaboration between a trial court and a CMHSP, suggesting that participants in the MHC would likely be CMH consumers qualifying with serious and persistent mental illness (SPMI). However, two courts expanded clinical eligibility criteria to include individuals who do not qualify for CMH services within the county. Clinical eligibility in the remaining six courts is tied to eligibility in the partnering CMH, with enrollment in the CMH occurring before admission, at admission, or immediately following admission to the MHC. **As with the differences in legal eligibility described above, the wide variation in the clinical eligibility of the eight courts prohibits comparison of outcomes between courts.**

Essential Element #4: Terms of Participation
This element considers the length and terms of the program. The intended program length varies between the courts. All programs are intended to be at least 12 months long. However, four of the programs are intended to last approximately one calendar year (12 or 13 months), and the other four are intended to last 18 or 24 months. In one case, the intended program length was increased from 12 months to 18 months once the program became operational in order to accommodate the high level of needs demonstrated by participants.

All courts have objectives – implicit or explicit – that participants must meet in order to successfully complete the program. Though none of the courts share the identical objectives, the objectives stated by each court are similar and include abstaining from drugs or alcohol, compliance with the mental health treatment program, participation in a 12-step program, employment or enrollment in school, safe housing etc. All eight courts require compliance with the mental health treatment plan and mental health stability for discharge. In addition, all courts also require some period of negative drug screens as an indication that the participant is no longer using drugs or alcohol, but only two courts required participation in a 12-step program. Lastly, only two courts state that new criminal behavior is cause for termination; all other courts consider the impact of new offenses committed during MHC participation on a case-by-case basis.

Essential Element #6: Participant Identification
This element considers which agencies or individuals the court will receive referrals from. In reviewing the courts, it was noted that each court had a role that could be identified as a gatekeeper. For purposes of the report, the gatekeeper is identified as the person/role with the ultimate authority to forward or reject cases to the treatment team for consideration for the MHC. This decision can occur early on or late in the admission process depending on how the court's admission process is structured. In five of the eight courts, the gatekeeper was identified as the assistant prosecutor or prosecutor's office because all individuals ultimately considered by the treatment team for admission to the MHC have to be approved and referred by the prosecutor or because an admission to the MHC requires a "yes" vote by the assistant prosecutor who also serves as a member of the treatment team. In two of the courts, the gatekeeper was identified as a sentencing judge who either has the authority to sentence a defendant to the MHC or who has the authority to accept or decline a recommendation for the

MHC put forth by the MHC treatment team. In one case, both the prosecutor and a referring judge were identified as gatekeepers because defendants can be sentenced to the MHC by a referring judge, but all referrals require the approval of the prosecutor before they can be considered by the treatment team.

The role of gatekeeper can change or fluctuate within a court for a variety of reasons including a change in MHC policy or practice, the election of a new county prosecutor, the loss or gain of support for the MHC by the prosecutor's office, or a change in personnel or representation by the prosecutor's office on the treatment team. For example, one court lost the support of the prosecutor's office and the office's representation on the treatment team when a new prosecutor was elected. Though the MHC prefers to have the support of the prosecutor's office, the program has continued to thrive even without this support because the MHC structure is not reliant on the prosecutor for approval/referral of defendants to the program. Conversely, one MHC has had difficulty attracting prospective participants to the program. It was reported during interviews that the large role of the prosecutor is at least partly to blame for the low number of referrals to program due to the high level of scrutiny that the prosecutor, who is the gatekeeper for the program, applies to otherwise eligible cases. At this court, team members anticipate that the tight control currently exerted by the prosecutor's office can potentially loosen if a new prosecutor is elected.

Essential Element #7: Integration of Treatment and Community Supports
This element considers how the program meets the treatment needs of specific populations including participants with co-occurring psychiatric and substance abuse disorders (COD). The screening and treatment of substance use disorders (SUD) employed by the courts varies greatly. All courts noted a high rate of participants diagnosed with COD, and seven of eight courts reported that MHC participants are assessed for SUD using the standard integrated mental health and substance abuse assessment prescribed by the CMH. Three courts were unable to identify which standardized substance abuse screening instrument is used in the assessment. Only three CMHs offer integrated mental health and substance abuse treatment for individuals with COD. Of the remaining five courts, four offer treatment at separate mental health and substance abuse providers and, in one court, substance abuse treatment is only offered through the probation department and is unmonitored by the treatment team. Of the eight courts, three courts do not have substance abuse treatment providers represented on the treatment team despite estimating that more than half of the participants have a COD.

Above and beyond the additional supervision and accessibility to treatment offered as part of the MHC, all courts offer some level of additional services to participants. The types of services offered are based on the needs of the participants and/or the availability of funding or resources within the community. The most popular additional service is transportation, usually by way of bus passes or tokens, provided by six of the eight courts. Housing or housing referrals, therapy groups, and expedited Medicaid application processing through the Department of Human Services are also popular among the majority of the courts. More unique services offered by MHCs include yoga, medication drops, and employment services.

Essential Element #8: The Court Team
This element considers the composition of the court treatment team. Across the courts, the composition of the treatment team varies widely. All courts have representation from the CMH on the treatment team through a CMH liaison and/or treatment provider, but the roles of the liaisons and providers varies greatly between courts. In seven courts, the CMH liaison has direct contact with MHC participants, either during the admission process or as a case manager during the program. Only one court has a CMH liaison that has no direct contact at any point with MHC participants. Of the seven courts where the CMH liaison has contact with participants, four have a CMH liaison who also serves as the mental health case manager, providing direct care to participants; the remaining three courts have a CMH liaison that has some direct contact with the participants, but case management services are rendered by a separate CMH case manager. Though the role of the CMH liaison varies, all courts have a primary liaison from the CMH assigned to the treatment team, improving collaboration between the CMH and the MHC and improving accountability and accessibility to treatment services within the CMH. In nearly all cases, the ongoing collaboration between the mental health, legal, and/or criminal justice systems as practiced under the auspices of the MHC is the first of its kind ever experienced among the systems.

Similarly, the role of the mental health treatment provider also varies among courts. In five courts, the mental health treatment provider – the agency or person providing direct care to the MHC participants – is a member of the treatment team. In these cases, the provider is able to give the treatment team first- or second-hand information on the mental health services being delivered and/or the participants' compliance with the treatment plan. In the remaining three courts, the actual providers are not represented on the treatment team and, instead, updates regarding treatment and participant compliance are given by the CMH liaison by remotely accessing the CMH online system during treatment team meetings or gathering updates from the direct providers ahead of time. In each of these three courts, efforts have been made by the liaison to more actively engage the direct providers in the MHC either by attending treatment team meetings, submitting more timely reports, or attending court hearings with the client. In four courts, the mental health provider attends court hearings with the MHC participants. In two of the courts, this practice is expected of the providers and is consistent across all participants appearing on the docket on the day observed, while the participation in the other two courts is less consistent.

Building on the strength and value of the treatment teams, most courts have strong interaction between the judge and members of the treatment team. In seven of eight courts, the judges interact with members of the treatment team in preparation for the court hearings; in the remaining court, the judges do not attend the treatment team meetings and instead receive case updates during the court hearings. Of the seven courts in which the judge does interact with the treatment team, the interaction occurs during the treatment team meeting with the judge participating as a member of the team; while in the remaining court, the judge does not attend the treatment team meeting and instead meets with representatives of the treatment team prior to the court hearings.

Another similarity noted among the courts is the dissolution of the advisory committee. Though all MHCs were developed and implemented through the collaborative efforts of a team of stakeholders, only three of the eight courts still actively maintain an advisory committee. In all three cases where an advisory committee still exists, the frequency of meetings has been reduced: one to bi-annual, one to quarterly, and one to bi-monthly. Of those courts where there is no longer an active advisory committee, reasons for the dissolution of the committee centered on the lack of need for regular, ongoing meetings with stakeholders due to either stakeholder confidence in the treatment team's ability to properly administer the program post-implementation and/or the appropriate empowerment of the treatment team members to make policy-related decisions. Regardless of the current status of the advisory committee, administrators in all courts expressed confidence in the ability to re-engage stakeholders if necessary.

Essential Element #9: Monitoring Adherence to Court Conditions
This element considers what kind of incentives and sanctions are provided to encourage compliance, as well as the ways in which the court responds to violations of court conditions. All eight MHCs employ a system of sanctions and incentives to extinguish negative behaviors and encourage positive behaviors. Six courts administer sanctions and incentives on a case-by-case basis determined by the judge and/or treatment team. Of the two remaining courts, one uses a formal system or "menu" of sanctions and incentives and the other administers sanctions and incentives on a case-by-case basis informed with the use of a formal menu. All courts utilize jail as the most severe sanction, and just three courts report the use of tether as a sanction. Of the three courts reporting use of tether, just two courts actually administered a tether sanction during the pilot phase.

The courts vary in terms of the decision-making process to render an incentive or sanction. For the most part, these decisions are made by the treatment team in advance of the court hearing. However, some decisions are ultimately left to a key decision maker. In five courts, team members identified the judge as the key decision maker, while the other three courts named the team as the decision maker. Even within the five courts where the judge is the decision-maker, the judges and team members emphasized the democratic nature of the decision-making process and/or the judge's reliance on the expertise of the team to inform his/her decision.

Considering the Essential Elements of MHCs described above, the organizational structure of each of the eight MHCs was used to group courts for subsequent analyses. Please see Section X for a discussion of outcomes by system-level factors including the organizational structure of each court.

IV.   Michigan Mental Health Court Population

Determination of Number of MHC Participants (N)

As of 12/31/11, there were 768 separate admissions included in the data received from the SCCM database provided by SCAO. Of the initial 768 admissions, 90 of were removed due to the participant's age at screening or because the same individual was admitted multiple times. For a more congruent and balanced comparison, 68 admissions were removed from the analysis because the participant was under the age of 18 at MHC screening. Many of these underage admissions were involved in a juvenile MHC that was not part of this evaluation but for which the SCCM data system was utilized for recordkeeping. Additionally, 22 admissions were removed because they were multiple admissions for the same MHC participant. In these cases, each duplicate case was consolidated to one case and treated as a single admission.

Thus, there is a 90-case difference between the 768 admissions reported in SCCM on 12/31/11 and the 678 admissions, or participants, used for purposes of this report.

Participant Demographics

A typical MHC participant is male, in his mid-30s, unemployed, and dependent upon others for housing. Table 4, below, examines age, gender, race, and living arrangement and employment status at admission. During the period examined, the average age at time of admission was 35 years old with a range of 18 to 64. Nearly two thirds of participants (63%) are males. Over two-thirds of participants identify as Caucasian (67%); over one quarter identify as African American; and just 24 participants identify as some other ethnicity/race. The overwhelming majority of participants were unemployed (91%) at admission to the MHC, and nearly 20% were homeless.

Table 4: Characteristics of MHC Participants

Demographic Characteristic	Statewide (N=678)	
	N	%
Gender		
Female	253	37.3
Male	425	62.7
Race		
African American	197	29.1
Caucasian	457	67.4
Other	24	3.5
Living Arrangement at Admission		
Dependent/Residing w/ Others	356	52.5
Independent	191	28.1
Homeless/Institution/Hospital	131	19.3
Employment Status at Admission		
Unemployed	620	91.4
Employed	58	8.6
Age		
Mean	35.1	
Range	18 - 64	
18-24	159	23.5
25-34	193	28.5
35-44	144	21.2
45-54	154	22.7
55 +	28	4.1

Source: SCCM

Mental Health and Substance Abuse History and Characteristics

Clinical eligibility criteria set by the MMHCGP includes an Axis I thought or mood disorder or an Axis II development disorder. Table 5, below, provides information on mental health diagnosis at admission. Over one-third (38%) of participants were diagnosed with bipolar disorder at admission, and half (50%) were diagnosed with either depression or schizophrenia or another psychotic disorder.

Table 5: Primary MH Diagnosis at MHC Admission

MH Characteristics	Statewide (N=678)	
	N	%
MH Primary Diagnosis		
Bipolar	256	37.8
Depression	193	28.5
Schiz/Psychotic/Delusional	145	21.4
Other	84	12.4

Source: SCCM

As shown in Table 5, above, over 10% of participants (n=84) were diagnosed with "other" disorders. Of these cases, 38% (n=32) were Axis II developmental disorders (See Table 6, below), with 25 of the 32 cases centered in St. Clair County. Over half of the "other" cases (53%, n=44) were for Axis I anxiety disorders, targeted by the MMHCGP grant, or Axis II personality disorders, which were not targeted by the MMHCG grant. In addition, five of the "other" cases had a primary substance use disorder with either no mention of a MH diagnosis or a secondary MH diagnosis.

Table 6: "Other" MH Diagnosis at MHC Admission

MH Characteristics	Statewide (N=84)	
	N	%
"Other" MH Diagnosis		
Developmental DO	32	38.0
Anxiety DO	29	34.5
Personality DO	15	17.9
Substance Use DO	5	6.0
Other	3	3.6

Source: SCCM

In addition to examining mental health diagnosis, the indication of "yes" or "no" to the question of "current substance abuse" in the SCCM database was used to make an initial determination of a substance abuse problem at admission to the MHC (See Table 7, below). According to this data, 60% of participants indicated a substance abuse problem at admission. However, this number may not accurately reflect the scope of COD based on the number of participants receiving SA treatment during participation in MHC. Additional data regarding substance abuse is examined in Section VI.

Table 7: Current Substance Abuse (Y/N) at MHC Admission

	Statewide (N=678)	
SA Characteristics	N	%
Current Substance Abuse		
Yes	406	59.9
No	272	40.1

Source: SCCM

Criminal Justice History and Characteristics

Legal eligibility criteria prescribed by the MMHCGP only require that the programs target adults post-arraignment in the trial court system. In Table 8, below, information on the incident offense, the offense that brought the individual to MHC, as well as the charge type are provided. The majority of participants (86%) were admitted to MHC based on a new criminal offense with smaller proportions in violation of probation (13%) or parole (1%). Of the incident offenses, nearly half (48%) were felonies, 43% were misdemeanors, and 8% were civil/petition or other charges.

Table 8: Incident Offense and Charge Type at MHC Admission

	Statewide (N=678)	
Criminal Justice Characteristics	N	%
Incident Offense		
New Criminal Offense	584	86.1
Probation Violation	85	12.5
Parole Violation	9	1.3
Charge Type		
Felony	328	48.4
Misdemeanor	291	42.9
Civil/Petition or Other	59	8.1

Source: SCCM

V. Short-Term Outcomes

Length of Stay

The mean length of stay (LOS) for all MHC participants was 276 days (SD 185) as shown in Figure 1, below. The range of days in MHC was 2 to 1072. **Across all courts there were 187,043 days in MHC for the 678 participants between inception in 2009 and 12/31/11**.

Figure 1: Average Length of Stay in Days – All and By Completion Type
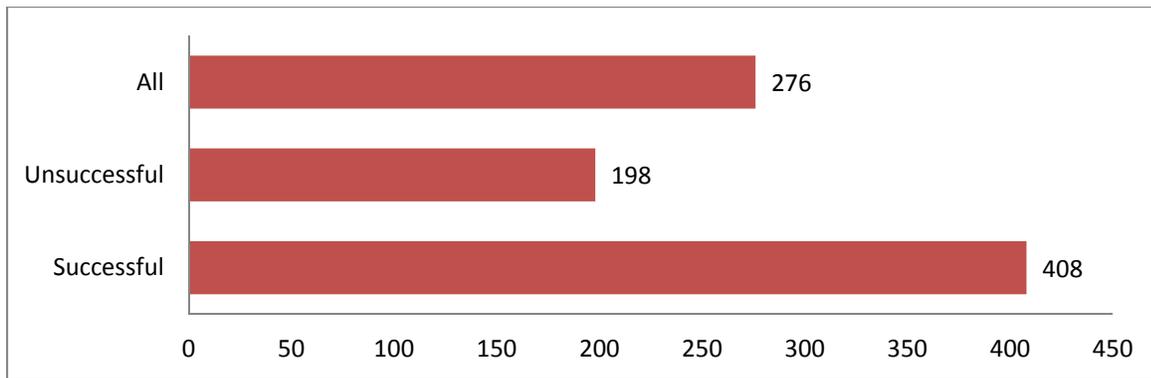
Source: SCCM

Program Completion and Discharge Status

As of 12/31/11, 450 participants were discharged from the MHCs across the state: 194 successfully (43%) and 256 (57%) were terminated without completing all program requirements. Reasons for unsuccessful discharge from MHC vary and are presented below (See Table 9). As the figure above demonstrates, those successfully discharged had a longer length of stay than those who were unsuccessfully discharged.

Table 9: MHC Discharges by Reason

	Statewide (N=450)	
	N	**%**
Discharge Reason		
Successfully Completed	194	43.1
Non-Compliant	152	33.8
Absconded	51	11.3
New Offense	26	5.8
Other	27	6.0
Total	450	100.0

Source: SCCM

Characteristics of Successful and Unsuccessful Participants

In an effort to assess what participant characteristics might predict program completion status, we compare several demographic and personal characteristics of the participants at the time of MHC admission. Program completion status is defined as participants who successfully completed the program as prescribed within their county court compared to participants that did not successfully complete the program. Since courts differ, successful completion is defined differently. As shown in Table 9, above, unsuccessful completion includes participants discharged for non-compliance, absconding, committing a new offense, death, or other.

Table 10: Characteristics of Successful and Unsuccessful MHC Participants

Demographic Characteristic	Discharged Status (N=450)		Test Statistic
	Successful n=194 %	Unsuccessful n=256 %	
Gender			
Female	44.7	55.3	Not Significant
Male	42.2	57.8	
Race			
African American	37.6	62.4	Not Significant
Caucasian	44.7	55.3	
Other	60.0	40.0	
Living Arrangement at Admission			$\chi^2(1)=9.91$; p =.002
Dependent/Homeless	38.8	61.2	
Independent	55.7	44.3	
Employment Status at Admission			$\chi^2(1)=7.8$; p=.005
Employed	64.9	35.1	
Unemployed	41.2	58.8	
Age			
Mean	38.55	32.27	
Range	(18-64)	(18-61)	
18-24	26.6	73.4	$\chi^2(4)=33.1$; p<.001
25-34	36.7	63.3	
35-44	47.9	52.1	
45-54	58.8	41.2	
55 +	75.0	25.0	
Current Substance Abuse at ADM			$\chi^2(1)=12.8$; p<.001
Yes	36.0	64.0	
No	52.9	47.1	
Mental Health Diagnosis			Not Significant
Bipolar	44.8	55.2	
Depression	37.2	62.8	
Schiz/Psychosis	41.7	58.3	
Other	54.9	45.1	
Offense Type at Admission			$\chi^2(2)=17.8$; p<.001
Felony	32.5	67.5	
Misdemeanor	53.3	46.7	
Civil	46.2	53.8	

Taken individually, several characteristics predict completion of MHC. More specifically, those who were living independently when they entered MHC were more successful than those who

were homeless or in a dependent (e.g. shelter, living with someone) situation. Similarly, those employed at admission were more likely to successfully complete than those who were not. Those identified as having substance abuse issues at admission were less likely to complete than those not so identified. Age was the strongest single predictor; those in the younger age groups were far less likely to complete than those in the older categories. Gender, race and mental health diagnosis did not predict completion.

Although many individual characteristics were predictive of successful completion, when these characteristics were compiled collectively into a **regression analyses** to be considered simultaneously, only two characteristics were significant in the model predicting completion status including: **age and offense type.** _The younger the participant in combination with the presence of a felony offense at admission were predictive of a lower chance of successfully completing_. Gender, race, employment, living situation, substance abuse and mental health diagnosis at admission did not significantly predict successful completion of the MHC in the regression model.

In subsequent analyses assessing long-term outcomes, successful program completion was a very strong predictor of positive outcomes. More specifically, when assessing if a participant was likely to have an occurrence of jail or new conviction (felony or any) post-MHC, those who successfully completed were significantly less likely to encounter these negative recidivism outcomes than those who did not complete.

Incentives and Sanctions
Mental health courts use a system of incentives and sanctions to encourage positive behavior and extinguish negative behavior. As reported during the interviews, the most popular incentives utilized by the MHCs included gift cards, judicial praise or applause, phase promotion, decreased frequency of drug screens, and increased freedom of movement. As shown in Figure 2, below, incentives were received by 55% of all participants, with 14% receiving just one; 25% receiving two to four incentives; and 16% receiving five or more.

Figure 2: Number of Incentives and Sanctions Received by MHC Participants

Incentives
(N = 678)
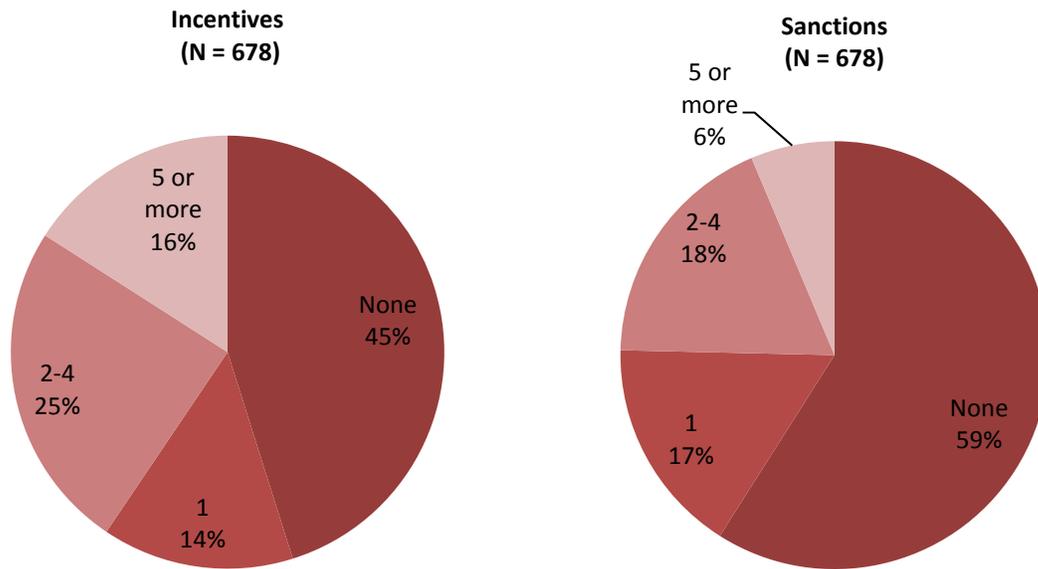
Sanctions
(N = 678)

Source: SCCM

As reported in the interviews, the most popular sanctions utilized by the MHCs include the jail, community service, increased frequency of drug screens, and increased reporting. As shown in Figure 2, above, sanctions were received by just 41% of participants, with 17% receiving just one; 18% receiving two to four incentives; and 6% receiving five or more. Ideally, incentives should outnumber sanctions by a ratio of 4:1 to incentivize positive or pro-social behavior[45]. The type of sanction used is something to consider when operating a MHC. Jail is thought by some to be an inappropriate sanction for those with SMI as it may exacerbate mental health symptoms, so the availability and variety of alternate sanctions utilized by the courts instead of jail is noteworthy[1].

As indicated in Table 3 (Page 16), three of the eight courts do not regularly record sanctions and incentives in SCCM. This means that the numbers reported above are likely less than the actual number of sanctions and incentives issued to participants during the period. Reported numbers may also be understated due to the recording practices of those courts that do record sanctions and incentives to SCCM. For example, one court reported that the judge's disapproval was one of the most common sanctions employed by the court. However, though the court regularly records sanctions and incentives in SCCM, the court does not record instances of judicial disapproval in SCCM.

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[1] *Note: The review of jail days during MHC within each county did not offer sufficient detail to determine between jail days as sanctions and other types of jail interface.*

Drug Screens

Most of the MHCs monitor participant use of drugs and alcohol through regular drug screening. The frequency of drug screening varies by court, and often by participant, according to the program's phase structure, participant compliance with the program, and whether or not the participant is known to have a substance abuse problem.

Figure 3: Drug Screens Administered to MHC Participants

(N = 678)
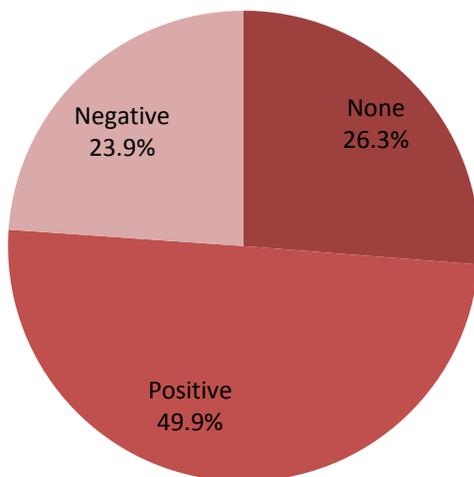
Source: SCCM

As shown in Figure 3, above, just over a quarter (26%) of participants were not screened for drug or alcohol use during participation in MHC. Of the 502 (74%) participants who were screened at least once, 339 (68%) had at least one positive result and 163 (32%) had negative results. Of the 339 (50%) participants who had at least one positive drug screen, 234 (69%) received substance abuse treatment during the MHC program.

VI.   Treatment Utilization

Mental Health Treatment

Of the 678 cases in MHC, 577 (85%) were found in the CMH data. After several data draws from the CMH central administrative database it was found that several of the participant identification numbers submitted for data extraction were incomplete or incorrect. In a small number of instances there was no CMH data, meaning that those without CMH encounter data were likely not enrolled in the CMH system and may not have been eligible for CMH services. ***For the remainder of this section (and other sections dealing with mental health services), 577***

cases are included as representative of the entire population, and sample size will not be indicated in the tables in an effort to minimize confusion.

Number of Mental Health Services Over Time
The majority of participants received mental health services in the year before the MHC (91%) and during their participation in the MHC (95%). More than two-thirds (71%) of the participants discharged from the MHC were found in the CMH data. In the year following their discharge, only 64% had received mental health services.

Table 11: Proportion of Participants Receiving MH Services Over Time

Pre-MHC	During MHC	Post-MHC
91%	95%	64%

Source: CMH Encounter Data
Note: Available Sample n=577 for pre/during and n=409 for post.

Individuals with SMI utilize a variety of mental health services that have differing levels of intensity. A high-intensity service may be used when an individual is in crisis (e.g. hospitalization) while a low-intensity service may be more routine (e.g. medication review). Using the available data, we categorized services into High, Medium and Low depending on the level of service intensity (See box below for examples). These service intensity levels are used throughout this report to group services and differentiate between various levels of treatment. *It should be noted that the mental health services reported here are those services occurring within the CMH treatment system only. It is acknowledged that mental health services could be received in other systems of care and are not reflected in this data.*

> **Low-intensity services** = case management, medication reviews, individual/group therapy
> **Medium-intensity services** = ACT, intensive outpatient, residential
> **High-intensity services** = psychiatric hospitalization, crisis residential, crisis center

In Figure 4 below, the average number of services per CMH-involved person, by intensity level, is provided over the three time points – pre-, during and post-MHC. As expected, low intensity services are provided more frequently than the other two levels across all three time periods, but the highest level of low intensity services is associated with the period during MHC enrollment. It is of interest that the average number of services during the post-MHC period declines from both pre- and during MHC.

Figure 4: Average Number of MH Services Over Time for All Participants
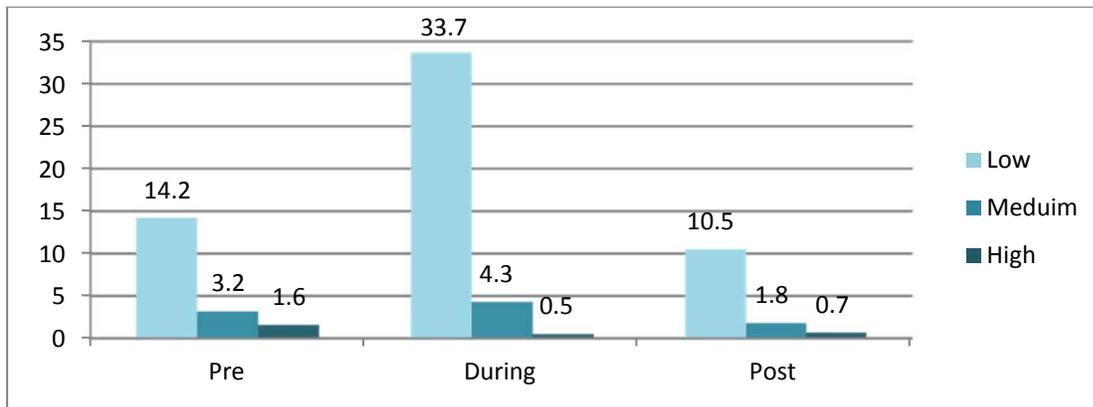
High-intensity services are among the most costly to CMH. Analysis of the proportion of participants that receive a high-intensity service over the three time periods shows a steady reduction of those requiring such services from the pre- to during to post-MHC periods (see Figure 5, below).

Figure 5: Proportion of Participants Receiving High-Intensity MH Services Over Time
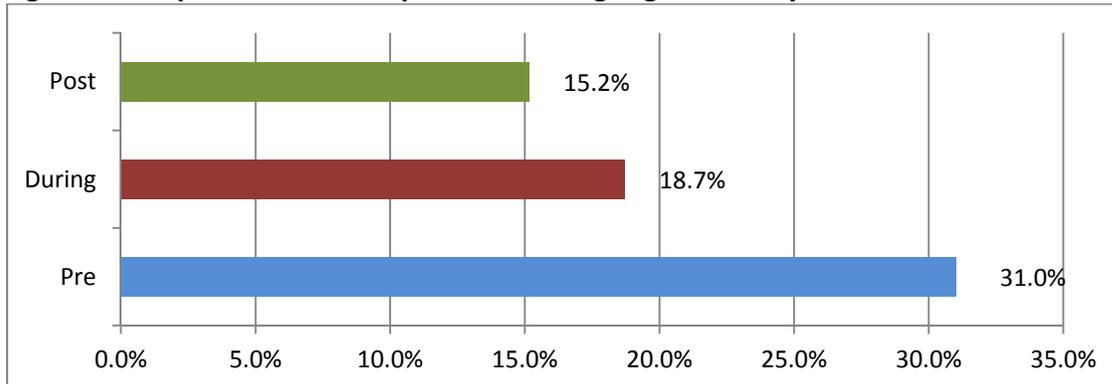
Another benchmark for assessing service utilization is length of time to service. Figure 6, below, illustrates the time to first mental health service at two time periods: 1) after MHC admission (15.9 days, SD 16) and 2) after MHC discharge (40.5 days, SD 40). The number of days to mental health service at admission ranges from 1 to 442 and at discharge ranges from 1 to 309.

Figure 6: Average Days to MH Treatment After Admission and Discharge

From Admission   15.9
From Discharge   40.5
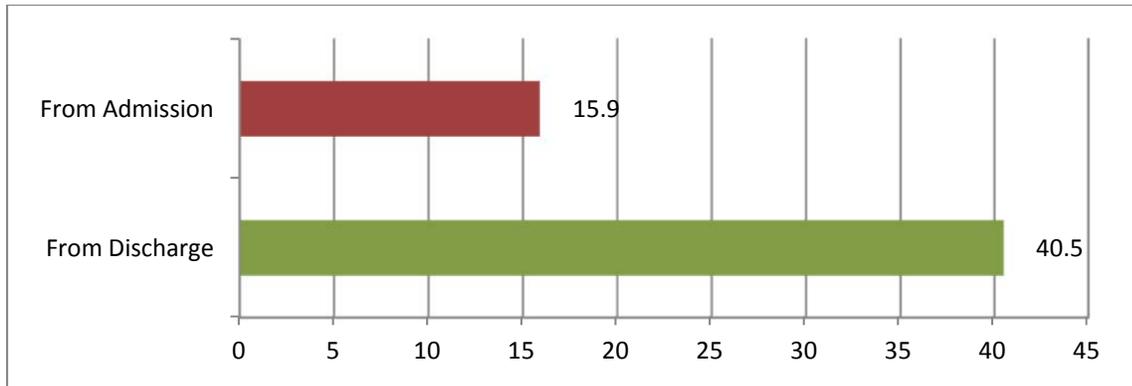
Source: CMH Encounter Data

Treatment Retention

To assess retention in mental health treatment during the transitions to and from MHC, the proportion of individuals receiving services across time points is graphed in Figure 7, below. The top line on the graph below signifies the presence of ANY mental health service at either transition (pre- to during MHC and during to post-MHC). Nearly three quarters (74%) of those receiving mental health services pre-MHC were receiving them during MHC and 57% of those receiving services during MHC were receiving them upon discharge. The majority of those individuals were engaged in low-intensity services (the second line on the graph) with 72% at the pre-MHC to during-MHC transition and 54% in the during-MHC to post-MHC transition. (NOTE: Retention in post-MHC services is based on data of discharged participants only). Medium intensity services stayed the same (6%) at both transitions while a smaller proportion had high-intensity services at either transition. A higher proportion of participants were present in the transition from before admission to MHC (pre-MHC) to during -MHC than those who remained engaged post-MHC.

Figure 7: Retention in MH Services, by Type, Across MHC Transitions
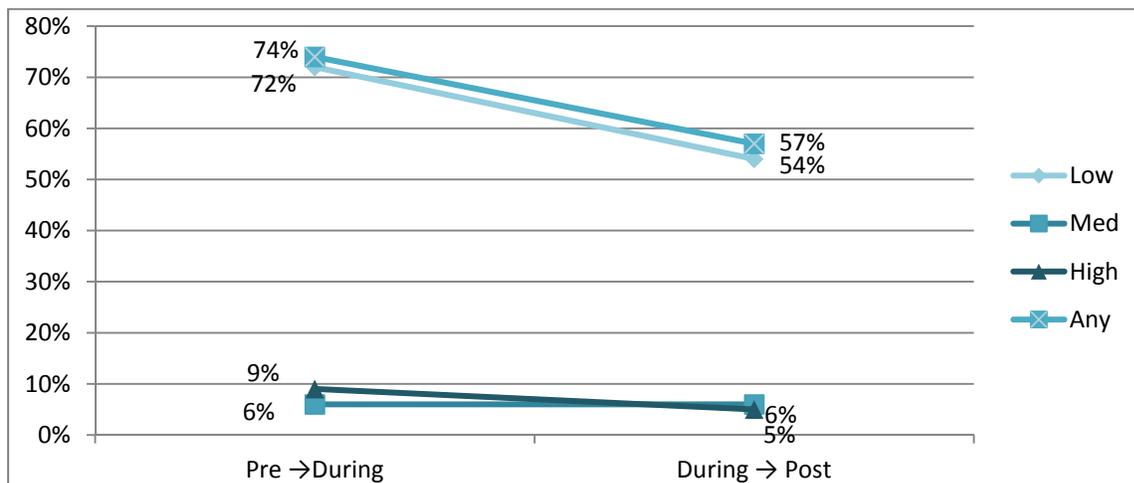
Source: CMH Encounter Data

Substance Abuse Treatment

Examination of the SCCM data reveals that 406 (60%) of the 678 unique individuals admitted to the MHC screened positively for a current substance abuse problem (See Table 12, below). However, when examining the available treatment data, an additional 130 participants received a substance abuse treatment service within either the CMH or Bureau of Substance Abuse and Addiction Services (BSAAS) Coordinating Agency (CA) system in the year prior to MHC admission. If formal treatment in the year before MHC admission (pre-) is considered to be an indicator of the need for substance abuse treatment or recovery services during MHC, then 79% or 536 MHC participants have some indication of a substance abuse treatment need when admitted.

Table 12: Various Indicators of Substance Abuse Problem

	Statewide (N=678)	
Substance Abuse Indicators	N	%
'Current Substance Abuse' *(SCCM Initial Eligibility screening)*	406	60.0
CMH *(SA treatment prior to MHC admission w/in CMH data)*	305	45.0
BSAAS/CA *(SA treatment prior to MHC admission w/in BSAAS/CA system)*	102	15.0
Participants with At Least One Indicator Above (SCCM, CMH, or BSAAS/CA)	536	79.0
Received Treatment from CMH or BSAAS/CA (Prior to MHC)	352	52.0
Only SCCM (No CMH or BSAAS/CA)	137	20.0

Source: SCCM; CMH Encounter Data; BSAAS Treatment Data

Although it appears that there is an overlap between those identified at admission (n=406) and the number who received treatment in either the CMH (n=305) and BSAAS (n=102) systems, it was found that there were 137 participants identified *only* at MCH admission but who were not found in the either treatment system prior to MHC admission.

In an effort to determine how substance abuse problems/disorders were identified among MHC participants, each court's process for screening at admission and more thorough, subsequent assessment was considered. The majority of courts utilized a CMH-standardized instrument or process to screen and/or assess participants for a current substance abuse problem at intake to the MHC. However, the process for recording the substance abuse diagnosis and/or the presence of a current substance abuse problem (yes or no) to SCCM varied across the courts. Therefore, those identified in SCCM as having a substance abuse problem at admission were compared with CMH and BSAAS/CA treatment data to determine overlap. For those with a positive substance abuse screen in SCCM (n=406), 185 (46%) did not receive any formal substance abuse treatment in the year prior to MHC. Conversely, among those with a negative

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substance abuse screen in SCCM (n=272), 130 (48%) did receive formal treatment in the year prior (See Table 13, below).

Table 13: Comparing Screening for SA at MHC Admission with Previous Treatment

'Current Substance Abuse?' (Per SCCM)	History of Formal Treatment in CMH or BSAAS/CA System PRIOR to MHC Admission		
	No	Yes	Total
Yes	185 (45.6%)	221 (54.4%)	406 (100.0%)
No	142 (52.2%)	130 (47.8%)	272 (100.0%)
			678

Source: SCCM; CMH Encounter Data; BSAAS Treatment Data

Receiving Substance Abuse Treatment During MHC

In an effort to determine the way in which the need for substance abuse treatment services was made during MHC, several 'definitions' of identifying substance use disorder were utilized to assess treatment interface. The first definition is admission screening. Of the 406 participants determined to meet criteria for 'current substance abuse' during the admission screening, 263 (65% of 406) received a related treatment service in either the CMH or BSAAS treatment system during MHC. Among the 272 who screened negatively for current substance abuse at admission, 126 (46% of 272) received a substance abuse treatment service during MHC.

The second definition is an indication of a substance abuse treatment in either the CMH or BSAAS treatment systems prior to MHC admission. Among the 352 participants who received a substance abuse treatment service prior to MHC admission, 243 (69% of 352) received a related treatment service during MHC.

Figure 8, below, indicates the proportion of MHC participants who received any substance abuse-related treatment service, in the formal CMH, SA or both systems, across three time periods: pre-, during, and post-MHC. The majority of substance abuse treatment services for MHC participants were provided through the CMH system, with a much smaller proportion delivered by the formal CA substance abuse treatment network administered by the BSAAS. During MHC, 57% of participants received a substance abuse treatment service, even though there is some indication that a greater proportion may have required such services. **However, one limitation of this report is that substance abuse treatment services may have been obtained through another system of care like Michigan Department of Corrections (MDOC) or Community Corrections networks**. In Michigan, MDOC contracts with substance abuse treatment agencies throughout the state to provide treatment for those on probation and/or parole. Treatment episodes obtained through this network are not contained within either of the examined statewide treatment databases and as such may not illuminate the entirety of treatment services received.

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Figure 8: Receipt of SA Treatment Services in CMH, BSAAS/CA, or Any System
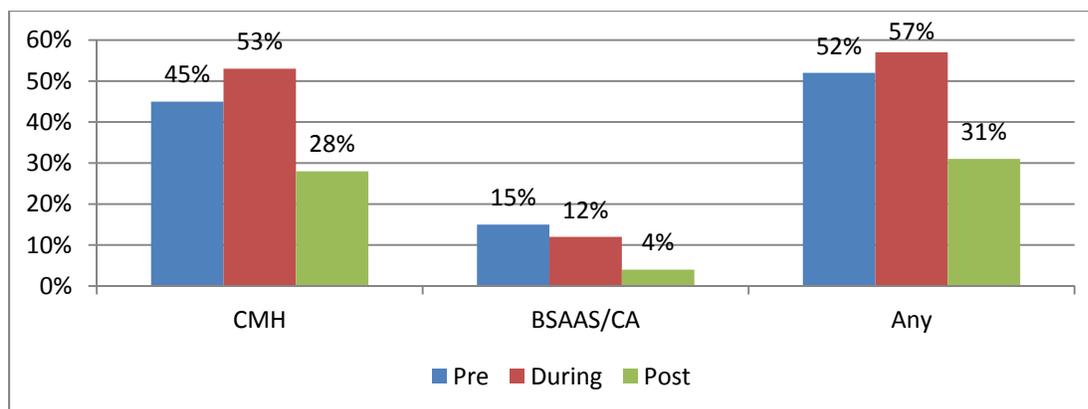
Source: CMH Encounter Data; BSAAS Treatment Data

Eligibility criteria for CMH does not preclude the presence of a co-occurring substance use disorder and in fact, challenges CMH providers to facilitate or coordinate such care for those with SPMI. The delivery of substance abuse treatment services for those with SPMI varies across the state and usually depends on arrangements made between the CA and CMH network in the region.

Although adoption of Integrated Dual Disorders Treatment (IDDT) within CMH may be moving service provision to be more 'in-house', Table 14, below, indicates the type and frequency of services provided through the formal substance abuse treatment system for MHC participants across three time periods: pre-, during and post-MHC. Outpatient treatment seems to be the most utilized with 109 MHC participants engaged at some point over the evaluation period. In comparison, only 41 participants received a detoxification service. Interface with substance abuse treatment services offered through CA providers (BSAAS/CA system) varied at the individual county level, ranging from a low of 4.5% to a high of 43% of participants.

Table 14: BSAAS Services Received by MHC Clients Over Time

Service Type	Pre (N=678)	During (N=678)	Post (n=450)	Anytime N=678
Detox	4.5% (n=31)	1.8% (n=12)	0.4% (n=3)	6.0% (n=41)
Residential: Long-term	1.4% (n=10)	1.9% (n=13)	0.6% (n=4)	3.5% (n=24)
Residential: Short-term	3.4% (n=23)	3.2% (n=22)	0.6% (n=4)	6.5% (n=44)
Outpatient	9.4% (n=64)	7.1% (n=49)	1.3% (n=9)	16% (n=109)
Intensive Outpatient	3.0% (n=20)	1.3% (n=9)	0.4% (n=3)	4.2% (n=29)
Unique # of Individuals	15% (n=102)	12.4% (n=84)	2.6% (n=18)	24.2% (n=161)
Range of Service Types	1-4	1-4	1-3	1-4

Source: BSAAS Treatment Data

As stated previously, the majority of substance abuse treatment services were provided through the CMH system. Table 15, below, examines the proportion of participants engaged in such services across all courts and the three time periods (pre-, during and post-). Overall, 70%

of MHC participants received substance abuse treatment within CMH at some point in time. With the exception of two counties, where the proportion remained the same, utilization of substance abuse treatment within CMH increased during MHC participation. This suggests that the realization of the effect of substance misuse may have been heightened during MHC. Conversely, attention to recovery post-MHC declined, with only 28% of all discharged participants receiving a substance abuse treatment service within CMH after MHC.

Table 15: Participant Utilization of SA Treatment within CMH Encounter Data Over Time

County	% Pre by Court	% During by Court	% Post by Court	Any SA-CMH Service by Court
Berrien	23	47	32	62
Wayne	22	63	7	74
Oakland	61	66	24	90
Livingston	68	68	30	82
St. Clair	41	51	49	57
Grand Traverse	50	53	30	67
Jackson	94	94	54	100
Genesee	43	27	20	43
Any Court	45	53	28	70

Source: CMH Encounter Data
Note: n=577 for pre/during; 409 for post.

VII. General Outcome 2: Criminal Justice Involvement

One of the primary goals of MHC is to reduce criminal or court involvement for individuals with SMI. Using three sources of data (SCCM, MSP, and local jail data), a variety of indicators were assessed.

Comparison of Jail Bed Days Over Time
Obtaining information from the jails in the counties where MHC were located allowed us to compare the number of jail bed days occupied by participants during multiple time periods (i.e., pre-MHC, during MHC, and post-MHC). Although this data does not include other county jails where the participant may have served time – or the state prison system – the use of the 'pre-MHC' period from the same jail sources acts as a control on the jail days during and post-MHC.

Prior to MHC, 81% (n=548) of participants spent time in the county jail, averaging about 39 days and amassing a sum of 26,258 jail bed days. During MHC 54% of participants (n=363) spent time in the jail, averaging 23.9 days and amassing 16,184 days. ***The reduction in jail days between Pre-MHC and During MHC is 10,074.***

Figure 9: Comparison of Average Number of Jail Bed Days Over Time
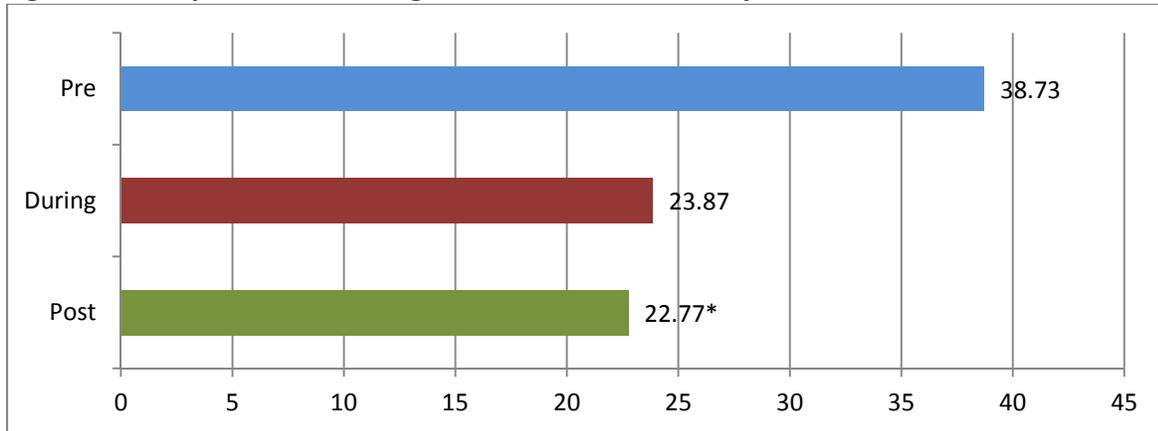
Source: Jail Data – All Counties; SCCM
*NOTE: Post-MHC period includes all jail days for n=450 discharged but is not the one year time period as in Pre-MHC period.

Figure 9, above, provides preliminary information on the jail bed days post-MHC for the 450 participants discharged by 12/31/11. This discharged sample of 450 includes 149 participants who were jailed post-MHC, serving an average of 23 days and consuming 10,267 jail bed days since discharge from MHC. **This represents a decrease of 15,991 jail days from the pre-MHC period (26,258 days) to the post-MHC period**. However, caution is needed in interpreting the pre-/post- MHC comparison, as the pre-/post-MHC time period is not equivalent in this representation. In Section IX, a smaller sample (n=236) of those discharged more than one year is used to appropriately compare the equivalent one-year time period pre-/post-MHC.

Figure 10: Number of Days to Jail During and Post-MHC
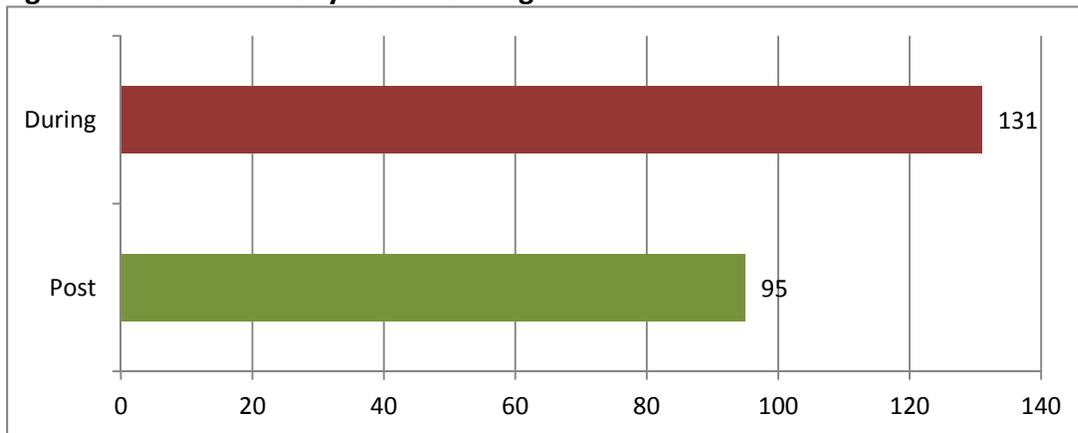
Source: Jail Data – All Counties; SCCM

Figure 10, above, illustrates that the number of days to jail at two transition points: from admission to the MHC (during) and from discharge from the MHC (post). The number of days to jail during participation in the MHC was 131 days on average, longer than the average number of days to jail in the post-MHC period (95 days).

Recidivism: New Offense

Data from the Michigan State Police (MSP) was used to examine new criminal activity during and post-MHC. There were matches for 194 (28.6%) of the 678 participants in the MSP data during these two time periods. In Table 16, below, 8% (n=55) of participants during MHC were charged with a new offense, and 46 were convicted. Of the 46 participants convicted, 10 were convicted of a felony offense.

Table 16: Number of Participants with New Charges and Convictions

	During MHC (N=678)		Post MHC (N=450)		Total Number of Participants Across Both Time Periods (N=678)	
Recidivism	N	%	N	%	N	%
Charged	55	8.1	44	6.5	92	13.6
Conviction (Any)	46	6.8	52	7.7	93	13.7
Felony conviction	10	1.5	20	2.9	30	4.4

Source: Michigan State Police Data

In the post-MHC period, there were 44 participants (6.5%) charged with a new offense and 52 convicted. The greater number of participants convicted is likely due to a time lapse between being charged and convicted as well as the likelihood that the participant was terminated from MHC as a result of the new charge.

Taken together across time in MHC and post-MHC periods, as of 12/31/11 approximately 14% of MHC participants had been charged and convicted of a new offense since admission into MHC. Of the 93 individuals convicted, 30 were convicted of a felony offense. There were no statistical differences between groups, based on the type of offense at admission, in the presence or absence of a charge, conviction or felony offense. In other words, neither a new offense nor the seriousness of the new offense was statistically related to whether an individual entered the program with a felony, misdemeanor or civil offense. Considering that 100% of individuals were legally involved in the year prior to MHC, this is a great reduction in criminality.

Incarceration in State Prison

A review of MDOC's Offender Tracking and Information System (OTIS) found that of the 450 discharged MHC clients, 24 (5%) individuals were in prison in September 2012. Twenty-three of these individuals did not successfully complete MHC and of these, nine were admitted into prison on the day of discharge from the MHC.

VIII.   Outcomes by Individual-Level Factors

Specific differences among the MHC participants may have some impact on outcomes across counties. In this section, three individual differences that could have an effect on outcomes are examined: 1) differences in mental health diagnoses; 2) presence of a co-occurring SUD (COD);

and/or 3) the type of offense that the participant entered the court with (i.e., felony, misdemeanor or civil). Process and outcome data are examined by each of these factors below.

Mental Health Diagnosis
As previously discussed above (See Table 5, Page 25), the majority of MHC participants had a diagnosis of bipolar (38%), depression (29%) or schizophrenia/psychotic (21%) disorders. Those categorized as having an "other" diagnosis (12%) included developmental disability, anxiety disorders, personality disorders, primary substance use disorders, and "other" disorders (See Table 6, Page 25). There are similar proportions for those admitted, those discharged, and those discharged for more than one year. This analysis investigates differences in process and outcome variables by these diagnoses pre-, during, and post-MHC.

Mental Health Service Utilization Prior to MHC
There is a significant difference in mental health service utilization prior to mental health court admission (pre-MHC) based on mental health diagnosis. Participants diagnosed with schizophrenia/psychotic disorder received more services than those in the bipolar and depression disorder categories (F(3/573)=5.1,p<.01). Correspondingly, participants diagnosed with schizophrenia/psychotic disorder received more low-intensity services and medium intensity services. No significant differences were found across groups on high-intensity services in the year prior to MHC admission.

Figure 11: Average MH Services Received in the Year Pre-MHC Admission by MH Diagnosis
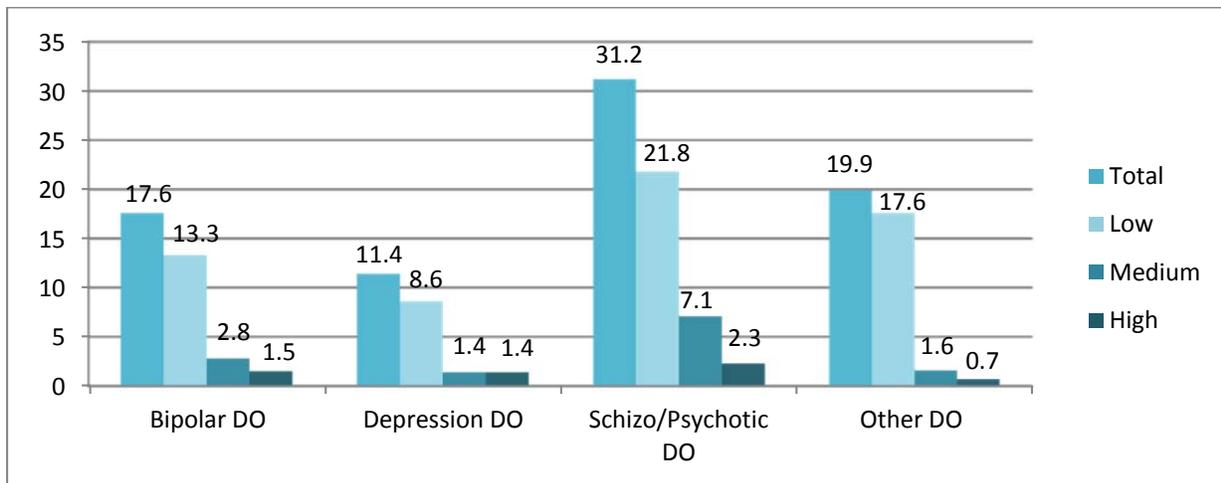
Source: CMH Encounter Data

Jail Episodes and Number of Days in Jail Prior to MHC
A smaller proportion of participants with an "other" diagnosis (64%) had a jail episode in the year prior to admission to the MHC, compared to 83% for each of the other diagnosis categories (X^2(3)=16.9, p<.01). Additionally, the number of days in jail before MHC was greater for participants diagnosed with schizophrenia/psychotic disorder (M=47 days), compared to participants diagnosed as "other" (M=24 days) (F(3/674)=2.78, p<.05).

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Figure 12: Average Number of Days in Jail in the Year Pre-MHC Admission by MH Diagnosis
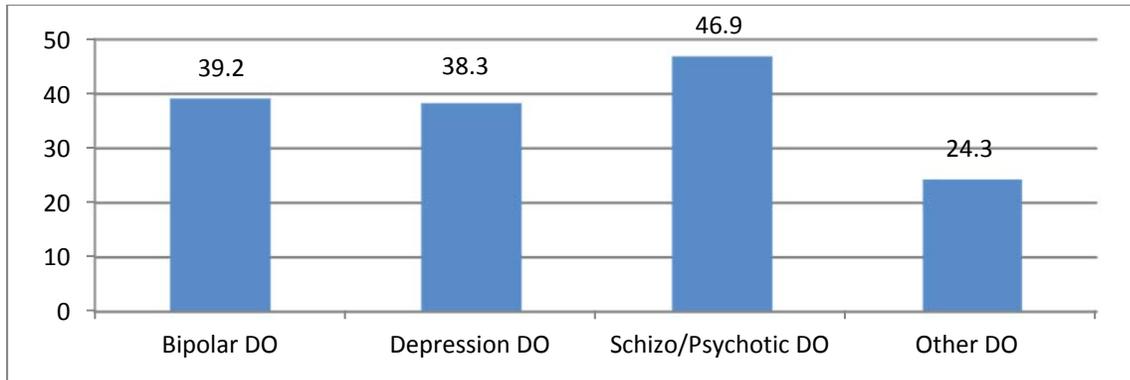
Source: Jail Data - All Counties; SCCM

Mental Health Treatment Engagement from Pre-MHC to During-MHC
A higher proportion of participants diagnosed with schizophrenia or psychotic disorders (81%) remained engaged in mental health services in the transition to MHC, compared to participants diagnosed with other (60%), depression (72%) and bipolar disorders (75%) $(X^2(3,N=678)=13.121, p<.01)$.

Table 17: Engagement in MH Treatment Pre- and During MHC

	Bipolar DO		Depression DO		Schizo/ Psychotic DO		Other DO	
	N	%	N	%	N	%	N	%
Engaged in CMH Before and During (N=498)	193	75.4	138	71.5	117	80.7	50	59.5
Not Engaged in CMH Before and During (N=180)	63	24.6	55	28.5	28	19.3	34	40.5

Soucre: CMH Encounter Data

Length of Stay and Completion Status
The average length of stay in the MHC was 277 days, regardless of mental health diagnosis. Participants diagnosed with schizophrenia/psychotic disorders (M=261 days) and depression (M=271 days) were enrolled less than the average number of days, while participants with bipolar disorder (M=284 days) or "other" (M=297 days) were above the average length of stay; however, none of these were significantly different from the others. While not significant, the table below shows that participants diagnosed as "other" had the greatest proportion (55%) successfully completing the program, and participants diagnosed with depression had the lowest (37%).

Table 18: Program Completion by MH Diagnosis

Completion Status	Bipolar DO		Depression DO		Schizo/ Psychotic DO		Other	
	N	%	N	%	N	%	N	%
Successful (N=194)	78	44.8	48	37.2	40	41.7	28	54.9
Unsuccessful (N=256)	96	55.2	81	62.8	56	58.3	23	45.1

Source: SCCM

Time to First Mental Health Treatment and Jail Episode During MHC
No significant differences were found in the number of days to mental health treatment or first jail episode during MHC by mental health diagnosis. On average, participants diagnosed with depression disorders have the longest period of time from admission before entering treatment (19 days), while those with schizophrenia/psychotic disorders enter in the shortest period of time (11 days).

Figure 13: Number of Days to First MH Treatment During MHC by MH Diagnosis
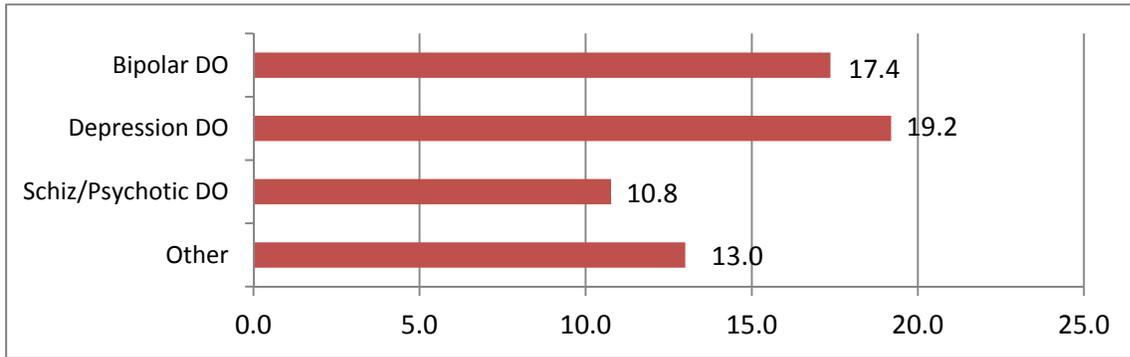
Source: CMH Encounter Data, SCCM

While participants diagnosed with schizophrenia/psychotic disorders have greater proportions and the greatest number of jail days in the year *prior to MHC*, they have the longest time to their first jail episode *during MHC* (160 days) compared to the other diagnostic categories.

Figure 14: Number of Days to First Jail Episode During MHC by MH Diagnosis
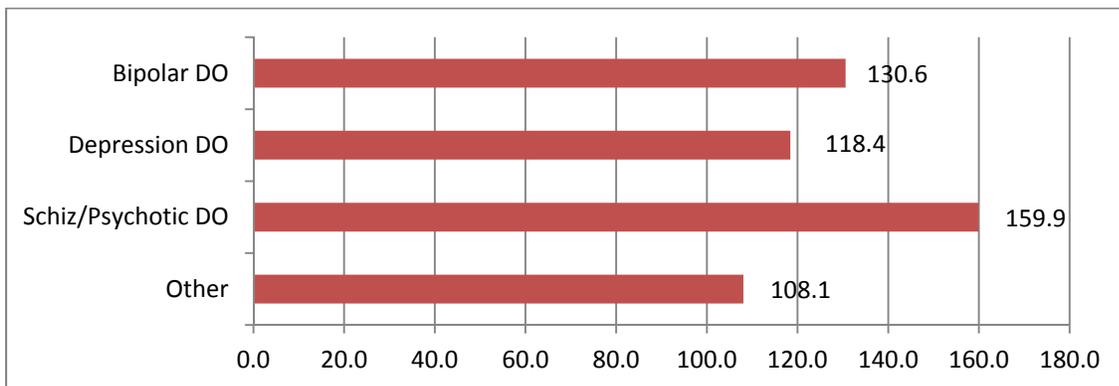
Source: Jail Data - All Counties; SCCM

Mental Health Treatment Utilization Post-MHC
Similar to service utilization prior to MHC, participants diagnosed with schizophrenia/psychotic and "other" disorders utilized more services on average after discharge from MHC. The number of low-intensity services was significantly greater during the post-MHC period between participants diagnosed with schizophrenic/psychotic (M=15.6) and "other" (M=15.6) disorders, compared to bipolar (M=8.6) and depression (M=7.2) disorders (F(3/405)=3.147, p<.05). Additionally, total services received differed between participants diagnosed with schizophrenia/psychotic disorders (M=19.5) and those with depression disorders (M=8.9) (F(3/405)=2.876, p<.05).

Figure 15: Post-MHC MH Service Utilization by MH Diagnosis
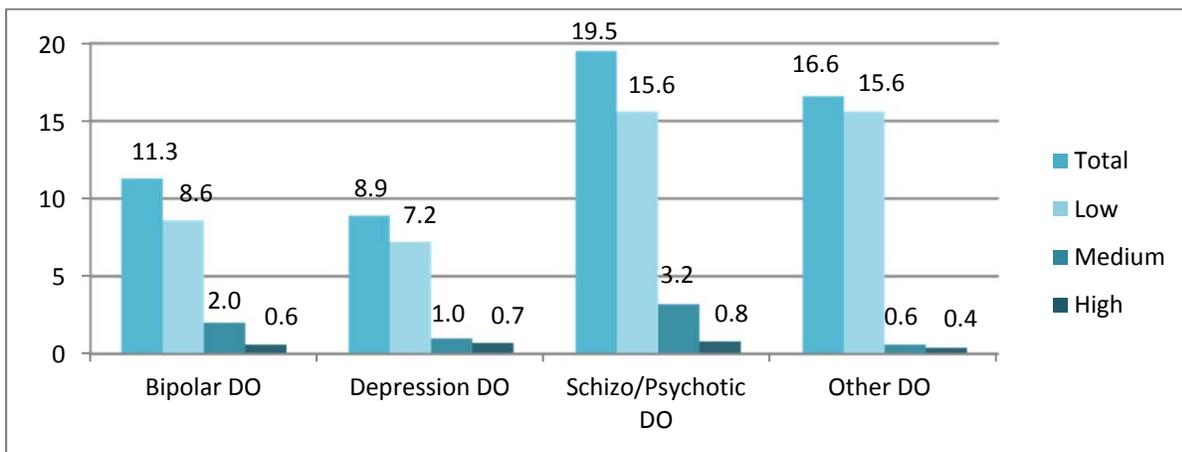
Source: CMH Encounter Data

Time to First Mental Health Treatment Post-MHC
After discharge from MHC, those who enter MH treatment do so at similar rates regardless of mental health diagnosis. As illustrated in Figure 16, below, participants diagnosed with bipolar and depression disorders enter at 43 days after discharge, schizophrenic/psychotic disorder at 39 days, and "other" at 32 days.

Figure 16: Number of Days to First MH Treatment Post-MHC by MH Diagnosis

Source: CMH Encounter Data; SCCM

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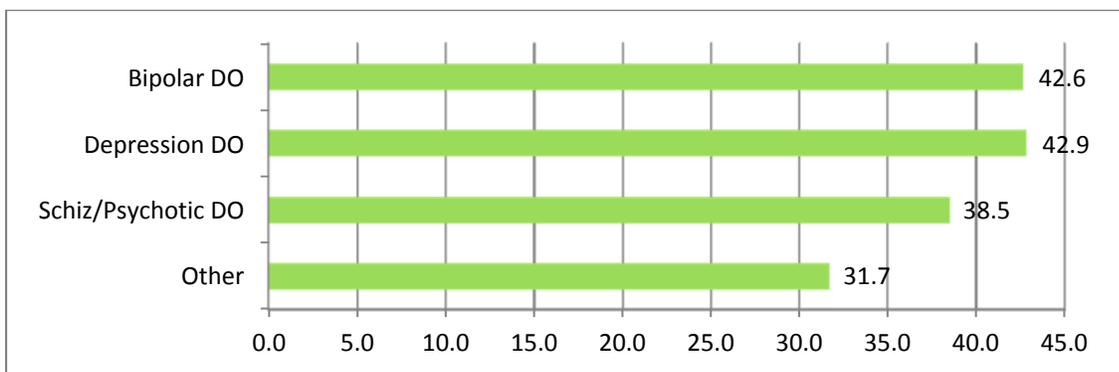
Treatment Engagement During the Transition to Post- MHC
No significant differences in treatment engagement by mental health diagnosis occurred as
participants transitioned from MHC to community-based services after MHC.

Table 19: Engagement in MH Treatment Pre-/During MHC and During/Post-MHC

	Bipolar DO		Depression DO		Schizo/ Psychotic DO		Other DO	
	N	%	N	%	N	%	N	%
Engaged in CMH *During and After* (N=255)	96	37.5	69	35.8	62	42.8	28	33.3
Not Engaged in CMH During and After (N=423)	160	62.5	124	64.2	83	57.2	56	66.7

Source: CMH Encounter Data; SCCM

Proportion in Jail Prior to MHC, Number of Days in Jail & Time to First Jail
Figure 17, below, shows that participants diagnosed with schizophrenia/psychotic disorders
(39%) and bipolar (36%) had the greatest proportion of individuals who had a jail episode after
discharge from the MHC, although this was not a significant difference.

Figure 17: Proportion of Participants With Jail Episode Post-MHC by MH Diagnosis
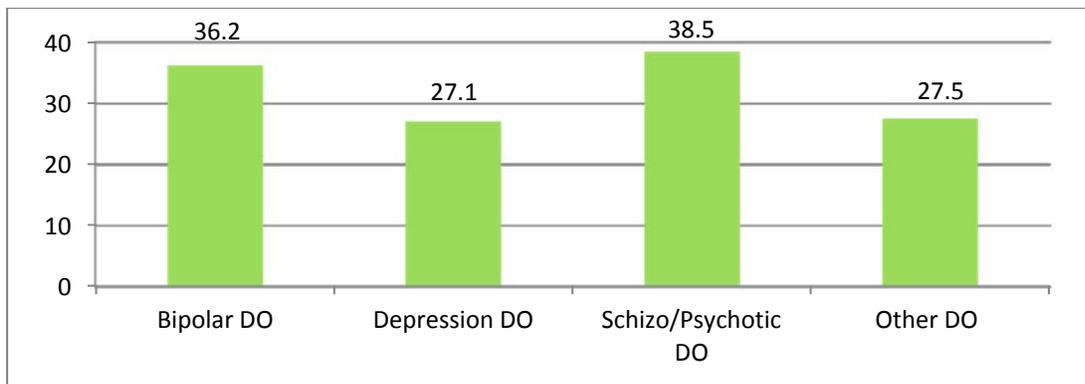
Source: Jail Data - All Counties; SCCM

The average number of days in jail after discharge from MHC (post-MHC), while not significantly
different by mental health diagnosis, shows that participants diagnosed with "other" disorders
spent fewer days in jail after discharge (M=9 days) compared to the other three diagnoses (See
Figure 18, below).

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Figure 18: Number of Days in Jail Post-MHC by MH Diagnosis

Bar chart showing Number of Days in Jail Post-MHC by MH Diagnosis:
- Bipolar DO: 24.9
- Depression DO: 20.5
- Schizo/Psychotic DO: 29.3
- Other DO: 9.1
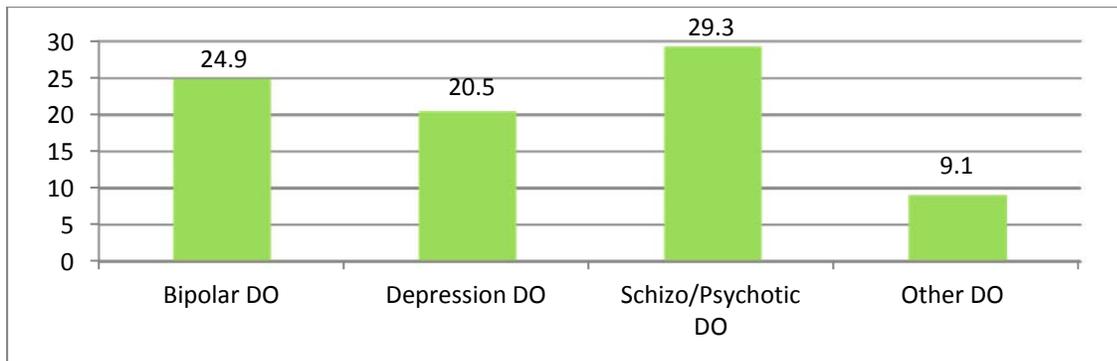
Source: Jail Data - All Counties; SCCM

Time to First Jail Episode After Discharge from MHC

The number of days to the first jail episode after discharge was not significantly different by mental health diagnosis. Figure 19, below, shows that on average participants diagnosed with "other" who had a jail episode after discharge had the longest period of time to the episode (138 days), while participants diagnosed with schizophrenia/psychotic disorder had the shortest period of time (81 days).

Figure 19: Number of Days to First Jail Episode Post-MHC by MH Diagnosis

Horizontal bar chart showing Number of Days to First Jail Episode Post-MHC by MH Diagnosis:
- Bipolar DO: 84.3
- Depression DO: 109.3
- Schiz/Psychotic DO: 80.5
- Other: 138.1
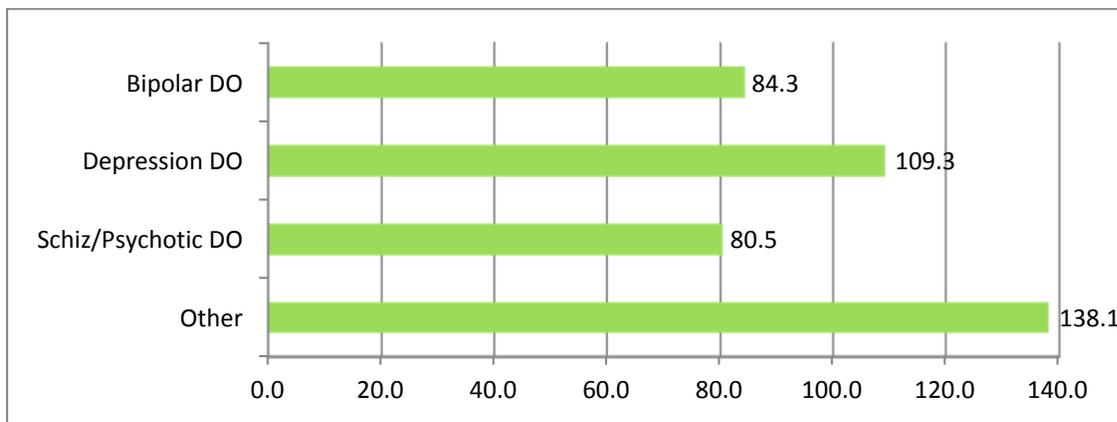
Source: Jail Data - All Counties; SCCM

Co-occurring Disorders (COD)

The salience of a co-occurring substance use disorders for those with SMI, particularly on outcomes related to recidivism, has been described previously in the literature. Therefore, in this section we examine outcomes based on the presence or absence of co-occurring mental health and substance use disorders. Since the major criteria for inclusion in a MHC is the presence of a mental illness, the first task is identifying individuals who have co-occurring substance use disorders. As discussed previously, data derived from the SCCM database include a single item identifying if individuals have a 'current substance abuse' issue. However, there

may or may not be a formal identification or assessment of a substance-related diagnosis or disorder, and the seriousness or immediacy of the issue is not clear.

Due to the variation in screening practices and recording substance abuse data to SCCM across the eight MHCs, a decision was made in concert with MDCH to define COD, for purposes of this section, as any participant who received treatment in either the CMH or BSAAS/CA system before or during MHC. However, because CMH data is available on only 577 of 678 participants, and treatment is a defining criteria, participants for whom there is no CMH data are excluded. As a result, of 577 participants with CMH data, 84% (n=482) have a COD and 16% (n=95) do not. In subsequent analyses pertaining to MHC outcomes, there will be those with COD (n=482) and those without COD (n=95). It should be noted that this definition excludes 45 participants who were identified as having 'current substance abuse' at MHC admission.

Figure 20: Proportion of Participants with COD; Defined as Treatment Pre-/During-MHC
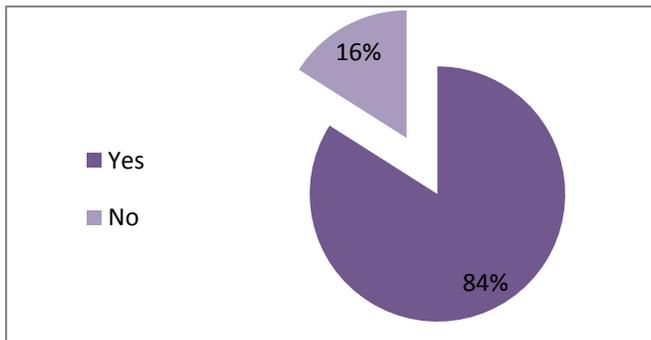
Source: CMH Encounter Data; BSAAS Treatment Data

When using this definition of COD, the presence of COD was a significant factor in length of stay and successful completion of MHC. It should be noted that, although not statistically significant, the proportion of those with COD who have had multiple admissions into MHC is greater than those without a COD (4% versus 1%). Those with COD averaged 301 days (SD 194) compared to 234 days (SD 179) for those with SMI alone (t-test = 3.08; p<.002). These differences persisted by completion status.

Figure 21: Length of Stay by COD
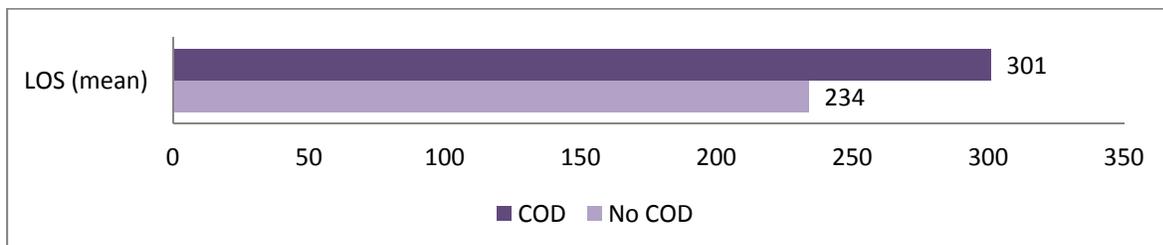
Source: SCCM; CMH Encounter Data; BSAAS Treatment Data

Of those with COD, 41% completed successfully compared to 53% of those without a COD. This difference was statistically significant (χ^2=4.2, p=.04). See Figure 22, below.

Figure 22: Completion Status by Presence or Absence of COD
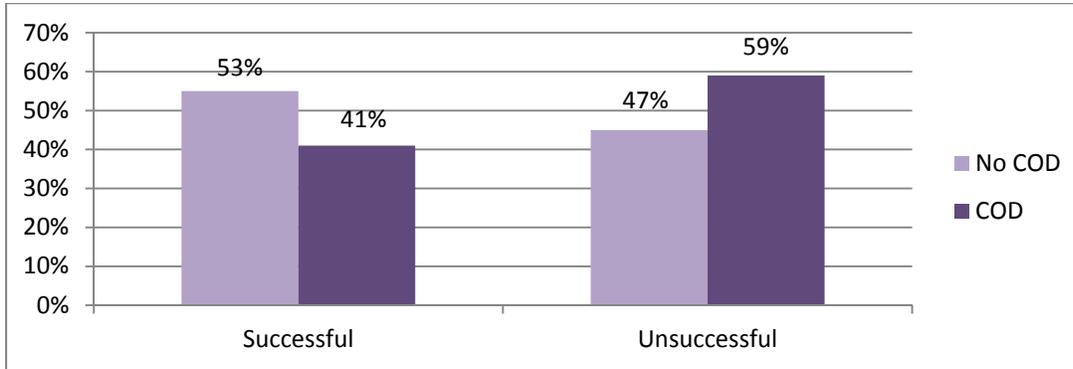
Source: CMH Encounter Data; BSAAS Treatment Data; SCCM
(χ^2 = 4.18; p=.04).

Mental Health Treatment

CMH encounter data provided some indication of differences in the proportion of participants who received mental health services based on the presence or absence of a COD. Prior to MHC admission, a higher proportion of those with COD received mental health services in the community than those without COD (92.1% versus 86.3%). While this proportion was trending toward statistical significance (χ_2=3.3; p =.07), the difference in treatment during MHC was strongly significant (χ_2=31.3; p<.001). Treatment obtained post-MHC did not differ by group membership. These differences during MHC could reflect the criteria used for COD definition (e.g. treatment in either CMH or SA system) or could be due to the likelihood of participants receiving substance abuse treatment within CMH.

Figure 23: Proportion of Participants Engaged in MH Treatment Over Time by COD Status

Source: CMH Encounter Data

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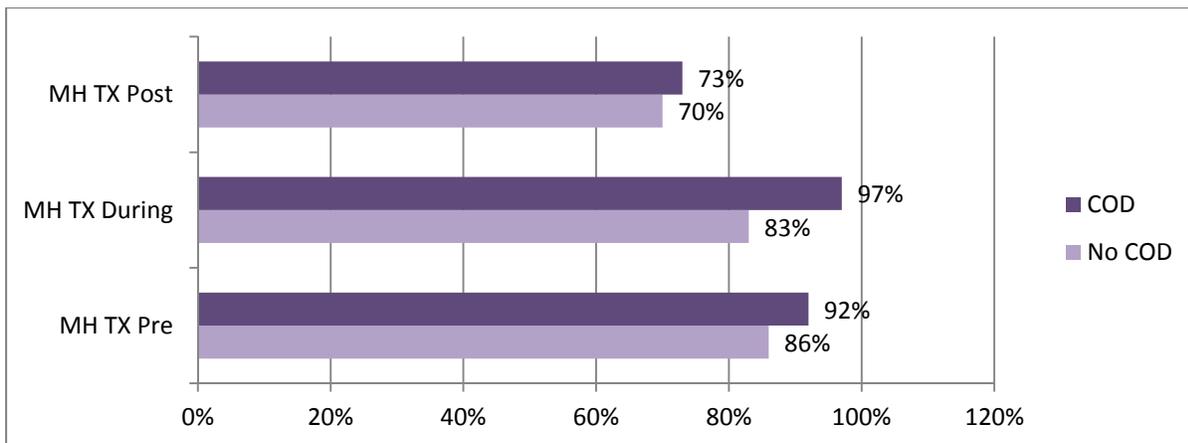
Because the definition for COD includes the presence of substance abuse treatment service in either the CMH or BSAAS treatment system, and the majority of substance abuse services were provided within the CMH system, comparison of the number and type of treatment services within CMH is confounding and not presented. Based on this definition, one could hypothesize that individuals with COD received a greater number of services pre-, during and post-MHC. However, the data does not reveal any such differences in the average number or intensity of services delivered by group membership (COD versus no COD).

While those with COD were more likely to demonstrate engagement in CMH services in the transition between pre-MHC and during-MHC compared to those without (89% versus 72%; χ_2=21, p.<001); there were no statistical differences in engagement of CMH services in transitions between during-MHC to post-MHC (64% versus 53%).

Criminal Justice Involvement and Recidivism
Replicating previous outcome measures, assessment of jail days across time (pre-, during and post-MHC) and the presence of new criminal charges or convictions is compared by group. When examining the presence or absence of any jail time in the pre-, during and post-MHC periods there are noteworthy group differences (See Figure 24, below). Although there are equal proportions of participants in both groups who have time in jail pre-MHC admission (83% each), those with a COD have a significantly higher proportion serving jail time during MHC as compared to those without a COD (54% versus 28%; χ^2=21.4; p.<.001).

Figure 24: Proportion of Participants by Group with Any Jail Over Time
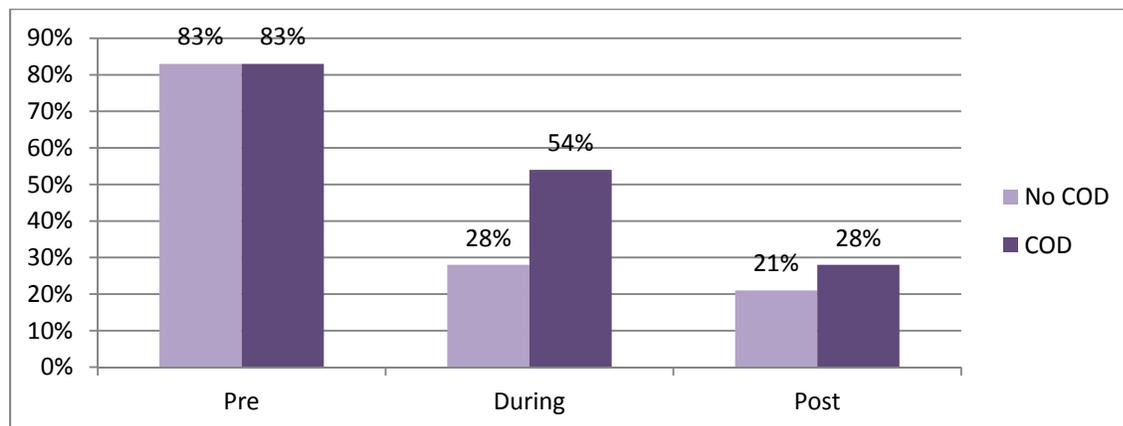
Source: Jail Data - All Counties

In another comparison of the average number of jail days served by participants across the pre, during, and post-MHC periods, the only significant difference is during MHC. Those with a COD serve a much higher number of jail days during MHC than do those without a COD (30.4 versus 11.2; t=5.6; p.<.001). In addition, Figure 25, below, demonstrates the trend of jail days served across time with both groups trending toward a decrease in the number of days post-MHC as compared to pre-MHC (Note: the post-MHC sample are those discharged one year, N=236).

Figure 25: Comparison of Jail Days Over Time by COD Group
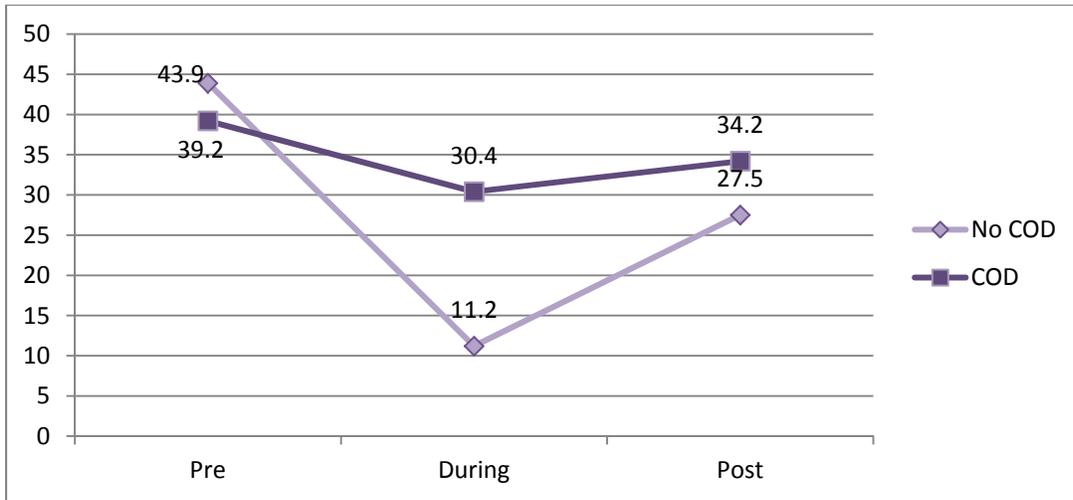
Source: Jail Data - All Counties

In examining new charges and convictions during and post-MHC, Michigan State Police data is used to examine during and post-MHC periods. Figure 26, below, demonstrates that the COD group is more likely to have new charges and convictions than those without. It should be noted that some of these proportions are overlapping as a charge in one time period can become a conviction in another. The average number of convictions post-MHC does not differ by group (1.0 for No COD versus 1.2 COD).

Figure 26: Proportion of New Charges and Convictions by COD Group
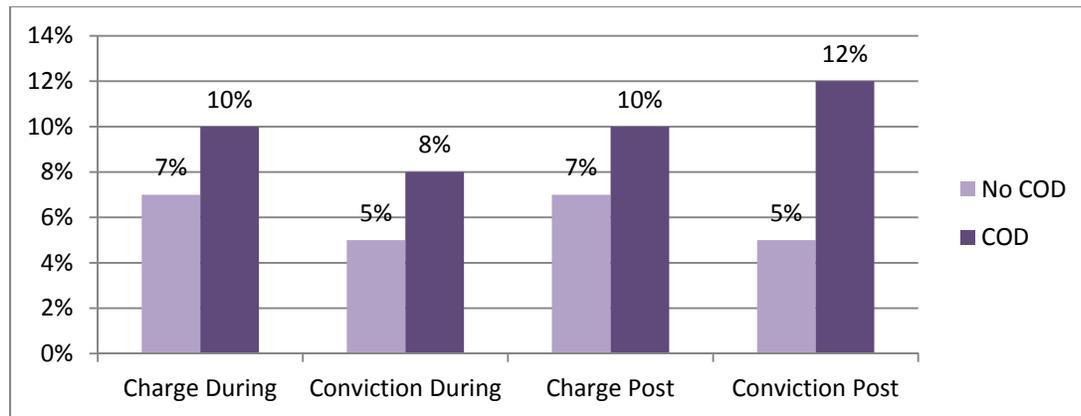
Source: Michigan State Police Data

Offense Type at Admission

To assess if the arrest or infraction type resulted in varying outcomes, this section examines outcomes by group. Of the 678 cases among all MHCs almost half (48%; n=328), were in court on a felony arrest. Of the remaining 52% (n=350) the majority were charged with

50

misdemeanors offenses, but of that group, 9% (n=59) were coded as civil/petition or other. For purposes of our analyses, the sample was divided into two groups: 1) Felony (48%), and 2) Misdemeanor/Civil (52%).

There were no differences by gender or age, but there were differences by race, with African Americans significantly more likely to be in MHC on a felony than a misdemeanor (χ^2=18.99, p=.000). Those with a felony were also significantly less likely to be living independently (χ^2=10.99, p<.01), more likely to have a history of substance abuse (χ^2=5.78, p=.016), and more likely to have a bipolar diagnosis than those with a misdemeanor (χ^2=26.21, p<.001).

Among those discharged (n=450), the proportion of participants with a felony offense is only slightly lower than the proportion with a felony among the entire sample (41% discharged and 48% entire sample). In looking at this discharged sample, those with a felony were in MHC for nearly the exact same number of days as those with a misdemeanor (290.0 and 290.1 respectively). While the time spent in MHC was similar by offense type, there were significant differences by completion status. As Figure 27, below, shows 67.5% of those with a felony did not successfully complete the MHC compared to 48.2% with a misdemeanor (χ^2=16.94, p<.001).

Figure 27: Completion Status by Offense Type
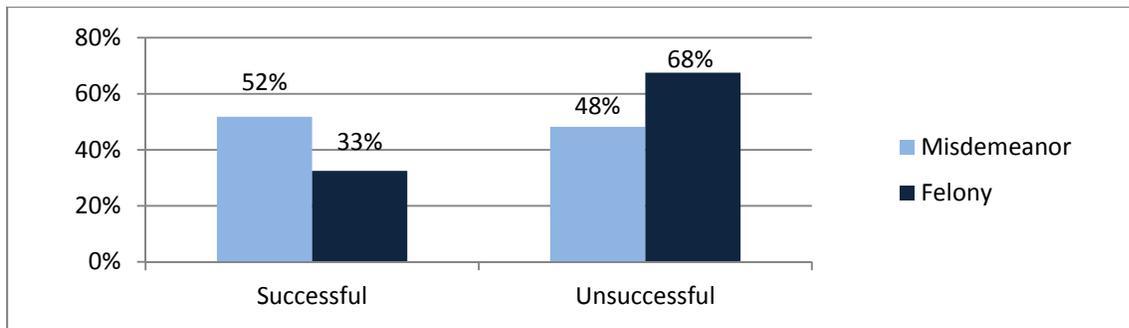
Source: SCCM

Considering completion status and the average number of days spent in jail by offense type shows that those with a felony arrest spent significantly more time in MHC. Figure 28, below, shows that those with a felony and misdemeanor offense who did not complete the MHC both spent approximately 200 days in MHC (201.9 and 199.2 respectively). However, those with a felony who successfully completed the MHC spent slightly over 100 days more in MHC than those with a misdemeanor (t=5.3, p<.001).

Figure 28: Length of Stay by Completion Status and Offense Type
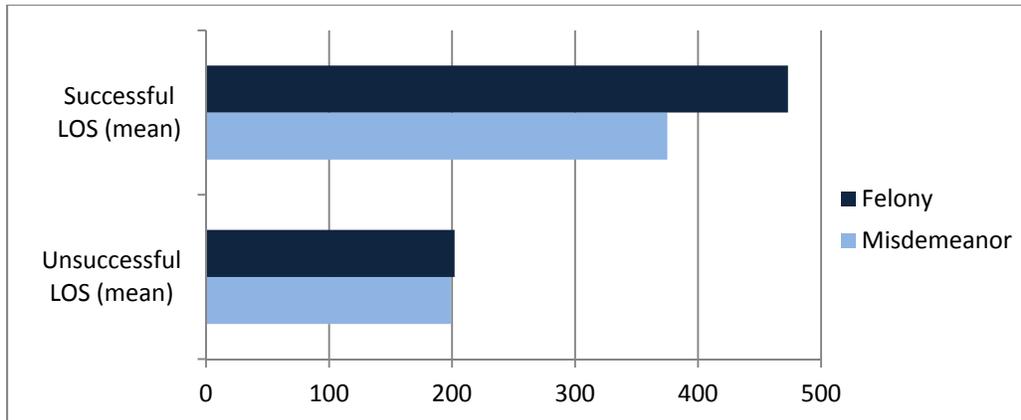
Criminal Justice Involvement and Recidivism

Replicating previous outcome measures (assessment of jail days across time and the presence of new criminal charges or convictions) for the discharged sample (n=450) shows interesting differences by arrest type. As illustrated in Figure 29, below, those with a felony are significantly more likely to have spent any time in jail prior to MHC (χ^2=31.84, p<.001) and during MHC (χ^2=13.66, p<.001). In the year prior to MHC almost everyone who was in MHC on a felony arrest spent time in jail (93%), while in the time following MHC, less than a quarter (22%) had been in jail.

Figure 29: Proportion of Participants by Offense Type with Any Jail Over Time
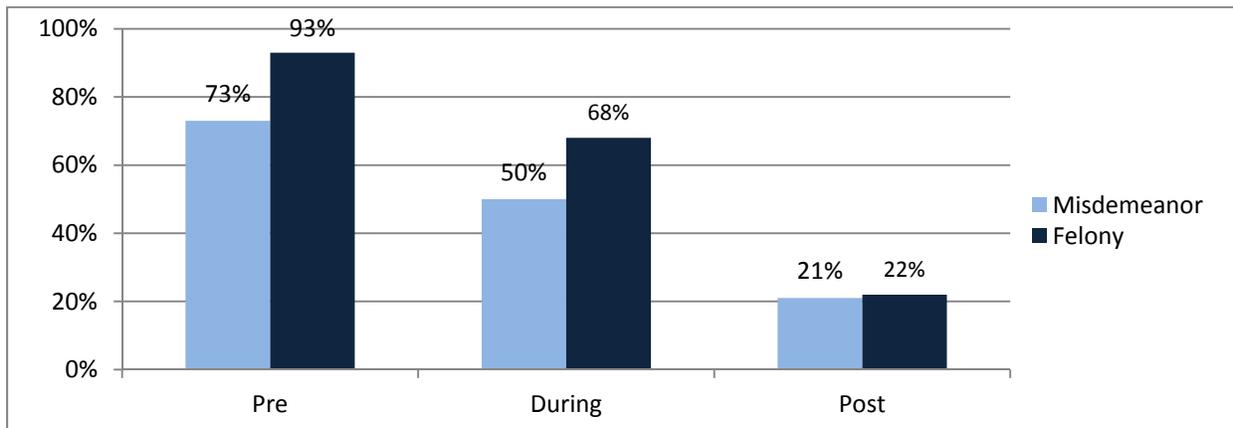
IX.   Long-term Outcomes: One Year Post-MHC

Randomly selecting participants into one intervention and comparing it to another intervention is the strongest research design. Since the goal of the funding behind the implementation of

the MHC was feasibility, random selection was not appropriate or desired. However, a strong evaluation was desired, and every effort was made to assess if change over time was attributable to MHC. Therefore, data was collected for every participant on the same behaviors (treatment utilization and criminal involvement) in the year pre-MHC in an effort to compare to behaviors in the year post-MHC. Although this design cannot control for changes in environmental or system factors, it does hold constant all of the individual factors.

In this section, the sample is limited to participants discharged from MHC for more than one year (N=236). The majority of these participants were found in the CMH data (N=217, 92%) and show a similar pattern as previous analyses. As listed in Table 20, below, the majority of participants received mental health services in the year pre- (89%) and during MHC (96%), but the rate of participants using mental health services in the year post-MHC decreased (72%).

Table 20: Participants Discharged More Than One Year Receiving MH Services Over Time

Pre-MHC	During MHC	Post-MHC
89%	96%	72%

Source: CMH Encounter Data

As Table 21, below, demonstrates, participants receive, on average, the greatest number of low-intensity mental health services during MHC (M=35.3) and the greatest number of medium- (M=4.2) and high-intensity services (M=1.9) pre-MHC. High-intensity services peaks pre-MHC (M=1.9), is the lowest during MHC (M=0.7), and slightly increases post-MHC (M=0.9).

Table 21: Comparing MH Services and Service Intensity Over Time

	Pre-MHC		During MHC		Post-MHC	
	M (SD)	Range	M (SD)	Range	M (SD)	Range
LOW-Intensity Services	18.1 (50.1)	0-652	35.3 (57.7)	0-618	14.1 29.5)	0-296
MEDIUM-Intensity Services	4.2 (18.5)	0-161	3.2 (11.9)	0-83	2.6 (11.1)	0-76
HIGH- Intensity Services	1.9 (4.7)	0-42	0.7 (2.1)	0-19	0.9 (3.7)	0-37

Source: CMH Encounter Data
Note: Available data for 217 of the 236 participants

On average, MHC participants receive more mental health services, regardless of intensity level, in the year before admission to MHC (pre-) when compared to the year after MHC (post-). Figure 30, below, illustrates the variation in treatment across the three periods.

Figure 30: Average Number of MH Services Over Time for Participants Discharged One Year
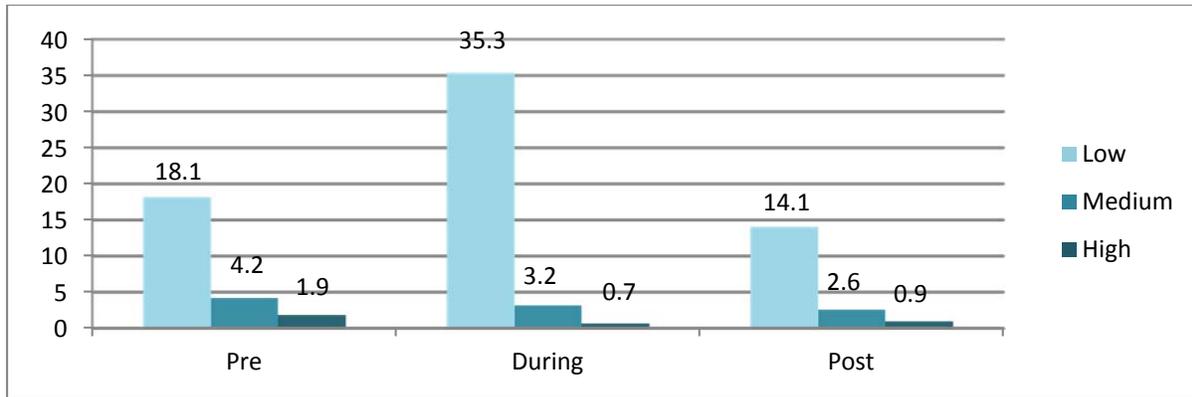
Source: CMH Encounter Data

Jail Interface

There was a significant decline in the proportion of participants that interfaced with jails in the pre-MHC period as compared to post. **In the year pre-MHC, 80% (n=189) of participants spent some time in jail, compared to 43% (n=102) in the year post-MHC.** Although fewer individuals spent time in jail the year post-MHC, there was not a significant decline in the average number of days spent in jail when comparing the pre/post period (39 days prior compared to 33 days post). Figure 31, below, illustrates this and then compares successful (n=95) and unsuccessful (141) completers. Those with successful MHC completion significantly reduced their jail days from pre to post (24 days vs. 1 day, t=5.7, p<. 001), however there was no significant change for those who did not complete.

Figure 31: Comparing Average Jail Days for Participants Discharged One Year
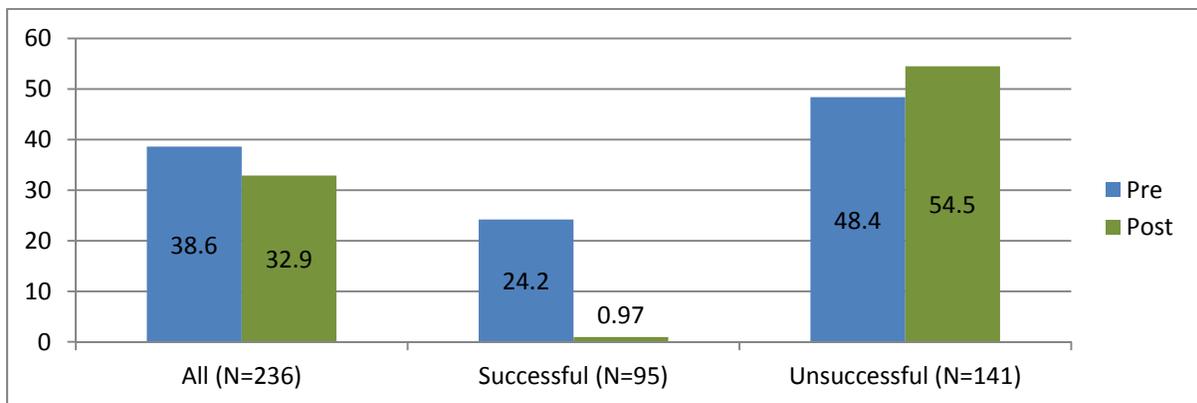
Source: Jail Data – All Counties; SCCM

New Offenses

Analysis of new charges and convictions after admission to MHC showed that 16.5% of participants were charged with a new offense after admission and 17.4% were convicted of a new offense. However, the rates differed significantly by successful completion status: 6.3% of those with successful completions were charged/convicted of a new offense as compared to

23.4% charged and 24.8% convicted among those with unsuccessful completion. **These outcomes related to new offenses are more favorable than those reported in the research literature for both groups.**

Prison Interface

Using the MDOC Offender Information Tracking System (OTIS) as a mechanism to determine if there was interface with state correction's authority, we found that the majority of participants discharged greater than one year (65%) did not have a record in OTIS. About one fifth (18%) were found, but had been discharged from all MDOC statuses; 4% (n=10) were in prison as of September 2012 when the review was conducted. Smaller proportions remain under probation (8%) and parole (4%) supervision.

Pre-to Post-MHC Changes by Mental Health Diagnosis

Among those discharged longer than one year, low-intensity service utilization decreased from pre- to post-MHC involvement; however, there were no significant differences for any of the mental health diagnoses categories. Similarly, there was a drop in high-intensity service utilization across all mental health diagnoses. Participants diagnosed with schizophrenia/psychotic disorder were the only diagnostic category that had a statistically significant drop, from 2.4 services in the year prior to MHC admission to 0.4 in the year after discharge from MHC.

Figure 32: Pre- to Post-MHC Low-Intensity Service Changes by MH Diagnosis
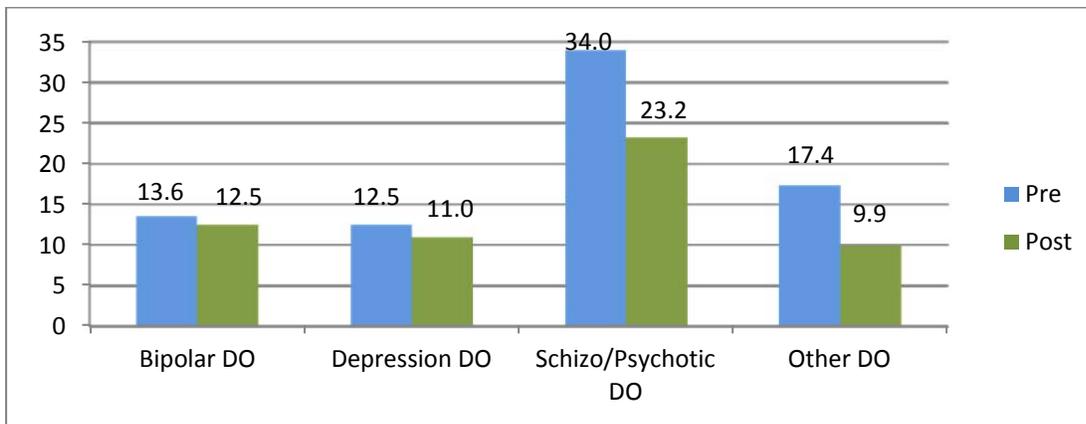
Source: CMH Encounter Data

Figure 33: Pre- to Post-MHC High-Intensity Service Changes by MH Diagnosis
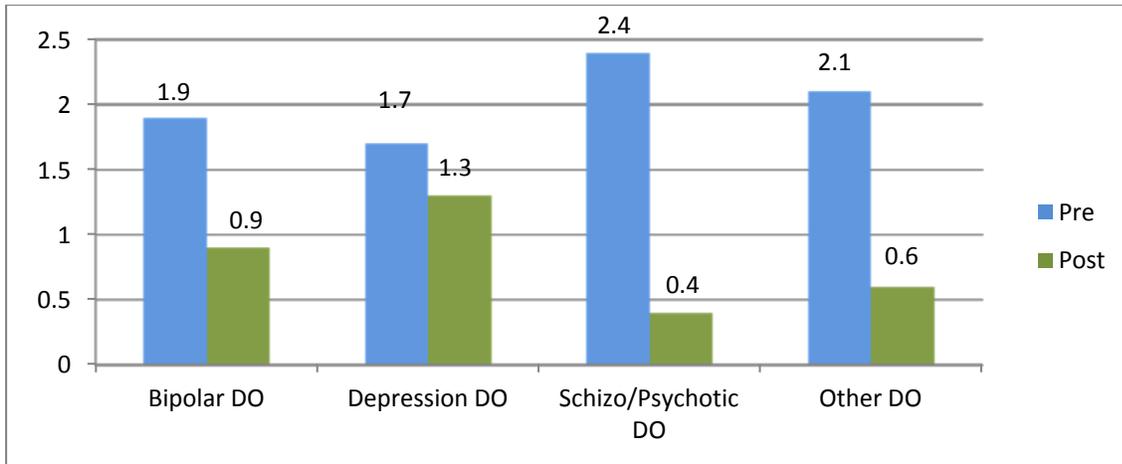
While no significant differences were found in the number of days in jail from pre-MHC to post-MHC, the chart below shows that participants diagnosed with schizophrenia/psychotic disorder dropped from 56 days to 41 days. Participants diagnosed with "other" had 30 days in jail prior to admission and 14 days after discharge from MHC. Participants diagnosed with bipolar had on average 35 days in jail prior to admission and 36 days after discharge from MHC.

Figure 34: Pre- to Post-MHC Changes in Number of Days in Jail by MH Diagnosis

Pre- to Post-MHC Changes by COD

Of those with one year post MHC (n=236), the majority (81%) have COD when defined as receiving a formal substance abuse treatment service (within the CMH or BSAAS systems) either before or during MHC. Below is an examination of service utilization and recidivism by COD status.

Mental Health Service Utilization

In examining the sample with one year of post-MHC data (n=236), 73% of those with a COD and 70% of those without COD received a mental health service. Although there is a numerical difference in the time to first treatment (55 days for those without a COD versus 43 days for those with a COD), it is not significant. Similarly, the number of days to a high intensity mental health treatment service does not differ by group. In the one year post-MHC period, only 45 individuals received a high intensity service out of a possible 217: 8 (24%) of the No-COD group and 37 (20%) of the COD group. Time to the high-intensity service was 142 days for the No-COD group compared to 151 days for the COD group.

Long term Recidivism Outcomes by COD

Although there is a difference in the proportion of participants serving time in jail post-MHC (45% of those with COD compared to 35% of those without COD), this is not statistically significant. Similarly, there is a numeric difference in the number of days to jail post-MHC between groups (93 days for those without COD compared to 114 for those with COD), but the difference is not statistically significant.

Figure 35: Proportion in Jail Post-MHC by COD
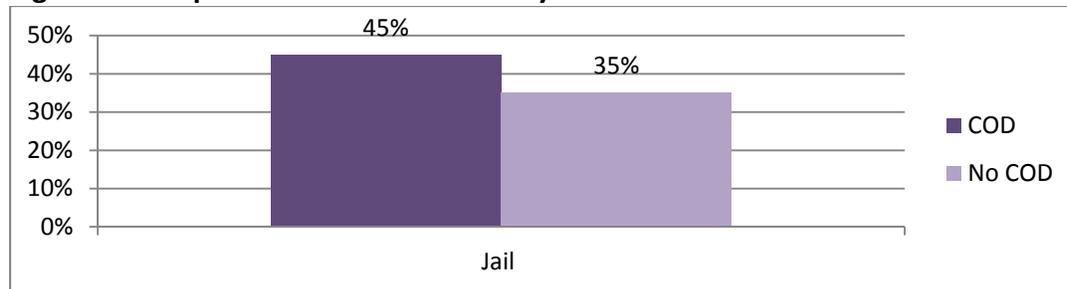
Source: CMH Encounter Data; Jail Data – All Counties

Comparing the number of jail days during the pre/post MHC periods, there is a significant decline for those without COD compared to those with COD. Those without COD averaged 54 days in jail pre-MHC and 28 days post-MHC. However, the number of jail days remained nearly the same across time for those with COD; 35 days pre-MHC and 34 days post-MHC.

Figure 36: Presence of New Offense After MHC Admission/Discharge

Source: MSP data

57
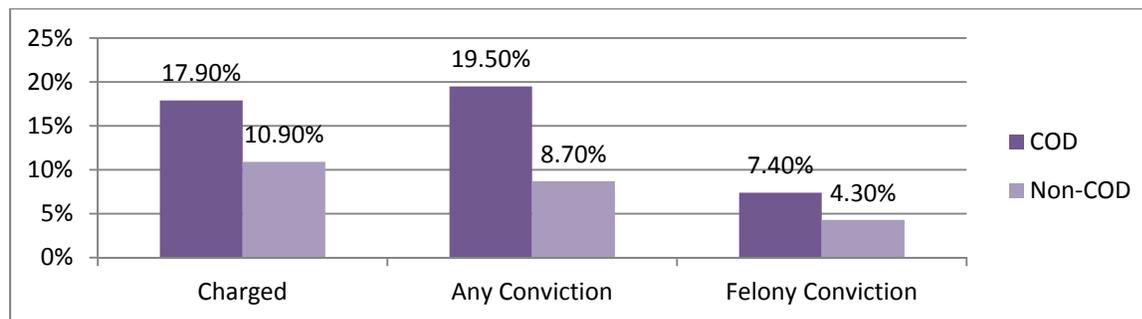
Examining recidivism as defined as a new offense, there are no significant differences between groups in the proportion charged with an offense either during or after MHC, even though the proportion is higher among those with COD (18% vs. 11%).However, when conviction rates are examined, there is a trend toward a significant difference; those with a COD were more likely than those without COD to be convicted of an offense after MHC admission (χ^2 (2) = 3.0; p=.08), but no difference is found in the type of conviction (felony). (See Figure 36, above).

Pre- to Post-MHC Changes by Offense Type at Admission
Changes from the pre- to post-MHC period can also be examined by the type of offense that brought the participant into MHC. In looking at those with a full year of follow up data (n=236), 41% (n=96) entered with a felony offense, 44% (n=104) had a misdemeanor, and 15% (n=36) had a civil charge. For this analysis, misdemeanor and civil offenses were combined. Those who were admitted with a felony spent an average of 70 days in jail in the year prior to MHC, which is significantly higher than the 17 jail days on average that misdemeanants spent in the year prior to MHC (t=6.6, p<.001). Similarly, those with a felony arrest spent more days in jail during MHC, averaging 30 days to the misdemeanor group's 17 days (t=3.2, p=.002). However, there were no significant differences between groups in the time in jail post-MHC; those with a felony averaged 38 days, while those with a misdemeanor averaged 30 days.

Figure 37: Comparison of Jail Days Over Time by Offense Type at Admission
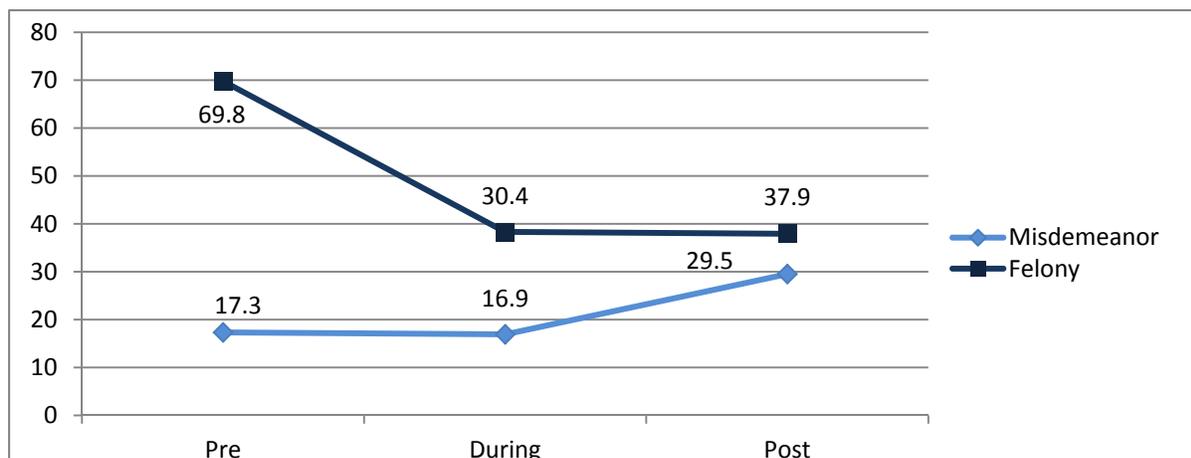
Source: Jail data - all counties

To further examine this relationship between pre- and post-MHC behavior, statistical analysis was conducted to look at the average rate of change in jail days before and after MHC by offense type at admission. The average number of days pre- and post-MHC for those with a misdemeanor went from 17 to 30, respectively. Although the average number of days increased overall for those admitted with misdemeanors, the change was not statistically significant. However, in looking at those with a felony at admission, the average number of days declined significantly, from 70 days pre-MHC to 38 days post-MHC (t=3.3, p=.001). Figure 37, above, illustrates these changes across time.

Figure 38: Percent of Individuals with New Charges and Convictions by Offense Type
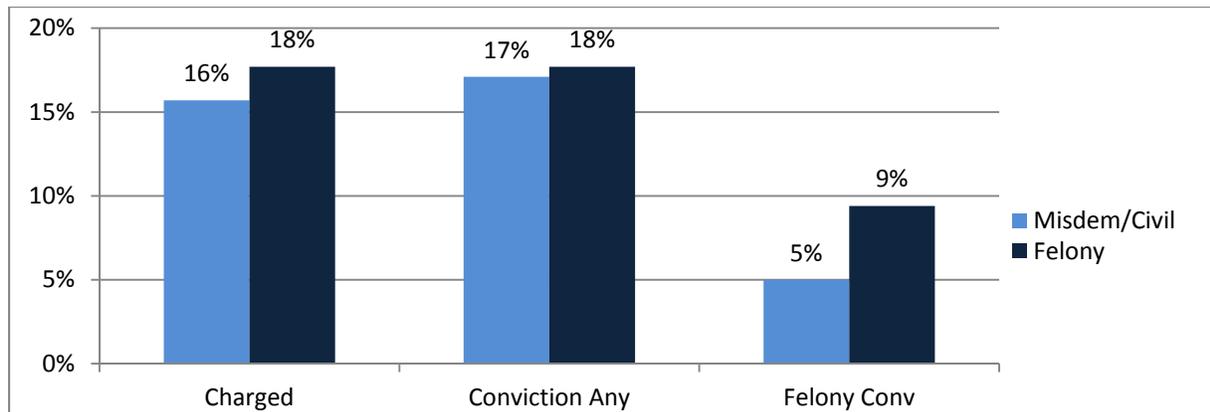
Source: Michigan State Police Data (Sample n=236, those with one year of discharge data).

For the 236 participants with at least one year post-discharge, new criminal offenses at any time since admission to MHC were examined by the offense type at MHC admission (Figure 38, above). There were no statistical differences in the number of new charges or convictions for those admitted on lower level offenses (misdemeanor or civil) as compared to those admitted with higher level offenses (felony). Although a higher proportion of those admitted with felony offenses were convicted of a new felony after MHC admission (9%), this represents 9 individuals compared to 7 individuals (5%) of those admitted with misdemeanor or civil offenses and does not represent a statistically significant difference.

X.   Outcomes by System-Level Factors

In Section VIII, above, consideration of individual-level factors on MHC processes and outcomes were considered. Similarly, system-level differences across the courts may impact outcomes across MHCs. In an effort to consider what system-level factors may affect both processes and outcomes associated with MHC, two system-level differences were examined: A) the level of integration between court and mental health, and B) the type of court based on the level of offenses considered eligible. Below the groupings within each factor are described as well as analyses by group.

Integration Level
As described in Section III, a number of differences and similarities were noted within the context of the Essential Elements of a MHC. These differences and similarities included system-level differences, as defined in Essential Elements #7 and #8, treatment integration and community supports and the composition of the court team, respectively. Inherent within Elements #7 and #8 is an emphasis on the integration of the MHC, including the integration of treatment services and ancillary resources within the program, as well as the integration, inclusivity, and collaboration of court team, treatment providers, and the judge. Focusing on these elements, a level of integration for each MHC was established by assigning a score of 1

(presence of) or 0 (absence of) to the following six factors as observed or reported during onsite interviews: 1) an active advisory council; 2) additional services for participants (i.e. transportation, employment readiness, therapy groups etc.); 3) mental health background/experience of the MHC case manager; 4) involvement of the mental health provider on the treatment team; 5) involvement of the mental health provider in status hearings; and 6) involvement of the substance abuse treatment provider (See Table 22, below). Based on the resulting scores, the eight MHCs were categorized as High Integration (scores of 4 – 6) or Low Integration (scores of 1 – 3).

Table 22: Court Integration Elements

1	The MHC has an active advisory council
2	The MHC offers additional services (e.g., transportation, employment services, therapy groups)
3	The MHC case manager is part of the mental health system
4	The mental health provider/case manager participates on the MHC treatment team
5	The mental health provider/case manager participates in MHC status hearings
6	The substance abuse provider/case manager participates in the MHC treatment team or status hearings

Source: Onsite interviews

While each integration grouping (High and Low) has four courts in it, more participants in the full sample (N=678) are included in the High Integration group (60%). Among the discharged sample (n=450), 62% were in a High Integration court while 67% of those discharged for at least one-year (n=236) were in a High Integration court.

High Integration courts are associated with higher risk (e.g. felony) offenders; 63% of those with felonies upon admission were in the High Integration courts. These High Integration courts have significantly more males (χ^2=12.3, p<.001), African Americans (χ^2=105.8,p<.001), felony arrestees (χ^2=83.4, p<.001), and persons not living in an independent housing situation (χ^2=3.8, p=.05). They are also more likely to have participants with a bipolar or schizoaffective diagnosis (χ^2=15.2, p<.001) than those in a Low Integration court.

Figure 39: Completion Status by Integration Type
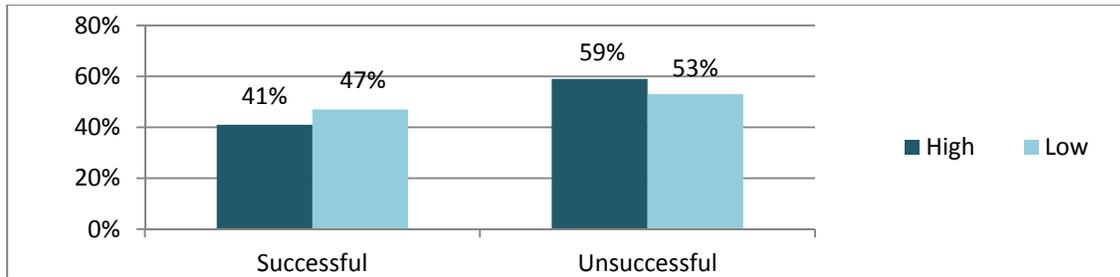
Source: Observation/Interview Data and SCCM

While the Low Integration courts have a slightly higher success rate than High Integration courts (47% to 41%, respectively), the difference is not statistically significant. Among those discharged from the court, those in the High Integration group spent significantly less time under the supervision of the court. The average number of days in MHC for a participant in a High Integration court was 275 compared to 314 days for those in a Low Integration court (t=2.1, p=.04). However, the length of time spent in court is much different when completion status is also considered. As illustrated in Figure 40 below, those who completed a High Integration court averaged slightly over a month longer in MHC than those in a Low Integration court (422 and 389 days; not significantly different). Figure 40 also shows that those who are unsuccessful in a High Integration courts are terminated significantly (t=2.9, p=.003) sooner than Low Integration courts; spending an average of 176 and 248 days in MHC respectively.

Figure 40: Length of Stay by Completion Status and Integration Type
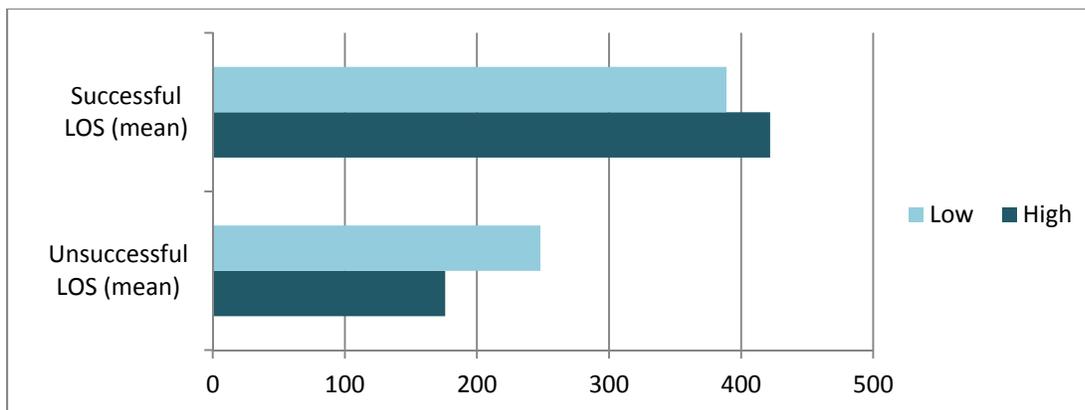
Source: SCCM and Interview/Observation Data

Criminal Justice Involvement and Recidivism

Figure 41, below, shows that participants in a High Integration court averaged more jail days before MHC than those in a Low Integration court, but the difference was not statistically significant. The average *change* in jail days before and during MHC was significant. Participants discharged greater than one year in the High Integration group (n=159) had a significant reduction in jails days, going from an average of 43 days in jail prior to MHC to 26 days during

MHC (t=2.8, p=.006). In comparing pre- and post-MHC periods, the average number of days in jail for participants in the Low Integration courts actually increased. Participants in the Low Integration courts went from 29 days prior to MHC to 39 days after MHC, while those in the High Integration courts decreased from 43 days prior to 30 days after MHC (t=1.8, p=.07). ***The findings suggest that High Integration courts have greater reductions than Low Integration courts in jail days during MHC and that these reductions are retained in the year following MHC.***

Figure 41: Comparison of Jail Days Over Time by Court Integration
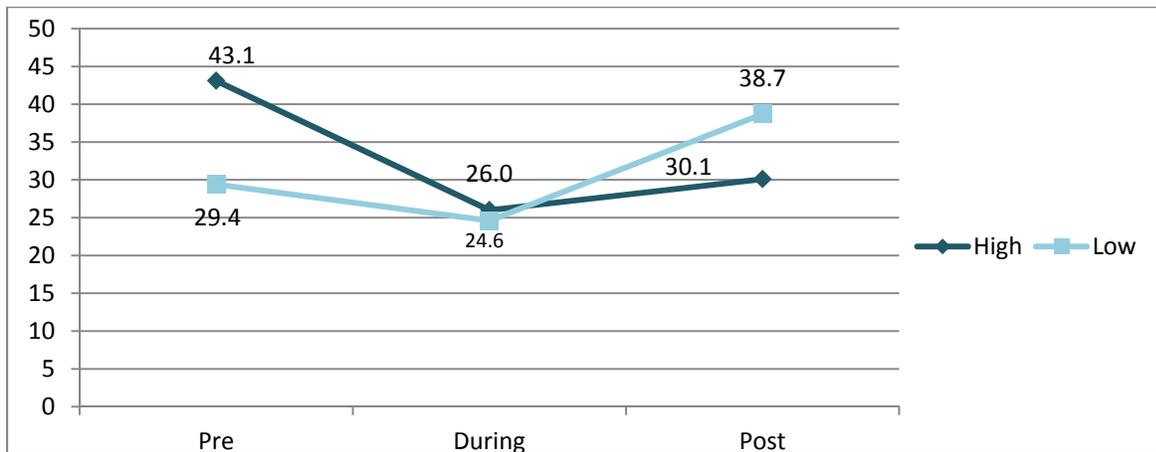
Source: Jail data - all counties; pre/post sample of 236 discharged greater than one year

Completion status also plays a role in the number of jail days across time periods by court integration type. As Figure 42, below, shows, participants who successfully completed the High Integration and Low Integration courts had significant reductions in the average number of jail days before and after MHC. Those who successfully completed a High Integration court went from an average of 27 days to 1 day (t=5.6, p<.001) while those who completed a Low Integration court went from 19 days to .75 days (t=2.2, p=.03). Those who were unsuccessful in a High Integration court went from 54 to 49, a non-significant reduction. ***However, those who were unsuccessful in a Low Integration court actually increased in average jail days, going from 37 to 66 days (t=1.8, p=.08).***

Figure 42: Comparison of Jail Days Over Time by Court Integration and Completion Type
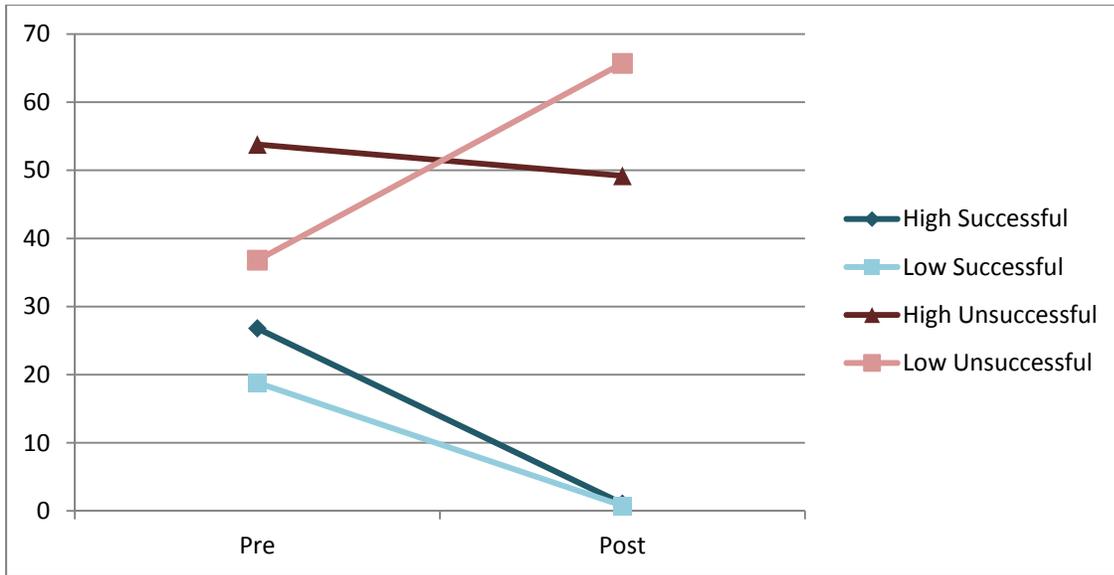
Source: Jail Data - All Counties

Figure 43, below, provides another illustration of this interaction between court integration level and successful completion. This figure also reveals that those who were unsuccessful in MHC, irrespective of integration type, generally had a greater number of jail days prior to MHC. Those who were successful in MHC averaged 24 days in jail prior to MHC while those who were unsuccessful averaged double that number with 48 days in jail (t=3.4, p=.001). This may indicate some individual differences pre-MHC.

Figure 43: Jail Days Post-MHC by Court Integration Type and Completion Type
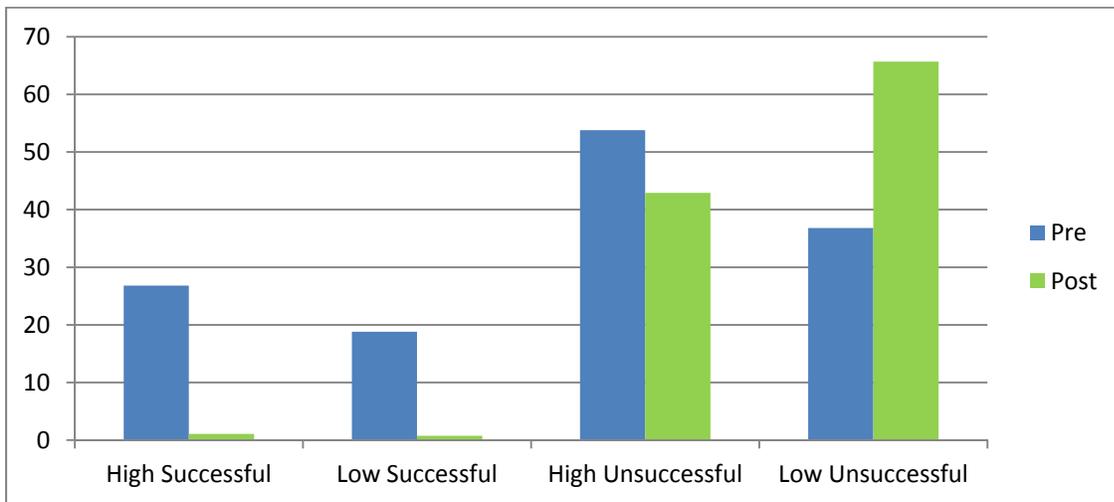
Source: Jail Data – All Counties

Time to Treatment

One aspect of a highly integrated MHC team, which may explain reductions in jail days during court, is length of time for participants to become involved in treatment. Among the one year pre-post sample (n=236), the average length of time for a participant's first treatment encounter was 10 days. This average does not differ by completion; those who were successful and unsuccessful both average 10 days to first treatment encounter. However, this differs significantly by court integration (t=1.95, p=.055). ***Participants in a High Integration court average 8 days to first treatment encounter while those in Low Integration average 14 days.***

Court Type

Eligibility criteria for MHC courts differed by the offense of the participant: Two courts accepted only those with felony offense (i.e., felony courts); two courts accepted only those with misdemeanors (i.e., misdemeanor courts); and the remaining four accepted both those with felony and misdemeanors (i.e., mixed courts). The following analysis considers the influence of 'court type' on the process or outcomes of the MHC.

Participants were most frequently enrolled in mixed courts (44%) that accepted both felony and misdemeanor arrests. The remaining participants were split fairly evenly between the other court types with 27% in misdemeanor courts and 29% in felony courts (See Figure 44, below).

Figure 44: Proportion of Participants by Court Type
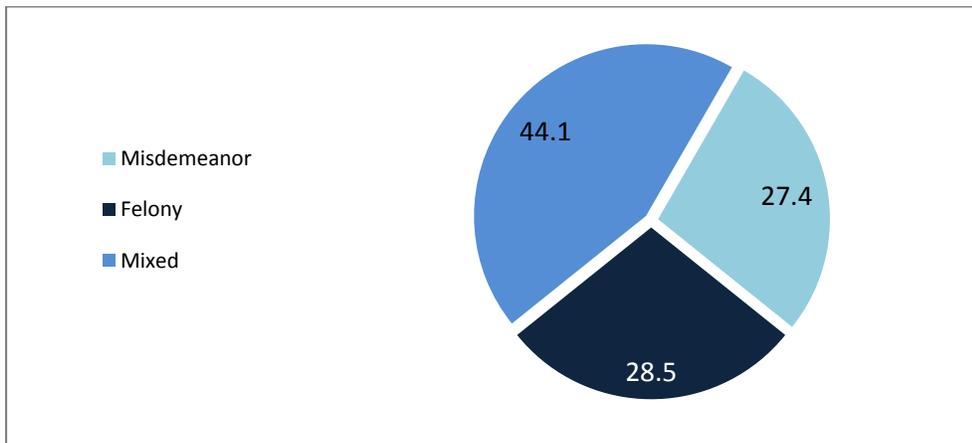
The courts differed significantly in the average length of stay in the MHC. Participants in the felony courts had significantly longer length of stays than those in other court types (*F=4.563, p=.011)* (See Figure 45, below).

Figure 45: Length of Stay by Crime Type Eligibility
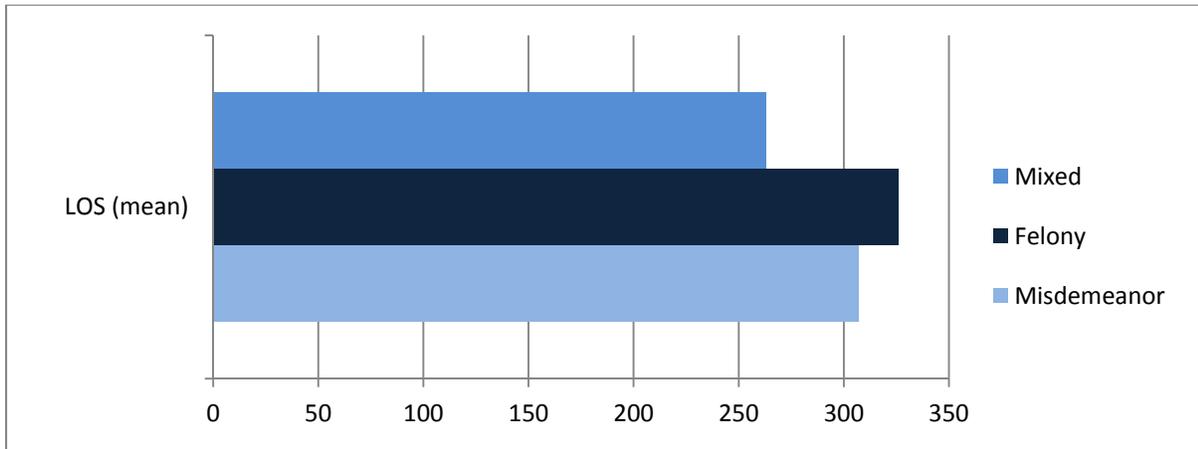
As shown below in Figure 46, participants in the felony courts are significantly less likely to successfully complete MHC (χ^2=13.2, p=.001). Over half (55%) of those in a misdemeanor court completed while less than half of those in a mixed court (42%) and slightly less than a third (32%) of those in a felony court completed.

Figure 46: Completion Status by Court Type
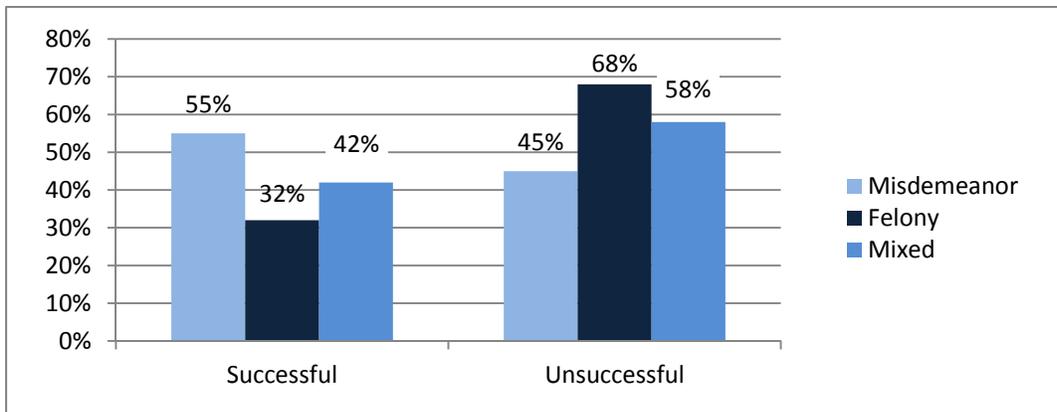
Criminal Justice Involvement and Recidivism

Replicating previous outcome measures, jail days across time (pre-, during and post-MHC) and the presence of new criminal charges or convictions were assessed by court type. Figure 47, below, shows that felony court participants are significantly more likely to have a jail interface prior to and during MHC. Nearly all (99%) of the felony court participants had time in jail prior to MHC compared to approximately three quarters in the misdemeanor (77%) and mixed (76%) courts. There was a similarly high proportion of jail days during MHC among the felony courts. Approximately 79% of those in the felony courts spent some time in jail during MHC compared

to 53% of those in misdemeanor court and 50% of those in a mixed court. **Despite these differences prior to and during MHC, there were no significant differences by court type in the likelihood of jail time after MHC.**

Figure 47: Proportion of Participants by Court Type with Jail Stays Over Time
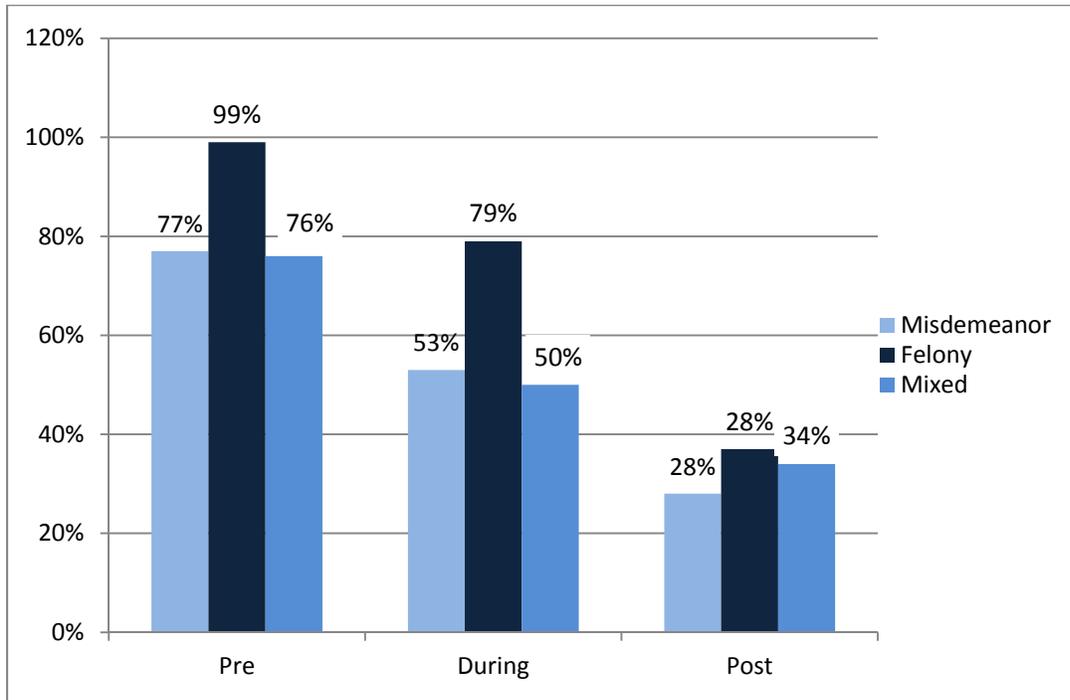
Source: Jail Data - All Counties

Jail interface is further examined by analyzing the average number of jail days by court type. Figure 48, below, shows that those in a felony court had significantly more days in jail compared to participants in other court types prior to MHC (t=5.1, p<.001). Participants in felony court spent an average of 72 days in jail in the year prior to MHC, compared to an average of 37 days for those in a mixed court, and 16 days for those in misdemeanor court.

A comparison of the number of jail days *prior* to MHC and the number of jail days *during* MHC shows that the felony and mixed courts had reductions, while the misdemeanor courts had increases. Only the mixed courts had a significant reduction from the number of jail days prior to MHC to the number of jail days during MHC (t=3.5, p=.001), going from 37 to 15 days.

When comparing the number of days in jail *prior* to MHC with the number of days *post*-MHC, the only significant reductions are in the felony courts (t=5.6, p<.001), showing a drastic reduction from 72 days prior to 18 days after. The mixed courts had an overall reduction from 37 to 15 days (not significant), while the misdemeanor courts had a slight increase from 16 to 25 (also not significant).

Figure 48: Comparison of Jail Days Over Time by Court Type Using Pre/Post Comparison Group (n=236)
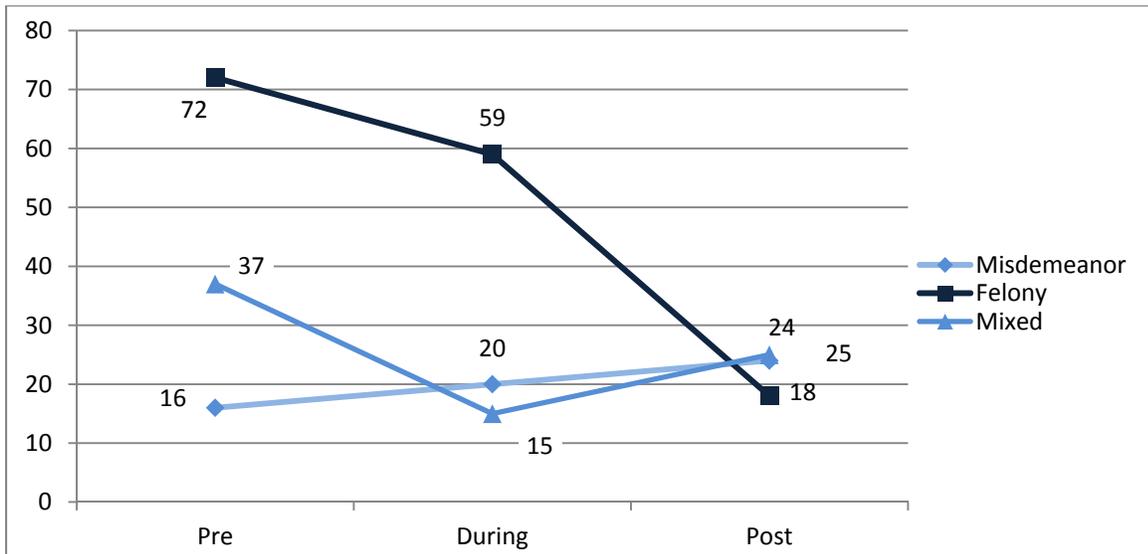
Source: Jail Data – All Counties

To further explore these reductions in jail days by court type, jail days pre- and post-MHC by completion type were also considered. For each of the court types, those who successfully completed the courts had significant reductions when looking at the number of jails days in the year prior to and the year after MHC. The misdemeanor court success group went from 15 days to 0.80 days (t=2.0, p=.006); the felony court success group went from 52 to 4 days (t=3.7, p<.001) and the mixed court success group went from 22 to 0.27 days (t=4.5, p<.001). For those unsuccessful by court type, there were increases for both the misdemeanor (18 to 59 days; t=2.25, p=.03) and mixed courts (46 to 63 days; t=1.16, NS); however, the felony courts still had an overall reduction of 80 days to 33 days (t=4.5, p<.001).

XI.   Conclusions and Recommendations

In 2008 the Michigan Department of Community Health and the State Court Administrative Office joined forces to initiate a proposal process for funding and evaluating mental health courts across the state. This report summarizes the outcomes associated with those mental health courts by aggregating participant data across courts and merging it with several secondary sources of administrative data. Primary data were also collected through surveys, interviews, and observations at each of the eight studied courts. In addition to a straightforward assessment of data across the entire sample of 678 participants, approaches were utilized to assess differences by individual (i.e., diagnosis, co-occurring disorders, and offense at admission) and system (i.e. integration level, court type) factors. Using this accumulation of outcome data, a summary of conclusions is provided below.

Program Similarities and Differences: As Table 3 (Page 16) and Appendix B illustrate, there is wide variation among the MHCs across legal and clinical eligibility criteria (e.g., diagnosis; offense type), characteristics of participants, length of stay, organizational structure, size, and program requirements. <u>Differences between courts should not be construed as a 'right' or 'wrong' way of operating a MHC. Rather, each court is responsive to the needs of the particular county and uses the resources available to the best of its abilities.</u> **Because each MHC is unique, it is not possible to draw direct comparisons between courts. The intent of this evaluation is to illuminate the variety of MHC structures and processes across the state and utilize individual- and system-level factors, other than county of origin, to assess outcomes.**

A. **General Outcomes Across All Participants:** Highlighted below is a summary of findings among all participants admitted to the MHCs.

Participant Characteristics
- The typical participant is male, mid-30s, unemployed, dependent on others for housing, and has a problem with drugs/alcohol.
- Participants were just as likely to have a misdemeanor/civil case as a felony offense upon admission.

Program Outcomes
- The average length of stay in MHC is 276 days; across courts 678 participants spent 187,043 days in MHC since 2009.
- As of 12/31/11, 450 participants were discharged from MHC – 43% successfully.
- Age and offense type were the strongest predictors of success: Successful completers were more likely to be older than average (39 years) and have a misdemeanor/civil offense.
- One quarter (26%) of MHC participants were never screened for drug or alcohol use during MHC; 234 participants (35%) had a positive drug screen at least once.
- Over half (55%) of participants received some type of incentive during MHC and 41% received at least one program sanction.

Treatment Outcomes
- When comparing pre-, during and post-MHC periods, participants received the greatest number of services during MHC, and they were primarily low-intensity services.
- Time to first mental health treatment after MHC admission averaged 16 days.
- Time to first mental health treatment after MHC discharge averaged 41 days.
- Mental health treatment was received by 95% of participants during MHC, but by only 64% of participants post-MHC.
- The proportion of participants requiring high-intensity mental health treatment (e.g. hospitalization) declined from 31% pre-MHC to 15% post-MHC.

- Nearly 80% of participants were identified at admission with a current substance abuse problem or had received a formal substance abuse treatment service in the year prior to admission.
- Of the 406 participants screened as having 'current substance abuse' at admission, 65% (n= 263) received a substance abuse treatment service in either the mental health or substance abuse treatment system during MHC.
- Utilization of substance abuse treatment within CMH increased during MHC participation, suggesting that the realization of the effect of substance misuse may have been heightened during MHC. Post-MHC, only 28% of all discharged participants received a substance abuse treatment service within CMH.

Recidivism Outcomes
- A reduction of 10,074 jail days is seen when comparing time spent in jail the year prior to MHC to the time during enrollment in MHC.
- To date, a reduction of 15,991 jail bed days is seen when comparing the pre-MHC period with the post-MHC period for 450 participants discharged.
- Since admission into MHC, 14% of participants have been tried and convicted of a new offense (of these, 4% are for felony offenses).
- Of those participants discharged, 5% (n=24) are incarcerated in state prisons.
- Successful program completion strongly predicts a lack of future recidivism (i.e. jail post-MHC, new charge, felony).

Long-term Outcomes: Discharged Longer than One Year
- Reduction in jail interface: 80% of participants spent time in jail the year pre-MHC compared with 43% in the year post-MHC.
- Arrest rates in the year post-MHC are lower than published findings from other courts: Overall, 16.5% were charged with a new offense after admission, but for those who successfully completed MHC, only 6.3% were charged with a new offense.
- 72% of participants engaged in mental health treatment in the year post-MHC
- There was a 50% reduction in the utilization of high-intensity mental health services in the year post-MHC compared to the year pre-MHC.

It should be noted that the outcomes reported above are very favorable in comparison to the published literature on MHC. For example, one year post-discharge arrest rates for successful completers range from 15% to 27%[27], whereas MHCs in Michigan average 6.3%. Moreover, treatment utilization post-MHC has been reported as 55%[17] compared to 72% in Michigan.

B. **Individual-Level Factors Comparison:** In addition to the general outcomes above, the evaluation also sought to determine if there were differences in outcomes by certain factor specific to the individual such as diagnosis, presence of co-occurring disorders or the type of offense at admission.

Mental Health Diagnosis
- There were no differences in outcomes (i.e., presence of jail episode, reductions in jail bed days, reductions in high-intensity mental health treatment, or increases in low-intensity mental health treatment) across the four mental health diagnosis categories.
- Prior to MHC admission, participants diagnosed with schizophrenia/psychotic disorders were more likely to have had a jail episode and a longer stay in jail than participants with other diagnoses.
- Participants diagnosed with schizophrenia/psychotic disorders had a statistically significant drop in high-intensity service utilization from pre- to post-MHC.
- There were no significant differences by mental health diagnosis when considering successful completion; however, it is important to note that participants diagnosed as "other" had the greatest proportion of successful completers and those diagnosed with depression had the lowest.

MHCs should continue to consider participants with various mental health diagnoses, as well as developmental disabilities, since no differences were found across diagnosis categories on the key outcomes.

Presence of Co-Occurring Disorders (COD)
- Those with COD had longer program stays (301 vs. 234 days) and were less likely to complete successfully (41% vs. 53%) than those without COD.
- Those with COD were much more likely to spend time in jail during (54% vs. 28%) and post-MHC (28% vs. 21%) than those without.
- Those with COD were more likely to have new charges and convictions than those without COD.

Treatment of COD may be an important factor in the success of MHC participants. When defining COD very conservatively (i.e. any substance abuse treatment service prior to or during MHC) the presence of COD was found to be a significant predictor in unsuccessful completion, jail time during and post-MHC, and new convictions. These differences suggest that more attention to the screening, assessment, and treatment of COD during MHC may improve court outcomes.

Offense Type
- Those with a felony offense were far less likely to complete the MHC program when compared with misdemeanants.
- Those with a felony offense spent considerably more time completing MHC than those with a misdemeanor (473 days compared to 375 respectively).
- There were significant pre/post reductions in jail days for participants with felony offenses whether or not they successfully completed the program.

- Long-term outcomes suggest that there is a decrease in jail days in the year post-MHC when compared with the year pre-MHC for those who enter with felony offenses and an increase for those with a misdemeanor/civil case.
- There is no statistical association between a new offense – or seriousness of a new offense – and the type of offense at admission.

Findings suggest that participants with a felony arrest have the greatest reductions in jail days between pre- and post-MHC periods. These reductions occurred irrespective of completion status, even though those with a felony were less likely to complete. Some of these reductions may be attributable to the greater number of jail days pre-MHC among those with felony offenses, but it is noteworthy that increases in jail days post-MHC were found for those with misdemeanor offenses. The increased supervision and case management that comes with MHC participation, coupled with little difference in the length of stay during MHC, may inadvertently create a greater level of surveillance for those with a misdemeanor. This increased surveillance for misdemeanants may put them at increased risk for sanctions or getting caught for behaviors that otherwise would have gone unnoticed.

C.   System-Level Factors: As stated above, the evaluation sought to determine if there were either individual- or system-level factors that created differences in outcomes. System-level factors refer more to organizational-type factors of the court such as variation in the court type (felony, misdemeanor/civil, or mixed) or the level of integration between the court and the treatment system (low or high integration).

Court Type
- Participants in felony and mixed courts had reductions in jail days when comparing pre-MHC to during MHC, while participants in misdemeanor courts had increases.
- Comparison between pre-MHC and post-MHC jail days shows that felony court is the only court type to have significant reductions from 72 days pre- to 18 days post-MHC.
- Examining unsuccessful completers by court type, there were increases in jail days pre- to post-MHC for both the misdemeanor (18 to 59 days) and mixed courts (46 to 63 days); however, the felony courts still had an overall reduction of 80 days to 33 days.

When the courts were grouped by criminal offense type, the MHCs that exclusively accepted felony cases had the greatest reductions in jail days. The magnitude of these reductions is all the more evident when considering that the average number of jail days for those courts that only accepted misdemeanors increased post-MHC. Although this increase was not statistically significant, it suggests something about the effectiveness of the MHC process for various types of offenders.

Integration Level

- Half the courts scored in the 'High Integration' range and half in the 'Low Integration' range.
- High Integration courts were more likely to serve those with more serious offenses (e.g. felony) and more likely to reduce re-arrest among these high-risk populations.
- The average number of days in MHC for a participant in a High Integration court was 275 compared to 314 days for those in a Low Integration court. Those who completed a High Integration court averaged slightly over a month longer in MHC than those in a Low Integration court.
- Those in the High Integration courts average 8.3 days to first treatment encounter during MHC while those in Low Integration courts average 14.3 days.
- Among both levels of integration, participants who successfully completed MHC had significant reductions in the average number of jail days in the post-MHC period. However, among those who failed to complete MHC, those in High Integration courts still had reductions in jail days.
- High Integration courts have greater reductions in jail days during MHC, and these reductions are retained in the year post-MHC.
- In comparing those MHCs with and without a mental health provider on the team, it was found that teams with a mental health provider had a greater proportion of successful completions and greater reductions in jail days post-MHC. (Note: The term provider is used to identify a staff member from community mental health contracted to provide direct service to MHC participants i.e., case manager, clinical supervisor, or administrator).

MHCs that are highly integrated took on more serious offenders, but were also more likely to have greater reductions in jail days during and post-MHC. These reductions were for both those who were successful and unsuccessful in MHC. For those in the Low Integration courts, reductions were only found among those who successfully completed the court. The most important element of integration was the presence of a mental health provider on the treatment team (i.e. case manager, clinical supervisor, or administrator from the mental health provider contracted to provide direct service to MHC participants).

D. *Recommendations for Enhancing MHC Outcomes:* One of the unique aspects of this report is not only that data are analyzed from multiple MHCs, but also from individual as well as organizational and procedural differences across participants and courts. This approach to the analysis allows for a more complex and multifaceted appraisal of the short and long term outcomes.

While MHCs have similarities in terms of the essential elements, there were acute differences in how these elements played out. For example, while all of the observed courts used a non-adversarial team approach, they differed in terms of the criminal justice, mental health, and community stakeholders who were a part of this team, as well as each group's level of involvement in decisions about MHC participants. Courts are not structured as a 'one size fits

all' and thus are more able to assess unique differences among participants, as well as the resources available within their communities.

Implementation of MHCs across Michigan has been successful, and many quantitative indicators, as well as personal stories, demonstrate positive outcomes. Based upon the body of knowledge amassed in this report, the following are areas for future consideration that may improve outcomes long-term.

1. **Maximize integration efforts with treatment at all levels of court administration and functioning**

A primary goal and an 'essential element' of MHC is the collaboration between two systems: courts/criminal justice and mental health treatment. Analyses in this evaluation demonstrate that this is more than a theoretical tenet; there is evidence to support that MHCs with greater integration between the courts and treatment community have better participant outcomes.

Based on the six-point integration measure used in this evaluation, courts that scored 'high' had participants with shorter lengths of stay, greater reductions in jail days, and less time to treatment – even though these courts were more likely to serve felony offenders. The most predictive item in the scale was the presence of a mental health provider on the court treatment team. Another indicator of integration is an active community advisory board, which is a component in three of the eight courts.

Efforts to maintain high levels of collaboration and cooperation between mental health and court constituencies should remain a primary goal statewide. Maintaining community advisory boards and a clinical presence on the court treatment teams may be desirable for all MHCs.

2. **Matching level of supervision/court intensity with offense level**

Participants with felony offenses were more likely to experience reductions in jail days when comparing pre-/post-MHC jail days – irrespective of completion status. In other words, any 'dosage' of MHC was effective in reducing jail days for felony offenders, although a greater decrease was found among those who successfully completed. This was not the case for those who entered the court with a misdemeanor/civil case. Those who entered with a misdemeanor offense and successfully completed the program had a reduction in jail time. However, the evidence suggests that those with misdemeanors/civil offenses as a whole experienced an increased number of jail days in the year post-MHC as compared to the year pre-MHC. When examining long-term outcomes, those with misdemeanor offenses averaged 17 jail days in the year pre-MHC and 30 days post-MHC. While much of the decline for felony offenders may be attributed to the greater number of jail days pre-MHC (related likely to the seriousness of offense), it is nonetheless disconcerting that individuals with lesser offenses actually experienced an increase in jail days after some dosage of the MHC intervention.

One factor to consider is length of MHC. The average of 276 days may incentivize those with felony offenses, while it may be much more intensive than the typical sanction for someone with a misdemeanor offense. In fact, the length of stay (LOS) for successful completers with a felony offense, as compared to those with a misdemeanor, averaged only three months longer. However, for non-completers, the LOS was exactly the same, irrespective of offense type. Considering the likely variation in sentencing between misdemeanor and felony offenses, it is striking to see little difference in program length of stay.

What the examined data do not reveal is criminal history. Incomplete data in this field within the SCCM database did not allow examination of felony histories among participants with a misdemeanor target offense. When interpreting difference by offense level, criminal history should be taken into account and could be assessed by using risk assessment tools. It was noted during interviews that only one court currently collects risk scores and that none of the courts are currently considering risk scores when considering individuals for admission to the MHC.

Nevertheless, some questions remain. Is it possible that those with low-level misdemeanor offenses are under court supervision far longer in MHC than they would have been without MHC? Is this increased surveillance resulting in more sanctions that might not otherwise be there? Enhancing court outcomes may require more use of 'matching' principles or using criminal justice risk assessment tools that examine risk/needs to determine length of court supervision and MHC involvement.

It is difficult to find comparisons in the literature on such a phenomenon since historically the majority of MHCs served misdemeanants only. Moreover, evaluations rarely examine outcomes by type of court or offense. However, recent research on Drug Courts has found that focus on high-risk/high-need offenders reduces crime twice as much as those serving less serious offenders[46][47]. Furthermore, the focus on this higher risk population yields a nearly a 50-percent greater cost-benefit to their communities[48].

3. Increasing successful completion rates

Similar to other national studies[27][49], this evaluation found that those who successfully completed MHC in Michigan experienced less recidivism and higher treatment utilization post-MHC. Therefore, one goal would be to increase the proportion of participants with successful completion. The successful completion rate across the eight MHCs in the state was 43%, meaning that 57% of participants experience a negative termination. This negative termination rate is within the 14% to 60% range of success reported in other studies[35][38][39], but on the higher end of the continuum.

Increasing successful outcomes may be a delicate balance between adjusting program requirements (e.g. LOS for lower level offenders as discussed above) and enhancing community resources and individual motivation. In both mental health and substance abuse treatment there are tenants and mechanisms for matching level of need with level of services. Some

research, in treatment, as well as criminal justice sanctions, has indicated that when there is an inappropriate matching to a higher than needed service, there are fewer positive outcomes. In MHC there is a need to match participants with appropriate levels of treatment, as well as appropriate levels of supervision. Therefore, adjusting program requirements to more appropriate match the participant's criminal risk may be necessary. For example, increasing LOS for those with higher risk and decreasing LOS for those with lower risk. Success in this delicate balancing act would likely improve outcomes.

Individual-level predictors of completion were age, living situation, employment, substance use, and offense type (note: when considered simultaneously, only age and offense type were significant). Those that were employed or living independently at admission were more likely to complete than those who were unemployed or dependent on others for housing. Although it is difficult to say, a lack of community supports or resources available to the court to support housing and employment initiatives may contribute to treatment failure. Some courts offered greater ancillary services and demonstrated broader community supports than others, and certainly there is variation in success rates across courts. However, it is not merely the presence or absence of resources that contributed to outcomes but rather the combination of these system- and individual-level factors. One strategy is the employment of peer support specialists on the MHC team. Peer support specialists are individuals with SMI who are recipients of services in the CMH system and have reached stability in their recovery. They are trained, certified, and employed in a variety of roles, with the opportunity to provide a unique 'insider' perspective to other individuals with SMI. In addition, this opens up employment opportunities for successful graduates, perhaps incentivizing successful completion of the program. Although some courts are using this strategy, more widespread use across courts may be advantageous.

Finally, individual personality characteristics and life circumstances are also factors in moving a participant to successful completion status. Enhancing motivation at an individual level can be successful in engaging individuals in treatment and increasing length of stay. One evidence-based method for enhancing motivation and engaging individuals with SMI and/or SUD into treatment is motivational interviewing[50]. Motivational interviewing is also an important component in the evidence-based IDDT Model for treatment of COD[51].

4. Enhancing compliance and motivation through the use of rewards and sanctions

Although all courts employed the use of sanctions and rewards to extinguish negative behaviors and encourage positive behaviors, it was difficult to assess the success of these strategies due to the limited reporting of them in the SCCM database. When used effectively, a system of rewards and sanctions can positively affect criminal behavior[45] as well as treatment engagement and completion.

Research on the effective use of rewards and sanctions, also referred to as contingency management, has documented positive effects when used in drug courts in increasing length of stay and treatment compliance[52] Contingency management approaches use a structured set of

incentives to modify behavior by either giving rewards or sanctions – or taking away rewards/sanctions. Examples of giving rewards can be praise, token gifts, or certificates of accomplishment. Sanctions can be a writing assignment, increasing reporting times, or jail. Examples of taking away a reward may be a monetary fine, revoking a license, or taking away earned privileges. Taking away a sanction might be reducing reporting days or treatment levels.

Principles attached to the use of rewards and sanctions include the certain implementation of the scheduled reward/sanction and that rewarding positive behavior more frequently than sanctioning negative behavior is more effective. However, based on the data in SCCM, the ratio of incentives to sanctions falls short of the ratios suggested for successful behavior change (4:1 rewards to sanction). This could be lack of reporting or absence of data, but more conscious efforts to develop and record incentivizing systems may improve outcomes.

Moreover, some courts rely heavily on jail as a sanction despite the goal of decreasing jail stays and the negative effects of incarceration on persons with SMI. Although the data do not allow full assessment of which jail days during MHC were used as sanctions versus new offenses, the small number of new offenses (14% of the entire population) and the moderate reduction in jail days during as compared to pre-MHC, suggests that jail is a commonly used sanction. The use of jail as a sanction might be more limited if the menu of sanctions increased. In other words, there is a need for graduated sanctions that would offer a more comprehensive array of options to incentivize positive behavior and a similar array of options to sanction negative or unwanted behavior. If this more comprehensive array of options was available, and the incentive/sanction ratio favored incentives, jail might be used less frequently.

5. **Improving dual diagnosis capabilities of the court/team**

Although there is a variation in how and when substance use disorders are assessed across courts, thus making it difficult to definitively capture the prevalence of COD, it is clear that the majority of participants were misusing drugs and/or alcohol or had a COD. The presence of COD, defined as receiving any substance abuse treatment before or during MHC, predicted unsuccessful completion, more jail days during MHC, and poorer recidivism outcomes.

However, there are indications that enhanced treatment for COD may improve outcomes. For example, gaps between who was identified as having a substance abuse problem and who received related services could be closed (only 65% of those identified with a substance use disorder received a related treatment during MHC). Moreover, of the 339 (50%) participants who had at least one positive drug screen during MHC, 234 (69%) received substance abuse treatment. Based on interviews with program staff, only three reported offering integrated mental health and substance abuse treatment services, but there was no indication of any participant receiving the CMH preferred Integrated Dual Disorders Treatment (IDDT).

Enhancing staff involved in MHC to provide the multiple components of IDDT, including motivational interviewing, 'staging' both substance abuse and mental health treatment, dual

recovery support groups, and a multidisciplinary team would be a beneficial addition. One advantage of the MHC is the presence of the treatment team as a vehicle for collaboration among the mental health, substance abuse, and criminal justice providers. Operationalizing this vehicle outside of an MHC program is often an obstacle to this level of collaboration.

6. Enhance treatment retention post-MHC

The data demonstrate that participation in MHC greatly increases the number of mental health treatment services – particularly low-intensity services – as compared with the year pre-MHC. However, in the one year post-MHC, there is a reduction in the number and amount of services provided. On one hand a reduction in overall service utilization could be a positive outcome in that functionality of the participant has improved. However, that nearly a quarter of those discharged do not engage in any service – even low-intensity services (i.e. medication reviews)– may affect longer-term outcomes of MHC.

It should be remembered that the post-MHC service utilization across Michigan MHCs is higher than reported in the research literature. However, efforts to enhance the continuum of care between MHC involvement and discharge may elongate stabilization gains made during MHC. Community outreach and transition planning with new providers may enhance engagement over time.

Limitations

As in any study, there are limitations. Although analysis of several statewide and county databases were included to assess outcomes, it was not possible to review every system that MHC participants may have entered. For example, treatment data from the Community Corrections departments in each of the counties or MDOC were not collected. Since MDOC and many of the Community Corrections departments contract with substance abuse treatment providers for those on probation and/or parole, MHC participants may have entered that system of care and this analysis did not capture those services. Similarly, if a participant received mental health services in a private hospital or provider outside the CMH system, those services were not captured. In addition, the use of administrative data can be problematic if there is missing data or the data has been entered inappropriately.

However, even with these limitations, this is the most comprehensive review of possible outcomes available on MHC to date.

Appendix A
Sources of Secondary Data and Merging Procedures

State Court Administrator's Office Specialty Court Case Management (SCCM)
The original file received from MDCH had 1,240 cases. A large portion of cases were removed from this analysis because they were cases that were rejected from the MHCs (N=472*). After these cases were removed, 768 separate admissions were included in the data. However, 90 of these admissions were removed due to the age of the participant at screening or the same participant had multiple admissions. For a more balanced comparison, 68 participants were removed from the analysis if they were under the age of 18 at MHC screening. Additionally, 22 cases were removed because they were multiple admissions for the same MHC participant. Thus, there is a 90 case difference for admitted participants between the SCAO data and the number of admissions we use in this report: 678 participants.

*The rejected cases were further reduced as many of these had multiple admissions, were juvenile cases or did not meet the qualifications for a "comparable" group of individuals. Cases were kept in the comparison group for the following reasons: refusal, program at capacity, geographical/transportation issues, unable to locate, pending another case, judicial denial and "other". Cases were removed from the comparison group if they were not in the target population, violent, for mental health reasons, or for medical issues. The final number of rejected participants was 135.

All other data sources were merged to this original file. The last four digits of the participant's social security number (SSN) were used when available to merge the files. In 62 cases, the last four digits of SSN were not unique. These cases were manually assigned an "a", "b", or "c" after the last four digits to further specify. When merging the data files for these cases, date of birth was used to verify that these cases were matched correctly.

An initial review of the variables from this data source showed that many variables had a high proportion of cases with missing data. This limited the number of variables included in the analyses. Additionally, after merging other data sources, inconsistencies in the data were found. It was decided that the data from the SCCM file would be kept intact, as there was no way to determine which data source had the most accurate information.

To assign mental health diagnostic categories, the 57 diagnoses found in the SCCM data file were collapsed into four categories. Three predominant diagnoses were found across the courts: a) bipolar disorder, b) depressive disorder, and c) schizophrenia/psychotic disorders. The final category, "other", included the following five categories: a) developmental disorders, b) anxiety disorders, c) personality disorders, d) substance use disorders, and e) other.

In a few instances the original data was changed. One participant's admission date to the court was after the date of discharge. This was corrected by the MHC's contact person. Finally, cases

that had discharge dates that were after the evaluation cutoff date (12/31/11) were removed and no longer considered to be discharged participants.

Michigan Department of Community Health: Bureau of Substance Abuse and Addiction Services (BSAAS)
The original file for substance abuse services was provided in a list-wise fashion. This file was converted to case-wise. A total of 806 cases were found, which included both the intervention and comparison groups. The majority of these cases did not have any episodes found in the data file, as only 252 had a treatment episode. Episodes were removed if they occurred more than one year prior to the participant's admission date or over one year after their discharge from MHC. In the end, only 165 participants had a substance abuse treatment episode in any time period (pre-, during-, or post-MHC). The data had six categories of substance abuse services: a) detox, b) residential- long-term, c) residential- short-term, d) intensive outpatient, e) outpatient, and f) case management. Detox and long-term residential services were categorized as a high level services, short-term residential and intensive outpatient were categorized as medium level services, and outpatient and case management were categorized as low level services.

To accurately determine substance abuse services received, episodes were combined into one episode when the reason for discharge was "transfer" or "completion/continuation". If the date of discharge from one episode and the date of admission for the next episode was within 30 days of each other, the two episodes were merged into one substance abuse service. The level of service that was assigned for the episode (low, medium or high) was the level that was in the first episode. Once these episodes were collapsed, they were manually organized into the time periods for each participant: a) one year prior to MHC admission, b) during MHC, and c) one year after MHC discharge. Once these time periods were created, the file was merged with the SCCM database using the last four digits of the participant's SSN and date of birth. After merging, the file was checked for errors and cleaned.

Michigan Department of Community Health: Community Mental Health Encounter Data (CMH)
To retrieve the CMH encounter data for MHC participants, ID numbers were provided by the courts to MDCH. All of the CMH IDs across the courts were combined and then all encounters were extracted from the MDCH encounter data for the time period 01/01/08 to 12/31/11. Several attempts were made to extract a complete set of encounters for all participants in the MHCs. Unfortunately the final file had a substantial number of incorrect CMH IDs from Genesee County. Additionally, many cases in St. Clair County were not found in the CMH data. A few cases in Wayne and Grand Traverse Counties were also missing from the CMH encounter data. Encounters were removed if they occurred more than one year prior to the participant's admission date or more than one year after discharge from the MHC. A total of 577 participants in the courts had encounter data.

Services were categorized into low, medium and high-intensity services. Low-intensity services include: case management, medication reviews, and individual/group therapy. Medium-

intensity services include: ACT, case management, intensive outpatient, and residential. High-intensity services include: psychiatric hospitalization, crisis residential, and crisis center. When assigning the intensity levels, it was noted that many of the encounters were for substance abuse services. These were categorized separately for inclusion in the analysis of substance abuse services. Codes counted as substance abuse services in CMH include: H0001, H0002, H0004, H0005, H0010, H0012, H0014, H0015, H0018, H0019, H0020, H0033, H2035, H2036, H0049, 90804 thru 90815, 90847, 90853, 90857, and T1012.

Prior to merging the file, the data was organized into the three time periods used in this evaluation: pre-, during-, and post-MHC. The last four digits of the participant's SSN and date of birth were used to merge the CMH data with the SCCM database. SSNs were updated when a discrepancy was found between the SCCM and the CMH data. These changes were kept in a log sheet. The file was checked for data errors and was cleaned once the data was merged.

Michigan State Police Statewide Arrest and Conviction Data
Arrests and convictions were collected from the Michigan State Police (MSP) for the participants and comparison group in the MHC. No data was collected for the year prior to admission because the data contract between MDCH and MSP did not include this time period. The original file came as a list from MSP and included 486 charges and 469 convictions. Many of these were multiple charges and convictions for the same event. In such cases, the charge with the highest severity was kept as the charge for the event. This file was reorganized into a case-wise file. Convictions and charges were organized into the two time periods (during- and post-MHC). Any episodes that occurred more than one year after discharge from the MHC were removed. Additionally, charges and convictions that occurred after the evaluation cutoff date (12/31/11) were removed. In the end, 226 individuals, both intervention (N=194) and comparison (N=32), were found in the data.

County Jail Booking and Release Data
Each court was asked to work with the local jail to retrieve the booking/release dates and charges for all MHC participants from 1/1/2008 to 12/31/11. These files came in many types formats. Using these documents, the MSU evaluation team manually calculated the number of days in jail for each participant, across the three time periods (pre-, during- and post-MHC). Additionally, the first booking dates that occurred after admission to MHC and after discharge from MHC were retrieved. These two dates were used to calculate the number of days to first jail episode during and after MHC participation. During the organization of each court a few data errors were verified with our court contacts. For example, one case was found in the jail data that was not found in SCCM file. This case was not included in the analysis as it was too late in the process to gather the other required variables from the other data sources. Once this file was completed it was merged with the SCCM database by name. The file was then checked for data errors and was cleaned and verified.

Appendix B

Table 23: Demographics and Characteristics of MHC Participants – Statewide and By Court

	Statewide N = 678		Berrien N = 47		Genesee N = 166		Grand Trav N = 70		Jackson N = 64		Livingston N = 22		Oakland N = 61		St. Clair N = 116		Wayne N = 132	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Age																		
18-24	159	23.5	18	38.3	36	21.7	12	17.1	28	43.8	7	31.8	17	27.9	29	25.0	12	9.1
25-34	193	28.5	5	10.6	50	30.1	23	32.9	15	23.4	8	36.4	17	27.9	30	25.9	45	34.1
35-44	144	21.2	11	23.4	26	15.7	16	22.9	11	17.2	4	18.2	16	26.2	25	21.6	35	26.5
45-54	154	22.7	9	19.1	43	25.9	14	20.0	10	15.6	2	9.1	11	18.0	28	24.1	37	28.0
55 +	28	4.1	4	8.5	11	6.6	5	7.1	0	0.0	1	4.5	0	0.0	4	3.4	3	2.3
Mean	35.1		34.4		36.2		35.9		29.9		31.4		33.0		35.2		37.6	
Range	18 - 64		18 - 61		18 - 61		18 - 63		18 - 53		19 - 60		18 - 52		18 - 64		18 - 61	
Race																		
African American	197	29.1	17	36.2	87	52.4	0	0.0	9	14.1	0	0.0	7	11.5	12	10.3	65	49.2
Caucasian	457	67.4	30	63.8	76	45.8	66	94.3	50	78.1	18	81.8	53	86.9	103	88.8	61	46.2
Other	24	3.5	0	0.0	3	1.8	4	5.7	5	7.8	4	18.2	1	1.6	1	0.9	6	4.5
Gender																		
Female	253	37.3	17	36.2	44	26.5	29	41.4	24	37.5	9	40.9	36	59.0	48	41.4	46	34.8
Male	425	62.7	30	63.8	122	73.5	41	58.6	40	62.5	13	59.1	25	41.0	68	58.6	86	65.2
Employment Status																		
Unemployed	620	91.4	44	93.6	157	94.6	57	81.4	58	90.6	20	90.9	55	90.2	109	94.0	120	90.9
Employed	58	8.6	3	6.4	9	5.4	13	18.6	6	9.4	2	9.1	6	9.8	7	6.0	12	9.1
Living Arrangement																		
Dependent/Residing w/Others	356	52.5	23	48.9	71	42.8	16	22.9	35	54.7	0	0.0	48	78.7	63	54.3	85	64.4
Independent	191	28.1	21	44.7	33	19.9	37	52.9	22	34.4	5	22.7	8	13.1	37	31.9	28	21.2
Homeless/Institution/Hospital	131	19.3	3	6.4	62	37.3	17	24.3	7	10.9	17	77.3	5	8.2	16	13.8	19	14.4
MH Primary Diagnosis																		
Bipolar	256	37.8	10	21.3	73	44.0	19	27.1	25	39.1	7	31.8	35	57.4	31	26.7	56	42.4
Depression	193	28.5	16	34.0	32	19.3	32	45.7	27	42.2	7	31.8	22	36.1	26	22.4	31	23.5
Schiz/Psychotic/Delusional	145	21.4	14	29.8	41	24.7	11	15.7	10	15.6	4	18.2	4	6.6	26	22.4	35	26.5
Other			7	14.9	20	12.0	8	11.4	2	3.1	4	18.2	0	0.0	33	28.4	10	7.6
Current Substance Abuse																		
Yes	406	59.9	29	61.7	128	77.1	15	21.4	23	35.9	9	40.9	0	0.0	49	42.2	19	14.4
No	272	40.1	18	38.3	38	22.9	55	78.6	41	64.1	13	59.1	61	100.0	67	57.8	113	85.6
Incident Offense																		
New Criminal Offense	584	86.1	41	87.2	147	88.6	66	94.3	62	96.9	18	81.8	24	39.3	116	100.0	110	83.3
Probation Violation	85	12.5	1	2.1	1	0.6	0	0.0	0	0.0	0	0.0	1	1.6	0	0.0	6	4.5
Parole Violation	9	1.3	5	10.6	18	10.8	4	5.7	2	3.1	4	18.2	36	59.0	0	0.0	16	12.1

Appendix C: Process Charts – All MHCs
Figure 49: Process Chart – Berrien County MHC

Referral Sources:
Jail MH Staff
Defense Attorneys
CMH Staff
Court Staff
Judges
Police Department
Probation Officers
Prosecuting Attorneys
Self-Referral/Family

Referral Received by MHC Coordinator

MHC Screening/Assessment
MHC Coordinator
1. Review of application
2. Willing/eligible to go to RWC for MHTx
3. Verify county residency

MISDEMEANOR

Legally Eligible

FELONY

Review for Legal Eligibility
Assistant Prosecutor
1. Review of criminal history (no violent offenses, CSC case-by-case)
2. No parolees
3. Straddle cell or less
4. Adult criminal system

Review of Clinical Record or Comprehensive Assessment for Clinical Eligibility
Mental Health Therapist, RWC
1. Axis I, Axis II Development Disability, or co-occurring Axis I and SUD
2. SPMI (CMH eligible)

Case Reviewed at Treatment Team Meeting
(Review of Defendant Checklist and Vote)

REJECT

Clinically or Legally Ineligible

ACCEPT

Entry to SCCM

Sentencing
(Sentencing Judge Notified of MHC Eligibility)

Sentencing Judge Denies MHC

REJECT

Legally Ineligible
(Judicial Denial)

Sentencing Judge Orders MHC

Entry to SCCM

ADMIT

Admitted to MHC (Treatment Group)
MHC Services:
   Court Supervision – Judge Butzbaugh or Pasula
   MHC Coordinator – A. Cheff
CMH Services:
   Case Mgt. – C. Alphenaar, Riverwood
   MH Treatment – Riverwood
Probation:
   Misdemeanor – C. Cuddohy
   Felony – S. Church
Substance Abuse Treatment (as needed/available)

Phase I   *(90 days minimum)*
• Bi-weekly court hearings
• Bi-weekly probation reporting
• Compliance with treatment plan

Phase II   *(6 months minimum)*
• Monthly court hearings
• Monthly probation reporting
• Compliance with treatment plan
• Community svc/restitution/fines & costs
• No drugs/alcohol for six months

Phase III   *(90 days minimum)*
• No court hearings
• Monthly probation reporting
• Compliance with treatment plan

Discharge – Unsuccessful

Discharge – Successful

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Figure 50: Process Chart – Genesee County MHC

Figure 51: Process Chart – Grand Traverse County MHC

```
                          ┌─────────────────────────┐
                          │   Individual Enters      │
                          │  Grand Traverse County   │
                          │   Correctional Facility  │
                          └─────────────────────────┘
                                      │
                                      ▼
                              ┌──────────────┐
                              │   Pre-Plea   │
                              └──────────────┘
                                      │
 ┌─────────────────────┐              ▼
 │  Referral Sources:  │    ┌─────────────────────────┐
 │  CMH Professionals  │    │  Individual Referred to │
 │  Defense Attorney   │◆ ─ ─ ─ ─ ─ ─▶│ Grand Traverse MHC │
 │ District Court      │    │      (MHC Liaison)       │
 │  Judge/Staff        │    └─────────────────────────┘
 │  Family Members     │              │
 │  Jail Services      │              ▼
 │  Police Dept.       │    ┌─────────────────────────┐
 │  Probation Officers │    │     Referral Form        │
 │  Prosecutor's Office│    │      Completed           │
 └─────────────────────┘    │      (MHC Liaison)       │
                            └─────────────────────────┘
```

Referral Sources:
CMH Professionals
Defense Attorney
District Court Judge/Staff
Family Members
Jail Services
Police Dept.
Probation Officers
Prosecutor's Office

Individual Referred to Grand Traverse MHC
(MHC Liaison)

Referral Form Completed
(MHC Liaison)

Prosecutor's Office– Legal Eligibility for MHC
1. Qualifying misdemeanor offense (no CSC or crimes against children)
2. At least 17 years old
3. Crime committed in Grand Traverse or Leelanau County

→ **Legally Ineligible (Reject)**

MH Diagnosis Entered to ◀ ─ ─ ─

CMH MHC Liaison – Screening/Assessment for Clinical Eligibility/ Goodness of Fit for MHC
1. Severe/persistent or moderate Axis I thought or mood disorder
2. Identified as person who could benefit from mental health treatment
3. No narcotic pain medication (exception may be granted by Judge)
4. Willingness of individual

→ **Clinically Ineligible (Reject)**

Plea

Entry to SCCM: MHC Liaison and PO ◀ ─ ─ ◆

Admitted to MHC (Treatment Group)
MHC Services:
  Court Supervision – Judge Haley
  Probation Supervision – Jill Platte
  MHC Case Management – Kurt Klein
  MH Treatment – CMH Provider
Additional Services:
  SA Treatment (as needed) – CHS, ATS
  Yoga
  Art Therapy
  Process Group
  Transitional Housing – ATS
  Transportation

SA Diagnosis Entered to SCCM ◀ ─ ─ ◆

No MHC (Compare Group)
Standard probation or other sentence

→ **Decline MHC (Reject)**

Group C *(3 – 6 months)*
- Compliance with Terms of Probation
- Compliance with MH and SA Treatment
- Compliance with MHC Program Mandates
- Report 1x per week

→ **Discharge – Unsuccessful**

Group B *(6 – 12 months)*
- Compliance with terms of probation
- Compliance with MH and SA treatment
- Compliance with MHC program mandates
- Report 2x per month

→ **Discharge – Unsuccessful**

Group A *(minimum 3 months)*
- MH symptom stability for 6 months
- Responsible medication management for 6 months
- Completion of terms of probation
- Compliance/progress with MH and SA treatment
- Compliance with MHC mandates
- Report 1x per month
- Payment of fines, costs, restitution, and treatment fees

→ **Discharge – Unsuccessful**
→ **Discharge – Successful**

Figure 52: Process Chart – Jackson County MHC

Referral Sources:
CMH Staff
Defense Attorneys
Jail MH Staff
Judges
Probation Dept.

Referral Received by MHC Coordinator
Referral form accessed at Court House

Review of Legal Eligibility
MHC Coordinator
1. Review of current charge
   a. Five year felony or less
   b. Excludes CSC and child abuse

REJECT → **Legally Ineligible**

Review for Legal Eligibility
Assistant Prosecutor
1. Review of criminal history
2. Review circumstances of current charge

REJECT

Review of Clinical Record or Comprehensive Assessment for Clinical Eligibility
Clinical Therapist - Integro
1. Axis I
2. SPMI (CMH eligible)
3. 18 years or older
4. Resident of Jackson County

Case Reviewed at Treatment Team Meeting

REJECT → **Clinically or Legally Ineligible**

ACCEPT ---- *Entry to SCCM*

Transferred to MHC Judge

Sentencing

Entry to SCCM ---- **ADMIT**

Phase I *(estimated 120 days)*
- Bi-weekly court hearings
- Bi-weekly probation reporting
- Intensive Supervision Probation
- 8 p.m. curfew
- Compliance with treatment plan

Admitted to MHC (Treatment Group)
MHC Services:
  Court Supervision – Judge M. Klaeren
  MHC Coordinator – M.J. Kennedy
CMH Services:
  Case Mgt. – C. Yanakeff & M. Scott, Hope Network
  MH Treatment – JCCMH (Lifeways)
  SA Treatment (as needed)
Probation:
  District Court – T. Barrett & C. Surque
  Circuit Court – J. Woodard

Phase II
- Bi-weekly court hearings
- Monthly probation reporting
- Intensive Supervision Probation (as needed)
- 10 p.m. curfew
- Compliance with treatment plan

Discharge – Unsuccessful

Phase III *(estimated 90 days)*
- Monthly court hearings
- Monthly probation reporting
- No Intensive Supervision Probation
- No curfew
- Compliance with treatment plan

Discharge – Successful

Figure 53: Process Chart – Livingston County MHC

Figure 54: Process Chart – Oakland County MHC

Individual Enters Oakland County Jail

Referral Sources:
Judges
Probation Officers
Defense Attorneys

Sentencing by Trial Judge

Legal Eligibility
1. Oakland County resident
2. PA511 Eligible
3. No pattern of violence
4. No firearms offenses
5. No current manufacture w/ intent to deliver offenses
6. Role of substance abuse/ mental illness in committed offense

Sentenced to ATC by Trial Judge

Determination of Eligibility for ATC (ATC Team)

INELIGIBLE → **Case Returned to Sentencing**

ELIGIBLE

MH Assessment (CMH MHC Liaison) **and Program Overview** (PO and Defense Counsel)

Clinical Eligibility
1. Primary - Axis SPMI
2. Secondary - SUD

Clinical Eligibility
1. Primary - SUD

Appointed to MHC

Appointed to ATC

Entry to SCCM: Min Data Stds (Data Proc) Daily Entry (All)

MH and SA Diagnosis Entered to SCCM

1st Appearance before ATC Judge to Accept/Decline Appointment (Judge O'Brien or Young)

DECLINE → **Case Returned to Sentencing**

ACCEPT

Discharge – Unsuccessful

Discharge – Successful

Admitted to ATC (Treatment Group)
ATC Services:
  Judicial Supervision – O'Brien (females) or Young (males)
  Case Management (Probation Officers) – Drury (males) or Jarnigan (females)
  ATC Supervisor/Coordinator – J. Howes-Evanson
  Defense Advisor – J. Holmes
CMH Services:
  CMH Liaison – A. Hadzagas
  SA Tx – OSAS
  MH Tx – CMH Core Provider

Stage 1: 16 wks
1. SA Treatment
2. ATC bi-weekly
3. AA/NA 45 in 90
4. Secure sponsor
5. Weekly screening

Stage 2: 12 wks
1. ATC monthly
2. AA/NA 3x week
3. Random drug screens

Stage 3: 12 wks min
1. ATC monthly
2. AA/NA 3x week
3. Random drug screens
4. School or work

Stage 4: 12 -16 wks
1. ATC as directed
2. Return to weekly drug screen
3. Continue w/ alumni group

Figure 55: Process Chart – St. Clair County MHC

Figure 56: Process Chart – Wayne County MHC

Individual Enters Wayne County Jail

↓

CDU - Determine Mental Health Status
1. Screening
2. IMS & CMH review
3. Criminal charge(s)/history

↓

RDC/BHU – Determine Level of Care and Diagnosis
1. Screening = Mental Status Exam/Screening Evaluation
2. Clinical Assessment = Comprehensive Psych Assessment
3. Axis I Primary & Secondary Diagnosis

↓

| **MHU** | **GP/OP** | **NONE** |

↓

Meets MHC or Diversion Clinical Eligibility
1. Non-violent offender (CDU)
2. Diag = Co-Occurring or SPMI (BHU)

↓

Prosecutor – Determine MHC Legal Eligibility
1. Eligible Crimes = controlled substance, crimes against property, and/or resisting/obstructing a police officer
2. Comm Supv Suitability = MI Sentencing Guidelines
3. Other Factors

→ **Offer Refused**
→ **Other**
→ **Diversion**

↓

Meets MHC Clinical & Legal Eligibility
Clinical:
1. Non-violent offender
2. Diag = COD or SPMI
Plus legal:
4. Qualifying crime
5. Comm Supv guidelines
6. Other factors satisfied

Referrals to MHC from Other Sources

↓

MHC Case Manager – Determine Suitability
1. Review Odyssey for CJ history
2. Obtain updated Criminal History report
3. Interview to determine interest
4. Assessment

↓

| **Accepted to MHC** | **Rejected for MHC** |

↓

Admitted to MHC (Treatment Group)
- Court Supervision - Judge Kenny
- MHC Case Management - MHC
- Mental Health Treatment - DCC
- Substance Abuse Treatment
- Probation Supervision - MDOC

No MHC (Compare Group)
- Treatment As Usual

↓

Phase I – 90-120 days
Comply w/ CMH Tx Plan
Status hearings

Phase II – LOS varies
Comply w/ CMH Tx Plan
Status hearings

Phase III – LOS varies
Comply w/ CMH Tx Plan
Status hearings
Participation in alumni grp

Phase IV – LOS varies
Comply w/ CMH Tx Plan
Status hearings
Participation in alumni grp

Discharge – Successful

Discharge – Unsuccessful

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